



Ruckus Wireless™ ZoneDirector™ Command Line Interface

Reference Guide

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About This Guide

This *Ruckus Wireless ZoneDirector Command Line Interface Reference Guide* contains the syntax and commands for configuring and managing ZoneDirector from a command line interface.

This guide is written for service operators and system administrators who are responsible for managing, configuring, and troubleshooting Ruckus Wireless devices. Consequently, it assumes a basic working knowledge of local area networks, wireless networking, and wireless devices.



NOTE: If a release note is shipped with ZoneDirector your Ruckus Wireless product and the information there differs from the information in this guide, follow the instructions in the release note.

Most user guides and release notes are available in Adobe Acrobat Reader Portable Document Format (PDF) or HTML on the Ruckus Wireless Support Web site at:

<http://support.ruckuswireless.com/>




Conventions

[Table 1](#) and [Table 2](#) list the text and notice conventions that are used throughout this guide.

Table 1. *Text Conventions*

Convention	Description	Example
monospace	Represents information as it appears on screen	[Device name]>
monospace bold	Represents information that you enter	[Device name]> set ipaddr 10.0.0.12
default font bold	Keyboard keys, software buttons, and field names	On the Start menu, click All Programs .
<i>italics</i>	Screen or page names	Click Advanced Settings . The <i>Advanced Settings</i> page appears.

Table 2. Notice Conventions

Icon	Notice Type	Description
	Information	Information that describes important features or instructions
	Caution	Information that alerts you to potential loss of data or potential damage to an application, system, or device
	Warning	Information that alerts you to potential personal injury

Documentation Comments

Ruckus Wireless is interested in improving its documentation and welcomes your comments and suggestions. You can email your comments to Ruckus Wireless at:

docs@ruckuswireless.com

When contacting us, please include the following information:

- Document title
- Document part number (on the cover page)
- Page number (if appropriate)

For example:

- Ruckus Wireless ZoneDirector Command Line Interface Reference Guide
- Part number: 800-70258-001
- Page 88

Please note that we can only respond to comments and questions about Ruckus Wireless product documentation at this email address. Questions related to technical support or sales should be directed in the first instance to your network supplier.

Understanding the ZoneDirector Command Line Interface

In This Chapter

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What Is the CLI?

The Ruckus Wireless ZoneDirector command line interface (CLI) is a software tool that enables you to configure and manage ZoneDirector, Ruckus Wireless's wireless LAN controller.

Using the command line interface, you can issue commands from an operating system prompt, such as the Microsoft Windows command prompt (C:\) or a Linux operating system terminal. Each command performs a specific action for configuring device settings or returning information about the status of a specific device feature.

Accessing the Command Line Interface

This section describes the requirements and the procedure for accessing the ZoneDirector CLI.

Requirements

To access the ZoneDirector CLI, you will need the following:

- A computer that you want to designate as administrative computer
- An RS-232 cable (type depends on the ZoneDirector model):
 - If you are using ZoneDirector 3000, you need an RS-232 to Ethernet cable.
 - If you are using ZoneDirector 1000, you need an RS-232 to RS-232 cable.
- A Telnet or SSH (secure shell) client program

Step 1: Connecting the Administrative Computer to ZoneDirector

The steps for connecting the administrative computer to ZoneDirector depend on the ZoneDirector model that you are using. Refer to the relevant section below.

- [Connecting ZoneDirector 1000](#)
- [Connecting ZoneDirector 3000](#)



NOTE: Before continuing, make sure that both the administrative computer and ZoneDirector are both powered on.

Connecting ZoneDirector 1000

1. Connect one end of the RS-232 cable to the port labeled *Console* on ZoneDirector.
2. Connect the other end to the RS-232 cable to a COM port on the administrative computer.

Connecting ZoneDirector 3000

1. Connect the RS-232 end of the cable to the port labeled *Console* on ZoneDirector.
2. Connect the Ethernet end of the cable to an Ethernet port on the administrative computer.

Step 2: Start and Configure the Telnet/SSH Client

Before starting this procedure, make sure that you Telnet/SSH is already installed on the administrative computer.

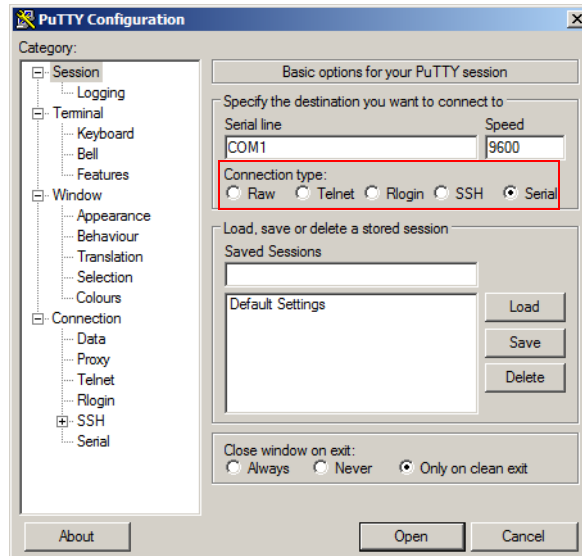


NOTE: The following procedure uses PuTTY, a free and open source Telnet/SSH client, for accessing the ZoneDirector CLI. If you are using a different Telnet/SSH client, the procedure may be slightly different (although the connection settings should be the same). For more information on PuTTY, visit www.putty.org.

To start and configure the Telnet/SSH client

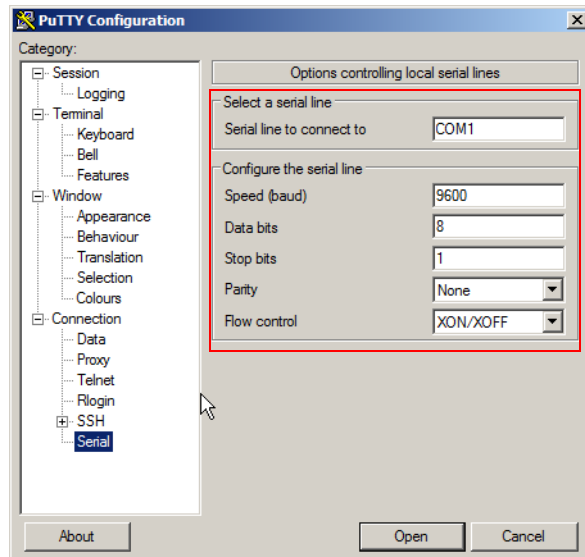
1. Start PuTTY. The PuTTY Configuration dialog box appears, showing the *Session* screen.
2. In *Connection type*, click **Serial**.

Figure 1. Click Serial as the connection type



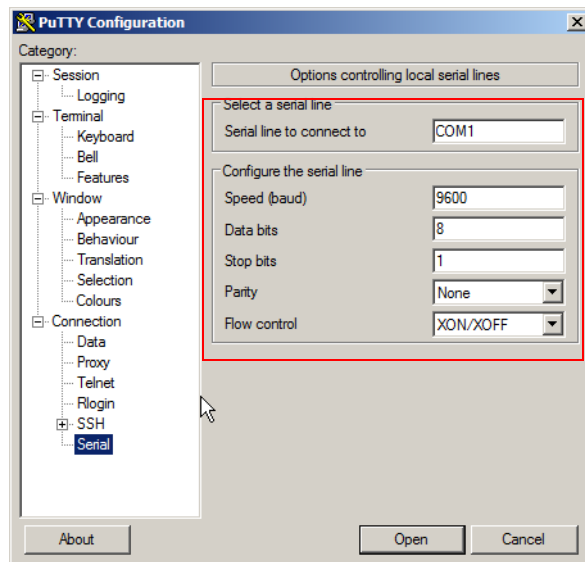
3. Under *Category*, click **Connection** > **Serial**. The serial connection options appear on the right side of the dialog box, displaying PuTTY's default serial connection settings.

Figure 2. PuTTY's default serial connection settings



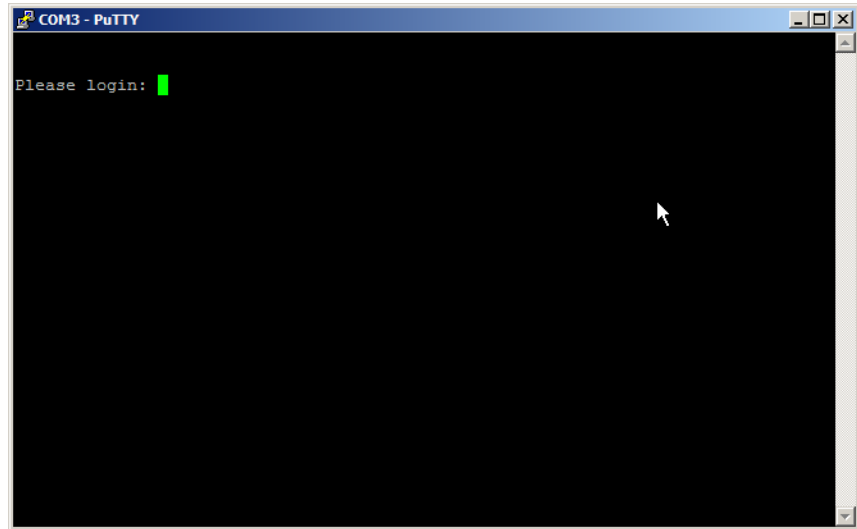
4. Configure the serial connection settings as follows:
 - *Serial line to connect to:* Type the COM port name to which you connected the RS-232 cable.
 - *Bits per second:* 115200
 - *Data bits:* 8
 - *Parity:* None
 - *Stop bits:* 1
 - *Flow control:* None

Figure 3. PuTTY's serial connection settings for connecting to ZoneDirector



5. Click **Open**. The PuTTY console appears and displays the login prompt.

Figure 4. The PuTTY console displaying the login prompt



You have completed configuring the Telnet/SSH client to connect to ZoneDirector.

Step 3: Log Into the CLI

1. At the `Please login:` prompt, type **admin**, and then press <Enter>.
2. At the Password prompt, type **admin**, and then press <Enter>. The Ruckus Wireless ZoneDirector CLI welcome message and the **ruckus** prompt appears.

You are now logged into the ZoneDirector CLI as a user with limited privileges. As a user with limited privileges, view a history of commands that were previously executed and ping a device. If you want to run more commands, you can switch to privileged mode by entering **enable** at the root prompt.

To view a list of commands that are available at the root level, enter **help** or **?**.



NOTE: You can tell if you logged into the CLI in limited or privileged mode by looking at the **ruckus** prompt. If you are in limited mode, the prompt appears as **ruckus>** (with a *greater than* sign). If you are in privileged mode, the prompt appears as **ruckus#** (with a *pound* sign).

Using the Help Command

To display all commands that the Ruckus Wireless CLI supports, use the `help` command.



CAUTION: Entering the `help` command into the CLI prints a long list of commands on the screen. If you only want to view the commands that are available from within a specific context, use the `?` command. See ["Using the ? Command"](#) below for more information.

Using the ? Command

To display commands that are available within a specific context, use the ? command.

Example

To display commands within the debug context, enter the following command:

```
ruckus# debug
```

```
ruckus(debug) # ?
```

help	Shows available commands.
history	Shows a list of previously run commands.
quit	Exits the debug context.
delete	Contains commands that can be executed from within the context.
restart	Contains commands that can be executed from within the context.

Viewing Current Configuration

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Show Commands Overview

Show commands display the controller’s current settings, including its status and system settings, and those of its AAA servers, access points, WLANs, and WLAN groups.



NOTE: You can only run `show` commands at the root prompt.

Show AAA Commands

Use the `show aaa` commands to display information about the authentication and accounting servers (AAA) servers that have been added to the controller.

show aaa all

To display a list of all AAA servers that have been added to the controller, use the following command:

```
show aaa all
```

Syntax Description

show	Display information
aaa	Display AAA server information
all	All AAA servers

Defaults

None.

Example

```
ruckus# show aaa all
AAA Servers
=====
ID: 1
Name: Local Database
Type: local
-----

ID: 2
Name: Guest Accounts
Type: guestpass
-----
```

show aaa name

To display information about a specific AAA server that has been added to the controller, use the following command:

```
show aaa name {AAA server name}
```

Syntax Description	
show	Display information
aaa name	Display information about the specified AAA server name
{AAA server name}	Name of the AAA server

Defaults None.

Example

```
ruckus()# show aaa name Ruckus-RADIUS
ID: 3
Name: Ruckus-RADIUS
Type: radius-auth
RADIUS Server IP Address: 192.168.0.33
RADIUS Server Port: 1812
RADIUS Server Shared Secret: testing123
-----
```

Show Access Point Commands

Use the `show ap` commands to display the current settings of managed devices, including their network address settings, device names, radio settings, and others.

show ap all

To display a summary of all devices that have been approved, use the following command:

```
show ap all
```

Syntax Description	
show	Display information
ap	Show device information
all	All devices that have been approved by the controller

Defaults None.

Example

```
ruckus# show ap all
```

```
AP List
=====
AP
=====
Name: 00:13:92:EA:43:01
ID: 1
MAC Address: 00:13:92:EA:43:01
Device Name: RuckusAP
Model: zf7962
Description: Warehouse NE
Location: Living Room
GPS Coordinates: 37.3881398,-122.0258633
-----
Radio a/n (5GHz)
Channelization: 20
Radio Channel: 149
TX Power: Auto
WLAN Group Name: Default
-----
Radio b/g/n (2.4GHz)
Channelization: 20
Radio Channel: 11
TX Power: Auto
WLAN Group Name: Default
-----
Management IP Address: DHCP
IP Address:
Netmask:
Gateway:
Primary DNS Server:
Secondary DNS Server:
-----
Mesh Status: Enabled
Mesh Mode: Auto (Mesh role is automatically assigned)
Uplink Selection: Smart (Mesh APs will automatically select the
best uplink)
=====

AP
=====
Name: 00:13:92:EA:43:04
```

```
ID: 2
MAC Address: 00:13:92:EA:43:04
Device Name: RuckusAP
Model: zf7962
Description: Warehouse NW
Location:
GPS Coordinates:
-----
Radio a/n (5GHz)
Channelization: 20
Radio Channel: 149
TX Power: Auto
WLAN Group Name: Default
-----
Radio b/g/n (2.4GHz)
Channelization: 20
Radio Channel: 11
TX Power: Auto
WLAN Group Name: Default
-----
Management IP Address: Keep AP's Setting
IP Address:
Netmask:
Gateway:
Primary DNS Server:
Secondary DNS Server:
-----
Mesh Status: Enabled
Mesh Mode: Auto (Mesh role is automatically assigned)
Uplink Selection: Smart (Mesh APs will automatically select the
best uplink)
=====
```

show ap devname

To display information about a specific device using its device name, use the following command:

```
show ap devname {device name}
```

Syntax Description	
show	Display information
ap devname	Show information about the specified device name
{device name}	The name of the device

Defaults

None.

Example

```
ruckus# show ap devname RuckusAP
AP
=====
Name: 00:13:92:EA:43:01
ID: 1
MAC Address: 00:13:92:EA:43:01
Device Name: RuckusAP
Model: zf7962
Description: Warehouse NE
Location: Living Room
GPS Coordinates: 37.3881398,-122.0258633
-----
Radio a/n (5GHz)
Channelization: 20
Radio Channel: 149
TX Power: Auto
WLAN Group Name: Default
-----
Radio b/g/n (2.4GHz)
Channelization: 20
Radio Channel: 11
TX Power: Auto
WLAN Group Name: Default
-----
Management IP Address: DHCP
IP Address:
Netmask:
Gateway:
Primary DNS Server:
Secondary DNS Server:
-----
Mesh Status: Enabled
Mesh Mode: Auto (Mesh role is automatically assigned)
Uplink Selection: Smart (Mesh APs will automatically select the
best uplink)
=====
AP
=====
Name: 00:13:92:EA:43:04
```

Viewing Current Configuration

Show Access Point Commands

```
ID: 2
MAC Address: 00:13:92:EA:43:04
Device Name: RuckusAP
Model: zf7962
Description: Warehouse NW
Location:
GPS Coordinates:
-----
Radio a/n (5GHz)
Channelization: 20
Radio Channel: 149
TX Power: Auto
WLAN Group Name: Default
-----
Radio b/g/n (2.4GHz)
Channelization: 20
Radio Channel: 11
TX Power: Auto
WLAN Group Name: Default
-----
Management IP Address: Keep AP's Setting
IP Address:
Netmask:
Gateway:
Primary DNS Server:
Secondary DNS Server:
-----
Mesh Status: Enabled
Mesh Mode: Auto (Mesh role is automatically assigned)
Uplink Selection: Smart (Mesh APs will automatically select the
best uplink)
=====

AP
=====
Name: 00:13:92:EA:43:07
ID: 3
MAC Address: 00:13:92:EA:43:07
Device Name: RuckusAP
Model: zf7962
Description: Warehouse SE
Location:
GPS Coordinates:
```

```
-----  
Radio a/n (5GHz)  
Channelization: 20  
Radio Channel: 149  
TX Power: Auto  
WLAN Group Name: Default  
-----
```

```
Radio b/g/n (2.4GHz)  
Channelization: 20  
Radio Channel: 11  
TX Power: Auto  
WLAN Group Name: Default  
-----
```

```
Management IP Address: Manual  
IP Address: 10.10.1.2  
Netmask: 255.255.255.0  
Gateway: 10.10.1.254  
Primary DNS Server: 29.13.12.10  
Secondary DNS Server: 29.13.13.10  
-----
```

```
Mesh Status: Enabled  
Mesh Mode: Auto (Mesh role is automatically assigned)  
Uplink Selection: Manual (Only selected APs can be used for uplink)  
AP MAC Address: 00:13:92:EA:43:01  
AP MAC Address: 00:13:92:EA:43:04  
=====
```

AP

```
=====
```

Name: 00:13:92:EA:43:0A
ID: 4
MAC Address: 00:13:92:EA:43:0A
Device Name: RuckusAP
Model: zf7942
Description: Warehouse SW
Location:
GPS Coordinates:

```
-----  
Radio b/g/n (2.4GHz)  
Channelization: Auto  
Radio Channel: 11  
TX Power: Auto
```

```
WLAN Group Name: Default
-----
Management IP Address: Keep AP's Setting
IP Address:
Netmask:
Gateway:
Primary DNS Server:
Secondary DNS Server:
-----
Mesh Status: Enabled
Mesh Mode: Auto (Mesh role is automatically assigned)
Uplink Selection: Smart (Mesh APs will automatically select the
best uplink)
=====
```

show ap mac

To search for the device that matches the specified MAC address, use the following command:

```
show ap mac {mac address}
```

Syntax Description	show	Display information
	ap mac	Display information about the device with the specified MAC address
	{mac address}	The MAC address of the device

Defaults

None.

```
Example
ruckus# show
ruckus(show)# ap mac 00:13:92:EA:43:01
AP
=====
Name: 00:13:92:EA:43:01
ID: 1
MAC Address: 00:13:92:EA:43:01
Device Name: RuckusAP
Model: zf7962
Description: Warehouse NE
Location: Living Room
GPS Coordinates: 37.3881398,-122.0258633
-----
```



```
Radio a/n (5GHz)
Channelization: 20
Radio Channel: 149
TX Power: Auto
WLAN Group Name: Default
-----
Radio b/g/n (2.4GHz)
Channelization: 20
Radio Channel: 11
TX Power: Auto
WLAN Group Name: Default
-----
Management IP Address: DHCP
IP Address:
Netmask:
Gateway:
Primary DNS Server:
Secondary DNS Server:
-----
Mesh Status: Enabled
Mesh Mode: Auto (Mesh role is automatically assigned)
Uplink Selection: Smart (Mesh APs will automatically select the
best uplink)
=====
```

Show L2 Access Control List Commands

Use the `show 12acl` commands to display Layer 2 access control list rules that have been added to the controller.

show 12acl all

To display all Layer 2 access control list (ACL) rules that have been added to the controller and their settings, use the following command:

```
show 12acl all
```

Syntax	Description
show	Display information
12acl	Display L2 ACL information
all	All L2 ACL

Defaults	None.
----------	-------

Example

```
ruckus# show l2acl all
L2/MAC ACL:
  ID:
    1:
      Name= System
      Description= System
      Restriction: Deny only the stations listed below
      Stations:
    2:
      Name= blocked-sta-list
      Description=
      Restriction: Deny only the stations listed below
      Stations:
```

show l2acl name

To display the settings of a specific L2 ACL rule that has been added to the controller, use the following command:

```
show l2acl name {L2ACL-NAME}
```

Syntax Description

show	Display information
l2acl	Display L2 ACL information
name	Display information about the specified L2 ACL rule name
{L2ACL-NAME}	Name of the L2 ACL rule

Defaults

None.

Example

```
ruckus# show l2acl name 1
L2/MAC ACL:
  ID:
    2:
      Name= 1
      Description=
      Restriction: Deny only the stations listed below
      Stations:
        MAC Address= 00:33:22:45:34:88
```

Show L3 Access Control List Commands

Use the `show l3acl` commands to display Layer 3 access control list rules that have been added to the controller.

show l3acl all

To display all Layer 3 access control list (ACL) rules that have been added to the controller and their settings, use the following command:

```
show l3acl all
```

Syntax Description	<div><div>show</div><div>l3acl</div><div>all</div></div> <div><div>Display information</div><div>Display L3 ACL information</div><div>All L3 ACL</div></div>
--------------------	--

Destination Port= 25
Protocol= 6

show l3acl name

To display the settings of a specific L3 ACL rule that has been added to the controller, use the following command:

show l3acl name <l3_acl_name>

Syntax Description	show	Display information
	l3acl	Display L3 ACL information
	name	Display information about the specified L3 ACL rule name
	{L3 ACL rule name}	Name of the L3 ACL rule

Defaults
None.

Example

```
ruckus# show l3acl name test2
L3/L4/IP ACL:
ID:
  4:
    Name= test2
    Description= test2
    Default Action if no rule is matched= Allow all by default
Rules:
  Order= 1
    Description=
    Type= Allow
    Destination Address= Any
    Destination Port= 53
    Protocol= Any
  Order= 2
    Description=
    Type= Allow
    Destination Address= Any
    Destination Port= 67
    Protocol= Any
  Order= 3
    Description=
    Type= Allow
```

Destination Address= 8.8.8.8/24
Destination Port= 25
Protocol= 6

Show Hotspot Commands

Use the `show hotspot` commands to display the controller's hotspot configuration settings.

show hotspot all

To display a list of all hotspots that have been created on the controller, use the following command:

```
show hotspot all
```

Syntax Description		
	show	Display information
	hotspot	Display hotspot information
	all	All available hotspots

Defaults	None.
----------	-------

Example	<pre>ruckus# show hotspot all Hotspot: ID: 1: Name= New Name Login Page Url= myhotspot.com Start Page= redirect to the URL that the user intends to visit. Session Timeout= Disabled Idle Timeout= Disabled Authentication Server= Local Database Accounting Server= Disabled Location ID= Location Name= Walled Garden 1= Walled Garden 2= Walled Garden 3= Walled Garden 4= Walled Garden 5= IPv4 Rules: IPv6 Rules: ID: 2:</pre>
---------	--

```

Name= New name2
Login Page Url= myhotspot.com
Start Page= redirect to the URL that the user intends to visit.
Session Timeout= Disabled
Idle Timeout= Disabled
Authentication Server= Local Database
Accounting Server= Disabled
Location ID=
Location Name=
Walled Garden 1=
Walled Garden 2=
Walled Garden 3=
Walled Garden 4=
Walled Garden 5=
IPv4 Rules:
    Order= 1
    Description= 10.9.5.55
    Type= Deny
    Destination Address= Any
    Destination Port= Any
    Protocol= Any

```

```
IPv6 Rules:
```

show hotspot name

To display information about the specific hotspot, use the following command:

```
show hotspot name <hotspot_name>
```

If the hotspot name includes a space, you must put the name in quotation marks (for example, "hotspot name").

Syntax Description

show	Display information
hotspot name	Display hotspot information
<hotspot_name>	The name of the hotspot

Defaults

None.

Example

```

ruckus# show hotspot name "New name2"
Hotspot:
  ID:
    2:

```

```
Name= New name2
Login Page Url= myhotspot.com
Start Page= redirect to the URL that the user intends to visit.
Session Timeout= Disabled
Idle Timeout= Disabled
Authentication Server= Local Database
Accounting Server= Disabled
Location ID=
Location Name=
Walled Garden 1=
Walled Garden 2=
Walled Garden 3=
Walled Garden 4=
Walled Garden 5=
IPv4 Rules:
    Order= 1
    Description= 10.9.5.55
    Type= Deny
    Destination Address= Any
    Destination Port= Any
    Protocol= Any

IPv6 Rules:
```

Show Role Commands

Use the `show role` commands to display details about roles that have been created on the controller.

show role all

To display a list of all roles that have been created on the controller, use the following command:

```
show role all
```

Syntax	Description
show	Display information
role	Display role information
all	All roles that have been created
Defaults	None.

Example

```
ruckus# show role all
Role:
  ID:
    1:
      Name= Default
      Description= Allow Access to All WLANs
      Group Attributes=
      Guest Pass Generation= Allowed
      ZoneDirector Administration= Disallowed
      Allow All WLANs= Allow access to all WLANs.

ruckus# show role name Default
Role:
  ID:
    1:
      Name= Default
      Description= Allow Access to All WLANs
      Group Attributes=
      Guest Pass Generation= Allowed
      ZoneDirector Administration= Disallowed
      Allow All WLANs= Allow access to all WLANs.
```

show role name

To display information about the specific role, use the following command:

```
show role name <role_name>
```

Syntax Description

show	Display information
role	Display role information
<role_name>	The name of the role

Defaults

None.

Show User Commands

Use the `show user` commands to display details about user accounts that exist on the controller.

show user all

To display a list of all existing user accounts, use the following command:

```
show user all
```

Syntax Description		
	show	Display information
	user	Display user information
	all	All existing user accounts

Defaults None.

Example

```
ruckus# show user all
User:
  ID:
    1:
      User Name= test22
      Full Name= test11
      Password= test1234
      Role= Default
```

show user name

To display information about the specific user, use the following command:

```
show user name <user_name>
```

Syntax Description		
	show	Display information
	user	Display user information
	<user_name>	The name of the user

Defaults None.

Example

```
ruckus# show user name test22
User:
  ID:
    1:
```

```
User Name= test22
Full Name= test11
Password= test1234
Role= Default
```

Show Currently Active Clients Commands

Use the `show current-active-clients` commands to display a list of wireless clients that are associated with the APs that the controller manages.

show current-active-clients all

To display a list of all existing user accounts, use the following command:

```
show current-active-clients all
```

Syntax Description	show	Display information
	current-active-clients	Display currently active wireless clients
	all	All active wireless clients

Defaults	None.
----------	-------

Example	<pre>ruckus# show current-active-clients all Current Active Clients: Clients: Mac Address= 00:22:fb:5c:e2:32 User/IP= 172.18.30.2 User/IPv6= Access Point= 04:4f:aa:13:30:f0 BSSID= 04:4f:aa:13:30:fa Connect Since=2011/03/01 02:48:22 Auth Method= OPEN WLAN= 11jojoe VLAN= None Channel= 6 Radio= 802. Signal= 0 Status= Authorized Last 300 Events/Activities: Activity:</pre>
---------	--

```
Date/Time= 2011/03/01 02:49:05
Severity= Low
User=
Activities= User[00:22:fb:5c:e2:32] joins WLAN[11jojoe] from
AP[04:4f:aa:13:30:f0]
Activity:
Date/Time= 2011/03/01 02:48:22
Severity= Low
User=
Activities= User[00:22:fb:5c:e2:32] joins WLAN[11jojoe] from
AP[04:4f:aa:13:30:f0]
```

show current-active-clients

To display information about the specific active client, use the following command:

```
show current-active-clients name <client_mac>
```

Syntax Description	
show	Display information
current-active-clients name	Display currently active wireless clients
<client_mac>	The MAC address of the wireless client

Defaults	None.
----------	-------

Example	<pre>ruckus# show current-active-clients name 00:22:fb:5c:e2:32 Current Active Clients: Clients: Mac Address= 00:22:fb:5c:e2:32 User/IP= 172.18.30.2 User/IPv6= Access Point= 04:4f:aa:13:30:f0 BSSID= 04:4f:aa:13:30:fa Connect Since=2011/03/01 02:48:22 Auth Method= OPEN WLAN= 11jojoe VLAN= None Channel= 6 Radio= 802. Signal= 29 Status= Authorized Received from client= 32 pkts / 3233 bytes Transmitted to client= 283 pkts / 65010 bytes</pre>
---------	--

```
TX drops due to retry failure= 264 pkts
```

```
Last 300 Events/Activities:
  Activity:
    Date/Time= 2011/02/21 03:13:11
    Severity= Low
    User=
    Activities= User[00:22:fb:5c:e2:32] disconnects from
WLAN[joejo8] at AP[04:4f:aa:13:30:f0]
  Activity:
    Date/Time= 2011/02/21 03:12:54
    Severity= Low
    User=
    Activities= User[00:22:fb:5c:e2:32] joins WLAN[joejo8] from
AP[04:4f:aa:13:30:f0]
```

Show Mesh Commands

Use the show mesh commands to display the controller’s mesh network configuration and topology.

show mesh info

To display a list of all mesh networks that have been formed, use the following command:

```
show mesh info
```

Syntax Description	show	Display information
	mesh	Display mesh network information
	info	Show mesh information

Defaults	None.
----------	-------

Example	<pre>ruckus# show mesh info Mesh Settings: Mesh Status= Disabled Mesh Name(ESSID)= Mesh-137903000198 Mesh Passphrase= 6vAD_BDsbgkPkrxfuedshh38UGVSz-eyO71aEpcqJf3OC06vsbvZfUbp8aSi8PI Mesh Hop Detection= Disabled Mesh Downlinks Detection= Disabled Tx. Rate of Management Frame= 2Mbps</pre>
---------	---

Beacon Interval= 200ms

show mesh topology

To display the topology of existing mesh networks, use the following command:

show mesh topology

Syntax Description	show	Display information
	mesh	Display mesh network information
	topology	Show mesh topology

Defaults	None.
----------	-------

Example	<pre>ruckus# show mesh topology Mesh Topology(Mesh-137903000198):</pre>
---------	---

Show Dynamic PSK Commands

Use the show dynamic-psks commands to display information about Dynamic PSKs that have been generated. Use the following command:

show dynamic-psks

Syntax Description	show	Display information
	dynamic-psks	Display dynamic PSKs that have been generated

Defaults	None.
----------	-------

Example	<pre>ruckus# show dynamic-psks Generated Dynamic PSKs: DPSK: User= BatchDPSK_User_1 Mac Address= 00:00:00:00:00:00 Created= 2011/03/01 03:30:01 Expired= Unlimited DPSK: User= BatchDPSK_User_2 Mac Address= 00:00:00:00:00:00 Created= 2011/03/01 03:30:02 Expired= Unlimited</pre>
---------	--

DPSK:

```
User= DPSK-User-2
Mac Address= 00:11:22:33:44:55
Created= 2011/03/01 03:30:47
Expired= Unlimited
```

Show Dynamic Certificate Commands

Use the `show dynamic-certs` commands to display information about Dynamic certificates that have been generated. Use the following command:

```
show dynamic-certs
```

Syntax Description

<code>show</code>	Display information
<code>dynamic-psks</code>	Display dynamic certificates that have been generated

Defaults

None.

Example

```
ruckus# show dynamic-certs
Generated Dynamic Certs:
```

Show Guest Pass Commands

Use the `show guest-passes` commands to display information about guest passes that have been generated. Use the following command:

```
show guest-passes
```

Syntax Description

<code>show</code>	Display information
<code>guest-passes</code>	Display guest passes that have been generated

Defaults

None.

Example

```
ruckus# show guest-passes
Generated Guest Passes:
ID:
  Guest Name= ruckus1
  Remarks= testforCLI
  Expires= 2011/03/02 01:55:40
  Re-auth=
  Creator= test22
```

```
Sharable= No
Wlan= joejoe988
```

Show Rogue Device Commands

Use the `show rogue-devices` commands to display information about rogue devices that the controller has detected on the network. Use the following command:

```
show rogue-devices
```

Syntax Description	
show	Display information
rogue-devices	Display rogues devices that have been detected on the network

Defaults	None.
----------	-------

```
ruckus# show rogue-devices
Current Active Rogue Devices:
Rogue Devices:
  Mac Address= 00:25:c4:52:1c:a1
  Channel= 6
  Radio= 802.11bg
  Type= AP
  Encryption= Open
  SSID= V54-HOME001
  Last Detected= 2011/03/01 02:03:43

Known/Recognized Rogue Devices:
```

Show Events and Activities Commands

Use the `show events-activities` commands to display information events and network activities that have been recorded by the controller. Use the following command:

```
show events-activities
```

Syntax Description	
show	Display information
rogue-devices	Display a list of events and activities records by the controller

Defaults	None.
----------	-------

Example

```
ruckus# show events-activities
Last 300 Events/Activities:
  Activity:
    Date/Time= 2011/03/01 02:02:03
    Severity= High
    User=
    Activities= A new Rogue[04:4f:aa:42:b6:49] with SSID[W2] is
detected
  Activity:
    Date/Time= 2011/03/01 02:02:03
    Severity= High
    User=
    Activities= A new Rogue[ac:67:06:1b:df:29] with SSID[Martin-
Wireless-1] is detected
```

Show Alarm Commands

Use the `show alarm` commands to display alarms that have been generated by the controller. Use the following command:

```
show alarm
```

Syntax Description

<code>show</code>	Display information
<code>alarm</code>	Display a list of alarms that have been generated by the controller

Defaults

None.

Example

```
ruckus# show alarm
Last 300 Alarms:
  Alarms:
    Date/Time= 2011/03/01 02:05:43
    Name= Rogue AP Detected
    Severity= High
    Activities= A new Rogue[ac:67:06:33:28:99] with SSID[Ruckus-
Wireless-1] is detected
  Alarms:
    Date/Time= 2011/03/01 02:05:43
    Name= Rogue AP Detected
    Severity= High
    Activities= A new Rogue[00:24:82:25:6a:4e] with SSID[island-
256A40] is detected
```

Show License Commands

Use the `show license` commands to display the controller's license information, including the model number, the maximum number of APs that it can support, and the maximum number of wireless clients that managed APs can support. Use the following command:

```
show license
```

Syntax Description	show	Display information
	license	Display the controller's license information
Defaults	None.	
Example	<pre>ruckus# show license License: Model= ZD1006 Max AP Number= 6 Max Client Number= 1250</pre>	

Show System Configuration Commands

Use the `show config` commands to display the controller's system configuration settings.

show config

To display the current system configuration settings, including network addressing, management VLAN, country code, logging, AAA servers, WLAN services, WLAN groups, AP list, SNMP, and ACLs, use the following command:

```
show config
```

Syntax Description	show	Display information
	config	Display system configuration settings
Defaults	None.	
Example	<pre>ruckus# show config Mode: Manual IP Address: 192.168.122.1</pre>	

Netmask: 255.255.255.0
Gateway Address: 172.17.16.1
Primary DNS: 172.17.17.5
Secondary DNS: 192.168.0.107

Management VLAN

=====
Status: disabled
VLAN ID:

Country Code

=====
Country Code: United States

NTP

=====
Status: disabled
Address: 192.168.0.2

Log Settings

=====
Status: disabled
Address: 192.168.0.101

AAA Servers

=====
ID: 1
Name: Local Database
Type: local

ID: 2
Name: Guest Accounts
Type: guestpass

ID: 3
Name: Ruckus-Acct-01

Viewing Current Configuration

Show System Configuration Commands

```
Type: radius-acct
RADIUS Server IP Address: 192.168.0.123
RADIUS Server Port: 18130
RADIUS Server Shared Secret: vguvkpi345
-----
```

```
ID: 4
Name: Ruckus-Auth-01
Type: radius-auth
RADIUS Server IP Address: 192.168.0.123
RADIUS Server Port: 18120
RADIUS Server Shared Secret: testing123
-----
```

```
ID: 5
Name: Ruckus-Auth-02
Type: ad
Server IP Address: 192.168.0.3
Server Port: 18123
-----
```

```
WLAN Service
=====
ID: 1
Name: corporate
Description:
Authentication: open
Encryption: wpa
Algorithm: aes
Passphrase: test1234
Authentication Server: Disabled
Accounting Server: Disabled
Tunnel Mode: Disabled
Max Clients: 100
Web Authentication: Disabled
Client Isolation: Disabled
VLAN: Disabled
Closed System: Disabled (Broadcast SSID)
L2/MAC: No ACLS
L3/L4/IP address: No ACLS
-----
```

ID: 2
Name: guest
Description:
Authentication: open
Encryption: none
Authentication Server: Disabled
Accounting Server: Disabled
Tunnel Mode: Disabled
Max Clients: 100
Web Authentication: Disabled
Client Isolation: Enabled
VLAN: Disabled
Closed System: Disabled (Broadcast SSID)
L2/MAC: No ACLS

ID: 3
Name: lobby
Description:
Authentication: open
Encryption: wpa
Algorithm: aes
Passphrase: test1234
Authentication Server: Disabled
Accounting Server: Disabled
Tunnel Mode: Disabled
Max Clients: 100
Web Authentication: Disabled
Client Isolation: Disabled
VLAN: Disabled
Closed System: Disabled (Broadcast SSID)
L2/MAC: No ACLS
L3/L4/IP address: No ACLS

ID: 4
Name: kitchen
Description:
Authentication: open
Encryption: wpa
Algorithm: aes

Viewing Current Configuration

Show System Configuration Commands

```
Passphrase: test1234
Authentication Server: Disabled
Accounting Server: Disabled
Tunnel Mode: Disabled
Max Clients: 100
Web Authentication: Disabled
Client Isolation: Disabled
VLAN: Disabled
Closed System: Disabled (Broadcast SSID)
L2/MAC: No ACLS
L3/L4/IP address: No ACLS
-----
```

```
ID: 5
Name: randy-wlansvc-01
Description: Randall Tsao Test WLAN
Authentication: 802.1x-eap
Encryption: wpa
Algorithm: aes
Passphrase:
Authentication Server: Ruckus-Auth-01
Accounting Server: Ruckus-Acct-01 Interim-Update: 5
Tunnel Mode: Disabled
Max Clients: 100
Web Authentication: Enabled
Client Isolation: Enabled
VLAN: Enabled (ID=12)
Closed System: Enabled (Hide SSID)
L2/MAC: No ACLS
-----
```

WLAN Group List

```
=====
WLAN Group
=====
ID: 1
Name: Default
Has-VLAN: true
WLAN Service: randy-wlansvc-01 (VLAN=)
-----
```

```
AP List
=====
AP
=====
Name: 00:13:92:EA:43:01
ID: 1
MAC Address: 00:13:92:EA:43:01
Device Name: RuckusAP
Model: zf7962
Description: Warehouse NE
Location: Living Room
GPS Coordinates: 37.3881398,-122.0258633
-----
Radio a/n (5GHz)
Channelization: 20
Radio Channel: 149
TX Power: 0
WLAN Group Name: Default
-----
Radio b/g/n (2.4GHz)
Channelization: 20
Radio Channel: 11
TX Power: 0
WLAN Group Name: Default
-----
Management IP Address: DHCP
IP Address:
Netmask:
Gateway:
Primary DNS Server:
Secondary DNS Server:
=====

AP
=====
Name: 00:13:92:EA:43:04
ID: 2
MAC Address: 00:13:92:EA:43:04
```

```
Device Name: RuckusAP
Model: zf7962
Description: Warehouse NW
Location:
GPS Coordinates:
-----
Radio a/n (5GHz)
Channelization: 20
Radio Channel
```

Show System Information Commands

Use the `show sysinfo` commands to display the controller’s system information.

show sysinfo

To display an overview of the system status, including system, devices, usage summary, user activities, system activities, used access points, and support information, use the following command:

```
show sysinfo
```

Syntax Description	<code>show</code>	Display information
	<code>sysinfo</code>	Display an overview of various system statuses

Defaults	None.
----------	-------

```
ruckus# show sysinfo
System Overview
=====
System Name: airespider
IP Address: 192.168.0.1
MAC Address: 00:23:AE:8F:1C:0B
Uptime: 019d 14h 01m
Model: ZD3025
Licensed APs: 25
Serial Number: SN-cygwin
Version: 8.2.0.0 build 1111

Devices Overview
=====
# of APs: 5
```


of Client Devices: 73
of Rogue Devices: 5

Usage Summary

=====

1 hr

Max Concurrent Users: 73

Bytes Transmitted: 15

of Rogue Devices: 5

24 hr

Max Concurrent Users: 103

Bytes Transmitted: 148

of Rogue Devices: 0

User Activities

=====

Date/Time	Severity	User Activities
-----------	----------	-----------------

System Activities

=====

Date/Time	Severity	Activities
-----------	----------	------------

2009/10/29 19:01:52	High	A new Rogue[00:1E:2D:55:FF:20] with SSID[unknown] is detected
---------------------	------	---

2009/10/29 19:01:51	High	A new Rogue[00:1E:2D:55:FF:19] with SSID[unknown] is detected
---------------------	------	---

2009/10/29 19:01:50	High	A new Rogue[00:1E:2D:55:FF:18] with SSID[unknown] is detected
---------------------	------	---

2009/10/29 19:01:49	Low	WLAN[corporate] with BSSID[00:1F:41:22:C2:D9] configuration has been updated on radio [11g/n] of AP[Warehouse NW@00:13:92:EA:43:04]
---------------------	-----	---

2009/10/29 19:01:47	High	A new Rogue[00:1E:2D:55:FF:88] with SSID[data] is detected
---------------------	------	--

2009/10/29 19:01:46	Low	WLAN[corporate] with BSSID[00:24:82:22:52:A9] configuration has been updated on radio [11g/n] of AP[Warehouse NE@00:13:92:EA:43:01]
---------------------	-----	---

2009/10/29 19:01:45	High	A new Rogue[00:13:92:EA:43:01] with SSID[unknown] is detected
---------------------	------	---

2009/10/29 19:01:44	High	AP[Warehouse SE@00:13:92:EA:43:07] fails to join
---------------------	------	--

2009/10/29 19:01:43	Low	AP[Warehouse NE@00:13:92:EA:43:04] joins
---------------------	-----	--

```
2009/10/29 19:01:42      Low  AP[Warehouse NE@00:13:92:EA:43:01]
joins
2009/10/29 19:01:41      Low  System restarted
```

Used Access Points

MAC Address	IP Address	Description	Model	Clients
00:13:92:EA:43:01	10.1.0.10	Warehouse NE	zf7962	31
00:13:92:EA:43:07	10.1.0.12	Warehouse SE	zf7962	21
00:13:92:EA:43:04	10.1.0.11	Warehouse NW	zf7962	8
00:13:92:EA:43:0D	10.1.0.14	AP5	zf2741	6
00:13:92:EA:43:0A	10.1.0.13	Warehouse SW	zf7942	0

Support

=====
Company: Ruckus Wireless
Email: support@ruckuswireless.com
Support Website: http://support.ruckuswireless.com/

Show Technical Support Commands

Use the following commands to display information that Ruckus Wireless may need when providing technical support.

show techsupport

To display system information required by Technical Support, use the following command:

```
show techsupport
```

Syntax	Description
show	Display information
techsupport	Display information about the controller that may be required by Ruckus Wireless Technical Support

Defaults	None.
----------	-------

Example	<pre>ruckus# show techsupport System Overview ===== System Name: airespider</pre>
---------	---

IP Address: 192.168.0.1
MAC Address: 00:23:AE:8F:1C:0B
Uptime: 019d 14h 01m
Model: ZD3025
Licensed APs: 25
Serial Number: SN-cygwin
Version: 8.2.0.0 build 1111

Devices Overview

=====

of APs: 5
of Client Devices: 73
of Rogue Devices: 5

Usage Summary

=====

1 hr
Max Concurrent Users: 73
Bytes Transmitted: 38
of Rogue Devices: 5

24 hr
Max Concurrent Users: 103
Bytes Transmitted: 69
of Rogue Devices: 0

User Activities

=====

Date/Time	Severity	User Activities
-----------	----------	-----------------

System Activities

=====

Date/Time	Severity	Activities
-----------	----------	------------

2009/10/29 19:01:52	High	A new Rogue[00:1E:2D:55:FF:20] with SSID[unknown] is detected
2009/10/29 19:01:51	High	A new Rogue[00:1E:2D:55:FF:19] with SSID[unknown] is detected
2009/10/29 19:01:50	High	A new Rogue[00:1E:2D:55:FF:18] with SSID[unknown] is detected

Viewing Current Configuration
Show Technical Support Commands

```
2009/10/29 19:01:49      Low   WLAN[corporate] with
BSSID[00:1F:41:22:C2:D9] configuration has been updated on radio
[11g/n] of AP[Warehouse NW@00:13:92:EA:43:04]
2009/10/29 19:01:47      High   A new Rogue[00:1E:2D:55:FF:88] with
SSID[data] is detected
2009/10/29 19:01:46      Low   WLAN[corporate] with
BSSID[00:24:82:22:52:A9] configuration has been updated on radio
[11g/n] of AP[Warehouse NE@00:13:92:EA:43:01]
2009/10/29 19:01:45      High   A new Rogue[00:13:92:EA:43:01] with
SSID[unknown] is detected
2009/10/29 19:01:44      High   AP[Warehouse SE@00:13:92:EA:43:07]
fails to join
2009/10/29 19:01:43      Low   AP[Warehouse NE@00:13:92:EA:43:04]
joins
2009/10/29 19:01:42      Low   AP[Warehouse NE@00:13:92:EA:43:01]
joins
2009/10/29 19:01:41      Low   System restarted
```

Used Access Points

```
=====
      MAC Address      IP Address      Description  Model  Clients
-----
00:13:92:EA:43:01      10.1.0.10      Warehouse NE  zf7962  31
00:13:92:EA:43:07      10.1.0.12      Warehouse SE  zf7962  21
00:13:92:EA:43:04      10.1.0.11      Warehouse NW  zf7962   8
00:13:92:EA:43:0D      10.1.0.14              AP5  zf2741   6
00:13:92:EA:43:0A      10.1.0.13      Warehouse SW  zf7942   0
```

Support

```
=====
Company: Ruckus Wireless
Email: support@ruckuswireless.com
Support Website: http://support.ruckuswireless.com/
```

Mode: Manual

```
IP Address: 192.168.122.1
Netmask: 255.255.255.0
Gateway Address: 172.17.16.1
Primary DNS: 172.17.17.5
Secondary DNS: 192.168.0.107
```

Management VLAN

```
=====
```

Status: disabled
VLAN ID:

Country Code
=====
Country Code: United States

NTP
=====
Status: disabled
Address: 192.168.0.2

Log Settings
=====
Status: disabled
Address: 192.168.0.101

AAA Servers
=====
ID: 1
Name: Local Database
Type: local

ID: 2
Name: Guest Accounts
Type: guestpass

ID: 3
Name: Ruckus-Acct-01
Type: radius-acct
RADIUS Server IP Address: 192.168.0.123
RADIUS Server Port: 18130
RADIUS Server Shared Secret: vguvkpi345

ID: 4
Name: Ruckus-Auth-01

Viewing Current Configuration
Show Technical Support Commands

```
Type: radius-auth
RADIUS Server IP Address: 192.168.0.123
RADIUS Server Port: 18120
RADIUS Server Shared Secret: testing123
-----
```

```
ID: 5
Name: Ruckus-Auth-02
Type: ad
Server IP Address: 192.168.0.3
Server Port: 18123
-----
```

```
WLAN Service
=====
ID: 1
Name: corporate
Description:
Authentication: open
Encryption: wpa
Algorithm: aes
Passphrase: test1234
Authentication Server: Disabled
Accounting Server: Disabled
Tunnel Mode: Disabled
Max Clients: 100
Web Authentication: Disabled
Client Isolation: Disabled
VLAN: Disabled
Closed System: Disabled (Broadcast SSID)
L2/MAC: No ACLS
L3/L4/IP address: No ACLS
-----
```

```
ID: 2
Name: guest
Description:
Authentication: open
Encryption: none
Authentication Server: Disabled
```

Accounting Server: Disabled
Tunnel Mode: Disabled
Max Clients: 100
Web Authentication: Disabled
Client Isolation: Enabled
VLAN: Disabled
Closed System: Disabled (Broadca

Show WLAN Commands

Use the following commands to display information about available WLANs on the controller.

show wlan all

To display all available WLAN services (SSIDs), use the following command:

```
show wlan all
```

Syntax	Description
show	Display information
wlan	Display WLAN services (SSIDs) settings
all	All available WLANs/SSIDs

show	Display information
wlan	Display WLAN services (SSIDs) settings
all	All available WLANs/SSIDs

Defaults

None.

Example

```
ruckus# show wlan all

WLAN Service
=====
ID: 1
Name: corporate
Description:
Authentication: open
Encryption: wpa
Algorithm: aes
Passphrase: test1234
Authentication Server: Disabled
Accounting Server: Disabled
Tunnel Mode: Disabled
Max Clients: 100
Web Authentication: Disabled
Client Isolation: Disabled
VLAN: Disabled
Closed System: Disabled (Broadcast SSID)
L2/MAC: No ACLS
L3/L4/IP address: No ACLS
-----

ID: 2
Name: guest
```


Description:
Authentication: open
Encryption: none
Authentication Server: Disabled
Accounting Server: Disabled
Tunnel Mode: Disabled
Max Clients: 100
Web Authentication: Disabled
Client Isolation: Enabled
VLAN: Disabled
Closed System: Disabled (Broadcast SSID)
L2/MAC: No ACLS

ID: 3
Name: lobby
Description:
Authentication: open
Encryption: wpa
Algorithm: aes
Passphrase: test1234
Authentication Server: Disabled
Accounting Server: Disabled
Tunnel Mode: Disabled
Max Clients: 100
Web Authentication: Disabled
Client Isolation: Disabled
VLAN: Disabled
Closed System: Disabled (Broadcast SSID)
L2/MAC: No ACLS
L3/L4/IP address: No ACLS

ID: 4
Name: kitchen
Description:
Authentication: open
Encryption: wpa
Algorithm: aes
Passphrase: test1234
Authentication Server: Disabled
Accounting Server: Disabled

```
Tunnel Mode: Disabled
Max Clients: 100
Web Authentication: Disabled
Client Isolation: Disabled
VLAN: Disabled
Closed System: Disabled (Broadcast SSID)
L2/MAC: No ACLS
L3/L4/IP address: No ACLS
-----

ID: 5
Name: randy-wlansvc-01
Description: Randall Tsao Test WLAN
Authentication: 802.1x-eap
Encryption: wpa
Algorithm: aes
Passphrase:
Authentication Server: Ruckus-Auth-01
Accounting Server: Ruckus-Acct-01 Interim-Update: 5
Tunnel Mode: Disabled
Max Clients: 100
Web Authentication: Enabled
Client Isolation: Enabled
VLAN: Enabled (ID=12)
Closed System: Enabled (Hide SSID)
L2/MAC: No ACLS
-----
```

show wlan name

To display information about the specified WLAN service (SSID), use the following command:

```
show wlan name {WLAN name}
```

Syntax Description	show	Display information
	wlan name	Display information about the specified WLAN name
	{WLAN name}	The name of the WLAN
Defaults	None.	
Example	ruckus# show wlan name corporate	

```
ID: 1
Name: corporate
Description:
Authentication: open
Encryption: wpa
Algorithm: aes
Passphrase: test1234
Authentication Server: Disabled
Accounting Server: Disabled
Tunnel Mode: Disabled
Max Clients: 100
Web Authentication: Disabled
Client Isolation: Disabled
VLAN: Disabled
Closed System: Disabled (Broadcast SSID)
L2/MAC: No ACLS
L3/L4/IP address: No ACLS
-----
```

show wlan name stations

To display a list of wireless stations associated with the specified WLAN service, use the following command:

```
show wlan name {WLAN name} stations
```

Syntax Description

show	Display information
wlan name	Display information about the specified WLAN name
{WLAN name}	The name of the WLAN
stations	Display stations associated with the WLAN

Defaults

None.

Example

```
ruckus# show wlan name corporate station
Clients
=====
MAC Address: 00:10:77:01:00:01
User/IP Address: jyang
Access Point: 00:13:92:EA:43:01
WLAN: corporate
Channel: 64
Signal (%): 11
```

Viewing Current Configuration

Show WLAN Commands

```
-----  
MAC Address: 00:10:77:01:00:02  
User/IP Address: bob  
Access Point: 00:13:92:EA:43:01  
WLAN: corporate  
Channel: 60  
Signal (%): 26  
-----
```

```
MAC Address: 00:D4:05:01:03:03  
User/IP Address: user0001  
Access Point: 00:13:92:EA:43:01  
WLAN: corporate  
Channel: 48  
Signal (%): 42  
-----
```

```
MAC Address: 00:10:77:01:00:01  
User/IP Address: jyang  
Access Point: 00:13:92:EA:43:01  
WLAN: corporate  
Channel: 11  
Signal (%): 22  
-----
```

```
MAC Address: 00:10:77:01:00:02  
User/IP Address: bob  
Access Point: 00:13:92:EA:43:01  
WLAN: corporate  
Channel: 1  
Signal (%): 40  
-----
```

```
MAC Address: 00:C9:21:01:01:03  
User/IP Address: user0002  
Access Point: 00:13:92:EA:43:01  
WLAN: corporate  
Channel: 1  
Signal (%): 33  
-----
```

```
MAC Address: 00:0D:E5:01:01:04  
User/IP Address: user0003  
Access Point: 00:13:92:EA:43:01  
WLAN: corporate  
Channel: 1  
Signal (%): 18
```

```
-----
MAC Address: 00:C2:7D:01:01:05
User/IP Address: user0004
Access Point: 00:13:92:EA:43:01
WLAN: corporate
Channel: 6
Signal (%): 32
-----

MAC Address: 00:F5:35:02:03:01
User/IP Address: user0005
Access Point: 00:13:92:EA:43:04
WLAN: corporate
Channel: 52
Signal (%): 22
-----

MAC Address: 00:75:28:03:03:01
User/IP Address: user0006
Access Point: 00:13:92:EA:43:07
WLAN: corporate
Channel: 52
Signal (%): 34
-----
```

Show WLAN Group Commands

Use the following commands to display information about the WLAN groups that exist on the controller.

show wlan-group all

To display a list of existing WLAN groups, use the following command:

```
show wlan-group all
```

Syntax Description	show	Display information
	wlan-group	Display information about the specified WLAN group
	all	Show all WLAN groups
Defaults	None.	
Example	ruckus# show wlan-group all WLAN Group List	

```
=====
WLAN Group
=====
ID: 1
Name: Default
Has-VLAN: true
WLAN Service: randy-wlansvc-01 (VLAN=)
-----
```

show wlan-group name

To display information about the specified WLAN group name, use the following command:

```
show wlan-group name {WLAN group name}
```

Syntax Description

show	Display information
wlan-group name	Display information about the specified WLAN group name
{WLAN group name}	The name of the WLAN group

Defaults

None.

Example

```
ruckus# show wlan-group name Default
WLAN Group
=====
ID: 1
Name: Default
Has-VLAN: true
WLAN Service: randy-wlansvc-01 (VLAN=)
-----
```

Configuring Controller Settings

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Configuration Commands Overview

This chapter describes the commands that you can use to configure the different settings on the controller. Commands are divided into sections, including:

- [Configure AAA Server Settings](#)
- [Configure Administration Preferences](#)
- [Configure Device's System Information](#)

Configure AAA Server Settings

The `config aaa` context contains commands for configure the AAA server settings. AAA server settings are classified into the following command types:

- [Configure AAA Server Type Commands](#)
- [Configure AAA Network Addressing Commands](#)
- [Configure AAA RADIUS Commands](#)

Configure AAA Server Type Commands

Use the `aaa-type` commands to set the type of AAA server that is used by the controller for authentication purposes.

type ad

To set the AAA server type to *Active Directory*, use the following command:

```
type ad
```

Syntax Description	<pre>type ad</pre> Set the AAA server type to ActiveDirectory
Defaults	None.
Example	<pre>ruckus# config aaa Ruckus-Auth-02</pre> <p>The AAA server 'Ruckus-Auth-02' has been updated. To save the AAA server, type end or exit.</p> <pre>ruckus(config-aaa-Ruckus-Auth-02)# type ad</pre> <p>The command was executed successfully.</p>

type ldap

To set the AAA server type to 'LDAP', use the following command:

```
type ldap
```


Syntax Description	<table><tr><td>type ldap</td><td>Set the AAA server type to LDAP</td></tr></table>	type ldap	Set the AAA server type to LDAP
type ldap	Set the AAA server type to LDAP		
Defaults	None.		
Example	<pre>ruckus# config ruckus(config)# aaa Ruckus-Auth-02 The AAA server 'Ruckus-Auth-02' has been updated. To save the AAA server, type end or exit. ruckus(config-aaa-Ruckus-Auth-02)# type ldap The command was executed successfully.</pre> <p>type radius</p> <p>To set the AAA server type to 'RADIUS', use the following command</p> <pre>type radius</pre>		
Syntax Description	<table><tr><td>type radius</td><td>Set the AAA server type to RADIUS</td></tr></table>	type radius	Set the AAA server type to RADIUS
type radius	Set the AAA server type to RADIUS		
Defaults	None.		
Example	<pre>ruckus# config ruckus(config)# aaa Ruckus-Auth-02 The AAA server 'Ruckus-Auth-02' has been updated. To save the AAA server, type end or exit. ruckus(config-aaa-Ruckus-Auth-02)# type radius The command was executed successfully.</pre> <p>type radius-acct</p> <p>To set the AAA server type to 'RADIUS Accounting', use the following command:</p> <pre>type radius-acct</pre>		
Syntax Description	<table><tr><td>type radius-acct</td><td>Set the AAA server type to RADIUS Accounting</td></tr></table>	type radius-acct	Set the AAA server type to RADIUS Accounting
type radius-acct	Set the AAA server type to RADIUS Accounting		
Defaults	None.		
Example	<pre>ruckus# config</pre>		

```
ruckus(config)# aaa Ruckus-Auth-02
The AAA server 'Ruckus-Auth-02' has been updated. To save the AAA
server, type end or exit.

ruckus(config-aaa-Ruckus-Auth-02)# type radius-acct
The command was executed successfully.
```

Configure AAA Network Addressing Commands

Use the `ip-addr` commands to set the network address settings of AAA servers that the controller is using.

ip-addr

To set the AAA server's IP address, use the following command:

```
ip-addr {IP address}
```

Syntax Description	
<code>ip-addr</code>	Set the AAA server IP address
<code>{IP address}</code>	Set to this IP address

Defaults None.

Example

```
ruckus# config
ruckus(config)# aaa Ruckus-Auth-02
The AAA server 'Ruckus-Auth-02' has been updated. To save the AAA
server, type end or exit.

ruckus(config-aaa-Ruckus-Auth-02)# ip-addr 192.168.0.2
The command was executed successfully.
```

ip-addr port

To set the AAA server's IP address and port number, use the following command:

```
ip-addr {IP address} port {port number}
```

Syntax Description	
<code>ip-addr {IP address}</code>	Set the AAA server IP address to this IP address
<code>port {port number}</code>	Set the AAA server to this port number to this port

Defaults None.

Example

```
ruckus# config
ruckus(config)# aaa Ruckus-Auth-02
```

The AAA server 'Ruckus-Auth-02' has been updated. To save the AAA server, type end or exit.

```
ruckus(config-aaa-Ruckus-Auth-02)# ip-addr 192.168.0.2 port 1812
```

The command was executed successfully.

Configure AAA RADIUS Commands

Use the radius commands to configure additional RADIUS server settings.

radius-secret

To set the AAA server's shared secret, use the following command:

```
radius-secret {RADIUS secret}
```

Syntax Description	
radius-secret	RADIUS server secret
{RADIUS secret}	Set the RADIUS server secret to this secret

Defaults None.

Example

```
ruckus# config
ruckus(config)# aaa Ruckus-Auth-02
```

The AAA server 'Ruckus-Auth-02' has been updated. To save the AAA server, type end or exit.

```
ruckus(config-aaa-Ruckus-Auth-02)# type radius
```

The command was executed successfully.

```
ruckus(config-aaa-Ruckus-Auth-02)# radius-secret testing123
```

The command was executed successfully.

Miscellaneous AAA Commands

This section lists miscellaneous AAA commands.

domain-name

To set the Windows/Base domain name, use the following command:

```
domain-name <domain_name>
```

Syntax Description	domain-name	Configure the Windows/Base domain name
	<domain_name>	Set the Windows/Base domain name to this domain name
Defaults	None.	
Example	<pre>ruckus(config-aaa)# domain-name company.com</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>	

no ad-global-catalog

To disable Global Catalog support, use the following command:

```
no ad-global-catalog
```

Syntax Description	no ad-global-catalog	Disable Global Catalog support
Defaults	None.	
Example	<pre>ruckus(config-aaa)# no ad-global-catalog</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>	

ad-global-catalog

To enable Global Catalog support, use the following command:

```
ad-global-catalog
```

Syntax Description	ad-global-catalog	Enable Global Catalog support
Defaults	None.	

Example

```
ruckus(config-aaa)# ad-global-catalog
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

admin-dn

To set the admin domain name, use the following command:

```
admin-dn <admin_dn_name>
```

Syntax Description

admin-dn	Set the admin domain name
<admin_dn_name>	Set to this domain name

Defaults

None.

Example

```
ruckus(config-aaa)# admin-dn domain_of_admin
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

admin-password

To set the admin password, use the following command:

```
admin-password <admin_password>
```

Syntax Description

admin-password	Set the admin password
<admin_password>	Set to this password

Defaults

None.

Example

```
ruckus(config-aaa)# admin-password test1234
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

key-attribute

To set the LDAP key attribute, use the following command:

```
key-attribute <attribute>
```

Syntax Description

key-attribute	Set the LDAP key attribute
<attribute>	Set to this attribute

Defaults	None.
Example	<pre>ruckus(config-aaa)# key-attribute mycompany</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>

search-filter

To set the LDAP search filter, use the following command:

```
search-filter <filter_name>
```

Syntax Description	search-filter	Set the LDAP search filter
	<filter_name>	Set to this filter

Defaults	None.
Example	<pre>ruckus(config-aaa)# search-filter stringofsearch</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>

Configure Administration Preferences

The config admin context contains commands for configuring and viewing administrator login and authentication settings.

- [Configure Admin Login Commands](#)
- [Configure Admin Authentication Commands](#)
- [Display Administrator Account Settings](#)

Configure Admin Login Commands

Use the admin-name commands to set the admin user name and password.

name

To set the administrator user name, use the following command:

```
name {admin name}
```

Syntax Description	name	Configure the admin name setting
	{admin name}	Set the admin name to this name

Defaults	admin
Example	<pre>ruckus(config)# admin ruckus(config-admin)# name admin The command was executed successfully.</pre>

name password

To set the admin name and password at the same time, use the following command:

```
name {admin name} password {password}
```

Syntax Description	name	Configure the admin name setting
	{admin name}	Set the admin name to this name
	password	Configure the admin password
	{password}	Set the admin password to this password

Defaults	admin
Example	<pre>ruckus(config)# admin ruckus(config-admin)# name admin password admin The command was executed successfully.</pre>

Configure Admin Authentication Commands

Use the `auth-server` commands to set the administrator authentication options with an external authentication server.

no auth-server

To disable administrator authentication with a remote server, use the following command:

```
no auth-server
```

Syntax Description	no auth-server	Disable admin authentication with an external server
Defaults	None.	
Example	<pre>ruckus(config-admin)# no auth-server The command was executed successfully.</pre>	

auth-server

To enable administrator authentication with a remote server and set the authentication server, use the following command:

```
auth-server {server name}
```

Syntax Description

auth-server	Admin authentication with an external server
{server name}	Set the authentication server to this server

Defaults

None.

Example

```
ruckus(config-admin)# auth-server s  
The AAA server 's' could not be found. Please check the spelling,  
and then try again.  
Invalid command  
  
ruckus(config-admin)# auth-server Ruckus-Auth-02  
The command was executed successfully.
```

auth-server with fallback

To enable fallback authentication (for use when the remote server is unavailable), use the following command:

```
auth-server with fallback
```

Syntax Description

auth-server	Admin authentication with an external server
{server name}	Set the auth-server to this server
with fallback	Enable fallback authentication if the remote authentication server is unavailable

Defaults

None.

Example

```
ruckus(config-admin)# auth-server Ruckus-Auth-02 with fallback  
The command was executed successfully.
```


Display Administrator Account Settings

Use the `admin show` command to display the administrator account settings.

admin show

To display the current admin user name and password, use the following command:

```
admin show
```

Syntax Description	admin	Admin setting
	show	Show current administrator settings

Defaults	None.
----------	-------

Example	<pre>ruckus(config-admin)# show Administrator Info ===== Admin Name: admin Password: admin x-Password: benjo Auth Mode: Authenticate using the admin user name and password</pre>
---------	--

Configure Device's System Information

Use the `ap` commands to configure the device's system information, including the device name, description, and location.

ap

Setting the device's system information requires that first enter the `config-ap` context. To enter the `config-ap` context, enter the following command:

```
ap {MAC address}
```

Syntax Description	ap	Access point
	{MAC address}	MAC address of the access point for configuration

Defaults	None.
----------	-------

Example	<p>To configure the device with the specified MAC address, run this command:</p> <pre>ruckus# conf ap 00:13:92:00:33:1C</pre>
---------	---

devname

To set the device name, use the following command:

```
devname {device name}
```

Syntax Description	devname	Device name
	{device name}	Set the device name to this name
Defaults	None.	
Example	<pre>ruckus# conf ap 00:13:92:00:33:1C</pre> <pre>ruckus(config-ap-00:13:92:00:33:1C)# devname Ruckus-AP-1C</pre> <p>The command was executed successfully.</p>	

description

To set the device description, use the following command:

```
description {description}
```

Syntax Description	description	Device description
	{description}	Set the device description to this text
Defaults	None.	
Example	<pre>ruckus# config</pre> <pre>ruckus(config)# ap 00:13:92:00:33:1C</pre> <pre>ruckus(config-ap-00:13:92:00:33:1C)# description this-is-the-</pre> <pre>device-description</pre> <p>The command was executed successfully.</p>	

location

To set the device location, use the following command:

```
location {location}
```

Syntax Description	location	Device location
	{location}	Set the device location to this address

Defaults

None.

Example

To set the device location to *Sunnyvale-Office*, run this command:

```
ruckus# config
```

```
ruckus(config)# ap 00:13:92:00:33:1C
```

```
ruckus(config-ap-00:13:92:00:33:1C)# location Sunnyvale-Office
```

The command was executed successfully.

Configure Device Policy Commands

Use the `ap-policy` commands to configure the device's radio, heater, LED, and port state settings. To run these commands, you must first enter the `config-ap-policy` context.

For example, to configure a ZoneFlex 7762 AP, enter the following command:

```
ruckus(config-ap-policy) # ap-model zf7762
ruckus(config-ap-model) #
```

show

To display the current device policy, use the following command:

```
show
```

Syntax Description	<div>show</div> <div>Display the current device policy</div>
Defaults	None.
Example	<pre>ruckus(config-ap-policy) # show AP Policy: Automatically approve all join requests from APs= Disabled Limited ZD Discovery= Enabled Primary ZoneDirector IP= 172.18.30.12 Secondary ZoneDirector IP= 172.18.30.28 Management VLAN Mode= Enabled VLAN ID= 60</pre>
<h2>limited-zd-discovery zd-ip</h2> <p>To configure devices to connect to a specific ZoneDirector and to set the primary and secondary ZoneDirector's IP addresses, use the following command:</p> <pre>limited-zd-discovery zd-ip [<primary_ip_addr> <secondary_ip_addr>]</pre>	
Syntax Description	<div>limited-zd-</div> <div>discovery zd-ip</div> <div><primary_ip_addr> IP address of the primary ZoneDirector</div> <div><secondary_ip_addr> IP address of the secondary ZoneDirector</div> <div>r></div>
Defaults	None.

ap-max-clients

To set the maximum number of wireless clients that can associate with each device, use the following command:

```
ap-max-clients {NUMBER}
```

Syntax Description	ap-max-clients	Set the maximum number of clients per AP
	{NUMBER}	Set to this number
Defaults	None.	
Example	<pre>ruckus(config-ap-policy)# ap-max-clients 99</pre> <p>The Max clients of AP management has been updated.</p>	

ap-radio 2.4 tx-power [Auto | Full|1/2|1/4|1/8|Min]

To set the TX power of the device's 2.4GHz radio, use the following command:

```
ap-radio 2.4 tx-power [Auto | Full|1/2|1/4|1/8|Min]
```

Syntax Description	ap-radio 2.4 tx- power	Set the TX power of the 2.4GHz radio
	[Auto Full 1/2 1/ 4 1/8 Min]	Set to this value
Defaults	None.	
Example	<pre>ruckus(config-ap-policy)# ap-radio 2.4 tx-power 1/4</pre> <p>The command was executed successfully.</p>	

ap-radio 2.4 11n-only [Auto | N-only]

To set the 11n mode of the 2.4GHz radio, use the following command:

```
ap-radio 2.4 11n-only [Auto|N-only]
```

Syntax Description	ap-radio 2.4 11n- only	Set the 802.11n mode of 2.4GHz radio
	Auto	Set to auto mode
	N-only	Set to 11n only mode

Defaults None.

Example `ruckus(config-ap-policy)# ap-radio 2.4 11n-only Auto`
The command was executed successfully.

ap-radio 5 tx-power

To set the TX power of the 5GHz radio, use the following command:

```
ap-radio 5 tx-power [Auto | Full|1/2|1/4|1/8|Min]
```

Syntax Description

ap-radio 5 tx-power	Set the TX power of the 5GHz radio
[Auto Full 1/2 1/4 1/8 Min]	Set to this value

Defaults None.

Example `ruckus(config-ap-policy)# ap-radio 5 tx-power 1/4`
The command was executed successfully.

ap-radio 5 11n-only

To set the 11n mode of the 5GHz radio, use the following command:

```
ap-radio 5 11n-only [Auto|N-only]
```

Syntax Description

ap-radio 5 11n-only	Set the 802.11n mode of 5GHz radio
Auto	Set to auto mode
N-only	Set to 11n only mode

Defaults None.

Example `ruckus(config-ap-policy)# ap-radio 5 11n-only N-only`
The command was executed successfully.

ap-internal-heater

To enable the internal heater on ZoneFlex 7762 devices, use the following command:

```
ap-internal-heater
```

Syntax Description	ap-internal-heater	Enable the internal heater on ZoneFlex 7762 devices
Defaults	None.	
Example	ruckus(config-ap-policy)# ap-internal-heater The command was executed successfully.	

ap-poe-port

To enable the PoE-Out port on ZoneFlex 7762 devices, use the following command:

```
ap-poe-port
```

Syntax Description	ap-poe-port	Enable the PoE-OUT port on ZoneFlex 7762 devices
Defaults	None.	
Example	ruckus(config-ap-policy)# ap-poe-port The command was executed successfully.	

led

To enable the Status LED on ZF 7343/7363/ZF7341/ZF 7762/7762-S/7762-T devices, use the following command:

```
led [ all | zf7343/7363/7341 |zf7762/7762-s/7762-t]
```

Syntax Description	led	Enable the Status LED
	[all zf7343/7363/7341 zf7762/7762-s/7762-t]	Enable on these devices
Defaults	None.	
Example	ruckus(config-ap-policy)# led zf7343/7363/7341	

The command was executed successfully.

ap-management-vlan

To enable and configure the device policy management VLAN, use the following command:

```
ap-management-vlan {NUMBER}
```

Syntax Description	ap-management-vlan	Enable and configure the device policy management VLAN
	{NUMBER}	Set the management VLAN ID to this

Defaults None.

Example

```
ruckus(config-ap-policy)# ap-management-vlan 60
```

The command was executed successfully.

no ap-management-vlan

To disable the device policy management VLAN, use the following command:

```
no ap-management-vlan
```

Syntax Description	no ap-management-vlan	Disable the device policy management VLAN
--------------------	-----------------------	---

Defaults None.

ap-auto-approve

To enable the automatic approval of join requests from devices, use the following command:

```
ap-auto-approve
```

Syntax Description	ap-auto-approve	Enable the automatic approval of join requests from devices
--------------------	-----------------	---

Defaults None.

Example

```
ruckus(config-ap-policy)# ap-auto-approve
```

The AP automatically approve policy has been updated.

no ap-auto-approve

To disable the automatic approval of join requests from devices, use the following command:

```
no ap-auto-approve
```

Syntax Description

no ap-auto-approve	Disable the automatic approval of join requests from devices
--------------------	--

Defaults

None.

limited-zd-discovery

To specify the ZoneDirectors that devices can join, use the following command:

```
limited-zd-discovery zd-ip [<primary_ip_addr> |  
<secondary_ip_addr>]
```

Syntax Description

limited-zd-discovery zd-ip	Specify the ZoneDirectors that devices can join
<primary_ip_addr>	IP address of the primary ZoneDirector
<secondary_ip_addr>	IP address of the secondary ZoneDirector

Defaults

None.

Example

```
ruckus(config-ap-policy)#limited-zd-discovery zd-ip  
172.18.30.12 172.18.30.28
```

The Limited ZoneDirector discovery function has been updated.

no limited-zd-discovery

To allow devices to join any available ZoneDirector devices on the network, use the following command:

```
no limited-zd-discovery
```

Syntax Description

no limited-zd-discovery	Allow devices to join any available ZoneDirector devices on the network
-------------------------	---

Defaults

None.

no ap-internal-heater

To disable the internal heater on ZoneFlex 7762 devices, use the following command:

```
no ap-internal-heater
```

Syntax Description	
no ap-internal-heater	Disable the internal heater on ZoneFlex 7762 devices

Defaults
None.

no ap-poe-port

To disable the PoE-Out port on ZoneFlex 7762 devices, use the following command:

```
no ap-poe-port
```

Syntax Description	
no ap-poe-port	Disable the PoE-OUT port on ZoneFlex 7762 devices

Defaults
None.

no led

To disable the Status LED on ZF 7343/7363/ZF7341/ZF 7762/7762-S/7762-T devices, use the following command:

```
no led [ all | zf7343/7363/7341 | zf7762/7762-s/7762-t]
```

Syntax Description	
no led	Disable the Status LED
[all zf7343/7363/7341 zf7762/7762-s/7762-t]	Disable on these devices

Defaults
None.

ap_model

To configure the port state of supported devices, use the following command:

```
ap_model [ zf7025 | zf7942 | zf7962 | zf7762 | zf7762-s | zf7762-t | zf7343 | zf7363 | zf2942 | zf2741 ]
```

Entering the above command enable you to enter the ruckus (config-ap-model) # context. See ["Configure Device Port State Commands"](#) on [page 77](#) for commands that you can execute within that context.

Syntax Description	ap_model	Configure the port state of supported devices
	[all zf7343/ 7363/7341 zf7762/ 7762-s/7762-t]	Configure these devices
Defaults	None.	

Configure Device Port State Commands

Use the `config-ap-model` commands to configure the port state of supported devices.

abort

To exit the `config-ap-model` context without saving changes, use the following command:

```
abort
```

Syntax Description	<table><tr><td><code>abort</code></td><td>Exit the context without saving changes</td></tr></table>	<code>abort</code>	Exit the context without saving changes
<code>abort</code>	Exit the context without saving changes		
Defaults	None.		
Example	<pre>ruckus(config-ap-model)# abort No changes have been saved. ruckus(config-ap-policy)#</pre>		

end

To save changes, and then exit the `config-ap-model` context, use the following command:

```
end
```

Syntax Description	<table><tr><td><code>end</code></td><td>Save changes, and then exit the context</td></tr></table>	<code>end</code>	Save changes, and then exit the context
<code>end</code>	Save changes, and then exit the context		
Defaults	None.		
Example	<pre>ruckus(config-ap-model)# end Your changes have been saved.</pre>		

exit

To save changes, and then exit the `config-ap-model` context, use the following command:

```
exit
```

Syntax Description	<table><tr><td><code>exit</code></td><td>Save changes, and then exit the context</td></tr></table>	<code>exit</code>	Save changes, and then exit the context
<code>exit</code>	Save changes, and then exit the context		

Defaults	None.		
Example	<pre>ruckus(config-ap-model)# exit Your changes have been saved. ruckus(config-ap-policy)#</pre> <p>quit</p> <p>To exit the config-ap-model context without saving changes, use the following command:</p> <pre>quit</pre>		
Syntax Description	<table><tr><td>quit</td><td>Exit the context without saving changes</td></tr></table>	quit	Exit the context without saving changes
quit	Exit the context without saving changes		
Defaults	None.		
Example	<pre>ruckus(config-ap-model)# quit No changes have been saved. ruckus(config-ap-policy)#</pre> <p>show</p> <p>To show a device's port state, use the following command:</p> <pre>show</pre>		
Syntax Description	<table><tr><td>show</td><td>Display the device's port state</td></tr></table>	show	Display the device's port state
show	Display the device's port state		
Defaults	None.		
Example	<pre>ruckus(config-ap-model)# show Model= zf2942 PORT_STATUS PORT_TYPE VLAN_ID LAN 1 Enable Trunk Port 23 LAN 2 Enable Trunk Port 20</pre> <p>no lan</p> <p>To disable a specific port on devices, use the following command:</p> <pre>no lan <port_number></pre>		

Syntax Description

no lan	Disable a specific port on devices
<port_number>	Disable this port

Defaults

None.

Example

```
ruckus(config-ap-model)# no lan 2
ruckus(config-ap-model)#
```

lan

To enable a specific port on devices, use the following command:

```
lan <port_number>[ access-port |trunk-port] [NO_VLAN | vlan_id
<ap_vlan_id>]
```

Syntax Description

lan	Disable a specific port on devices
<port_number>	Disable this port
[access-port trunk-port]	Set the port type
NO_VLAN	Disable VLAN
vlan_id <ap_vlan_id>	Enable VLAN and set the VLAN ID

Defaults

None.

Example

```
ruckus(config-ap-model)# lan 2
ruckus(config-ap-model)#
ruckus(config-ap-model)# lan 2 access-port vlan-id 20
The command was executed successfully.
ruckus(config-ap-model)# lan 1 trunk-port vlan-id 22
The command was executed successfully.
```

Configure Device Network Addressing Commands

Use the `config ap ip-addr` commands to configure the device's IP address, netmask, gateway, and IP addressing mode.

ip addr

To set the device's IP address and netmask, use the following command:

```
ip addr {IP address} {netmask}
```

Use a space () to separate the IP address and netmask.

Syntax Description	ip addr	IP address
	{IP address}	Set the IP address to this address
	{netmask}	Set the netmask to this address
Defaults	None.	
Example	<pre>ruckus# config ruckus(config)# ap 00:13:92:00:33:1C ruckus(config-ap-00:13:92:00:33:1C)# ip addr 192.168.0.33 255.255.255.0 The command was executed successfully.</pre>	

ip addr gateway

To set the device's IP address, netmask, and gateway IP address at the same time, use the following command:

```
ip addr {IP address} {netmask} gateway {gateway IP address}
```

Syntax Description	ip addr	IP address
	{IP address}	Set the IP address to this address
	{netmask}	Set the netmask to this address
	gateway	Gateway IP address
	{gateway IP address}	Set the gateway IP address to this address
Defaults	None.	
Example	<pre>ruckus# config ruckus(config)# ap 00:13:92:00:33:1C</pre>	

```
ruckus(config-ap-00:13:92:00:33:1C)# ip addr 192.168.0.33  
255.255.255.0 gateway 192.168.0.1  
The command was executed successfully.
```

ip mode

To set the device's IP address mode setting, use the following command:

```
ip mode {dhcp | static | keep}
```

Syntax Description	<table><tr><td>ip mode</td><td>IP address mode</td></tr><tr><td>{dhcp}</td><td>Set the device's IP address mode to DHCP</td></tr><tr><td>{static}</td><td>Set the device's IP address mode to static</td></tr><tr><td>{keep}</td><td>Leave the IP address mode unchanged</td></tr></table>	ip mode	IP address mode	{dhcp}	Set the device's IP address mode to DHCP	{static}	Set the device's IP address mode to static	{keep}	Leave the IP address mode unchanged
ip mode	IP address mode								
{dhcp}	Set the device's IP address mode to DHCP								
{static}	Set the device's IP address mode to static								
{keep}	Leave the IP address mode unchanged								
Defaults	None.								
Example	<p>To set the device's IP address mode to 'static', run this command:</p> <pre>ruckus# config ruckus(config)# ap 00:13:92:00:33:1C ruckus(config-ap-00:13:92:00:33:1C)# ip mode static</pre> <p>The command was executed successfully.</p> <h3>ip name-server</h3> <p>To set the device's DNS servers, use the following command:</p> <pre>ip name-server {NS1} {NS2}</pre> <p>Use a space () to separate the primary and secondary DNS servers.</p>								
Syntax Description	<table><tr><td>ip name-server</td><td>Nameserver IP addresses</td></tr><tr><td>{NS1}</td><td>Set the primary nameserver to this IP address</td></tr><tr><td>{NS2}</td><td>Set the secondary nameserver to this IP address</td></tr></table>	ip name-server	Nameserver IP addresses	{NS1}	Set the primary nameserver to this IP address	{NS2}	Set the secondary nameserver to this IP address		
ip name-server	Nameserver IP addresses								
{NS1}	Set the primary nameserver to this IP address								
{NS2}	Set the secondary nameserver to this IP address								
Defaults	None.								
Example	<pre>ruckus# config ruckus(config)# ap 00:13:92:00:33:1C ruckus(config-ap-00:13:92:00:33:1C)# ip name-server 192.168.0.2 192.168.0.3</pre> <p>The command was executed successfully.</p>								

Configure the 2.4GHz Radio Commands

Use the `radio 2.4` commands to configure the 2.4GHz radio settings of a device. To run these commands, you must first enter the `config-ap` context.

radio 2.4 channel

To set the 2.4GHz radio to use a specific channel, use the following command:

```
radio 2.4 channel {channel number}
```

Syntax Description

radio 2.4	2.4GHz radio settings
channel	Radio channel
{channel number}	Set the radio channel to this number

Defaults

None.

Example

```
To set the 2.4Ghz radio to channel 1, enter this command:
ruckus# config
ruckus(config)# ap 00:13:92:00:33:1C
ruckus(config-ap-00:13:92:00:33:1C)# radio 2.4 channel 1
The command was executed successfully.
```

radio 2.4 channel auto

To set the 2.4GHz radio to use 'Auto' channel, use the following command:

```
radio 2.4 channel auto
```

Syntax Description

radio 2.4	2.4GHz radio settings
channel	Radio channel
auto	Set the radio channel to 'auto'

Defaults

None.

Example

```
ruckus# config
ruckus(config)# ap 00:13:92:00:33:1C
ruckus(config-ap-00:13:92:00:33:1C)# radio 2.4 channel auto
The command was executed successfully.
```

radio 2.4 tx-power

To set the 2.4GHz radio to use a specific TX power setting, use the following command:

```
radio 2.4 tx-power {TX power}
```

Syntax Description

radio 2.4	2.4GHz radio settings
tx-power	TX power setting
{TX power}	Set the TX power to this number

Defaults

None.

Example

To set the TX power to 1, run this command:

```
ruckus# config
ruckus(config)# ap 00:13:92:00:33:1C
ruckus(config-ap-00:13:92:00:33:1C)# radio 2.4 tx-power 1
The command was executed successfully.
```

radio 2.4 tx-power auto

To set the 2.4GHz radio to use auto TX power setting, use the following command:

```
radio 2.4 tx-power auto
```

Syntax Description

radio 2.4	2.4GHz radio settings
tx-power	TX power setting
auto	Set the TX power to auto

Defaults

None.

Example

```
ruckus# config
ruckus(config)# ap 00:13:92:00:33:1C
ruckus(config-ap-00:13:92:00:33:1C)# radio 2.4 tx-power auto
The command was executed successfully.
```

radio 2.4 wlan-group

To assign the 2.4GHz radio to the specific WLAN group, use the following command:

```
radio 2.4 wlan-group {WLAN group name}
```

Syntax Description

radio 2.4	2.4GHz radio settings
-----------	-----------------------

wlan-group	WLAN group
{WLAN group name}	Assign the radio to this WLAN group

Defaults	None.
Example	<p>To assign the 2.4GHz radio to a WLAN group named <i>Default</i>, run this command:</p> <pre>ruckus# config ruckus(config)# ap 00:13:92:00:33:1C ruckus(config-ap-00:13:92:00:33:1C)# radio 2.4 wlan-group Default</pre> <p>The command was executed successfully.</p>

Configure the 5GHz Radio Commands

Use the `radio 5` commands to configure the 5GHz radio settings of a device. To run these commands, you must first enter the `config-ap` context.

radio 5 channel

To set the 5GHz radio to a specific channel, use the following command:

```
radio 5 channel {channel number}
```

Syntax Description	
radio 5	5GHz radio settings
channel	Radio channel
{channel number}	Set the radio channel to this number

Defaults	None.
Example	<p>To set the 5GHz channel to 100, run this command:</p> <pre>ruckus# config ruckus(config)# ap 00:13:92:00:33:1C ruckus(config-ap-00:13:92:00:33:1C)# radio 5 channel 100</pre> <p>The command was executed successfully.</p>

radio 5 channel auto

To set the 5GHz radio to use 'Auto' channel, use the following command:

```
radio 5 channel auto
```

Syntax Description	
radio 5	5GHz radio settings

channel	Radio channel
auto	Set the radio channel to 'auto'

Defaults

None.

Example

```
ruckus# config
ruckus(config)# ap 00:13:92:00:33:1C
ruckus(config-ap-00:13:92:00:33:1C)# radio 5 channel auto
The command was executed successfully.
```

radio 5 tx-power

To set the 5GHz radio to use a specific TX power setting, use the following command:

```
radio 5 tx-power {TX power}
```

Syntax Description

radio 5	5GHz radio settings
tx-power	TX power settings
{TX power}	Set the TX power to this number

Defaults

None.

Example

To set the 5GHz radio TX power to 1, enter this command:

```
ruckus# config
ruckus(config)# ap 00:13:92:00:33:1C
ruckus(config-ap-00:13:92:00:33:1C)# radio 5 tx-power 1
The command was executed successfully.
```

radio 5 tx-power auto

To set the 5GHz radio to use auto TX power setting, use the following command:

```
radio 5 tx-power auto
```

Syntax Description

radio 5	5GHz radio settings
tx-power	TX power settings
auto	Set the TX power to auto

Defaults

None.

Example

```
ruckus# config
ruckus(config)# ap 00:13:92:00:33:1C
ruckus(config-ap-00:13:92:00:33:1C)# radio 5 tx-power auto
```

The command was executed successfully.

radio 5 wlan-group

To assign the 5GHz radio to the specific WLAN group, use the following command:

```
radio 5 wlan-group {WLAN group name}
```

Syntax Description

radio 5	Configure the 5GHz radio settings
wlan-group	WLAN group settings
{WLAN group name}	Assign the radio to this WLAN group

Defaults

None.

Example

To assign the 5GHz radio to a WLAN group named *Default*, enter this command:

```
ruckus# config
ruckus(config)# ap 00:13:92:00:33:1C
ruckus(config-ap-00:13:92:00:33:1C)# radio 5 wlan-group Default
```

The command was executed successfully.

Configure Management VLAN Commands

Use the `config ap management vlan` commands to configure and display the management VLAN settings.

ap-management-vlan

To enable the device's policy VLAN and update the VLAN ID to the specified ID number, use the following command:

```
ap-management-vlan {vlan id}
```

Syntax Description

ap-management-vlan	Management VLAN settings
{vlan id}	Set the management VLAN ID to this value

Defaults

Disabled.

Example

```
ruckus(config)# ap-management-vlan 3
```

Configuring Controller Settings

Configure Management VLAN Commands

```
The AP management VLAN has been updated.  
ruckus(config)#
```

Configure Layer 2 Access Control Commands

Use the `layer2 access control` commands to configure the Layer 2 Access Control List settings. To run these commands, you must first enter the `config-l2acl` context.

To enter the `config-l2acl` context, run this command:

```
ruckus# config
ruckus(config)# l2acl L2ACL-policy
ruckus(config-l2acl-L2ACL-policy)#
```

abort

To exit the `config-l2acl` context without saving changes, use the following command:

```
abort
```

Syntax Description	abortExit the config-l2acl context without saving changes
Defaults	None.
Example	ruckus(config-l2-acl)# abort No changes have been saved. ruckus(config)#

end

To save changes, and then exit the `config-l2acl` context, use the following command:

```
end
```

Syntax Description	endSave changes and exit the config-l2acl context
Defaults	None.
Example	ruckus(config-l2-acl)# end The L2 ACL entry has saved successfully. Your changes have been saved. ruckus(config)#

exit

To save changes, and then exit the `config-l2acl` context, use the following command:

```
exit
```

Syntax Description	exit	Save changes and exit the <code>config-l2acl</code> context
--------------------	------	---

Defaults	None.
----------	-------

Example	<pre>ruckus(config-l2-acl)# exit</pre> <p>The L2 ACL entry has saved successfully. Your changes have been saved.</p> <pre>ruckus(config)#</pre>
---------	--

quit

To exit the `config-l2acl` context without saving changes, use the following command:

```
quit
```

Syntax Description	quit	Exit the <code>config-l2acl</code> context without saving changes
--------------------	------	---

Defaults	None.
----------	-------

Example	<pre>ruckus(config-l2-acl)# abort</pre> <p>No changes have been saved.</p> <pre>ruckus(config)#</pre>
---------	--

show

To displays the L2 ACL settings, use the `show` command. You must run this command from within the `config-l2acl` context.

```
show
```

Syntax Description	show	Display the Layer 2 access control list settings
--------------------	------	--

Defaults	None.
----------	-------

Example

```
ruckus(config-l2-acl)# show
L2/MAC ACL:
  ID:
    3:
      Name= test
      Description=
      Restriction: Deny only the stations listed below
      Stations:
        MAC Address= 00:01:02:34:44:55
        MAC Address= 00:01:02:34:44:56
```

no acl

To delete an L2 ACL, use the following command:

```
no acl {ACL name}
```

Syntax Description

no acl	Delete an existing ACL
{ACL name}	Delete this ACL

Defaults

None.

Example

```
ruckus# config
ruckus(config)# no acl L2_ACL_NAME
The L2 ACL 'L2_ACL_NAME' has been deleted.
```

acl

To create a new L2 ACL entry or update an existing entry, use the following command:

```
acl {ACL name}
```

Syntax Description

acl	Create a new ACL
{ACL name}	Assign this name to the new ACL

Defaults

None.

Example

```
ruckus# config
ruckus(config)# l2acl L2_ACL_NAME
The L2 ACL entry 'L2_ACL_NAME' has been created.
ruckus(config-l2acl-L2_ACL_NAME)#
```

abort

To exit the `config-l2acl-{ACL name}` context without saving changes, use the following command:

```
acl {ACL name} abort
```

Syntax Description

acl	ACL context
{ACL name}	Name of the ACL context
abort	Exit the context without saving changes

Defaults

None.

Example

```
ruckus# config
ruckus(config)# l2acl L2_ACL_NAME
The L2 ACL entry 'L2_ACL_NAME' has been created.
ruckus(config-l2acl-L2_ACL_NAME)# abort
No changes have been saved.
```

end

To save changes, and then exit the `config-l2acl-{ACL name}` context, use the following command:

```
acl {ACL name} end
```

Syntax Description

acl	ACL context
{ACL name}	Name of the ACL context
end	Exit the context without saving changes

Defaults

None.

Example

```
ruckus# config
ruckus(config)# l2acl L2_ACL_NAME
The L2 ACL entry 'L2_ACL_NAME' has been created.
ruckus(config-l2acl-L2_ACL_NAME)# end
Your changes have been saved.
```

exit

To save changes, and then exit the `config-l2acl-{ACL name}` context, use the following command:

```
acl {ACL name} exit
```

Syntax Description		
	acl	ACL context
	{ACL name}	Name of the ACL context
	exit	Exit the context without saving changes

Defaults	None.
----------	-------

Example	<pre>ruckus# config ruckus(config)# l2acl L2_ACL_NAME The L2 ACL entry 'L2_ACL_NAME' has been created. ruckus(config-l2acl-L2_ACL_NAME)# exit Your changes have been saved.</pre>
---------	---

quit

To exit the config-l2acl-{ACL name} context without saving changes, use the following command:

```
acl {ACL name} quit
```

Syntax Description		
	acl	ACL context
	{ACL name}	Name of the ACL context
	quit	Exit the context without saving changes

Defaults	None.
----------	-------

Example	<pre>ruckus# config ruckus(config)# l2acl L2_ACL_NAME The L2 ACL entry 'L2_ACL_NAME' has been created. ruckus(config-l2acl-L2_ACL_NAME)# quit Your changes have been saved.</pre>
---------	---

acl name

To rename an L2 ACL entry, use the following command:

```
acl {ACL name} name
```

Syntax Description		
	acl	ACL context

{ACL name}	Name of the ACL context
name {new name}	Rename the ACL to {new name}

Defaults None.

Example

```
ruckus# config
ruckus(config)# l2acl L2_ACL_NAME
The L2 ACL entry 'L2_ACL_NAME' has been created.
ruckus(config-l2acl-L2_ACL_NAME)# name L2_ACL_New_Name
The command was executed successfully.
```

acl description

To set the description of an L2 ACL entry, use the following command:

```
description {description}
```

Syntax Description	description {description}	Set the L2 ACL description to {description}
---------------------------	---------------------------	---

Defaults None.

Example

```
ruckus# config
ruckus(config)# l2acl L2_ACL_NAME
The L2 ACL entry 'L2_ACL_NAME' has been created.
ruckus(config-l2acl-L2_ACL_NAME)# description Description-123
The command was executed successfully.
```

add mac

To add a MAC address to the L2 ACL, use the following command:

```
add mac {MAC address}
```

Syntax Description	add mac	Add a MAC address to the ACL
	{MAC address}	Add this MAC address

Defaults None.

Example

```
ruckus# config
ruckus(config)# l2acl L2_ACL_NAME
The L2 ACL entry 'L2_ACL_NAME' has been created.
```

```
ruckus(config-l2acl-L2_ACL_NAME)# add mac 00:11:22:33:44:55
```

The station '00:11:22:33:44:55' has been added to the ACL.

add-mac

To add a MAC address to the L2 ACL, use the following command:

```
add-mac {MAC}
```

Syntax Description	add-mac	Add a MAC address to the L2 ACL
	{MAC}	Add this MAC address

Defaults None.

Example

```
ruckus(config-l2-acl)# add-mac 00:01:02:34:44:55
```

The station '00:01:02:34:44:55' has been added to the ACL.

```
ruckus(config-l2-acl)# add-mac 00:01:02:34:44:55
```

The station '00:01:02:34:44:55' already exists in the list.

mode allow

To set the ACL mode to 'allow', use the following command:

```
mode allow
```

Syntax Description	mode allow	Set the ACL mode to allow
--------------------	------------	---------------------------

Defaults None.

Example

```
ruckus# config
```

```
ruckus(config)# l2acl L2_ACL_NAME
```

The L2 ACL entry 'L2_ACL_NAME' has been created.

```
ruckus(config-l2acl-L2_ACL_NAME)# mode allow
```

The command was executed successfully.

mode deny

To set the ACL mode to 'deny', use the following command:

```
mode deny
```

Syntax Description	mode allow	Set the ACL mode to deny
--------------------	------------	--------------------------

Defaults None.

Example ruckus# **config**
ruckus(config)# **l2acl L2_ACL_NAME**
The L2 ACL entry 'L2_ACL_NAME' has been created.
ruckus(config-l2acl-L2_ACL_NAME)# **mode deny**
The command was executed successfully.

no-mac

To delete a MAC address from an L2 ACL, use the following command:

no-mac {MAC address}

Syntax Description	no-mac	Delete a MAC address from the ACL
	{MAC address}	Delete this {MAC address}

Defaults None.

Example ruckus(config-l2-acl)# **no-mac 00:01:02:34:44:55**
The station '00:01:02:34:44:55' has been removed from the ACL.
ruckus(config-l2-acl)# **no-mac 00:01:02:34:44:55**
The station '00:01:02:34:44:55' could not be found. Please check the spelling, and then try again.

Configure Layer 3 Access Control Commands

Use the `l3acl` commands to configure the Layer 3 Access Control List settings. To run these commands, you must first enter the `config-l2acl` context.

To enter the `config-l3acl` context, run this command:

```
ruckus# config
ruckus(config)# l3acl
ruckus(config-l3acl)#
```

abort

To exit the `config-l3acl-{ACL name}` context without saving changes, use the following command:

```
abort
```

Syntax Description	abort	Exit the context without saving changes
--------------------	-------	---

Defaults	None.
----------	-------

Example	<pre>ruckus(config-l3acl)# abort No changes have been saved. ruckus(config)#</pre>
---------	--

end

To save changes, and then exit the `config-l3acl-{ACL name}` context, use the following command:

```
end
```

Syntax Description	end	Exit the context without saving changes
--------------------	-----	---

Defaults	None.
----------	-------

Example	<pre>ruckus(config-l3acl)# end The L3/L4/IP ACL entry has saved successfully. Your changes have been saved. ruckus(config)#</pre>
---------	--

exit

To save changes, and then exit the `config-l3acl` context, use the following command:

```
exit
```

Syntax Description	<table><tr><td>exit</td><td>Save changes and exit the <code>config-l3acl</code> context</td></tr></table>	exit	Save changes and exit the <code>config-l3acl</code> context
exit	Save changes and exit the <code>config-l3acl</code> context		
Defaults	None.		
Example	<pre>ruckus# config-l3acl ruckus(config-l3acl)# exit Your changes have been saved.</pre>		

quit

To exit the `config-l3acl` context without saving changes, use the following command:

```
quit
```

Syntax Description	<table><tr><td>quit</td><td>Exit the context without saving changes</td></tr></table>	quit	Exit the context without saving changes
quit	Exit the context without saving changes		
Defaults	None.		
Example	<pre>ruckus(config-l3acl)# quit No changes have been saved. ruckus(config)#</pre>		

show

To display the L3ACL settings, use the `show` command. You must run this command from within the `config-l3acl` context.

```
show
```

Syntax Description	<table><tr><td>show</td><td>Display the Layer 3 access control list settings</td></tr></table>	show	Display the Layer 3 access control list settings
show	Display the Layer 3 access control list settings		
Defaults	None.		
Example	<pre>ruckus(config-l3acl)# show L3/L4/IP ACL:</pre>		


```
ID:
  3:
    Name= test_newname
    Description= justfortestCLI
    Default Action if no rule is matched= Deny all by default
    Rules:
      Order= 1
        Description=
        Type= Allow
        Destination Address= Any
        Destination Port= 53
        Protocol= Any
      Order= 2
        Description=
        Type= Allow
        Destination Address= Any
        Destination Port= 67
        Protocol= Any
```

name

To set the name of an L3/L4/IP ACL entry, use the following command:

```
name {L3ACL-NAME}
```

Syntax Description	name	Set the name of an L3/L4/IP ACL entry
	{L3ACL-NAME}	Name of the L3/L4/IP ACL entry

Defaults	None.
----------	-------

Example

```
ruckus(config-l3acl)# name test_newname
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

description

To set the description of an L3/L4/IP ACL entry, use the following command:

```
description {DESCRIPTION}
```

Syntax Description	description	Set the L3/L4/IP ACL entry description
	{DESCRIPTION}	Set to this description

Defaults	None.
----------	-------

Example	<pre>ruckus(config-l3acl)# description justfortestCLI</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>
---------	---

mode allow

To set the ACL mode to 'allow', use the following command:

```
mode allow
```

Syntax Description	mode	Set the ACL mode
	allow	Set the mode to 'allow'

Defaults	None.
----------	-------

Example	<pre>ruckus(config-l3acl)# mode allow</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>
---------	---

mode deny

To set the ACL mode to 'deny', use the following command:

```
mode allow
```

Syntax Description	mode	Set the ACL mode
	deny	Set the mode to 'deny'

Defaults	None.
----------	-------

Example	<pre>ruckus(config-l3acl)# mode deny</pre>
---------	---

The command was executed successfully. To save the changes, type 'end' or 'exit'.

no rule-order

To delete a rule from the L3/L4/IP ACL, use the following command:

```
no rule-order <rule_order_id>
```

Syntax Description	no rule-order	Delete a rule from the L3/L4/IP ACL
	<rule_order_id>	Delete this rule ID

Defaults None.

Example For example, to delete rule 3 from the ACL, use the following command:
ruckus(config-l3acl)# **no rule-order 3**
The rule '3' has been removed from the ACL.

rule-order

To create or modify a rule in the L3/L4/IP ACL, use the following command:

```
rule-order <rule_order_id>
```

Syntax Description	rule-order	Create a new rule or modify an existing one
	<rule_order_id>	Create or modify this rule ID

Defaults None.

Example For example, to set the current rule as the third ACL rule to apply, use the following command:
ruckus(config-l3acl)# **rule-order 3**
ruckus(config-l3acl-rule)#

Configure Layer 3 Access Control Rule Commands

Use the `l3acl-rule` commands to configure the Layer 3 Access Control List rules. To run these commands, you must first enter the `config-l3acl-rule` context.

To enter the `config-l3acl-rule` context, run this command:

```
ruckus# config  
ruckus(config)# l3acl-rule  
ruckus(config-l3acl-rule)#
```

end

To save changes, and then exit the `config-l3acl-{ACL name}` context, use the following command:

```
end
```

Syntax Description	end Save changes, and then exit the context
Defaults	None.
Example	<pre>ruckus(config-l3acl-rule)# end ruckus(config-l3acl)#</pre>

exit

To save changes, and then exit the `config-l3acl-{ACL name}` context, use the following command:

```
exit
```

Syntax Description	exit Save changes, and then exit the context
Defaults	None.
Example	<pre>ruckus(config-l3acl-rule)# exit ruckus(config-l3acl)#</pre>

order

To set the order of an L3/L4/IP ACL rule, use the following command:

```
order <rule_order_id>
```

Syntax Description

order	Set the order of a rule
<rule_order_id>	Set the rule to this order

Defaults

None.

Example

```
ruckus(config-l3acl-rule)# order 3
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

description

To set the description of an L3/L4/IP ACL rule, use the following command:

```
description {DESCRIPTION}
```

Syntax Description

description	Set the L3/L4/IP ACL rule description
{DESCRIPTION}	Set to this description

Defaults

None.

Example

```
ruckus(config-l3acl-rule)# description thirdl3rule
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

type allow

To set the ACL rule type to 'allow', use the following command:

```
type allow
```

Syntax Description

type	Set the ACL rule type
allow	Set the rule type to 'allow'

Defaults

None.

Example

```
ruckus(config-l3acl-rule)# type allow
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

type deny

To set the ACL rule type to 'deny', use the following command:

```
type deny
```

Syntax Description	type	Set the ACL rule type
	deny	Set the rule type to 'deny'
Defaults	None.	
Example	<pre>ruckus(config-l3acl-rule)# type deny</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>	

destination address

To set the destination address of the rule, use the following command:

```
destination address <IP-ADDR/WORD>
```

Syntax Description	destination address	Set the destination address of the rule
	IP-ADDR/WORD	Set the destination to this IP address
Defaults	None.	
Example	<pre>ruckus(config-l3acl-rule)# destination address 192.168.1.22</pre> <p>The destination IP address is invalid. Please enter 'Any' or check the IP address(for example:192.168.0.1/24), and then please try again.</p> <pre>ruckus(config-l3acl-rule)# destination address 192.168.1.22/24</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>	

destination port

To set the destination port of the rule, use the following command:

```
destination port <NUMBER/WORD>
```

Syntax Description	destination port	Set the destination port of the rule
	<NUMBER/WORD>	Set the destination to this port number

Defaults	None.
Example	<pre>ruckus(config-l3acl-rule)# destination port 580</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>

protocol

To set the protocol for the rule, use the following command:

```
protocol <NUMBER/WORD>
```

Syntax Description	protocol	Set the protocol for the rule
	<NUMBER/WORD>	Set to this protocol

Defaults	None.
Example	<pre>ruckus(config-l3acl-rule)# protocol tcp</pre> <p>The protocol must be a number between 0 and 254.</p> <pre>ruckus(config-l3acl-rule)# protocol Any</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>

Configure Role Commands

Use the `role` commands to configure user roles on the controller. To run these commands, you must first enter the `config-role` context.

abort

To exit the `config-role` context without saving changes, use the `abort` command. Enter this command from within the context of the role that you are configuring.

```
abort
```

Syntax Description	abort	Exit the role without saving changes
--------------------	-------	--------------------------------------

Defaults	None.
Example	<pre>ruckus(config-role)# abort</pre> <p>No changes have been saved.</p> <pre>ruckus(config)#</pre>

end

To save changes, and then exit the `config-role` context, use the following command:

```
end
```

Syntax Description

end	Save changes, and then exit the context
-----	---

Defaults

None.

Example

<pre>ruckus(config-role)# end The Role entry has saved successfully. Your changes have been saved. ruckus(config)#</pre>

exit

To save changes, and then exit the `config-role` context, use the following command:

```
exit
```

Syntax Description

exit	Save changes, and then exit the context
------	---

Defaults

None.

Example

<pre>ruckus(config-role)# exit The Role entry has saved successfully. Your changes have been saved. ruckus(config)#</pre>
--

quit

To exit the `config-role` context without saving changes, use the `quit` command. Enter this command from within the context of the role that you are configuring.

```
quit
```

Syntax Description

quit	Exit the role without saving changes
------	--------------------------------------

Defaults

None.

Example

```
ruckus(config-role)# quit  
No changes have been saved.  
ruckus(config)#
```

name

To set the name of a user role, use the following command:

```
name <role_name>
```

Syntax Description

name	Set the name of a user role
<role_name>	Set to this role

Defaults

None.

Example

```
ruckus(config-role)# name guest33  
The command was executed successfully. To save the changes, type  
'end' or 'exit'.
```

description

To set the description for a user role, use the following command:

```
description <description>
```

Syntax Description

description	Set the description of a user role
<description>	Set to this description

Defaults

None.

Example

```
ruckus(config-role)# description testforCLI  
The command was executed successfully. To save the changes, type  
'end' or 'exit'.
```

group-attributes

To set the group attributes of a user role, use the following command:

```
group-attributes <attributes>
```

Syntax Description

group-attributes	Set the attributes of a user role
<attributes>	Set to this attribute

Defaults None.

Example

```
ruckus(config-role)# group-attributes ruckus1
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

wlan-allowed

To set the WLANs to which a user role will have access, use the following command:

```
wlan-allowed [all | specify-wlan]
```

Syntax Description

wlan-allowed	Set the WLANs to which a role will have access
all	Grant access to all WLANs
specify-wlan	Grant access to a specific WLAN

Defaults None.

Example

```
ruckus(config-role)# wlan-allowed all
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

```
ruckus(config-role)# wlan-allowed specify-wlan
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

no specify-wlan-access

To remove a particular WLAN from the list of WLANs that a user role can access, use the following command:

```
no specify-wlan-access <wlan_ssid>
```

Syntax Description

no specify-wlan-access	Remove access to a WLAN by a user role
<wlan_ssid>	Remove access to this WLAN

Defaults None.

Example

```
ruckus(config-role)# no specify-wlan-access joejoe98
```

The wlan 'joejoe98' has been removed from the Role.

specify-wlan-access

To add a particular WLAN to the list of WLANs that a user role can access, use the following command:

```
specify-wlan-access <wlan_ssid>
```

Syntax Description	specify-wlan-access	Add access to a WLAN by a user role
	<wlan_ssid>	Add access to this WLAN

Defaults None.

Example

```
ruckus(config-role)# specify-wlan-access joejoe98
```

The wlan 'joejoe98' has been added to the Role.

no guest-pass-generation

To remove guest pass generation privileges from a user role, use the following command:

```
no guest-pass-generation
```

Syntax Description	no guest-pass-generation	Remove guest pass generation privileges from a user role
--------------------	--------------------------	--

Defaults None.

Example

```
ruckus(config-role)# no guest-pass-generation
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

guest-pass-generation

To add guest pass generation privileges to a user role, use the following command:

```
guest-pass-generation
```

Syntax Description	guest-pass-generation	Add guest pass generation privileges to a user role
--------------------	-----------------------	---

Defaults None.

Example

```
ruckus(config-role)# guest-pass-generation
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

no adminn

To remove ZoneDirector administration privileges from a user role, use the following command:

```
no admin
```

Syntax Description

no admin	Remove ZoneDirector administration privileges from a user role
----------	--

Defaults

None.

Example

```
ruckus(config-role)# no admin
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

admin [superoperator|monitoring]

To add ZoneDirector administration privileges to a user role, use the following command:

```
admin [super|operator|monitoring]
```

Syntax Description

admin	Add ZoneDirector administration privileges to a user role
[superoperator monitoring]	Set administration privileges

Defaults

None.

Example

```
ruckus(config-role)# admin super
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

show

To display the settings of a role, use the following command:

```
show
```

Syntax Description	show	Display the settings of a role
Defaults	None.	
Example	<pre>ruckus(config-role)# show Role: ID: 2: Name= guest Description= Group Attributes= Guest Pass Generation= Disallowed ZoneDirector Administration= Allowed Allow ZoneDirector Administration:Super Admin Allow All WLANs= Specify WLAN access</pre>	

Configure User Commands

Use the user commands to configure a user's name, password, and role. To run these commands, you must first enter the config-user context.

abort

To exit the config-user context without saving changes, use the abort command. Enter this command from within the context of the user that you are configuring.

```
abort
```

Syntax Description	abort	Exit the user settings without saving changes
Defaults	None.	
Example	<pre>ruckus(config-user)# abort No changes have been saved. ruckus(config)#</pre> <p>end</p> <p>To save changes, and then exit the config-user context, use the following command:</p> <pre>end</pre>	

Syntax Description

end	Save changes, and then exit the context
-----	---

Defaults

None.

Example

```
ruckus(config-user)# end  
The User entry has saved successfully.  
Your changes have been saved.  
ruckus(config)#
```

exit

To save changes, and then exit the config-user context, use the following command:

```
exit
```

Syntax Description

exit	Save changes, and then exit the context
------	---

Defaults

None.

Example

```
ruckus(config-user)# exit  
The User entry has saved successfully.  
Your changes have been saved.  
ruckus(config)#
```

quit

To exit the config-user context without saving changes, use the quit command. Enter this command from within the context of the user that you are configuring.

```
quit
```

Syntax Description

quit	Exit the user settings without saving changes
------	---

Defaults

None.

Example

```
ruckus(config-role)# quit  
No changes have been saved.  
ruckus(config)#
```

user-name

To set the name of a user, use the following command:

```
user-name <user_name>
```

Syntax Description	user-name	Set the name of a user
	<user_name>	Set to this user name

Defaults	None.
----------	-------

Example	<pre>ruckus(config-user)# user-name joe1</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>
---------	--

full-name <full_name>

To set the full name of a user, use the following command:

```
full-name <full_name>
```

Syntax Description	full-name	Set the full name of a user
	<full_name>	Set to this full name

Defaults	None.
----------	-------

Example	<pre>ruckus(config-user)# full-name joejoe</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>
---------	--

password <password>

To set the password of a user, use the following command:

```
password <password>
```

Syntax Description	password	Set the password of a user
	<password>	Set to this password

Defaults	None.
----------	-------

Example	<pre>ruckus(config-user)# password 1234</pre>
---------	--

The command was executed successfully. To save the changes, type 'end' or 'exit'.

role

To assign a role to a user, use the following command:

```
role <role_name>
```

Syntax Description	role	Assign a role to a user
	<role_name>	Assign this role

Defaults
None.

Example

```
ruckus(config-user)# role guest
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

show

To display the settings of a user, use the following command:

```
show
```

Syntax Description	show	Show user settings

Defaults
None.

Example

```
ruckus(config-user)# show
User:
  ID:
  :
    User Name= joel
    Full Name= joejoe
    Password= 1234
    Role= guest
```


Configure Guest Access Commands

Use the `guest-access` commands to configure the guest access settings. To run these commands, you must first enter the `config-guest-access` context.

abort

To exit the `config-guest-access` context without saving changes, use the `abort` command.

```
abort
```

Syntax Description	<pre>abort</pre> Exit the guest access settings without saving changes
--------------------	--

Defaults	None.
----------	-------

Example	<pre>ruckus(config-guest-access)# abort</pre> No changes have been saved. <pre>ruckus(config)#</pre>
---------	---

end

To save changes, and then exit the `config-guest-access` context, use the following command:

```
end
```

Syntax Description	<pre>end</pre> Save changes, and then exit the context
--------------------	--

Defaults	None.
----------	-------

Example	<pre>ruckus(config-guest-access)# end</pre> Your changes have been saved. <pre>ruckus(config)#</pre>
---------	---

exit

To save changes, and then exit the `config-guest-access` context, use the following command:

```
exit
```

Syntax Description

exit	Save changes, and then exit the context
------	---

Defaults

None.

Example

```
ruckus(config-guest-access)# exit
Your changes have been saved.
ruckus(config)#
```

quit

To exit the config-guest-access context without saving changes, use the quit command.

```
quit
```

Syntax Description

quit	Exit the guest access settings without saving changes
------	---

Defaults

None.

Example

```
ruckus(config-guest-access)# quit
No changes have been saved.
ruckus(config)#
```

no authentication

To disable guest access authentication, use the following command:

```
no authentication
```

Syntax Description

exit	Disable guest access authentication
------	-------------------------------------

Defaults

None.

Example

```
ruckus(config-guest-access)# no authentication
The command was executed successfully.
```

authentication guest-pass

To allow multiple users to share a single guest pass, use the following command:

```
authentication guest-pass [shared | no-shared]
```

Syntax Description

authentication guest-pass	Configure guest pass authentication
shared	Allow multiple users to share a single guest pass
no-shared	Allow only a single user to use a guest pass

Defaults

None.

Example

```
ruckus(config-guest-access)# authentication guest-pass shared
```

The command was executed successfully.

no term-of-use

To hide the Terms of Use text on the guest pass access page, use the following command:

```
no term-of-use
```

Syntax Description

no term-of-use	Hide Terms of Use
----------------	-------------------

Defaults

None.

Example

```
ruckus(config-guest-access)# no term-of-use
```

The command was executed successfully.

term-of-use

To display and specify the Terms of Use text on the guest pass access page, use the following command:

```
term-of-use <term_of_use_text>
```

Syntax Description

term-of-use	Display Terms of Use
<term_of_use_text>	Use this text

Defaults

None.

Example

```
ruckus(config-guest-access)# term-of-use test.guest
```

The command was executed successfully.

redirect

To set the URL to which to redirect a guest user after passing authentication, use the following command:

```
redirect [original | url <start_page_url>]
```

Syntax Description

redirect	Set the URL to which the guest user will be redirected
original	Redirect user to the original page that he intended to visit
url <start_page_url>	Redirect user to a different URL. Specify the URL in <start_page_url>.

Defaults

original

Example

```
ruckus(config-guest-access)# redirect url  
http://www.ruckuswireless.com  
The command was executed successfully.
```

auth-server

To set the authentication server for guest user authentication, use the following command:

```
auth-server [local | name <auth_server_name>]
```

Syntax Description

auth-server	Set the authentication server for guest users
local	Use the controller as the authentication server
name <auth_server_name>	Use an external authentication server. Specify the authentication server name in <auth_server_name>.

Defaults

local

Example

```
ruckus(config-guest-access)# auth-server local  
The command was executed successfully.
```

guestpass-effective

To set the duration during which the guest pass will be effective, use the following command:

```
guestpass-effective [now | first_use_expired <days>]
```

Syntax Description

guestpass-effective	Set the guest pass effectivity period
---------------------	---------------------------------------

now	Set the guest pass effective as soon as it is generated
first_use_expired <days>	Set the guest pass to be effective upon first use and to expire after a specified number of days. Set the number of days in <days>.

Defaults

now

Example

```
ruckus(config-guest-access)# guestpass-effective first-use-expired 4
```

The command was executed successfully.

welcome-text

To configure the text to display when a guest user accesses the network, use the following command:

```
welcome-text <welcome_text>
```

Syntax Description

welcome-text	Configure the welcome message
<welcome_text>	Use this as the welcome message

Defaults

Welcome to the Guest Access login page.

Example

```
ruckus(config-guest-access)# welcome-text welcome.txt
```

The command was executed successfully.

show

To display the guest pass settings, use the following command:

```
show
```

Syntax Description

show	Display the guest pass settings
------	---------------------------------

Defaults

None.

Example

```
ruckus(config-guest-access)# show
```

Guest Access:

Authentication= Use guest pass authentication.

Multiple users to share a single guest pass= Allowed

Terms of Use= Enabled

```
Terms= test.guest
Redirection= To the following URL.
URL= http://ruckuswireless.com
Validity Period= Effective from first use.
Expire Days= 4
Title= welcome.txt
Restricted Subnet Access:
Name= Guest
Description=
Default Action if no rule is matched= Deny all by default
Rules:
Order= 1
  Description=
  Type= Deny
  Destination Address= local
  Destination Port= Any
  Protocol= Any
Order= 2
  Description=
  Type= Deny
  Destination Address= 10.0.0.0/8
  Destination Port= Any
  Protocol= Any
Order= 3
  Description=
  Type= Deny
  Destination Address= 172.16.0.0/12
  Destination Port= Any
  Protocol= Any
Order= 4
  Description=
  Type= Deny
  Destination Address= 192.168.0.0/16
  Destination Port= Any
  Protocol= Any
```

no restrict-access-order <order_id>

To delete a restrict access order, use the following command:

```
no restrict-access-order <order_id>
```

Syntax Description

no restrict-access-order	Delete a restrict access order
--------------------------	--------------------------------

<order_id>	Delete this order ID
------------	----------------------

Defaults

None.

Example

```
ruckus(config-guest-access)# no restrict-access-order 4
```

The Restricted Subnet Access entry has been removed from the Guest Access.

restrict-access-order <order_id>

To add a restrict access order, use the following command:

```
restrict-access-order <order_id>
```

Syntax Description

restrict-access-order	Add a restrict access order
<order_id>	Add this order ID

Defaults

None.

Example

```
ruckus(config-guest-access)# restrict-access-order 5
```

Sorry, please enter the order 4 if you want to add a new one.

```
ruckus(config-guest-access)# restrict-access-order 3
```

```
ruckus(config-guest-restrict-access)#
```

Configure Guest Access Restriction Commands

Use the `guest-restrict-access` commands to configure network segments to which guest access will be blocked. To run these commands, you must first enter the `config-guest-restrict-access` context.

abort

To exit the `config-guest-restrict-access` context without saving changes, use the `abort` command.

```
abort
```

Syntax Description

abort	Exit the guest access restriction settings without saving changes
-------	---

Defaults

None.

Example

```
ruckus(config-guest-restrict-access)# abort  
No changes have been saved.  
ruckus(config-guest-access)#
```

end

To save changes, and then exit the config-guest-restrict-access context, use the following command:

```
end
```

Syntax Description

end	Save changes, and then exit the context
-----	---

Defaults

None.

Example

```
ruckus(config-guest-restrict-access)# end  
The Restricted Subnet Access entry has been added to the Guest  
Access.  
Your changes have been saved.  
ruckus(config-guest-access)#
```

exit

To save changes, and then exit the config-guest-restrict-access context, use the following command:

```
exit
```

Syntax Description

exit	Save changes, and then exit the context
------	---

Defaults

None.

Example

```
ruckus(config-guest-restrict-access)# exit  
The Restricted Subnet Access entry has been added to the Guest  
Access.  
Your changes have been saved.  
ruckus(config-guest-access)#
```

quit

To exit the config-guest-restrict-access context without saving changes, use the quit command.

```
quit
```


Syntax Description	quit	Exit the guest access restriction settings without saving changes
Defaults	None.	
Example	<pre>ruckus(config-guest-restrict-access)# quit</pre> <p>No changes have been saved.</p> <pre>ruckus(config-guest-access)#</pre> <h3>show</h3> <p>To display guest access restriction settings, use the following command:</p> <pre>show</pre>	
Syntax Description	show	Display guest access restriction settings
Defaults	None.	
	<h3>order</h3> <p>To configure the guest access rule order, use the following command:</p> <pre>order <rule_order_id></pre>	
Syntax Description	order	Set the order of a guest access rule
	<rule_order_id>	Assign the rule this order
Defaults	None.	
Example	<pre>ruckus(config-guest-restrict-access)# order 3</pre> <p>The command was executed successfully.</p> <h3>description</h3> <p>To set the description of a guest access rule, use the following command:</p> <pre>description <description></pre>	
Syntax Description	description	Set the description of a guest access rule
	<description>	Set this as description

Defaults None.

Example `ruckus(config-guest-restrict-access)# description guestd3`
The command was executed successfully.

type allow

To set the guest access rule type to 'allow', use the following command:

```
type allow
```

Syntax Description		
	type	Set the guest access rule type
	allow	Set the rule type to 'allow'

Defaults None.

Example `ruckus(config-guest-restrict-access)# type allow`
The command was executed successfully.

type deny

To set the guest access rule type to 'deny', use the following command:

```
type deny
```

Syntax Description		
	type	Set the guest access rule type
	deny	Set the rule type to 'deny'

Defaults None.

Example `ruckus(config-guest-restrict-access)# type deny`
The command was executed successfully.

destination address

To set the destination address of the rule, use the following command:

```
destination address <IP-ADDR/WORD>
```

Syntax Description		
	destination address	Set the destination address of the rule
	IP-ADDR/WORD	Set the destination to this IP address

Defaults	None.
Example	<pre>ruckus(config-guest-restrict-access)# destination address 192.168.0.20/24</pre> <p>The command was executed successfully.</p>

destination port

To set the destination port of the rule, use the following command:

```
destination port <NUMBER/WORD>
```

Syntax Description	destination port	Set the destination port of the rule
	<NUMBER/WORD>	Set the destination to this port number

Defaults	None.
Example	<pre>ruckus(config-guest-restrict-access)# destination port 562</pre> <p>The command was executed successfully.</p>

protocol

To set the protocol for the rule, use the following command:

```
protocol <NUMBER/WORD>
```

Syntax Description	protocol	Set the protocol for the rule
	<NUMBER/WORD>	Set to this protocol

Defaults	None.
Example	<pre>ruckus(config-guest-restrict-access)# protocol 69</pre> <p>The command was executed successfully.</p>

Configure Hotspot Commands

Use the hotspot commands to configure the controller's hotspot settings. To run these commands, you must first enter the config-hotspot context.

abort

To exit the `config-hotspot` context without saving changes, use the `abort` command.

```
abort
```

Syntax Description	
--------------------	--

abort	Exit the hotspot settings without saving changes
-------	--

Defaults	
----------	--

None.	
-------	--

Example	
---------	--

<pre>ruckus(config-hotspot)# abort No changes have been saved. ruckus(config)#</pre>	
---	--

end

To save changes, and then exit the `config-hotspot` context, use the following command:

```
end
```

Syntax Description	
--------------------	--

end	Save changes, and then exit the context
-----	---

Defaults	
----------	--

None.	
-------	--

Example	
---------	--

<pre>ruckus(config-hotspot)# end The login page url can't be empty. ruckus(config-hotspot)# end The Hotspot entry has saved successfully. Your changes have been saved. ruckus(config)#</pre>	
---	--

exit

To save changes, and then exit the `config-hotspot` context, use the following command:

```
exit
```

Syntax Description	
--------------------	--

exit	Save changes, and then exit the context
------	---

Defaults	
----------	--

None.	
-------	--

Example

```
ruckus(config-hotspot)# exit
The login page url can't be empty
ruckus(config-hotspot)# exit
The Hotspot entry has saved successfully.
Your changes have been saved.
```

quit

To exit the config-hotspot context without saving changes, use the quit command.

```
quit
```

Syntax Description

quit	Exit the hotspot settings without saving changes
------	--

Defaults

None.

Example

```
ruckus(config-hotspot)# quit
No changes have been saved.
ruckus(config)#
```

show

To display the current hotspot settings, use the following command:

```
show
```

Syntax Description

show	Display the current hotspot settings
------	--------------------------------------

Defaults

None.

Example

```
ruckus(config-hotspot)# show
Hotspot:
ID:
1:
    Name= h1
    Login Page Url= http://172.18.110.122
    Start Page= redirect to the URL that the user intends to visit.
    Session Timeout= Disabled
    Idle Timeout= Enabled
    Timeout= 60 Minutes
    Authentication Server= Local Database
```

```
Accounting Server= Disabled
Location ID=
Location Name=
Walled Garden 1=
Walled Garden 2=
Walled Garden 3=
Walled Garden 4=
Walled Garden 5=
Rules:
  Order= 1
    Description= h1_order1
    Type= Deny
    Destination Address= 192.168.20.20/24
    Destination Port= 920
    Protocol= 58
```

name

To set the hotspot name, use the following command

```
name <hotspot_name>
```

Syntax Description	name	Set the hotspot name
	<hotspot_name>	Set to this name

Defaults	None.
----------	-------

Example

```
ruckus(config-hotspot)# name ruckus1
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

login-page

To set the URL of the hotspot login, use the following command:

```
login-page <login_page_url>
```

Syntax Description	login-page	Set the URL of the hotspot login
	<login_page_url>	Set to this URL

Defaults	None.
----------	-------

Example

```
ruckus(config-hotspot)# login-page http://ruckuswireless.com
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

start-page

To set the URL or page to which the user will be redirected after logging into the hotspot, use the following command:

```
start-page [original | url <start_page_url>]
```

Syntax Description

start-page	Set the URL or page to which the user will be redirected after logging into the hotspot
original	Redirect user to the original page he or she intended to visit
url <start_page_url>	Redirect use to another page. Set the URL of the page in <start_page_url>.

Defaults

original

Example

```
ruckus(config-hotspot)# start-page url  
http://www.ruckuswireless.com
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

no session-timeout

To disable the session timeout for hotspot usage, use the following command:

```
no session-timeout
```

Syntax Description

no session-timeout	Disable the session timeout for hotspot usage
--------------------	---

Defaults

None.

Example

```
ruckus(config-hotspot)# no session-timeout
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

session-timeout

To enable and set the session timeout for hotspot usage, use the following command:

```
session-timeout <minutes>
```

Syntax Description	session-timeout	Disable the session timeout for hotspot usage
	<minutes>	Set the session timeout to this value (in minutes)

Defaults 1440 minutes

Example

```
ruckus(config-hotspot)# session-timeout 20
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

no grace-period

To disable the grace period (idle timeout) for hotspot users, use the following command:

```
no grace-period
```

Syntax Description	no grace-period	Disable the idle timeout for hotspot users
--------------------	-----------------	--

Defaults None.

Example

```
ruckus(config-hotspot)# no grace-period
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

grace-period

To enable and set the grace period (idle timeout) for hotspot users, use the following command:

```
grace-period <minutes>
```

Syntax Description	grace-period	Set the idle timeout for hotspot users
	<minutes>	Set the idle timeout to this value (in minutes)

Defaults 60 minutes

Example

```
ruckus(config-hotspot)# grace-period 20
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

auth-server local

To use ZoneDirector as the authentication server for hotspot users, use the following command:

```
auth-server local
```

Syntax Description

auth-server	Set an authentication server for hotspot users
local	Use ZoneDirector as the authentication server

Defaults

local

Example

```
ruckus(config-hotspot)# auth-server local
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

auth-server name

To use an external server for authenticating hotspot users, use the following command:

```
auth-server name <auth_server_name> [no-mac-bypass | mac-bypass]
```

Syntax Description

auth-server name	Set an external authentication server for hotspot users
<auth_server_name>	Use this server as the authentication server
no-mac-bypass	Disable MAC bypass
mac-bypass	Enable MAC bypass

Defaults

None.

Example

```
ruckus(config-hotspot)# auth-server name rad1
```

The AAA server 'rad1' could not be found. Please check the spelling, and then try again.

no acct-server

To disable the accounting server for hotspot usage, use the following command:

```
no acct-server
```

Syntax Description	no acct-server	Disable the accounting server for hotspot usage
Defaults	None.	
Example	<pre>ruckus(config-hotspot)# no acct-server</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>	

acct-server interim-update

To enable and set the accounting server for hotspot usage, use the following command:

```
acct-server <acct_server_name> interim-update <minutes>
```

Syntax Description	no acct-server	Enable and set the accounting server for hotspot usage
	<acct_server_name>	Set to this accounting server
	interim-update	Set the interim update interval
	<minutes>	Set to this interval (in minutes)
Defaults	5 minutes	
Example	<pre>ruckus(config-hotspot)# acct-server asd interim-update 10</pre> <p>The AAA server 'asd' could not be found. Please check the spelling, and then try again.</p> <pre>ruckus(config-hotspot)# acct-server acct1 interim-update 20</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>	

location-id

To set the location ID of the hotspot, use the following command:

```
location-id <location-id>
```

Syntax Description	location-id	Set the location ID of the hotspot
	<location-id>	Set to this location ID

Defaults	None.
----------	-------

Example	<pre>ruckus(config-hotspot)# location-id us</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>
---------	---

location-name

To set the location name of the hotspot, use the following command:

```
location-name <location-name>
```

Syntax Description	location-name	Set the location name of the hotspot
	<location-name>	Set to this location name

Defaults	None.
----------	-------

Example	<pre>ruckus(config-hotspot)# location-name shenzhen</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>
---------	---

wall-garden url1

To set the walled garden URL number 1, use the following command:

```
wall-garden url1 <url1>
```

Syntax Description	wall-garden url1	Set the walled garden URL number 1
	<url1>	Set to this URL

Defaults	None.
----------	-------

Example	<pre>ruckus(config-hotspot)# wall-garden url1 http://www.yahoo.com</pre>
---------	---

The command was executed successfully. To save the changes, type 'end' or 'exit'.

wall-garden url2

To set the walled garden URL number 2, use the following command:

```
wall-garden url2 <url2>
```

Syntax Description	wall-garden url2	Set the walled garden URL number 2
	<url2>	Set to this URL

Defaults	None.
----------	-------

Example	<pre>ruckus(config-hotspot)# wall-garden url2 http://www.yahoo.com</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>
---------	---

wall-garden url3

To set the walled garden URL number 3, use the following command:

```
wall-garden url3 <url3>
```

Syntax Description	wall-garden url3	Set the walled garden URL number 3
	<url3>	Set to this URL

Defaults	None.
----------	-------

Example	<pre>ruckus(config-hotspot)# wall-garden url3 http://www.sohu.com</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>
---------	--

wall-garden url4

To set the walled garden URL number 4, use the following command:

```
wall-garden url4 <url4>
```

Syntax Description	wall-garden url4	Set the walled garden URL number 4
	<url4>	Set to this URL

Defaults	None.
Example	<pre>ruckus(config-hotspot)# wall-garden url4 http://www.sohu.com</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>

wall-garden url5

To set the walled garden URL number 5, use the following command:

```
wall-garden url5 <url5>
```

Syntax Description	wall-garden url5	Set the walled garden URL number 5
	<url5>	Set to this URL

Defaults	None.
Example	<pre>ruckus(config-hotspot)# wall-garden url5 http://www.sohu.com</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>

no restrict-access-order

To delete a restrict access order, use the following command:

```
no restrict-access-order <order_id>
```

Syntax Description	no restrict-access-order	Delete a restrict access order
	<order_id>	Delete this order ID

Defaults	None.
Example	<pre>ruckus(config-hotspot)# no restrict-access-order 1</pre> <p>The rule '1' has been removed from the Hotspot.</p>

restrict-access-order

To add a restrict access order, use the following command:

```
restrict-access-order <order_id>
```

Syntax Description	restrict-access-order	Add a restrict access order
	<order_id>	Add this order ID
Defaults	None.	
Example	<pre>ruckus(config-hotspot)# restrict-access-order 3 Sorry,please enter the order 1 if you want to add a new one. ruckus(config-hotspot)# restrict-access-order 1 ruckus(config-hotspot-restrict-access)#</pre>	

Configure Hotspot Access Restriction Commands

Use the `hotspot-restrict-access` commands to configure network segments to which hotspot access will be blocked. To run these commands, you must first enter the `config-hotspot-restrict-access` context.

end

To save changes, and then exit the `config-hotspot-restrict-access` context, use the following command:

```
end
```

Syntax Description	endSave changes, and then exit the context
Defaults	None.
Example	<pre>ruckus(config-hotspot-restrict-access)# end ruckus(config-hotspot)#</pre>

exit

To save changes, and then exit the `config-hotspot-restrict-access` context, use the following command:

```
exit
```

Syntax Description	exitSave changes, and then exit the context
Defaults	None.
Example	<pre>ruckus(config-hotspot-restrict-access)# exit ruckus(config-hotspot)#</pre>

show

To display hotspot access restriction settings, use the following command:

```
show
```

Syntax Description	showDisplay the hotspot access restriction settings
Defaults	None.

order

To configure the hotspot access rule order, use the following command:

```
order <rule_order_id>
```

Syntax Description	order	Set the order of a hotspot access rule
	<rule_order_id>	Assign the rule this order

Defaults None.

Example

```
ruckus(config-hotspot-restrict-access)# order 1
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

description

To set the description of a hotspot access rule, use the following command:

```
description <description>
```

Syntax Description	description	Set the description of a hotspot access rule
	<description>	Set this as description

Defaults None.

Example

```
ruckus(config-hotspot-restrict-access)# description h1_order1
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

type allow

To set the hotspot access rule type to 'allow', use the following command:

```
type allow
```

Syntax Description	type	Set the hotspot access rule type
	allow	Set the rule type to 'allow'

Defaults None.

Example

```
ruckus(config-hotspot-restrict-access)# type allow
```


The command was executed successfully. To save the changes, type 'end' or 'exit'.

type deny

To set the hotspot access rule type to 'deny', use the following command:

```
type deny
```

Syntax Description	type	Set the hotspot access rule type
	deny	Set the rule type to 'deny'

Defaults	None.
----------	-------

Example	<pre>ruckus(config-hotspot-restrict-access)# type deny</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>
---------	--

destination address

To set the destination address of the rule, use the following command:

```
destination address <IP-ADDR/WORD>
```

Syntax Description	destination address	Set the destination address of the rule
	IP-ADDR/WORD	Set the destination to this IP address

Defaults	None.
----------	-------

Example	<pre>ruckus(config-hotspot-restrict-access)# destination address 192.168.20.20/24</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>
---------	---

destination port

To set the destination port of the rule, use the following command:

```
destination port <NUMBER/WORD>
```

Syntax Description	destination port	Set the destination port of the rule
	<NUMBER/WORD>	Set the destination to this port number

Defaults None.

Example `ruckus(config-hotspot-restrict-access)# destination port 920`
The command was executed successfully. To save the changes, type 'end' or 'exit'.

protocol

To set the protocol for the rule, use the following command:

```
protocol <NUMBER/WORD>
```

Syntax Description

protocol	Set the protocol for the rule
<NUMBER/WORD>	Set to this protocol

Defaults None.

Example `ruckus(config-hotspot-restrict-access)# protocol 58`
The command was executed successfully. To save the changes, type 'end' or 'exit'.

Configure Certificate Commands

Use the config-certificate commands to restore the default ZoneDirector certificate or to regenerate the private key. To run these commands, you must first enter the config-certificate context.

quit

To exit the config-certificate context without saving changes, use the quit command.

```
quit
```

Syntax Description

quit	Exit the certificate settings without saving changes
------	--

Defaults None.

Example `ruckus(config-certificate)# quit`
No changes have been saved.

restore

To restore the default ZoneDirector certificate and private key, use the following command.

```
restore
```

Syntax Description	restore	Restore the default ZoneDirectory certificate and private key. The restore process will be completed after ZoneDirector is rebooted.
--------------------	---------	--

Defaults	None.
----------	-------

Example	<pre>ruckus(config-certificate)# restore</pre> <p>ZoneDirector will restart now to apply the changes in the certificate settings. If you want to configure other settings, log in again after ZoneDirector has completed restarting.</p>
---------	---

re-generate-private-key

To regenerate the ZoneDirector private key, use the following command:

```
re-generate-private-key {1024|2048}
```

Syntax Description	re-generate-private-key	Regenerate the ZoneDirector private key
	{1024 2048}	Specify the length of the private key as either 1024 or 2048.

Defaults	None.
----------	-------

Example	<pre>ruckus(config-certificate)# re-generate-private-key 1024</pre> <p>ZoneDirector will restart now to apply the changes in the certificate settings. If you want to configure other settings, log in again after ZoneDirector has completed restarting.</p> <p>The operation doesn't execute successfully. Please try again.</p>
---------	---

Configure Mesh Commands

Use the mesh commands to configure the controller’s mesh networking settings. To run these commands, you must first enter the `config-mesh` context.

abort

To exit the `config-mesh` context without saving changes, use the `abort` command.

```
abort
```

Syntax Description	abort	Exit the mesh settings without saving changes
--------------------	-------	---

Defaults	None.
----------	-------

Example	<pre>ruckus(config-mesh)# abort No changes have been saved. ruckus(config)#</pre>
---------	---

end

To save changes, and then exit the `config-mesh` context, use the following command:

```
end
```

Syntax Description	end	Save changes, and then exit the context
--------------------	-----	---

Defaults	None.
----------	-------

Example	<pre>ruckus(config-mesh)# end Your changes have been saved. ruckus(config)#</pre>
---------	---

exit

To save changes, and then exit the `config-mesh` context, use the following command:

```
exit
```

Syntax Description	exit	Save changes, and then exit the context
--------------------	------	---

Defaults	None.		
Example	<pre>ruckus(config-mesh)# exit Your changes have been saved. ruckus(config)#</pre> <p>quit</p> <p>To exit the config-mesh context without saving changes, use the quit command.</p> <pre>quit</pre>		
Syntax Description	<table><tr><td>quit</td><td>Exit the mesh settings without saving changes</td></tr></table>	quit	Exit the mesh settings without saving changes
quit	Exit the mesh settings without saving changes		
Defaults	None.		
Example	<pre>ruckus(config-mesh)# quit No changes have been saved. ruckus(config)#</pre> <p>show</p> <p>To display the current mesh settings, use the following command:</p> <pre>show</pre>		
Syntax Description	<table><tr><td>show</td><td>Display the current mesh settings</td></tr></table>	show	Display the current mesh settings
show	Display the current mesh settings		
Defaults	None.		
Example	<pre>ruckus(config-mesh)# show Mesh Settings: Mesh Status= Disabled Mesh Name(ESSID)= rks_mesh Mesh Passphrase= test123456 Mesh Hop Detection= Enabled Mesh Hops Threshold= 6 Mesh Downlinks Detection= Enabled Mesh Downlinks Threshold= 8</pre>		

no mesh

To disable mesh networking on the controller, use the following command:

```
no mesh
```

Syntax Description	no mesh	Disable mesh networking on the controller

Defaults	None.
----------	-------

ssid

To set the SSID of the mesh network, use the following command:

```
ssid <ssid>
```

Syntax Description	ssid	Set the SSID of the mesh network
	<ssid>	Set to this SSID

Defaults	None.
----------	-------

Example	<pre>ruckus(config-mesh)# ssid rks_mesh</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>
---------	---

passphrase

To set the passphrase that allows access to the mesh network, use the following command:

```
passphrase <passphrase>
```

Syntax Description	passphrase	Set the passphrase that allows access to the mesh network
	<passphrase>	Set to this passphrase

Defaults	None.
----------	-------

Example	<pre>ruckus(config-mesh)# passphrase test123456</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>
---------	---

hops-warn-threshold

To enable and configure the mesh hop threshold, use the following command:

```
hops-warn-threshold <threshold>
```

Syntax Description	hops-warn-threshold	Set the mesh hop threshold (max hops)
	<threshold>	Set to this threshold value

Defaults	5
----------	---

Example	<pre>ruckus(config-mesh)# hops-warn-threshold 6</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>
---------	--

no detect-hops

To disable the mesh hop threshold, use the following command:

```
no detect-hops
```

Syntax Description	no detect-hops	Disable the mesh hop threshold
--------------------	----------------	--------------------------------

Defaults	None.
----------	-------

Example	<pre>ruckus(config-mesh)# no detect-hops</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>
---------	---

fan-out-threshold

To enable and configure the mesh downlink threshold, use the following command:

```
fan-out-threshold <threshold>
```

Syntax Description	fan-out-threshold	Set the mesh downlink threshold (max downlinks)
	<threshold>	Set to this threshold value

Defaults	5
----------	---

Example	<pre>ruckus(config-mesh)# fan-out-threshold 8</pre>
---------	---

The command was executed successfully. To save the changes, type 'end' or 'exit'.

no detect-fanout

To disable the mesh downlink threshold, use the following command:

```
no detect-fanout
```

Syntax Description	no detect-fanout	Disable the mesh downlink threshold
Defaults	None.	
Example	ruckus(config-mesh)# no detect-fanout The command was executed successfully. To save the changes, type 'end' or 'exit'.	

Configure Alarm Commands

Use the `alarm` commands to configure the controller's alarm notification settings. To run these commands, you must first enter the `config-alarm` context.

abort

To exit the `config-alarm` context without saving changes, use the `abort` command.

```
abort
```

Syntax Description	abort	Exit the alarm settings without saving changes
Defaults	None.	
Example	ruckus(config-alarm)# abort No changes have been saved. ruckus(config)#	

end

To save changes, and then exit the `config-alarm` context, use the following command:

```
end
```


Syntax Description	<table><tr><td>end</td><td>Save changes, and then exit the context</td></tr></table>	end	Save changes, and then exit the context
end	Save changes, and then exit the context		
Defaults	None.		
Example	<pre>ruckus(config-alarm)# end</pre> <p>The Email Address and SMTP server port cannot be empty.</p> <pre>ruckus(config-alarm)# end</pre> <p>The Alarm settings have been updated. Your changes have been saved.</p> <pre>ruckus(config)#</pre> <p>exit</p> <p>To save changes, and then exit the config-alarm context, use the following command:</p> <pre>exit</pre>		
Syntax Description	<table><tr><td>exit</td><td>Save changes, and then exit the context</td></tr></table>	exit	Save changes, and then exit the context
exit	Save changes, and then exit the context		
Defaults	None.		
Example	<pre>ruckus(config-alarm)# exit</pre> <p>The Alarm settings have been updated. Your changes have been saved.</p> <p>quit</p> <p>To exit the config-alarm context without saving changes, use the quit command.</p> <pre>quit</pre>		
Syntax Description	<table><tr><td>quit</td><td>Exit the alarm settings without saving changes</td></tr></table>	quit	Exit the alarm settings without saving changes
quit	Exit the alarm settings without saving changes		
Defaults	None.		
Example	<pre>ruckus(config-alarm)# quit</pre> <p>No changes have been saved.</p> <pre>ruckus(config)#</pre>		

show

To display the current alarm settings, use the following command:

```
show
```

Syntax Description	show	Display the current alarm settings
--------------------	------	------------------------------------

Defaults	None.
----------	-------

Example	<pre>ruckus(config-alarm)# show Alarm Status= Enabled Email Address= joe@163.com SMTP Server Name= smtp.163.com SMTP Server Port= 1217 SMTP Authentication Username= joe SMTP Authentication Password= 123456 Encryption Options,TLS:Disabled</pre>
---------	--

e-mail

To set the email address to which alarm notifications will be sent, use the following command:

```
e-mail <e-mail_addr>
```

Syntax Description	e-mail	Set the email address to which alarm notifications will be sent
	<e-mail_addr>	Send alarm notifications to this email address

Defaults	None.
----------	-------

Example	<pre>ruckus(config-alarm)# e-mail joe@163.com The command was executed successfully. To save the changes, type 'end' or 'exit'.</pre>
---------	--

smtp-server-name

To set the SMTP server that ZoneDirector uses to send alarm notifications, use the following command:

```
smtp-server-name <smtp_server_name>
```

Syntax Description	smtp-server-name	Set the SMTP server that ZoneDirector uses to send alarm notifications
	<smtp_server_name>	Set to this SMTP server name

Defaults	None.
----------	-------

Example	<pre>ruckus(config-alarm)# smtp-server-name smtp.163.com</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>
---------	---

smtp-server-port

To set the SMTP server port that ZoneDirector uses to send alarm notifications, use the following command:

```
smtp-server-name <port>
```

Syntax Description	smtp-server-name	Set the SMTP server that ZoneDirector uses to send alarm notifications
	<port>	Set to this SMTP server port

Defaults	587
----------	-----

Example	<pre>ruckus(config-alarm)# smtp-server-port 1217</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>
---------	---

smtp-auth-name

To set the user name that ZoneDirector uses to authenticate with the SMTP server, use the following command:

```
smtp_auth_name <smtp_auth_name>
```

Syntax Description	smtp_auth_name	Set the user name that ZoneDirector uses to authenticate with the SMTP server
	<smtp_auth_name>	Set to this user name

Defaults	None.
----------	-------

Example

```
ruckus(config-alarm)# smtp-auth-name joe
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

smtp-auth-password

To set the password that ZoneDirector uses to authenticate with the SMTP server, use the following command:

```
smtp-auth-password <password>
```

Syntax Description

smtp-auth-password	Set the password that ZoneDirector uses to authenticate with the SMTP server
<password>	Set to this password

Defaults

None.

Example

```
ruckus(config-alarm)# smtp-auth-password 123456
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

tls-smtp-encryption

To enable TLS for SMTP encryption of alarm notifications, use the following command:

```
tls-smtp-encryption
```

Syntax Description

tls-smtp-encryption	Enable TLS for SMTP encryption of alarm notifications
---------------------	---

Defaults

None.

Example

```
ruckus(config-alarm)# tls-smtp-encryption
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

no tls-smtp-encryption

To disable TLS for SMTP encryption of alarm notifications, use the following command:

```
no tls-smtp-encryption
```

Syntax Description	tls-smtp-encryption	Disable TLS for SMTP encryption of alarm notifications
--------------------	---------------------	--

Defaults	None.
----------	-------

Example	<pre>ruckus(config-alarm)# no tls-smtp-encryption</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>
---------	--

starttls-smtp-encryption

To enable STARTTLS for SMTP encryption of alarm notifications, use the following command:

```
starttls-smtp-encryption
```

Syntax Description	starttls-smtp-encryption	Enable STARTTLS for SMTP encryption of alarm notifications
--------------------	--------------------------	--

Defaults	None.
----------	-------

Example	<pre>ruckus(config-alarm)# starttls-smtp-encryption</pre> <p>Should enable TLS of SMTP Encryption firstly, then try it again.</p>
---------	---

no starttls-smtp-encryption

To disable STARTTLS for SMTP encryption of alarm notifications, use the following command:

```
no starttls-smtp-encryption
```

Syntax Description	no starttls-smtp-encryption	Disable STARTTLS for SMTP encryption of alarm notifications
--------------------	-----------------------------	---

Defaults	None.
----------	-------

Example	<pre>ruckus(config-alarm)# no starttls-smtp-encryption</pre> <p>Should enable TLS of SMTP Encryption firstly, then try it again.</p>
---------	--

Configure Services Commands

Use the `services` commands to configure miscellaneous service settings, such as AP power, channel, background scanning, etc. To run these commands, you must first enter the `config-services` context.

abort

To exit the `config-services` context without saving changes, use the `abort` command.

```
abort
```

Syntax Description	abort	Exit the service settings without saving changes
Defaults	None.	
Example	<pre>ruckus(config-services)# abort No changes have been saved. ruckus(config)#</pre>	

end

To save changes, and then exit the `config-services` context, use the following command:

```
end
```

Syntax Description	end	Save changes, and then exit the context
Defaults	None.	
Example	<pre>ruckus(config-services)# end Your changes have been saved. ruckus(config)#</pre>	

exit

To save changes, and then exit the `config-services` context, use the following command:

```
exit
```

Syntax Description	<div>exit</div> <div>Save changes, and then exit the context</div>
Defaults	None.
Example	<div>ruckus(config-services)# exit</div> <div>Your changes have been saved.</div> <div>ruckus(config)#</div> <div>quit</div> <div>To exit the config-services context without saving changes, use the quit command.</div> <div>quit</div>
Syntax Description	<div>quit</div> <div>Exit the service settings without saving changes</div>
Defaults	None.
Example	<div>ruckus(config-services)# quit</div> <div>No changes have been saved.</div> <div>ruckus(config)#</div> <div>show</div> <div>To display the current service settings, use the following command:</div> <div>show</div>
Syntax Description	<div>show</div> <div>Display the current service settings</div>
Defaults	None.
Example	<div>ruckus(config-services)# show</div> <div>Services:</div> <div>Automatically adjust ap radio power= Disabled</div> <div>Automatically adjust ap channel= Disabled</div> <div>Protect my wireless network against excessive wireless requests= Disabled</div> <div>Temporarily block wireless clients with repeated authentication failures= Disabled</div>

```
Run a background scan on 2.4GHz radio= Enabled
Time= 20 seconds
Run a background scan on 5GHz radio= Disabled
Report rogue devices in ZD event log= Disabled
Rogue DHCP server detection= Disabled
AeroScout RFID tag detection= Disabled
```

no auto-adjust-ap-power

To disable the auto adjustment of the AP radio power, which helps optimize radio coverage when radio interference is present, use the following command:

```
no auto-adjust-ap-power
```

Syntax Description		
	no auto-adjust-ap-power	Disable the auto adjustment of the AP radio power
Defaults	None.	
Example	<pre>ruckus(config-services)# no auto-adjust-ap-power</pre> <p>The command was executed successfully.</p>	

auto-adjust-ap-power

To enable the auto adjustment of the AP radio power, which helps optimize radio coverage when radio interference is present, use the following command:

```
auto-adjust-ap-power
```

Syntax Description		
	auto-adjust-ap-power	Enable the auto adjustment of the AP radio power
Defaults	None.	
Example	<pre>ruckus(config-services)# auto-adjust-ap-power</pre> <p>The command was executed successfully.</p>	

no auto-adjust-ap-channel

To disable the auto adjustment of the AP radio channel when radio interference is present, use the following command:

```
no auto-adjust-ap-channel
```


Syntax Description	no auto-adjust-ap-channel	Disable the auto adjustment of the AP radio channel
--------------------	---------------------------	---

Defaults	None.
----------	-------

Example	<pre>ruckus(config-services)# no auto-adjust-ap-channel</pre> <p>The command was executed successfully.</p>
---------	---

auto-adjust-ap-channel

To enable the auto adjustment of the AP radio channel when radio interference is present, use the following command:

```
auto-adjust-ap-channel
```

Syntax Description	auto-adjust-ap-channel	Enable the auto adjustment of the AP radio channel
--------------------	------------------------	--

Defaults	None.
----------	-------

Example	<pre>ruckus(config-services)# auto-adjust-ap-channel</pre> <p>The command was executed successfully.</p>
---------	--

no protect-excessive-wireless-request

To disable protection of the wireless network against excessive wireless requests, use the following command:

```
no protect-excessive-wireless-request
```

Syntax Description	no protect-excessive-wireless-request	Disable protection of the wireless network against excessive wireless requests
--------------------	---------------------------------------	--

Defaults	None.
----------	-------

Example	<pre>ruckus(config-services)# no protect-excessive-wireless-request</pre> <p>The command was executed successfully.</p>
---------	---

protect-excessive-wireless-request

To enable protection of the wireless network against excessive wireless requests, use the following command:

protect-excessive-wireless-request

Syntax Description		
protect-excessive-wireless-request		Enable protection of the wireless network against excessive wireless requests

Defaults	Enabled
----------	---------

Example `ruckus(config-services)# protect-excessive-wireless-request`
The command was executed successfully.

no temp-block-auth-failed-client

To allow wireless clients that repeatedly fail to authenticate with APs to continue their authentication attempt, use the following command:

```
no temp-block-auth-failed-client
```

Syntax Description	
no temp-block-auth-failed-client	Allow wireless clients that repeatedly fail to authenticate with AP to continue their authentication attempt

Defaults	None
----------	------

Example ruckus(config-services)# **no temp-block-auth-failed-client**
The command was executed successfully.

temp-block-auth-failed-client time

To temporarily block wireless clients that repeatedly fail to authenticate with APs, use the following command:

```
temp-block-auth-failed-client time <seconds>
```

Syntax Description	
temp-block-auth-failed-client time	Temporarily block wireless clients that repeatedly fail to authenticate with APs
<seconds>	Block for this number of seconds

Defaults	30 seconds
----------	------------

Example

```
ruckus(config-services)# temp-block-auth-failed-client time 9
```

The Block Time must be a number between 10 and 1200.

```
ruckus(config-services)# temp-block-auth-failed-client time 99
```

The command was executed successfully.

no background-scan radio-2.4

To disable background scanning on the 2.4GHz radio, use the following command:

```
no background-scan radio-2.4
```

Syntax	Description
no background-scan radio-2.4	Disable background scanning on the 2.4GHz radio

Defaults

None

Example

```
ruckus(config-services)# no background-scan radio-2.4
```

The command was executed successfully.

background-scan radio-2.4-interval

To enable background scanning on the 2.4GHz radio and configure the scan interval, use the following command:

```
background-scan radio-2.4-interval <seconds>
```

Syntax	Description
background-scan radio-2.4-interval	Enable background scanning on the 2.4GHz radio and configure the scan interval
<seconds>	Perform background scan at this interval (in seconds)

Defaults

20 seconds

Example

```
ruckus(config-services)# background-scan radio-2.4-interval 6
```

The command was executed successfully.

no background-scan radio-5

To disable background scanning on the 5GHz radio, use the following command:

```
no background-scan radio-5
```

Syntax Description

no background-scan radio-5	Disable background scanning on the 5GHz radio
----------------------------	---

Defaults

None

Example

```
ruckus(config-services)# no background-scan radio-5  
The command was executed successfully.
```

background-scan radio-5-interval

To enable background scanning on the 5GHz radio and configure the scan interval, use the following command:

```
background-scan radio-5-interval <seconds>
```

Syntax Description

background-scan radio-5-interval	Enable background scanning on the 5GHz radio and configure the scan interval
<seconds>	Perform background scan at this interval (in seconds)

Defaults

20 seconds

Example

```
ruckus(config-services)# background-scan radio-5-interval 16  
The command was executed successfully.
```

rogue-report

To enable recording of detected rogue devices in the Event logs, use the following command:

```
rogue-report
```

Syntax Description

rogue-report	Enable recording of detected rogue devices in the Event logs
--------------	--

Defaults

None

Example

```
ruckus(config-services)# rogue-report  
Should enable running a background scan on 2.4/5GHz radio firstly,  
then try it again.  
ruckus(config-services)# rogue-report  
The command was executed successfully.
```

no rogue-report

To disable recording of detected rogue devices in the Event logs, use the following command:

```
no rogue-report
```

Syntax Description	no rogue-report	Disable recording of detected rogue devices in the Event logs
Defaults	None	
Example	ruckus(config-services)# no rogue-report The command was executed successfully.	

no rogue-dhcp-detection

To disable recording of detected rogue DHCP servers in the Event logs, use the following command:

```
no rogue-dhcp-detection
```

Syntax Description	no rogue-dhcp-detection	Disable recording of detected rogue DHCP servers in the Event logs
Defaults	None	
Example	ruckus(config-services)# no rogue-dhcp-detection The command was executed successfully.	

rogue-dhcp-detection

To enable recording of detected rogue DHCP servers in the Event logs, use the following command:

```
rogue-dhcp-detection
```

Syntax Description	rogue-dhcp-detection	Enable recording of detected rogue DHCP servers in the Event logs
Defaults	None	
Example	ruckus(config-services)# rogue-dhcp-detection	

The command was executed successfully.

no aeroscout-detection

To disable detection of AeroScout RFID Tags by APs that are managed by ZoneDirector, use the following command:

```
no aeroscout-detection
```

Syntax Description	no aeroscout-detection	Disable detection of AeroScout RFID Tags by APs
Defaults	None	
Example	ruckus(config-services)# no aeroscout-detection The command was executed successfully.	

aeroscout-detection

To enable detection of AeroScout RFID Tags by APs that are managed by ZoneDirector, use the following command:

```
aeroscout-detection
```

Syntax Description	aeroscout-detection	Enable detection of AeroScout RFID Tags by APs
Defaults	None	
Example	ruckus(config-services)# aeroscout-detection The command was executed successfully.	

Configure Load Balancing Commands

Use the load-balancing commands to configure the controller's load balancing settings. To run these commands, you must first enter the config-load-balancing context.

abort

To exit the config-load-balancing context without saving changes, use the abort command.

```
abort
```

Syntax Description	abort	Exit the service settings without saving changes
Defaults	None.	
	end To save changes, and then exit the <code>config-load-balancing</code> context, use the following command: <code>end</code>	
Syntax Description	end	Save changes, and then exit the context
Defaults	None.	
	exit To save changes, and then exit the <code>config-load-balancing</code> context, use the following command: <code>exit</code>	
Syntax Description	exit	Save changes, and then exit the context
Defaults	None.	
	quit To exit the <code>config-load-balancing</code> context without saving changes, use the <code>quit</code> command. <code>quit</code>	
Syntax Description	quit	Exit the service settings without saving changes
Defaults	None.	
	adj-threshold To configure the adjustment threshold for load balancing, use the following command: <code>adj-threshold {RADIO-INTERFACE} {NUMBER}</code>	

Syntax Description

adj-threshold	Configure the adjustment threshold for load balancing
{RADIO-INTERFACE}	Configure this interface
{NUMBER}	Set the adjust value to this

Defaults

None.

weak-bypass

To configure the weak bypass for load balancing, use the following command:

```
weak-bypass {RADIO-INTERFACE} {NUMBER}
```

Syntax Description

weak-bypass	Configure the weak bypass for load balancing
{RADIO-INTERFACE}	Configure this interface
{NUMBER}	Set the adjust value to this

Defaults

None.

strong-bypass

To configure the strong bypass for load balancing, use the following command:

```
strong-bypass {RADIO-INTERFACE} {NUMBER}
```

Syntax Description

strong-bypass	Configure the strong bypass for load balancing
{RADIO-INTERFACE}	Configure this interface
{NUMBER}	Set the adjust value to this

Defaults

None.

act-threshold

To configure the activation threshold for load balancing, use the following command:

```
act-threshold {RADIO-INTERFACE} {NUMBER}
```

Syntax Description

act-threshold	Configure the activation threshold for load balancing
{RADIO-INTERFACE}	Configure this interface

{NUMBER}	Set the adjust value to this
----------	------------------------------

Defaults

None.

show

To display the current service settings, use the following command:

show

Syntax Description

show	Display the current service settings
------	--------------------------------------

Defaults

None.

Example

```
ruckus(config-load-balancing)# show
Load Balancing:
  Status= Disabled
  Radio:
    0:
      AdjacentThreshold= 38
      WeakBypass= 20
      StrongBypass= 50
      ActivationThreshold= 1
      NewTrigger= 50
      Headroom= 30

    1:
      AdjacentThreshold= 45
      WeakBypass= 20
      StrongBypass= 50
      ActivationThreshold= 1
      NewTrigger= 1
      Headroom= 1
```

Configure System Commands

Use the `sys` command to configure the controller's system settings, including its host name, FlexMaster server, NTP server, SNMP, and QoS settings. To run these commands, you must first enter the `config-sys` context.

hostname

To set the system hostname, use the following command:

```
hostname
```

Syntax Description	hostnameSet the controller's system hostname
Defaults	None
Example	<pre>ruckus(config-sys)# hostname ruckus-xjoe</pre> <p>The system identity/hostname settings have been updated.</p> <pre>ruckus(config-sys)# hostname ruckus-xjoe&</pre> <p>The host name must be between 1 and 32 characters and must consist only of alphanumeric characters, underscores (<code>_</code>), and hyphens (<code>-</code>).</p>

no ntp

To disable the NTP client, use the following command:

```
no ntp
```

Syntax Description	no ntpDisable the NTP client on the controller.
Defaults	Enabled. The default NTP server addresss is <code>ntp.ruckuswireless.com</code> .
Example	<pre>ruckus(config-sys)# no ntp</pre> <p>The NTP settings have been updated.</p>

ntp

To enable the NTP client, use the following command:

```
ntp {NTP server address}
```

Syntax Description	ntpEnable the NTP client
	{NTP server}Set the NTP server address to this IP address

Defaults	None.
Example	<pre>ruckus(config-sys)# ntp 192.168.2.21</pre> <p>The NTP settings have been updated.</p> <pre>ruckus(config-sys)# ntp sohu.com</pre> <p>The NTP settings have been updated.</p>

mgmt-acl

To create or configure a management ACL, use the following command:

```
mgmt-acl <WORD>
```

Executing this command enters the config-mgmt-acl context.

For the commands that you can execute within the config-mgmt-acl context, refer to [“Configure Management ACL Commands”](#) on [page 171](#).

Syntax Description	mgmt-acl	Create or configure a management ACL
	<WORD>	Create or configure this management ACL

Defaults	None.
Example	<pre>ruckus(config-sys)# mgmt-acl mac11</pre> <p>The management ACL 'mac11' has been created. To save the Management ACL, type 'end' or 'exit'.</p> <pre>ruckus(config-mgmt-acl)#</pre>

flexmaster

To set the FlexMaster service URL and the periodic inform interval, use the following command:

```
flexmaster <flexmaster_url> interval <inform_interval>
```

Syntax Description	flexmaster	Configure the FlexMaster server settings
	<flexmaster_url>	Set to this URL or IP address
	interval	Configure the periodic inform interval
	<inform_interval>	Set to this interval (in minutes)

Defaults	None.
----------	-------

Example

```
ruckus(config-sys)# flexmaster http://172.18.30.118 interval 30
```

The FlexMaster Management settings have been updated.

snmpv2

To configure the SNMPv2 settings, use the following command:

```
snmpv2
```

Executing this command enters the config-sys-snmpv2 context.

Syntax Description	
snmpv2	Configure the SNMPv2 settings

Defaults

```
ruckus(config-sys)# snmpv2
ruckus(config-sys-snmpv2)#
```

snmpv3

To configure the SNMPv3 settings, use the following command:

```
snmpv3
```

Executing this command enters the config-sys-snmpv3 context.

Syntax Description	
snmpv3	Configure the SNMPv3 settings

Defaults

```
ruckus(config-sys)# snmpv3
ruckus(config-sys-snmpv2)#
```

snmp-trap-format

To set the SNMP trap format to SNMPV2 or SNMPV3, use the following command:

```
snmp-trap-format [SNMPv2 | SNMPv3]
```

Syntax Description	
snmp-trap-format	Set the SNMP trap format
[SNMPv2 SNMPv3]	Set to either SNMPv2 or SNMPv3

Defaults

None

Example

```
ruckus(config-sys)# snmp-trap-format SNMPV2
```

The SNMP trap settings have been updated.

snmpv2-trap

To enable the SNMPv2 trap and set the IP address of the trap server, use the following command:

```
snmpv2-trap {IP-ADDR}
```

Syntax Description	snmpv2-trap	Enable the SNMPv2 trap and set the trap server's IP address
	{ IP-ADDR}	Set to this IP address
Defaults	None	
Example	ruckus(config-sys)# snmpv2-trap 192.168.10.22 The SNMP trap settings have been updated.	

snmpv3-trap

To enable and configure the SNMPv3 trap parameters, use the following command:

```
snmpv3-trap <user_name> <snmp_trap_server_ip> [MD5 | SHA]  
<auth_pass_phrase> [DES <privacy_phrase>|AES <privacy_phrase>|  
None]
```

Syntax Description	snmpv3-trap	Enable the SNMPv3 trap and configure the trap parameters
	<user_name>	Trap user name
	<snmp_trap_server_ip>	Trap server IP address
	[MD5 SHA]	
	<auth_pass_phrase>	
	>	
	[DES	
	<privacy_phrase>	
	AES	
	<privacy_phrase>	
Defaults	None]	
Example	ruckus(config-sys)# snmpv3-trap test1234 192.168.0.22 MD5 test1234 DES test4321 The command was executed successfully.	

no flexmaster

To disable FlexMaster management of the controller, use the following command:

```
no flexmaster
```

Syntax Description	<table><tr><td data-bbox="404 307 665 366">no flexmaster</td><td data-bbox="665 307 1283 366">Disable FlexMaster management of the controller</td></tr></table>	no flexmaster	Disable FlexMaster management of the controller
no flexmaster	Disable FlexMaster management of the controller		
Defaults	None		
Example	<pre>ruckus(config-sys)# no flexmaster FlexMaster Management has been disabled.</pre>		

qos

To enable and configure QoS on the controller, use the following command:

```
qos
```

Executing this command enters the `config-sys-qos` context.

Syntax Description	<table><tr><td data-bbox="404 786 665 845">qos</td><td data-bbox="665 786 1283 845">Enable and configure QoS on the controller</td></tr></table>	qos	Enable and configure QoS on the controller
qos	Enable and configure QoS on the controller		
Defaults	None.		
Example	<pre>ruckus(config-sys)# qos ruckus(config-sys-qos)#</pre>		

no qos

To disable QoS on the controller, use the following command:

```
no qos
```

Syntax Description	<table><tr><td data-bbox="404 1225 665 1284">no qos</td><td data-bbox="665 1225 1283 1284">Disable QoS on the controller</td></tr></table>	no qos	Disable QoS on the controller
no qos	Disable QoS on the controller		
Defaults	None.		
Example	<pre>ruckus(config-sys)# no qos Changes are saved! System QoS function has been disabled.</pre>		

mgmt-if

To configure the management interface settings, use the following command:

```
mgmt-if
```

Executing this command enters the `config-sys-mgmt-if` context.

Syntax Description	<div>mgmt-if</div> <div>Configure the management interface settings</div>
Defaults	None.
Example	<pre>ruckus(config-sys)# mgmt-if ruckus(config-sys-mgmt-if)#</pre>

no mgmt-if

To disable the management interface, use the following command:

```
no mgmt-if
```

Syntax Description	<div>no mgmt-if</div> <div>Disable the management interface</div>
Defaults	None.
Example	<pre>ruckus(config-sys)# no mgmt-if The management interface has been updated.</pre>

no snmpv2

To disable the SNMPv2 agent, use the following command:

```
no snmpv2
```

Syntax Description	<div>no snmpv2</div> <div>Disables the SNMPv3 agent</div>
Defaults	None.
Example	<pre>ruckus(config-sys)# no snmpv2 The SNMP v2 agent settings have been updated.</pre>

no snmpv3

To disable the SNMPv3 agent, use the following command:

no snmpv3

Syntax Description		
	no snmpv3	Disables the SNMPv3 agent
Defaults	None.	
Example	ruckus(config-sys)# no snmpv3 The SNMP v3 agent settings have been updated.	

no snmp-trap

To disable the SNMP trap notifications, use the following command:

no snmp-trap

Syntax Description		
	no snmp-trap	Disables SNMP trap notifications
Defaults	None.	
Example	ruckus(config-sys)# no snmp-trap The SNMP trap settings have been updated.	

contact

To enable SNMP trap notification and set the system contact, use the following command:

contact {contact name}

This command must be entered from within the snmp-agent context.

Syntax Description		
	contact	Configure the SNMP contact
	{contact name}	Set the SNMP contact to this value
Defaults	None.	
Example	ruckus# config ruckus(config)# system ruckus(config-sys)# snmp-agent ruckus(config-sys-snmp-agent)# contact Joe-User The command was executed successfully.	

location

To set the system location, use the following command:

```
location {location name}
```

This command must be entered from within the `snmp-agent` context.

Syntax Description	location	Configure the SNMP location
	{location name}	Set the SNMP location to this value
Defaults	None.	
Example	<pre>ruckus# config ruckus(config)# system ruckus(config-sys)# snmp-agent ruckus(config-sys-snmp-agent)# location Sunnyvale</pre> The command was executed successfully.	

ro-community

To set the read-only (RO) community name, use the following command:

```
ro-community {RO community}
```

This command must be entered from within the `snmp-agent` context.

Syntax Description	ro-community	Configure the read-only community name
	{RO community}	Set the read-only community name to this value
Defaults	None.	
Example	<pre>ruckus(config-sys-snmp-agent)# ro-community private-123</pre> The command was executed successfully	

rw-community

To set the read-write (RW) community name, use the following command:

```
rw-community {RW community}
```

This command must be entered from within the `snmp-agent` context.

Syntax Description	rw-community	Configure the read-write community name
	{RW community}	Set the read-write community name to this value

Defaults None.

Example `ruckus(config-sys-snmp-agent)# rw-community public-123`
The command was executed successfully

snmp-trap

To enable SNMP trap notification and set the trap server address, use the following command:

```
snmp-trap {trap server address}
```

Syntax Description

<code>snmp-trap</code>	Enable SNMP trap notifications
<code>{trap server address}</code>	Set the trap server address to this IP address or host name

Defaults None.

Example `ruckus# config`
`ruckus(config)# system`
`ruckus(config-sys)# snmp-trap 192.168.0.3`

Configure Management ACL Commands

Use the `mgmt-acl` commands to configure the management ACL settings. To run these commands, you must first enter the `config-mgmt-acl` context.

abort

To exit the `config-mgmt-acl` context without saving changes, use the `abort` command.

```
abort
```

Syntax Description

<code>abort</code>	Exit the context without saving changes
--------------------	---

Defaults Disabled.

Example `ruckus(config-mgmt-acl)# abort`
No changes have been saved.
`ruckus(config-sys)#`

end

To save changes, and then exit the config-services context, use the following command:

```
end
```

Syntax Description	endSave changes, and then exit the context
Defaults	Disabled.
Example	<pre>ruckus(config-mgmt-acl)# end</pre> <p>The management ACL 'macl2' has been updated and saved. Your changes have been saved.</p> <pre>ruckus(config-sys)#</pre>

exit

To save changes, and then exit the config-services context, use the following command:

```
exit
```

Syntax Description	exitSave changes, and then exit the context
Defaults	Disabled.
Example	<pre>ruckus(config-mgmt-acl)# exit</pre> <p>The management ACL 'macl2' has been updated and saved. Your changes have been saved.</p> <pre>ruckus(config-sys)#</pre>

quit

To exit the config-mgmt-acl context without saving changes, use the abort command.

```
quit
```

Syntax Description	quitExit the context without saving changes
Defaults	Disabled.

Example

```
ruckus(config-mgmt-acl)# quit  
No changes have been saved.  
ruckus(config-sys)#
```

name

To set the management ACL name, use the following command:

```
name <WORD>
```

Syntax Description

name	Set the management ACL name
<WORD>	Set to this name

Defaults

Disabled.

Example

```
ruckus(config-mgmt-acl)# name mac12  
The command was executed successfully. To save the changes, type  
'end' or 'exit'.
```

restrict-type single ip-addr

To set the management ACL restriction type to a single IP address, use the following command:

```
restrict-type single ip-addr <ip_address>
```

Syntax Description

restrict-type single ip-addr	Set the management ACL restriction type to a single IP address
<ip_address>	Set to this IP address only

Defaults

Disabled.

Example

```
ruckus(config-mgmt-acl)# restrict-type single ip-addr  
192.168.110.22  
The command was executed successfully. To save the changes, type  
'end' or 'exit'.
```

restrict-type subnet ip-subnet

To set the management ACL restriction type to certain subnets, use the following command:

```
restrict-type subnet ip-subnet <IP-SUBNET> <IP-SUBNET>
```

Syntax Description	<code>restrict-type</code>	Set the management ACL restriction type to a single IP
	<code>subnet ip-subnet</code>	address
	<code><IP-SUBNET></code>	Set to this subnet
Defaults	Disabled.	
Example	<pre>ruckus(config-mgmt-acl)#restrict-type subnet ip-subnet 172.30.110.26 255.255.254.0</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>	

restrict-type range ip-range

To set the management ACL restriction type to an IP address range, use the following command:

```
restrict-type range ip-range <ip_address> <ip_address>
```

Syntax Description	<code>restrict-type range</code>	Set the management ACL restriction type to a single IP
	<code>ip-range</code>	address
	<code><ip_address></code> <code><ip_address></code>	Set to this IP address range. The first <code><ip_address></code> is for the startui
Defaults	Disabled.	
Example	<pre>ruckus(config-mgmt-acl)#restrict-type range ip-range 172.30.110.28 172.30.110.39</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>	

show

To display the current management ACL settings, use the following command:

```
show
```

Syntax Description	<code>show</code>	Display the current management ACL settings
Defaults	Disabled.	
Example	<pre>ruckus(config-mgmt-acl)# show</pre>	

Configuring Controller Settings

Configure System Commands

Management ACL:

ID:

:

Name= mac12

Restriction Type= range

IP range= 172.30.110.28-172.30.110.39

Configure Syslog Settings Commands

Use the `syslog` commands to configure the controller's syslog notification settings. To run these commands, you must first enter the `config-sys` context.

no syslog

To disable syslog notification, use the following command:

```
no syslog
```

Syntax Description	<table><tr><td><code>no syslog</code></td><td>Disable syslog notification</td></tr></table>	<code>no syslog</code>	Disable syslog notification
<code>no syslog</code>	Disable syslog notification		
Defaults	Disabled.		
Example	<pre>ruckus# config ruckus(config)# system ruckus(config-sys)# no syslog The command was executed successfully.</pre>		

syslog

To enable syslog notifications and set the syslog server address, use the following command:

```
syslog {syslog address}
```

Syntax Description	<table><tr><td><code>syslog</code></td><td>Enable syslog notification</td></tr><tr><td><code>{syslog IP address}</code></td><td>Send syslog notifications to this IP address or host name</td></tr></table>	<code>syslog</code>	Enable syslog notification	<code>{syslog IP address}</code>	Send syslog notifications to this IP address or host name
<code>syslog</code>	Enable syslog notification				
<code>{syslog IP address}</code>	Send syslog notifications to this IP address or host name				
Defaults	Disabled.				
Example	<pre>ruckus# config ruckus(config)# system ruckus(config-sys)# syslog 192.168.0.1 The command was executed successfully.</pre>				

Configure Controller's Country Setting Command

Use the `dot11-country-code` commands to configure the controller's country settings. To run these commands, you must first enter the `config-sys` context.

dot11-country-code

To set the controller's country code, use the following command:

```
dot11-country-code {country code}
```

Syntax Description	<code>dot11-country-code</code>	Configure the controller's country code setting
	<code>{country code}</code>	Set the country code to this value
Defaults	None.	
Example	<p>To set the country code to US, enter the following command:</p> <pre>ruckus# config ruckus(config)# system ruckus(config-sys)# dot11-country-code US</pre> <p>The command was executed successfully.</p>	

Configure Controller's IP Address Commands

Use the `ip` commands to configure the controller's IP address settings. To run these commands, you must first enter the `config-sys-if` context.

ip route gateway

To set the controller's gateway IP address, use the following command:

```
ip route gateway {gateway IP address}
```

Syntax Description	<code>ip route gateway</code>	Configure the controller's gateway IP address
	<code>{gateway IP address}</code>	Set the controller's gateway IP address to this value
Defaults	None.	
Example	<pre>ruckus# config ruckus(config)# system ruckus(config-sys)# interface ruckus(config-sys-if)# ip route gateway 192.168.0.1</pre> The command was executed successfully.	

ip name-server

To set the controller's DNS servers, use the `ip name-server` command. Use a space to separate the primary and secondary DNS servers.

```
ip name-server {DNS server}
```

Syntax Description	<code>ip name-server</code>	Configure the controller's DNS server address or addresses
	<code>{DNS server}</code>	Set the DNS server address to this value. If entering primary and secondary DNS server addresses, use a space to separate the two addresses.
Defaults	None.	
Example	<pre>ruckus# config ruckus(config)# system ruckus(config-sys)# interface ruckus(config-sys-if)# ip name-server 192.168.0.1</pre> The command was executed successfully.	

ip addr

To set the controller's IP address and netmask, use the following command:

```
ip addr {IP address} {netmask}
```

Use a space to separate the IP address and netmask.

Syntax Description

ip addr	Configure the controller's IP address and netmask
{IP address}	Set the controller's IP address to this value
{netmask}	Set the controller's netmask to this value

Defaults

None.

Example

```
ruckus# config
ruckus(config)# system
ruckus(config-sys)# interface
ruckus(config-sys-if)# ip addr 192.168.0.1 255.255.255.0
The command was executed successfully.
```

ip mode

To set the controller's IP address mode, use the following command:

```
ip mode {dhcp | static}
```

Syntax Description

ip mode	Configure the controller's IP address mode
{dhcp}	Set the controller's IP address mode to DHCP
{static}	Set the controller's IP address mode to static

Defaults

None.

Example

To set the controller's IP address mode to DHCP, enter the following command:

```
ruckus# config
ruckus(config)# system
ruckus(config-sys)# interface
ruckus(config-sys-if)# ip mode dhcp
The command was executed successfully.
```

show

To display the current management interface settings, use the following command:

```
show
```

Syntax Description	show	Display the current management interface settings
Defaults	None.	
Example	<pre>ruckus# config ruckus(config)# system ruckus(config-sys)# interface ruckus(config-sys-if)# show Mode: Manual IP Address: 192.168.122.1 Netmask: 255.255.255.0 Gateway Address: 172.17.16.1 Primary DNS: 172.17.17.5 Secondary DNS: 192.168.0.107 Management VLAN ===== Status: disabled VLAN ID: ruckus(config-if)#</pre>	

Configure WLAN Settings Commands

Use the `config wlan` commands to configure the WLAN settings, including the WLAN's description, SSID, and its security settings. To run these commands, you must first enter the `config-wlan` context.

description

To set the WLAN service description, use the following command:

```
description {WLAN description}
```

Syntax Description	description	Configure the WLAN description
	{WLAN description}	Set the WLAN description this value
Defaults	None.	
Example	<pre>ruckus# config ruckus(config)# wlan randy-wlansvc-01-open The WLAN service 'randy-wlansvc-01-open' has been created. To save the WLAN service, type end or exit.</pre>	

Configuring Controller Settings

Configure Syslog Settings Commands

```
ruckus(config-wlan-randy-wlansvc-01-open)#
```

ssid

To set the WLAN service's SSID or network name, use the following command:

```
ssid {SSID}
```

Syntax Description	ssid	Configure the WLAN service's SSID
	{SSID}	Set the SSID to this value

Defaults	None.
----------	-------

Example	<pre>ruckus# config ruckus(config)# wlan randy-wlansvc-01-open The WLAN service 'randy-wlansvc-01-open' has been created. To save the WLAN service, type end or exit. ruckus(config-wlan-randy-wlansvc-01-open)# description Auth- open-ENC-None The command was executed successfully. ruckus(config-wlan-randy-wlansvc-01-open)#</pre>
---------	--

open none

To set the authentication method to 'open' and encryption method to 'none', use the following command:

```
open none
```

Syntax Description	open	Set the authentication method to 'open'
	none	Set the encryption method to 'none'

Defaults	None.
----------	-------

Example	<pre>ruckus(config)# wlan randy-wlansvc-01-open The WLAN service 'randy-wlansvc-01-open' has been created. To save the WLAN service, type end or exit. ruckus(config-wlan-randy-wlansvc-01-open)# open none The command was executed successfully.</pre>
---------	--

open wpa passphrase {PASSPHRASE} algorithm AES

To set the authentication method to 'open', encryption method to 'WPA', and algorithm to 'AES', use the following command:

```
open wpa passphrase {passphrase} algorithm AES
```

Syntax Description

open	Set the authentication method to open
wpa	Set the encryption method to WPA
passphrase {passphrase}	Set the WPA passphrase to {passphrase}
algorithm AES	Set the encryption algorithm to AES

Defaults

None.

Example

```
ruckus(config)# wlan randy-wlansvc-01-open  
The WLAN service 'randy-wlansvc-01-open' has been created. To save  
the WLAN service, type end or exit.  
ruckus(config-wlan-randy-wlansvc-01-open)# open wpa passphrase  
12345678 algorithm AES  
The command was executed successfully.
```

open wpa passphrase {PASSPHRASE} algorithm TKIP

To set the authentication method to 'open', encryption method to 'WPA', and algorithm to 'TKIP', use the following command:

```
open wpa passphrase {passphrase} algorithm TKIP
```

Syntax Description	
open	Set the authentication method to open
wpa	Set the encryption method to WPA
passphrase {passphrase}	Set the WPA passphrase to {passphrase}
algorithm TKIP	Set the encryption algorithm to TKIP

Defaults	None.
----------	-------

Example	<pre>ruckus(config)# wlan randy-wlansvc-01-open</pre> <p>The WLAN service 'randy-wlansvc-01-open' has been created. To save the WLAN service, type end or exit.</p> <pre>ruckus(config-wlan-randy-wlansvc-01-open)# open wpa passphrase 12345678 algorithm TKIP</pre> <p>The command was executed successfully.</p>
---------	---

open wpa2 passphrase {PASSPHRASE} algorithm AES

To set the authentication method to 'open', encryption method to 'WPA2', and algorithm to 'AES', use the following command:

```
open wpa2 passphrase {passphrase} algorithm AES
```

Syntax Description	
open	Set the authentication method to open
wpa2	Set the encryption method to WPA2
passphrase {passphrase}	Set the WPA2 passphrase to {passphrase}
algorithm AES	Set the encryption algorithm to AES

Defaults	None.
----------	-------

Example	<pre>ruckus(config)# wlan randy-wlansvc-01-open</pre> <p>The WLAN service 'randy-wlansvc-01-open' has been created. To save the WLAN service, type end or exit.</p>
---------	---

```
ruckus(config-wlan-randy-wlansvc-01-open)# open wpa2 passphrase
12345678 algorithm AES
```

The command was executed successfully.

open wpa2 passphrase {PASSPHRASE} algorithm TKIP

To set the authentication method to 'open', encryption method to 'WPA2', and algorithm to 'TKIP', use the following command:

```
open wpa2 passphrase {passphrase} algorithm TKIP
```

Syntax Description

open	Set the authentication method to open
wpa2	Set the encryption method to WPA2
passphrase {passphrase}	Set the WPA2 passphrase to {passphrase}
algorithm TKIP	Set the encryption algorithm to TKIP

Defaults

None.

Example

```
ruckus(config)# wlan randy-wlansvc-01-open
```

The WLAN service 'randy-wlansvc-01-open' has been created. To save the WLAN service, type end or exit.

```
ruckus(config-wlan-randy-wlansvc-01-open)# open wpa2 passphrase
12345678 algorithm TKIP
```

The command was executed successfully.

open wep-64 key {KEY} key-id {KEY-ID}

To set the authentication method to 'open', encryption method to 'WEP-64', key index, and WEP key, use the following command:

```
open wep-64 key {key} key-id {key ID}
```

Syntax Description

open	Set the authentication method to open
wep-64	Set the encryption method to WEP 64-bit
key {key}	Set the WEP key to {key}
key-id {key ID}	Set the WEP key ID to {key ID}

Defaults

None.

Example

```
ruckus(config)# wlan randy-wlansvc-01-open
The WLAN service 'randy-wlansvc-01-open' has been created. To save
the WLAN service, type end or exit.
ruckus(config-wlan-randy-wlansvc-01-open)# open wep-64 key
1234567890 key-id 1
The command was executed successfully.
```

open wep-128 key {KEY} key-id {KEY-ID}

To set the authentication method to 'open', encryption method to 'WEP-128', key index, and WEP key, use the following command:

```
open wep-128 key {key} key-id {key ID}
```

Syntax Description

open	Set the authentication method to open
wep-128	Set the encryption method to WEP 128-bit
key {key}	Set the WEP key to {key}
key-id {key ID}	Set the WEP key ID to {key ID}

Defaults

None.

Example

```
ruckus(config)# wlan randy-wlansvc-01-open
The WLAN service 'randy-wlansvc-01-open' has been created. To save
the WLAN service, type end or exit.
ruckus(config-wlan-randy-wlansvc-01-open)# open wep-128 key
12345678901234567890123456 key-id 1
The command was executed successfully.
```

mac none auth-server

To set the authentication method to 'MAC Address' and encryption method to 'none', use the following command:

```
mac none auth-server {auth server}
```

Syntax Description

mac	Set the authentication method to 'MAC Address'
none	Set the encryption method to 'none'
auth-server {auth server}	Set the authorization server address to {auth server}

Defaults

None.

Example

```
ruckus(config-wlan-randall-wlansvc-01)# mac none auth-server  
Ruckus-Auth-01  
The command was executed successfully.
```

**mac wpa passphrase {PASSPHRASE} alogrithm AES
auth-server {AUTHSVR-NAME}**

To set the authentication method to 'MAC Address', encryption method to 'WPA', and algorithm to 'AES', use the following command:

```
mac wpa passphrase {passphrase} algorithm AES auth-server  
{AUTHSVR-NAME}
```

Syntax Description

mac	Set the authentication method to 'MAC Address'
wpa	Set the encryption method to 'WPA'
passphrase {passphrase}	Set the WPA passphrase to {passphrase}
algorithm AES	Set the encryption algorithm to 'AES'
auth-server {AUTHSVR- NAME}	Set the authorization server address to {AUTHSVR-NAME}

Defaults

None.

Example

```
ruckus(config-wlan-randall-wlansvc-01)# mac wpa passphrase  
12345678 algorithm AES auth-server Ruckus-Auth-01  
The command was executed successfully.
```

**mac wpa passphrase {PASSPHRASE} alogrithm TKIP
auth-server {AUTHSVR-NAME}**

To set the authentication method to 'MAC Address', encryption method to 'WPA', and algorithm to 'TKIP', use the following command:

```
mac wpa passphrase {PASSPHRASE} alogrithm TKIP auth-server  
{AUTHSVR-NAME}
```

Syntax Description

mac wpa	Set the authentication method to 'MAC Address' and encryption method to 'WPA'
passphrase {passphrase}	Set the WPA passphrase to {passphrase}
algorithm TKIP	Set the encryption algorithm to 'TKIP'

auth-server {AUTHSVR-NAME} Set the authorization server address to {AUTHSVR-NAME}

Defaults None.

Example

```
ruckus(config-wlan-randall-wlansvc-01)# mac wpa passphrase  
12345678 algorithm TKIP auth-server Ruckus-Auth-01
```

The command was executed successfully.

mac wpa2 passphrase {PASSPHRASE} alogrithm AES auth-server {AUTHSVR-NAME}

To set the authentication method to 'MAC Address', encryption method to 'WPA2', and algorithm to 'AES', use the following command:

```
mac wpa2 passphrase {PASSPHRASE} alogrithm AES auth-server  
{AUTHSVR-NAME}
```

Syntax Description

mac wpa2	Set the authentication method to 'MAC Address' and encryption method to 'WPA2'
passphrase {PASSPHRASE}	Set the WPA2 passphrase to {passphrase}
algorithm AES	Set the encryption algorithm to 'AES'
auth-server {AUTHSVR-NAME}	Set the authorization server address to {AUTHSVR-NAME}

Defaults None.

Example

```
ruckus(config-wlan-randall-wlansvc-01)# mac wpa2 passphrase  
12345678 algorithm AES auth-server Ruckus-Auth-01
```

The command was executed successfully.

mac wpa2 passphrase {PASSPHRASE} alogrithm TKIP auth-server {AUTHSVR-NAME}

To set the authentication method to 'MAC Address', encryption method to 'WPA2', and algorithm to 'TKIP', use the following command:

```
mac wpa2 passphrase {PASSPHRASE} alogrithm TKIP auth-server  
{AUTHSVR-NAME}
```

Syntax Description

mac wpa2	Set the authentication method to 'MAC Address' and encryption method to 'WPA2'
passphrase {PASSPHRASE}	Set the WPA2 passphrase to {passphrase}
algorithm TKIP	Set the encryption algorithm to 'TKIP'
auth-server {AUTHSVR-NAME}	Set the authorization server address to {AUTHSVR-NAME}

Defaults

None.

Example

```
ruckus(config-wlan-randall-wlansvc-01)# mac wpa2 passphrase 12345678 algorithm TKIP auth-server Ruckus-Auth-01
```

The command was executed successfully.

mac wep-64 key {KEY} key-id {KEY-ID} auth-server {AUTHSVR-NAME}

To set the authentication method to 'MAC Address', encryption method to 'WEP-64', key index, and WEP key, use the following command:

```
mac wep-64 key {KEY} key-id {KEY-ID} auth-server {AUTHSVR-NAME}
```

Syntax Description

mac	Set the authentication method to MAC address
wep-64	Set the encryption method to WEP 64-bit
key {KEY}	Set the WEP key to {KEY}
key-id {KEY-ID}	Set the WEP key ID to {KEY-ID}
auth-server {AUTHSVR-NAME}	Set the authorization server address to {AUTHSVR-NAME}

Defaults

None.

Example

```
ruckus(config-wlan-randy-wlansvc-01-wpa2)# mac wep-64 key 15791BD8F2 key-id 2 auth-server Ruckus-Auth-01
```

The command was executed successfully.

mac wep-128 key {KEY} key-id {KEY-ID} auth-server {AUTHSVR-NAME}

To set the authentication method to 'MAC Address', encryption method to 'WEP-128', key index, and WEP key, use the following command:

```
mac wep-128 key {KEY} key-id {KEY-ID} auth-server {AUTHSVR-NAME}
```

Syntax Description	
mac	Set the authentication method to MAC address
wep-128	Set the encryption method to WEP 128-bit
key {KEY}	Set the WEP key to {key}
key-id {KEY-ID}	Set the WEP key ID to {key ID}
auth-server {AUTHSVR-NAME}	Set the authorization server address to {AUTHSVR-NAME}

Defaults None.

Example

```
ruckus(config-wlan-randy-wlansvc-01-wpa2)# mac wep-128 key 15715791BD8F212345691BD8F2 key-id 2 auth-server Ruckus-Auth-01
```

The command was executed successfully.

shared wep-64 key {KEY} key-id {KEY-ID}

To set the authentication method to 'Shared', encryption method to 'WEP-64', key index, and WEP key, use the following command:

```
shared wep-64 key {KEY} key-id {KEY-ID}
```

Syntax Description	
shared	Set the authentication method to 'Shared'
wep-64	Set the encryption method to WEP 64-bit
key {KEY}	Set the WEP key to {key}
key-id {KEY-ID}	Set the WEP key ID to {KEY-ID}

Defaults None.

Example

```
ruckus(config-wlan-randy-wlansvc-01-wpa2)# shared authentication encryption wep-64 key 15791BD8F2 key-id 2
```

The command was executed successfully.

shared wep-128 key {KEY} key-id {KEY-ID}

To set the authentication method to 'Shared', encryption method to 'WEP-128', key index, and WEP key, use the following command:

```
shared wep-128 key {KEY} key-id {KEY-ID}
```

Syntax Description

shared	Set the authentication method to 'Shared'
wep-128	Set the encryption method to WEP 128-bit
key {KEY}	Set the WEP key to {key}
key-id {KEY-ID}	Set the WEP key ID to {KEY-ID}

Defaults

None.

Example

```
ruckus(config-wlan-randy-wlansvc-01-wpa2)# shared wep-128 key 15791B15791BD8F2123456D8F2 key-id 2
```

The command was executed successfully.

dot1x eap-type EAP-SIM auth-server

To set the authentication method to 'EAP-SIM', use the following command:

```
dot1x eap-type EAP-SIM auth-server [local | name {AUTHSVR-NAME}]
```

Syntax Description

dot1x	Set the authentication method to '802.11x'
EAP-SIM	Set the EAP type
auth-server {AUTHSVR-NAME}	Set the auth server to {AUTHSVR-NAME}

Defaults

None.

Example

```
ruckus(config-wlan)# dot1x eap-type EAP-SIM auth-server local
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

dot1x eap-type PEAP auth-server

To set the authentication method to 'PEAP', use the following command:

```
dot1x eap-type PEAP auth-server [local | name {AUTHSVR-NAME}]
```

Syntax Description

dot1x	Set the authentication method to '802.11x'
PEAP	Set the EAP type

auth-server {AUTHSVR-NAME}	Set the auth server to {AUTHSVR-NAME}
-------------------------------	---------------------------------------

Defaults None.

Example

```
ruckus(config-wlan)# dot1x eap-type PEAP auth-server local
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

dot1x wpa algorithm AES auth-server

To set the authentication method to '802.1x EAP', encryption method to 'WPA', and algorithm to 'AES', use the following command:

```
dot1x wpa algorithm AES auth-server {AUTHSVR-NAME}
```

Syntax Description

dot1x	Set the authentication method to '802.11x'
wpa	Set the encryption method to WPA
algorithm AES	Set the algorithm to AES
auth-server {AUTHSVR-NAME}	Set the auth server to {AUTHSVR-NAME}

Defaults None.

Example

```
ruckus(config-wlan-wlansvc-012)# dot1x wpa algorithm AES auth-server Ruckus-Auth-01
```

The command was executed successfully.

dot1x wpa algorithm TKIP auth-server {AUTHSVR-NAME}

To set the authentication method to '802.1x EAP', encryption method to 'WPA', and algorithm to 'TKIP', use the following command:

```
dot1x wpa algorithm TKIP auth-server {AUTHSVR-NAME}
```

Syntax Description

dot1x	Set the authentication method to '802.11x'
wpa	Set the encryption method to WPA
algorithm TKIP	Set the algorithm to TKIP
auth-server {AUTHSVR-NAME}	Set the auth server to {AUTHSVR-NAME}

Defaults None.

Example

```
ruckus(config-wlan-wlansvc-012)# dot1x wpa algorithm TKIP auth-server Ruckus-Auth-01
```


The command was executed successfully.

dot1x wpa2 algorithm AES auth-server {AUTHSVR-NAME}

To set the authentication method to '802.1x EAP', encryption method to 'WPA2', and algorithm to 'AES', use the following command:

```
dot1x wpa2 algorithm AES auth-server {AUTHSVR-NAME}
```

Syntax Description

dot1x	Set the authentication method to '802.11x'
wpa2	Set the encryption method to WPA2
algorithm AES	Set the algorithm to AES
auth-server {AUTHSVR-NAME}	Set the auth server to {AUTHSVR-NAME}

Defaults None.

Example

```
ruckus(config-wlan-randy-wlansvc-01-open)# dot1x wpa2 algorithm AES auth-server Ruckus-RADIUS
```


The command was executed successfully.

dot1x wpa2 algorithm TKIP auth-server {AUTHSVR-NAME}

To set the authentication method to '802.1x EAP', encryption method to 'WPA2', and algorithm to 'TKIP', use the following command:

```
dot1x wpa2 algorithm TKIP auth-server {AUTHSVR-NAME}
```

Syntax Description

dot1x	Set the authentication method to '802.11x'
wpa2	Set the encryption method to WPA2
algorithm TKIP	Set the algorithm to TKIP
auth-server {AUTHSVR-NAME}	Set the auth server to {AUTHSVR-NAME}

Defaults None.

Example

```
ruckus(config-wlan-wlansvc-012)# dot1x authentication encryption  
wpa2 algorithm TKIP auth-server Ruckus-Auth-01
```

The command was executed successfully.

dot1x authentication encryption wep-64 auth-server

To set the authentication method to '802.1x EAP', encryption method to 'WEP-64', key index, and WEP key, use the following command:

```
dot1x authentication encryption wep-64 auth-server {auth server}
```

Syntax Description

dot1x authentication	Set the authentication method to '802.11x'
encryption wep-64	Set the encryption method to WEP 64-bit
auth-server {auth server}	Set the auth server to {auth server}

Defaults

None.

Example

```
ruckus(config-wlan-wlansvc-012)# dot1x authentication encryption  
wep-64 auth-server Ruckus-Auth-01
```

The command was executed successfully.

dot1x authentication encryption wep-128 auth-server

To set the authentication method to '802.1x EAP', encryption method to 'WEP-128', key index, and WEP key, use the following command:

```
dot1x authentication encryption wep-128 auth-server
```

Syntax Description

dot1x authentication	Set the authentication method to '802.11x'
encryption wep-128	Set the encryption method to WEP 128-bit
auth-server {auth server}	Set the auth server to {auth server}

Defaults

None.

Example

```
ruckus(config-wlan-wlansvc-012)# dot1x authentication encryption  
wep-128 auth-server Ruckus-Auth-01
```

The command was executed successfully.

client isolation

To enable wireless client isolation, use the following command:

```
client isolation
```

Syntax Description	
client isolation	Enable client isolation

Defaults
None.

Example
ruckus(config-wlan-randy-wlansvc-01-open)# client isolation The command was executed successfully.

no client-isolation

To disable wireless client isolation, use the following command:

```
no client-isolation
```

Syntax Description	
no client-isolation	Disable client isolation

Defaults
None.

Example
ruckus# config ruckus(config)# wlan wlan-123 ruckus(config-wlan-wlan-123)# no client-isolation The command was executed successfully.

no web-auth

To disable Web authentication, use the following command:

```
no web-auth
```

Syntax Description	
no web-auth	Disable Web authentication

Defaults
None.

Example
ruckus# config ruckus(config)# wlan wlan-123 ruckus(config-wlan-wlan-123)# no web-auth The command was executed successfully.

no acct-server

To disable the AAA server, use the following command:

```
no acct-server
```

Syntax Description	no acct-server	Disable AAA server authentication
Defaults	None.	
Example	<pre>ruckus# config ruckus(config)# wlan wlan-123 ruckus(config-wlan-wlan-123)# no acct-server</pre> The command was executed successfully.	

no vlan

To disable the management VLAN, use the following command:

```
no vlan
```

Syntax Description	no vlan	Disable the management VLAN
Defaults	None.	
Example	<pre>ruckus# config ruckus(config)# wlan wlan-123 ruckus(config-wlan-wlan-123)# no vlan</pre> The command was executed successfully.	

no dynamic-vlan

To disable dynamic VLAN, use the following command:

```
no dynamic-vlan
```

Syntax Description	no dynamic-vlan	Disable dynamic VLAN
Defaults	None.	
Example	<pre>ruckus(config-wlan)# no dynamic-vlan</pre>	

The dynamic vlan can't be enabled or disabled when the authentication method is not '802.1x-EAP' or 'MAC Address' and Encryption method is not WPA,WPA2,WPA mixed,or none.

```
ruckus(config-wlan)# no dynamic-vlan
```

The command was executed successfully. To save the changes, type 'end' or 'exit'.

dynamic-vlan

To enable dynamic VLAN, use the following command:

```
dynamic-vlan
```

Syntax Description
dynamic-vlan

dynamic-vlan	Enable dynamic VLAN
--------------	---------------------

Defaults
None.

Example
ruckus(config-wlan)# dynamic-vlan
The command was executed successfully. To save the changes, type 'end' or 'exit'

no zero-it-activation

To disable Zero-IT activation, use the following command:

```
no zero-it-activation
```

Syntax Description
no zero-it-activation

no zero-it-activation	Disable Zero-IT activation
-----------------------	----------------------------

Defaults
None.

Example
ruckus(config-wlan)# no zero-it-activation
The command was executed successfully. To save the changes, type 'end' or 'exit'

zero-it-activation

To enable Zero-IT activation, use the following command:

```
zero-it-activation
```

Syntax Description
zero-it-activation

zero-it-activation	Enable Zero-IT activation
--------------------	---------------------------

Defaults	None.
Example	<pre>ruckus(config-wlan)# zero-it-activation</pre> <p>The Zero-IT Activation can't be enabled or disabled when the wlan type is Guest Access or Hotspot Service Or Encryption method is WPA-Mixed Or Authentication method is 802.1x EAP + MAC Address Or Authentication method is 802.1x EAP and Authentication Server is Local Database Or Encryption Algorithm is Auto.</p> <pre>ruckus(config-wlan)# zero-it-activation</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>

rate-limit-uplink

To set the uplink rate limit, use the following command:

```
rate-limit-uplink [disabled |100K | 250K |500K |1M |2M |5M |10M |20M |50M]
```

Syntax Description	rate-limit-uplink	Set the uplink rate limit
	disabled	Disable uplink rate limiting
	100K 250K 500K 1M 2M 5M 10M 20M 50M	Enable uplink rate limiting and set it to this value

Defaults	None.
----------	-------

no rate-limit-uplink

To disable the uplink rate limit, use the following command:

```
no rate-limit-uplink
```

Syntax Description	no rate-limit-uplink	Disable the downlink rate limit
--------------------	----------------------	---------------------------------

Defaults	None.
----------	-------

Example	<pre>ruckus(config-wlan)# rate-limit-uplink disabled</pre> <p>The command was executed successfully. To save the changes, type 'end' or 'exit'.</p>
---------	--

rate-limit-downlink

To set the downlink rate limit, use the following command:

```
rate-limit-uplink [disabled | 100K | 250K | 500K | 1M | 2M | 5M | 10M  
| 20M | 50M]
```

Syntax Description

rate-limit-downlink	Set the downlink rate limit
disabled	Disable downlink rate limiting
100K 250K 500K 1M 2M 5M 10M 20M 50M	Enable downlink rate limiting and set it to this value

Defaults

None.

no rate-limit-downlink

To disable the downlink rate limit, use the following command:

```
no rate-limit-downlink
```

Syntax Description

no rate-limit-downlink	Disable the downlink rate limit
------------------------	---------------------------------

Defaults

None.

Example

```
ruckus(config-wlan)# rate-limit-downlink disabled  
The command was executed successfully. To save the changes, type  
'end' or 'exit'.
```

no tunnel-mode

To disable the tunnel mode, use the following command:

```
no tunnel-mode
```

Syntax Description

no tunnel-mode	Disable the tunnel mode
----------------	-------------------------

Defaults

None.

Example

```
ruckus# config  
ruckus(config)# wlan wlan-123  
ruckus(config-wlan-wlan-123)# no tunnel-mode  
The command was executed successfully.
```

no l2 access control

To disable the L2 ACL, use the following command:

no l2 access control

Syntax Description	no l2 access control	Disable L2 access control
Defaults	None.	
Example	<pre>ruckus# config ruckus(config)# wlan wlan-123 ruckus(config-wlan-wlan-123)# no l2 access control</pre> The command was executed successfully.	

no l3 access control

To disable the L3/L4/IP ACL, use the following command:

no l3 access control

Syntax Description	no l3 access control	Disable L3 access control
Defaults	None.	
Example	<pre>ruckus# config ruckus(config)# wlan wlan-123 ruckus(config-wlan-wlan-123)# no l3 access control</pre> The command was executed successfully.	

web authentication

To enable Web authentication, use the following command:

web-auth {AUTHSVR-NAME}

Syntax Description	web-auth	Enable Web authentication
	{AUTHSVR-NAME}	The AAA server to use for Web authentication
Defaults	None.	
Example	<pre>ruckus# config ruckus(config)# wlan wlan-123 ruckus(config-wlan-wlan-123)# web authentication Ruckus-RADIUS</pre> The command was executed successfully.	

```
ruckus(config-wlan-wlan-123)#
```

acct-server

To set the AAA server, use the following command:

```
acct-server {AAA server}
```

Syntax Description		
	acct-server	Configure the AAA server
	{AAA server}	Set the AAA server to this address

Defaults None.

Example

```
ruckus# config
ruckus(config)# wlan wlan-123
ruckus(config-wlan-wlan-123)# acct-server Ruckus-Acct-01
The command was executed successfully.
```

acct-server interim-update

To configure the interim update frequency (in minutes) of the AAA server, use the following command:

```
acct-server {AAA name} interim-update {minutes}
```

Syntax Description		
	acct-server {AAA name}	Configure the interim update frequency of the AAA server
	interim-update {minutes}	Set the update frequency to this value (in minutes)

Defaults 5 (minutes)

Example

```
ruckus# config
ruckus(config)# wlan wlan-123
ruckus(config-wlan-wlan-123)# acct-server Ruckus-Acct-01 intrim-
update 5
The command was executed successfully.
```


vlan

To enable the management VLAN and set the VLAN ID, use the following command:

```
vlan {VLAN ID}
```

Syntax Description	vlan	Enable management VLAN
	{VLAN ID}	Set the VLAN ID to this value
Defaults	None.	
Example	<pre>ruckus# config ruckus(config)# wlan wlan-123 ruckus(config-wlan-wlan-123)# vlan 12</pre> The command was executed successfully.	

hide-ssid

To hide an SSID from wireless users, use the following command. Wireless users who know the SSID will still be able to connect to the WLAN service.

```
hide-ssid
```

Syntax Description	hide-ssid	Hide SSID from wireless users
Defaults	None.	
Example	<pre>ruckus# config ruckus(config)# wlan wlan-123 ruckus(config-wlan-wlan-123)# hide-ssid</pre> The command was executed successfully.	

no hide-ssid

To unhide or broadcast an SSID to wireless users, use the following command:

```
no hide-ssid
```

Syntax Description	no hide-ssid	Broadcast SSID to wireless users
Defaults	None.	

Example

```
ruckus# config
ruckus(config)# wlan wlan-123
ruckus(config-wlan-wlan-123)# no hide-ssid
The command was executed successfully
```

tunnel-mode

To enable tunnel mode, use the following command:

```
tunnel-mode
```

Syntax Description

tunnel-mode	Enable tunnel mode
-------------	--------------------

Defaults

None.

Example

```
ruckus# config
ruckus(config)# wlan wlan-123
ruckus(config-wlan-wlan-123)# tunnel-mode
The command was executed successfully.
```

max-clients

To set the maximum number of clients for a specific WLAN, use the following command:

```
max-clients {NUMBER}
```

Syntax Description

max-clients	Configure the maximum number of clients that the WLAN can support
{NUMBER}	Set the maximum clients to this value

Defaults

None.

Example

To set the maximum number of clients on WLAN-123 to 50, enter this command:

```
ruckus# config
ruckus(config)# wlan wlan-123
ruckus(config-wlan-wlan-123)# max-clients 50
The command was executed successfully.
```

acl l2

To configure the L2 ACL, use the following command:

```
acl 12 {L2ACL-NAME}
```

Syntax Description	acl 12	Configure the L2 ACL
	{L2ACL-NAME}	The name of the L2 ACL that you want to configure
Defaults	None.	
Example	<pre>ruckus# config ruckus(config)# wlan wlan-123 ruckus(config-wlan-wlan-123)# acl 12 L2-ACL-name</pre> The command was executed successfully.	

acl l3

To configure the L3/L4/IP ACL, use the following command:

```
acl 13 {L2ACL-NAME}
```

Syntax Description	acl 13	Configure the L3 ACL
	{L2ACL-NAME}	The name of the L3 ACL that you want to configure
Defaults	None.	
Example	<pre>ruckus# config ruckus(config)# wlan wlan-123 ruckus(config-wlan-wlan-123)# acl 13 L3-ACL-name</pre> The command was executed successfully.	

show

To display the WLAN settings, use the following command:

```
show
```

Syntax Description	show	Display WLAN settings
Defaults	None.	

Example

```
ruckus> en

ruckus# conf wlan show

WLAN Service
=====
ID: 1
Name: corporate
Description:
Authentication: open
Encryption: wpa
Algorithm: aes
Passphrase: test1234
Authentication Server: Disabled
Accounting Server: Disabled
Tunnel Mode: Disabled
Max Clients: 100
Web Authentication: Disabled
Client Isolation: Disabled
VLAN: Disabled
Closed System: Disabled (Broadcast SSID)
L2/MAC: No ACLS
L3/L4/IP address: No ACLS
-----
```

Configure WLAN Group Settings Commands

Use the `wlan-group` commands to configure the settings of a particular WLAN group.

wlan-group

To create a new WLAN group or update an existing WLAN group, use the following command:

```
wlan-group {WLAN group name}
```

Syntax Description

wlan-group	Configure the WLAN group
{WLAN group name}	Create or edit this WLAN group

Defaults

None.

Example	<pre>ruckus# config ruckus(config)# wlan-group wlangrp-01 The WLAN group has been created. To save the WLAN group, type end or exit.</pre> <h3>abort</h3> <p>To exit the <code>wlan-group</code> context without saving changes, use the <code>abort</code> command. Enter this command from within the context of the WLAN group that you are configuring.</p> <pre>abort</pre>	
Syntax Description	abort	Exit the WLAN group without saving changes
Defaults	None.	
Example	<pre>ruckus# config ruckus(config)# wlan-group wlangrp-01 ruckus(config-wlangrp-wlangrp-01)# abort No changes have been saved.</pre> <h3>end</h3> <p>To save changes to the WLAN group settings and exit the <code>wlan-group</code> context, use the following command. Enter this command from within the context of the WLAN group that you are configuring.</p> <pre>end</pre>	
Syntax Description	end	Save changes, and then exit the WLAN group
Defaults	None.	
Example	<pre>ruckus# config ruckus(config)# wlan-group wlangrp-01 ruckus(config-wlangrp-wlangrp-01)# end The WLAN group 'hello-wlangrp' has been updated. Your changes have been saved.</pre>	

exit

To save changes to the WLAN group settings and exit the `wlan-group` context, use the `exit` command. Enter this command from within the context of the WLAN group that you are configuring.

```
exit
```

Syntax Description	<code>exit</code> Save changes, and then exit the WLAN group
--------------------	--

Defaults	None.
----------	-------

Example	<pre>ruckus# config ruckus(config)# wlan-group wlangrp-01 ruckus(config-wlangrp-wlangrp-01)# exit The WLAN group 'hello-wlangrp' has been updated. Your changes have been saved.</pre>
---------	---

quit

To exit the `wlan-group` context without saving changes, use the following command. Enter this command from within the context of the WLAN group that you are configuring.

```
quit
```

Syntax Description	<code>quit</code> Exit the WLAN group without saving changes
--------------------	--

Defaults	None.
----------	-------

Example	<pre>ruckus# config ruckus(config)# wlan-group wlangrp-01 ruckus(config-wlangrp-wlangrp-01)# quit No changes have been saved.</pre>
---------	--

name

To set the WLAN group name, use the following command. Enter this command from within the context of the WLAN group that you are configuring.

```
name {WLAN group name}
```

Syntax Description	<code>name</code> Configure the WLAN group name
--------------------	---

{WLAN group name}	Set the WLAN group name to this value
-------------------	---------------------------------------

Defaults

None.

Example

```
ruckus# config
ruckus(config)# wlan-group wlangrp-01
ruckus(config-wlangrp-wlangrp-01)# name hello-wlangrp
The command was executed successfully.
```

description

To set the WLAN group description, use the following command. Enter this command from within the context of the WLAN group that you are configuring.

```
description {WLAN group description}
```

Syntax Description

description	Configure the WLAN group description
{WLAN group description}	Set the WLAN group description to this value

Defaults

None.

Example

```
ruckus# config
ruckus(config)# wlan-group wlangrp-01
ruckus(config-wlangrp-wlangrp-01)# description my-description-123
The command was executed successfully.
```

no wlan

To delete a WLAN service, use the following command. Enter this command from within the context of the WLAN group that you are configuring.

```
no wlan {WLAN name to be deleted}
```

Syntax Description

no wlan	Delete an existing WLAN service
{WLAN name to be deleted}	Delete the WLAN service with this name

Defaults

None.

Example

```
ruckus# config
ruckus(config)# wlan-group wlangrp-01
ruckus(config-wlangrp-wlangrp-01)# no wlan wlansvc-012
The command was executed successfully.
```

wlan

To add a WLAN service to the WLAN group, use the following command. Enter this command from within the context of the WLAN group that you are configuring.

```
wlan {WLAN name to be created}
```

Syntax Description

wlan	Create a WLAN service
{WLAN name to be created}	Name of the new WLAN created

Defaults

None.

Example

```
ruckus# config
ruckus(config)# wlan-group wlangrp-01
ruckus(config-wlangrp-wlangrp-01)# wlan wlansvc-012
The command was executed successfully.
```

wlan vlan override none

To add a WLAN service to the WLAN group and set the VLAN tag to 'No Change', use the following command. Enter this command from within the context of the WLAN group that you are configuring.

```
wlan {WLAN name} vlan override none
```

Syntax Description

wlan {WLAN name}	Add the {WLAN name} to the WLAN group
vlan override none	Set the VLAN tag of {WLAN name} to No Change

Defaults

None.

Example

```
ruckus# config
ruckus(config)# wlan-group wlangrp-01
ruckus(config-wlangrp-wlangrp-01)# wlan wlansvc-012 vlan override none
The command was executed successfully.
```


wlan vlan override untag

To add a WLAN service to the WLAN group and set the VLAN tag to 'Untag', use the following command:

```
wlan {WLAN name} vlan override untag
```

Syntax Description	
wlan {WLAN name}	Add the {WLAN name} to the WLAN group
vlan override untag	Set the VLAN tag of {WLAN name} to Untagged

Defaults	None.
----------	-------

Example	<pre>ruckus# config ruckus(config)# wlan-group wlangrp-01 ruckus(config-wlangrp-wlangrp-01)# wlan wlangsvc-012 vlan override untag</pre> <p>The command was executed successfully.</p>
---------	--

wlan vlan override tag

To add a WLAN service to the WLAN group and set the VLAN tag to 'Tag', use the following command:

```
wlan {WLAN name} vlan override tag {vlan ID}
```

Syntax Description	
wlan {WLAN name}	Add the {WLAN name} to the WLAN group
vlan override tag {vlan ID}	Set the VLAN tag of {WLAN name} to Tagged for {vlan ID}

Defaults	None.
----------	-------

Example	<pre>ruckus# config ruckus(config)# wlan-group RW-group</pre> <p>The WLAN group 'RW-group' has been created. To save the WLAN group, type end or exit.</p> <pre>ruckus(config-wlangrp-RW-group)# wlan corporate vlan override tag 33</pre> <p>The WLAN service (SSID) 'corporate' has been added.</p> <pre>ruckus(config-wlangrp-RW-group)#</pre>
---------	---

Using Debug Commands

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Deauthorizing a Device

Deauthorizing a device refers to removing it from the list of devices that have been approved to join the controller.

delete-station {MAC address}

To deauthorize the station with the specified MAC address, use the following command.

```
delete-station {MAC address}
```

Syntax Description	
delete-station	Delete the station with the specified MAC address
{MAC address}	The MAC address of the station that will be deleted
Defaults	None.
Example	<pre>ruckus# debug ruckus(debug)# delete-station 00:10:77:01:00:01 The command was executed successfully.</pre>

Restarting a Device

Use the `restart` command to restart a device that is reporting to the controller.

restart-ap {MAC address}

To restart the device with the specified MAC address, use the `restart ap` command.

```
restart-ap {MAC address}
```

Syntax Description

<code>restart-ap</code>	Restart the device with the specified MAC address
<code>{MAC address}</code>	The MAC address of the device to be restarted

Defaults

None.

Example

```
ruckus# debug  
ruckus(debug)# restart-ap 00:13:92:EA:43:01  
The command was executed successfully.
```

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