



Cisco AireOS Controller to Cisco Catalyst 9800 Series Wireless Controller, Command Reference Mapping Guide

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Americas Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
<http://www.cisco.com>
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0883

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Cisco AireOS Controller to Cisco Catalyst 9800 Series Wireless Controller - CLI Mapping 1



Preface

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Document Conventions

This document uses the following conventions:

Convention	Description
^ or Ctrl	Both the ^ symbol and Ctrl represent the Control (Ctrl) key on a keyboard. For example, the key combination ^D or Ctrl-D means that you hold down the Control key while you press the D key. (Keys are indicated in capital letters but are not case sensitive.)
bold font	Commands and keywords and user-entered text appear in bold font .
<i>Italic font</i>	Document titles, new or emphasized terms, and arguments for which you supply values are in <i>italic font</i> .
Courier font	Terminal sessions and information the system displays appear in <code>courier font</code> .
Bold Courier font	Bold Courier font indicates text that the user must enter.
[x]	Elements in square brackets are optional.
...	An ellipsis (three consecutive nonbolded periods without spaces) after a syntax element indicates that the element can be repeated.
	A vertical line, called a pipe, indicates a choice within a set of keywords or arguments.
[x y]	Optional alternative keywords are grouped in brackets and separated by vertical bars.
{x y}	Required alternative keywords are grouped in braces and separated by vertical bars.

Convention	Description
[x {y z}]	Nested set of square brackets or braces indicate optional or required choices within optional or required elements. Braces and a vertical bar within square brackets indicate a required choice within an optional element.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
< >	Nonprinting characters such as passwords are in angle brackets.
[]	Default responses to system prompts are in square brackets.
!, #	An exclamation point (!) or a pound sign (#) at the beginning of a line of code indicates a comment line.

Reader Alert Conventions

This document may use the following conventions for reader alerts:



Note Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the manual.



Tip Means *the following information will help you solve a problem*.



Caution Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.



Timesaver Means *the described action saves time*. You can save time by performing the action described in the paragraph.



Warning IMPORTANT SAFETY INSTRUCTIONS

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Use the statement number provided at the end of each warning to locate its translation in the translated safety warnings that accompanied this device. Statement 1071

SAVE THESE INSTRUCTIONS

Related Documentation



Note Before installing or upgrading the , refer to the release notes.

- Cisco Catalyst 9800-40 Wireless Controller documentation, located at:
<http://www.cisco.com/go/c9800>
- Cisco Catalyst 9800-80 Wireless Controller documentation, located at:
<http://www.cisco.com/go/c9800>

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/c/en/us/td/docs/general/whatsnew/whatsnew.html>

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CHAPTER 1

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Cisco AireOS Controller to Cisco Catalyst 9800 Series Wireless Controller - CLI Mapping

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Interface Configuration

Table 1: Interface Configuration

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
config interface create <i>vlan-name vlan-number</i>	vlan <i>vlan-number</i>
config interface vlan <i>vlan-name vlan-number</i>	no shutdown
config interface address dynamic-interface <i>vlan-name primary-ip-address subnet-mask</i>	interface vlan <i>vlan-number</i>
config interface dhcp dynamic-interface <i>vlan-name primary primary-ip-address secondary secondary-ip-address</i>	description " <i>vlan-name</i> "
	ip address <i>ip-address subnet-mask</i>
	ip helper-address <i>primary-ip-address</i>
	ip helper-address <i>secondary-ip-address</i>
	no shutdown

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config interface create 001-wifi 3001 config interface vlan 001-wifi 3001 config interface address dynamic-interface 001-wifi 10.1.224.2 255.255.224.0 10.1.224.1 config interface dhcp dynamic-interface 001-wifi primary 10.240.208.31 secondary 10.240.208.33</pre>	<pre>vlan 3001 no shutdown interface vlan 3001 description "001-wifi" ip address 10.1.224.2 255.255.224.0 ip helper-address 10.240.208.31 ip helper-address 10.240.208.33 no shutdown</pre>

Interface Configuration - IOS Global Parameters

Table 2: Interface Configuration - IOS Global Parameters

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config sysname <i>hostname</i> config logging syslog host <i>ip-address</i> config logging syslog level <i>critical</i> config logging syslog level <i>level</i> config time ntp server 1 <i>ip-address</i> config prompt <i>hostname</i> config sessions timeout <i>timeout-value</i></pre>	<pre>hostname <i>hostname</i> logging host <i>ip-address</i> logging trap <i>level</i> ntp server <i>ip-address</i> prompt <i>hostname</i> line console 0 exec-timeout <i>timeout-value</i></pre>
<pre>config sysname CORE_8540 config logging syslog host 10.240.222.27 config logging syslog level critical config logging syslog level 2 config time ntp server 1 10.240.222.1 config prompt CORE_8540 config sessions timeout 60</pre>	<pre>hostname CORE_8540 logging host 10.240.222.27 logging trap 2 ntp server 10.240.222.1 prompt CORE_8540 line console 0 exec-timeout 60</pre>

Radius Global Parameters

Table 3: Radius Global Parameters

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config radius auth <i>call-station-type ap-name-ssid</i> config radius acct mac-delimiter <i>delimiter</i></pre>	<pre>aaa new-model radius-server attribute wireless authentication <i>call-station-id ap-name-ssid</i> <i>delimiter</i> radius-server attribute wireless accounting mac-delimiter</pre>
<pre>config radius auth callstationidtype ap-name-ssid config radius acct mac-delimiter colon</pre>	<pre>aaa new-model radius-server attribute wireless authentication call-station-id ap-name-ssid radius-server attribute wireless accounting mac-delimiter colon</pre>

Authentication TACACS Server**Table 4: Authentication TACACS Server**

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config tacacs auth add encrypt 1 ip-address password 1 password config tacacs auth server-timeout 1 timeout-value</pre>	<pre>tacacs server authentication-server address ipv4 ip-address port port-number timeout timeout-value</pre>
<pre>config tacacs auth add encrypt 1 192.16.176.96 49 password 1 *** ** 16 *** config tacacs auth server-timeout 1 5</pre>	<pre>tacacs server TACACS_SERVER_AUTH_1 address ipv4 192.16.176.96 port 49 timeout 5</pre>

Accounting TACACS Server**Table 5: Accounting TACACS Server**

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config tacacs acct add encrypt 1 ip-address 49 password password config tacacs acct server-timeout 1 timeout-value</pre>	<pre>tacacs server accounting-server address ipv4 ip-address port port-number timeout timeout-value</pre>
<pre>config tacacs acct add encrypt 1 192.16.176.96 49 password 1 *** ** 16 *** config tacacs acct server-timeout 1 5</pre>	<pre>tacacs server TACACS_SERVER_ACCT_1 address ipv4 192.16.176.96 port 49 timeout 5</pre>

Authorization TACACS Server**Table 6: Authorization TACACS Server**

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config tacacs athr add encrypt 1 ip-address 49 password 1 password config tacacs athr server-timeout 1 ip-address</pre>	<pre>tacacs server authorization-server address ipv4 ip-address port-number port timeout timeout-value</pre>
<pre>config tacacs athr add encrypt 1 192.16.176.96 49 password 1 *** ** 16 *** config tacacs athr server-timeout 1 5</pre>	<pre>tacacs server TACACS_SERVER_ATHR_1 address ipv4 192.16.176.96 port 49 timeout 5</pre>

Authentication Radius Server

Table 7: Authentication Radius Server

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
config radius auth add encrypt 4 ip-address 1812 password 1 password config radius auth retransmit-timeout 4 timeout-value	aaa new-model radius server radius-authentication-server address ipv4 ip-address auth-port authentication-port acct-port accounting-port
<pre>config radius auth add encrypt 4 10.240.222.72 1812 password 1 *** *** 16 *** config radius auth retransmit-timeout 4 5</pre>	<pre>aaa new-model radius server RADIUS_SERVER_AUTH_4 address ipv4 10.240.222.72 auth-port 1812 acct-port 1813</pre>

Accounting Radius Server

Table 8: Accounting Radius Server

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
config radius acct add encrypt 1 ip-address 1813 password 1 password config radius acct retransmit-timeout 1 timeout-value	aaa new-model radius server radius-accounting-server address ipv4 ip-address auth-port authentication-port acct-port accounting-port
<pre>config radius acct add encrypt 1 10.240.222.15 1813 password 1 *** *** 16 *** config radius acct retransmit-timeout 1 2</pre>	<pre>aaa new-model radius server RADIUS_SERVER_ACCT_1 address ipv4 10.240.222.15 auth-port 1812 acct-port 1813</pre>

FlexConnect ACL

Table 9: FlexConnect ACL

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
config flexconnect acl apply Secured-Wireless-Networks config flexconnect acl create Secured-Wireless-Networks config flexconnect acl rule add Secured-Wireless-Networks 1 config flexconnect acl rule action Secured-Wireless-Networks 1 permit config flexconnect acl rule protocol Secured-Wireless-Networks 1 17 config flexconnect acl rule destination port range Secured-Wireless-Networks 1 1812 1813	ip access-list extended Secured-Wireless-Networks 1 permit 17 any any range 1812 1813 2 permit 17 any range 67 68 3 permit ip any ip-address 0.0.0.0 4 permit ip ip-address 0.0.0.0 any

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config flexconnect acl apply Secured-Wireless-Networks config flexconnect acl create Secured-Wireless-Networks config flexconnect acl rule add Secured-Wireless-Networks 1 config flexconnect acl rule action Secured-Wireless-Networks 1 permit config flexconnect acl rule protocol Secured-Wireless-Networks 1 17 config flexconnect acl rule destination port range Secured-Wireless-Networks 1 1812 1813</pre>	<pre>ip access-list extended Secured-Wireless-Networks 1 permit 17 any any range 1812 1813 2 permit 17 any range 67 68 any range 67 68 3 permit ip any 168.213.64.215 0.0.0.0 4 permit ip 168.213.64.215 0.0.0.0 any</pre>

ACL

Table 10: ACL

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config acl apply <i>Apply_All</i> config acl create <i>Allow_All</i> config acl rule add <i>Allow_All 1</i> config acl rule action <i>Allow_all 1 permit</i> config acl rule source port range <i>Allow_All 1 permit Allow_All 1 0 65535</i> config acl rule destination port range <i>Allow_All 1 0 65535</i></pre>	<pre>ip access-list extended <i>Allow_All</i> 1 permit ip any any</pre>
<pre>config acl apply Allow_All config acl create Allow_All config acl rule add Allow_All 1 config acl rule action Allow_All 1 permit config acl rule source port range Allow_All 1 0 65535 config acl rule destination port range Allow_All 1 0 65535</pre>	<pre>ip access-list extended Allow_All 1 permit ip any any</pre>

Multicast Parameters

Table 11: Multicast Parameters

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config network multicast global <i>enable/disable</i> config network multicast igmp snooping <i>enable/disable</i> config network multicast mode multicast <i>ip-address</i></pre>	<pre>wireless multicast ip igmp snooping querier wireless multicast <i>ip-address</i></pre>

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config network multicast global enable config network multicast igmp snooping enable config network multicast mode multicast 239.240.222.41</pre>	<pre>wireless multicast ip igmp snooping ip igmp snooping querier wireless multicast 239.240.222.41</pre>

Mobility Configuration

Table 12: Mobility Configuration

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config mobility group domain B1SD config mobility group member add mac-address ip-address B1SD</pre>	<pre>wireless mobility group name B1SD wireless mobility group member ip ip-address public-ip ip-address group B1SD</pre>
<pre>config mobility group domain B1SD config mobility group member add 54:4a:00:32:b7:80 10.240.222.45 B1SD</pre>	<pre>wireless mobility group name B1SD wireless mobility group member ip 10.240.222.45 public-ip 10.240.222.45 group B1SD</pre>

Rogue Global Configuration

Table 13: Rogue Global Configuration

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config rogue ap rldp enable alarm-only monitor-ap-only config rogue detection report-interval time config rogue detection monitor-ap report-interval time config rogue detection min-rssi time config rogue ap classify friendly state internal mac-address config rogue ap friendly add mac-address config rogue client mse enable</pre>	<pre>wireless wps rogue ap rldp alarm-only monitor-ap-only wireless wps rogue detection report-interval time wireless wps rogue detection monitor-ap report-interval time wireless wps rogue detection min-rssi -time wireless wps rogue ap friendly mac-address state internal wireless wps rogue client mse</pre>
<pre>config rogue ap rldp enable alarm-only monitor-ap-only config rogue detection report-interval 30 config rogue detection monitor-ap report-interval 30 config rogue detection min-rssi -70 config rogue ap classify friendly state internal 68:72:51:2c:b5:85 config rogue ap friendly add 2c:3e:cf:3c:a5:a0 config rogue client mse enable</pre>	<pre>wireless wps rogue ap rldp alarm-only monitor-ap-only wireless wps rogue detection report-interval 30 wireless wps rogue detection monitor-ap report-interval 30 wireless wps rogue detection min-rssi -70 wireless wps rogue ap friendly 6872.512c.b585 state internal wireless wps rogue client mse</pre>

Rogue Rules Configuration

Table 14: Rogue Rules Configuration

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config rogue rule add ap priority <i>priority</i> classify friendly notify none state external <i>128_Ignore</i> config rogue rule condition ap set rssi -128 128_Ignore config rogue rule enable 128_Ignore config rogue rule match any 128_Ignore</pre>	<pre>wireless wps rogue rule <i>128_Ignore</i> priority <i>priority</i> shutdown classify friendly state <i>external</i> condition rssi -128 match any no shutdown</pre>
<pre>config rogue rule add ap priority 3 classify friendly notify none state external 128_Ignore config rogue rule condition ap set rssi -128 128_Ignore config rogue rule enable 128_Ignore config rogue rule match any 128_Ignore</pre>	<pre>wireless wps rogue rule 128_Ignore priority 3 shutdown classify friendly state external condition rssi -128 match any no shutdown</pre>

SNMP Trap Receiver Global Configuration

Table 15: SNMP Trap Receiver Global Configuration

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config snmp trapreceiver create <i>ip-address</i> <i>ip-address</i></pre>	<pre>snmp-server host <i>ip-address</i> version 2c <i>ip-address</i></pre>
<pre>config snmp trapreceiver create 10.240.222.40 10.240.222.40</pre>	<pre>snmp-server host 10.240.222.40 version 2c 10.240.222.40</pre>

SNMP Community Global Configuration

Table 16: SNMP Community Global Configuration

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config snmp community ipaddr <i>ip-address</i> <i>ip-address</i> read2008bisd config snmp community create read2008bisd config snmp community mode enable read2008bisd rw read2008bisd config snmp community accessmode</pre>	<pre>ip access-list extended read2008bisd_ACL permit udp any host <i>ip-address</i> eq snmp snmp-server community read2008bisd rw read2008bisd_ACL</pre>

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config snmp community ipaddr 10.240.222.0 255.255.255.0 read2008bisd config snmp community create read2008bisd config snmp community mode enable read2008bisd config snmp community accessmode rw read2008bisd</pre>	<pre>ip access-list extended read2008bisd_ACL permit udp any host 10.240.222.0 eq snmp snmp-server community read2008bisd rw read2008bisd_ACL</pre>

SNMP Syscontact and Syslocation Global Configuration

Table 17: SNMP Syscontact and Syslocation Global Configuration

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
config snmp syslocation NOC	snmp-server contact NOC
<pre>config snmp syslocation NOC</pre>	<pre>snmp-server contact NOC</pre>

Location Global Configuration - Trapflags

Table 18: Location Global Configuration - Trapflags

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
config trapflags 802.11-security ids-sig-attack disable	no trapflags client dot11 ids-sig-attack
<pre>config trapflags 802.11-security ids-sig-attack disable</pre>	<pre>no trapflags client dot11 ids-sig-attack</pre>

Wireless Global Parameters

Table 19: Wireless Global Parameters

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre> config exclusionlist add 58:3f:54:c8:04:8f "IDS EAPOL Flood Attack " config exclusionlist add 2c:8a:72:b6:da:4b MDNSInterfere config exclusionlist add f0:f7:55:75:f0:f0 OE-AP config advanced fra enable config wps client-exclusion 802.11-assoc disable config wps client-exclusion ip-theft disable config wps client-exclusion 802.11-auth disable config wps client-exclusion 802.1x-auth disable config network mgmt-via-wireless enable config rfid status enable config rfid timeout 1200 config advanced probe limit 2 500 config network rf-network-name RF1 config country US load-balancing window 20 config load-balancing window 20 </pre>	<pre> wireless exclusionlist 583f.54c8.048f description "IDS EAPOL Flood Attack " wireless exclusionlist 2c8a.72b6.da4b description MDNSInterfere wireless exclusionlist f0f7.5575.f0f0 description OE-AP ap fra no wireless wps client-exclusion ip-theft no wireless wps client-exclusion dot11-assoc no wireless wps client-exclusion dot11-auth no wireless wps client-exclusion dot1x-auth wireless mgmt-via-wireless wireless rfid wireless rfid timeout 1200 wireless probe limit 2 500 wireless rf-network RF1 ap country US wireless load-balancing window 20 </pre>
<pre> config exclusionlist add 58:3f:54:c8:04:8f "IDS EAPOL Flood Attack " config exclusionlist add 2c:8a:72:b6:da:4b MDNSInterfere config exclusionlist add f0:f7:55:75:f0:f0 OE-AP config advanced fra enable config wps client-exclusion 802.11-assoc disable config wps client-exclusion ip-theft disable config wps client-exclusion 802.11-auth disable config wps client-exclusion 802.1x-auth disable config network mgmt-via-wireless enable config rfid status enable config rfid timeout 1200 config advanced probe limit 2 500 config network rf-network-name RF1 config country US load-balancing window 20 config load-balancing window 20 </pre>	<pre> wireless exclusionlist 583f.54c8.048f description "IDS EAPOL Flood Attack " wireless exclusionlist 2c8a.72b6.da4b description MDNSInterfere wireless exclusionlist f0f7.5575.f0f0 description OE-AP ap fra no wireless wps client-exclusion ip-theft no wireless wps client-exclusion dot11-assoc no wireless wps client-exclusion dot11-auth no wireless wps client-exclusion dot1x-auth wireless mgmt-via-wireless wireless rfid wireless rfid timeout 1200 wireless probe limit 2 500 wireless rf-network RF1 ap country US wireless load-balancing window 20 </pre>

Media-stream Configuration**Table 20: Media-stream Configuration**

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
media-stream multicast-direct <i>disable</i> media-stream multicast-direct <i>enable</i>	wireless media-stream multicast-direct
media-stream multicast-direct disable media-stream multicast-direct enable	wireless media-stream multicast-direct

Mac-Filtering at WLAN level**Table 21: Mac-Filtering at WLAN level**

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
config macfilter add <i>mac-address 4 240-sysops Roku</i> config wlan radius_server auth add <i>4 5</i> config wlan create <i>4 SYSOPS SYSOPS</i> config wlan enable <i>4</i> config wlan broadcast-ssid enable <i>4</i> config wlan security wpa disable <i>4</i> <i>wpa2 disable 4 config wlan security wpa</i> config wlan security wpa <i>wpa2 ciphers aes disable 4</i> config wlan security wpa <i>akm 802.1x disable 4</i> config wlan wmm allow <i>4</i> config wlan mac-filtering enable <i>4</i>	aaa new-model aaa attribute list ATTR_LIST_SYSOPS attribute type ssid SYSOPS username b0ee7b3ff473 mac aaa attribute list ATTR_LIST_SYSOPS
config macfilter add b0:ee:7b:3f:f4:73 4 240-sysops Roku config wlan radius_server auth add 4 5 config wlan create 4 SYSOPS SYSOPS config wlan enable 4 config wlan broadcast-ssid enable 4 config wlan security wpa disable 4 config wlan security wpa wpa2 disable 4 config wlan security wpa wpa2 ciphers aes disable 4 config wlan security wpa akm 802.1x disable 4 config wlan wmm allow 4 config wlan mac-filtering enable 4	aaa new-model aaa attribute list ATTR_LIST_SYSOPS attribute type ssid SYSOPS username b0ee7b3ff473 mac aaa attribute list ATTR_LIST_SYSOPS

WLAN Profile Configuration

Table 22: WLAN Profile Configuration

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre> config wlan radius_server auth add 1 4 config wlan radius_server acct add 1 1 config wlan create 1 BISSD-5G BISSD-5G config wlan security wpa akm 802.1x enable 1 config wlan security wpa akm 802.1x enable 1 config wlan security wpa enable 1 config wlan security wpa akm ft 802.1x enable 1 config wlan enable 1 config wlan broadcast-ssid enable 1 config wlan band-select allow enable 1 config wlan security wpa wpa1 enable 1 config wlan security wpa wpa1 ciphers aes enable 1 config wlan wmm allow 1 config wlan ccx aironet-iesupport disable 1 config wlan radio 1 802.11a-only </pre>	<pre> aaa new-model aaa group server radius RADIUS_SERVER_GROUP_AUTH_BISSD-5G server name RADIUS_SERVER_AUTH_4 server name RADIUS_SERVER_AUTH_5 aaa authentication dot1x DOT1X_RADIUS_AUTH_LIST_BISSD-5G group RADIUS_SERVER_GROUP_AUTH_BISSD-5G aaa group server radius RADIUS_SERVER_GROUP_ACCT_BISSD-5G server name RADIUS_SERVER_ACCT_1 aaa accounting identity RADIUS_ACCT_LIST_BISSD-5G start-stop group RADIUS_SERVER_GROUP_ACCT_BISSD-5G wlan BISSD-5G 1 BISSD-5G security wpa security wpa wpa1 security wpa wpa1 ciphers aes security wpa akm dot1x security wpa akm ft dot1x security dot1x authentication-list DOT1X_RADIUS_AUTH_LIST_BISSD-5G broadcast-ssid band-select wmm allowed no ccx aironet-iesupport radio dot11a no shutdown </pre>

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre> config wlan radius_server auth add 1 4 config wlan radius_server auth add 1 5 config wlan radius_server acct add 1 1 config wlan create 1 BISSD-5G BISSD-5G config wlan security wpa akm 802.1x enable 1 config wlan security wpa enable 1 config wlan security wpa akm ft 802.1x enable 1 config wlan enable 1 config wlan broadcast-ssid enable 1 config wlan band-select allow enable 1 config wlan security wpa wpa1 enable 1 config wlan security wpa wpa1 ciphers aes enable 1 config wlan wmm allow 1 config wlan ccx aironet-iesupport disable 1 config wlan radio 1 802.11a-only </pre>	<pre> aaa new-model aaa group server radius RADIUS_SERVER_GROUP_AUTH_BISSD-5G server name RADIUS_SERVER_AUTH_4 server name RADIUS_SERVER_AUTH_5 aaa authentication dot1x DOT1X_RADIUS_AUTH_LIST_BISSD-5G group RADIUS_SERVER_GROUP_AUTH_RADIUS_SERVER_GROUP_AUTH_BISSD-5G aaa group server radius RADIUS_SERVER_GROUP_ACCT_BISSD-5G server name RADIUS_SERVER_ACCT_1 aaa accounting identity RADIUS_ACCT_LIST_BISSD-5G start-stop group RADIUS_SERVER_GROUP_ACCT_BISSD-5G wlan BISSD-5G 1 BISSD-5G security wpa security wpa wpa1 security wpa wpa1 ciphers aes security wpa akm dot1x security wpa akm ft dot1x security dot1x authentication-list DOT1X_RADIUS_AUTH_LIST_BISSD-5G broadcast-ssid band-select wmm allowed no ccx aironet-iesupport radio dot11a no shutdown </pre>

Flow Exporter Configuration

Table 23: Flow Exporter Configuration

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre> config flow create exporter "Cisco Prime" mac-address port port-number </pre>	<pre> flow exporter "Cisco Prime" destination mac-address transport udp port-number </pre>
<pre> config flow create exporter "Cisco Prime" 10.240.222.40 port 9991 </pre>	<pre> flow exporter "Cisco Prime" destination 10.240.222.40 transport udp 9991 </pre>

Flow Monitor Configuration

Table 24: Flow Monitor Configuration

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre> config flow create monitor "Cisco Prime" config flow add monitor "Cisco Prime" exporter "Cisco Prime" </pre>	<pre> flow monitor "Cisco Prime" flow exporter "Cisco Prime" flow monitor "Cisco Prime" exporter "Cisco Prime" </pre>

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config flow create monitor "Cisco Prime" config flow add monitor "Cisco Prime" exporter "Cisco Prime"</pre>	<pre>flow monitor "Cisco Prime" flow exporter "Cisco Prime" flow monitor "Cisco Prime" exporter "Cisco Prime"</pre>

Class Map Configuration for AVC Profile

Table 25: Class Map Configuration for AVC Profile

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config avc profile Sample rule add application application-name drop</pre>	<pre>class-map match-any CM_AVC_1_1 description Class-map for AVC-Profile - Sample, Action - police cir 8000 conform-action drop exceed-action drop match protocol application-name</pre>
<pre>config avc profile Sample rule add application facebook drop</pre>	<pre>class-map match-any CM_AVC_1_1 description Class-map for AVC-Profile - Sample, Action - police cir 8000 conform-action drop exceed-action drop match protocol facebook</pre>

Policy Map Configuration for AVC Profile

Table 26: Policy Map Configuration for AVC Profile

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config avc profile sample-create config avc profile Sample rule add application application-name drop</pre>	<pre>policy-map sample description Policy-map for AVC-Profile - sample class CM_AVC_1_1 police cir 8000 conform-action drop exceed-action drop</pre>
<pre>config avc profile Sample create config avc profile Sample rule add application facebook drop</pre>	<pre>policy-map Sample description Policy-map for AVC-Profile - Sample class CM_AVC_1_1 police cir 8000 conform-action drop exceed-action drop</pre>

Policy Profile Configuration

Table 27: Policy Profile Configuration

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre> config wlan aaa-override <i>enable/disable 1</i> config wlan apgroup interface-mapping add <i>vlan-number vlan-id vlan-name</i> config interface vlan <i>vlan-name vlan-number</i> config wlan interface <i>vlan-id vlan-interface</i> config wlan session-timeout <i>1 timeout-value</i> config wlan user-idle-threshold <i>threshold-value 1</i> config wlan qos <i>1 qos-profile</i> config wlan avc <i>1 visibility enable</i> config wlan exclusionlist <i>1 60</i> config wlan profiling local dhcp <i>enable 1</i> config wlan profiling local http <i>enable 1</i> config wlan nac radius <i>enable 1</i> </pre>	<pre> wireless profile policy POLICY_PROFILE_1 description "Policy profile for wlan-ids=['vlan-id']" shutdown aaa-override wlan <i>vlan-number</i> session-timeout <i>timeout-value</i> idle-threshold <i>threshold-value</i> service-policy output <i>qos-profile</i> ipv4 flow monitor wireless-avc-basic input ipv4 flow monitor wireless-avc-basic output exclusionlist timeout <i>timeout-value</i> local-dhcp-profiling local-http-profiling nac </pre>
<pre> config wlan aaa-override <i>enable 1</i> config wlan apgroup interface-mapping add <i>119</i> <i>1 119-wifi</i> config interface create <i>119-wifi 3119</i> config interface vlan <i>119-wifi 3119</i> config wlan interface <i>1 012-wifi</i> config wlan session-timeout <i>1 28800</i> config wlan user-idle-threshold <i>70 1</i> config wlan qos <i>1 platinum</i> config wlan avc <i>1 visibility enable</i> config wlan exclusionlist <i>1 60</i> config wlan profiling local dhcp <i>enable 1</i> config wlan profiling local http <i>enable 1</i> config wlan nac radius <i>enable 1</i> </pre>	<pre> wireless profile policy POLICY_PROFILE_1 description "Policy profile for wlan-ids=['1']" shutdown aaa-override vlan <i>3119</i> session-timeout <i>28800</i> idle-threshold <i>70</i> service-policy input <i>platinum-up</i> service-policy output <i>platinum</i> ipv4 flow monitor wireless-avc-basic input ipv4 flow monitor wireless-avc-basic output exclusionlist timeout <i>60</i> local-dhcp-profiling local-http-profiling nac </pre>

Policy Tag Configuration

Table 28: Policy Tag Configuration

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config wlan apgroup add 001 "group-name" config wlan apgroup description 001 "group-name" config wlan apgroup interface-mapping add 001 2 guest-wifi config wlan apgroup interface-mapping add 001 3 001-wifi config wlan apgroup interface-mapping add 001 1 001-wifi</pre>	<pre>wireless tag policy APG_001 description "Policy tag for wlan-ids=set(['1', '3', '2'])" wlan BISSD-5G policy POLICY_PROFILE_34 wlan BISSD-Guest policy POLICY_PROFILE_38 wlan BISSD policy POLICY_PROFILE_62</pre>
<pre>config wlan apgroup add 001 "Haltom HS" config wlan apgroup description 001 "Haltom HS" config wlan apgroup interface-mapping add 001 2 guest-wifi config wlan apgroup interface-mapping add 001 3 001-wifi config wlan apgroup interface-mapping add 001 1 001-wifi</pre>	<pre>wireless tag policy APG_001 description "Policy tag for wlan-ids=set(['1', '3', '2'])" wlan BISSD-5G policy POLICY_PROFILE_34 wlan BISSD-Guest policy POLICY_PROFILE_38 wlan BISSD policy POLICY_PROFILE_62</pre>

Global Radio Parameters

Table 29: Global Radio Parameters

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config 802.11a cac voice sip bandwidth 64 sample-interval interval</pre>	<pre>ap dot11 5ghz cac voice sip bandwidth 64 sample-interval interval</pre>
<pre>config advanced 802.11a channel add channel-id</pre>	<pre>ap dot11 5ghz rrm channel dca add channel-id</pre>
<pre>config advanced 802.11a channel dca chan-width channel-width</pre>	<pre>ap dot11 5ghz rrm channel dca chan-width channel-width</pre>
<pre>config 802.11a cleanair enable</pre>	<pre>ap dot11 5ghz cleanair</pre>
<pre>config advanced 802.11a channel cleanair-event enable</pre>	<pre>ap dot11 5ghz cleanair</pre>
<pre>config advanced 802.11a profile foreign global 60</pre>	<pre>no ap dot11 5ghz rrm channel cleanair-event</pre>
<pre>config advanced 802.11a profile clients global 30</pre>	<pre>ap dot11 5ghz rrm channel cleanair-event</pre>

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config 802.11a cac voice sip bandwidth 64 sample-interval 20 config advanced 802.11a channel add 140 config advanced 802.11a channel dca chan-width 40 config 802.11a cleanair enable config advanced 802.11a channel cleanair-event enable config advanced 802.11a profile foreign global 60 config advanced 802.11a profile clients global 30</pre>	<pre>ap dot11 5ghz cac voice sip bandwidth 64 sample-interval 20 ap dot11 5ghz rrm channel dca add 140 ap dot11 5ghz rrm channel dca chan-width 40 ap dot11 5ghz cleanair ap dot11 5ghz cleanair no ap dot11 5ghz rrm channel cleanair-event ap dot11 5ghz rrm channel cleanair-event</pre>

RF Profile Configuration

Table 30: RF Profile Configuration

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config rf-profile create 802.11a rf-profile-name</pre>	<pre>ap dot11 5ghz rf-profile rf-profile-name</pre>
<pre>config rf-profile data-rates 802.11a mandatory 1 2 rf-profile-name</pre>	<pre>shutdown rate RATE_12M mandatory</pre>
<pre>config rf-profile trap-threshold clients threshold-value rf-profile-name</pre>	<pre>rate RATE_6M mandatory</pre>
<pre>config rf-profile trap-threshold interference 60 rf-profile-name</pre>	<pre>rate RATE_24M mandatory rate RATE_48M supported</pre>
<pre>config rf-profile load-balancing window 20 rf-profile-name</pre>	<pre>rate RATE_36M supported rate RATE_9M supported</pre>
<pre>config rf-profile channel add channel-width rf-profile-name</pre>	<pre>rate RATE_18M supported</pre>
<pre>config rf-profile channel chan-width channel-width rf-profile-name</pre>	<pre>rate RATE_54M supported trap threshold clients threshold-value trap threshold interference 60</pre>
	<pre>load-balancing window 20</pre>
	<pre>channel add channel-number</pre>
	<pre>channel chan-width channel-width</pre>
	<pre>no shutdown</pre>

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config rf-profile create 802.11a A_Profile config rf-profile data-rates 802.11a mandatory 12 A_Profile config rf-profile trap-threshold clients 30 A_Profile config rf-profile trap-threshold interference 60 A_Profile config rf-profile load-balancing window 20 A_Profile config rf-profile channel add 112 A_Profile config rf-profile channel chan-width 80 A_Profile</pre>	<pre>ap dot11 5ghz rf-profile A_Profile shutdown rate RATE_12M mandatory rate RATE_6M mandatory rate RATE_24M mandatory rate RATE_48M supported rate RATE_36M supported rate RATE_9M supported rate RATE_18M supported rate RATE_54M supported trap threshold clients 30 trap threshold interference 60 load-balancing window 20 channel add 112 channel chan-width 80 no shutdown</pre>

RF Tag Configuration

Table 31: RF Tag Configuration

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config wlan apgroup profile-mapping add ap-group-profile</pre>	<pre>wireless tag rf ap-group-profile description "RF-Tag for AP-Group - BISDOEAP" 5ghz-rf-policy A_Profile</pre>
<pre>config wlan apgroup profile-mapping add BISDOEAP A_Profile</pre>	<pre>wireless tag rf BISDOEAP description "RF-Tag for AP-Group - BISDOEAP" 5ghz-rf-policy A_Profile</pre>

Flex Profile Configuration

Table 32: Flex Profile Configuration

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config flexconnect group flex-group-name add config flexconnect group default-flex-group radius ap authority id group-id config flexconnect group default-flex-group radius ap authority info "group-info" config flexconnect group default-flex-group radius ap server-key encrypt 1 *** ** *</pre>	<pre>eap method fast profile EF_default-flex-group description "Eap-Fast profile: fc-grp=default-flex-group" authority-id identity id authority-id information "info" pac-password unencrypted/hidden server-key wireless profile flex flex-profile-name description flex-group-name no local-auth ap eap-fast EF_default-flex-group</pre>

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config flexconnect group default-flex-group add config flexconnect group default-flex-group radius ap authority id 436973636f0000000000000000000000 config flexconnect group default-flex-group radius ap authority info "Cisco A_ID" config flexconnect group default-flex-group radius ap server-key encrypt 1 *** *** ***</pre>	<pre>eap method fast profile EF_default-flex-group description "Eap-Fast profile: fc-grp=default-flex-group" authority-id identity 436973636f0000000000000000000000 authority-id information "Cisco A_ID" pac-password <UNENCRYPTED/HIDDEN> <SERVER_KEY> wireless profile flex default-flex-group description default-flex-group no local-auth ap eap-fast EF_default-flex-group</pre>

AP Profile Configuration

Table 33: AP Profile Configuration

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config advanced backup-controller primary WISM-Central4 mac-address config ap packet-dump ftp serverip mac-address path / username username password password config ap packet-dumpbuffer-size buffer-size config ap packet-dump capture-time duration config ap packet-dump truncate 0 config ap packet-dump classifier control enable config ap packet-dump classifier management enable config ap packet-dump classifier ip enable config ap packet-dump classifier data enable config ap packet-dump classifier udp enable config ap ssh enable all</pre>	<pre>wireless profile ap packet-capture pc_default-ap-profile ftp serverip mac-address ftp username username ftp password 0 password ftp path / buffer-size buffer-size duration duration classifier control classifier management classifier data classifier udp ap profile default-ap-profile packet-capture pc_default-ap-profile capwap backup primary WISM-Central4 mac-address ssh</pre>

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config advanced backup-controller primary WISM-Central4 10.240.222.44 config ap packet-dump ftp serverip 10.240.222.27 path / username ncsadmin password @dmin2015 config ap packet-dump buffer-size 3000 config ap packet-dump capture-time 10 config ap packet-dump truncate 0 config ap packet-dump classifier control enable config ap packet-dump classifier management enable config ap packet-dump classifier ip enable config ap packet-dump classifier data enable config ap packet-dump classifier udp enable config ap ssh enable all</pre>	<pre>wireless profile ap packet-capture pc_default-ap-profile ftp serverip 10.240.222.27 ftp username ncsadmin ftp password 0 @dmin2015 ftp path / buffer-size 3000 duration 10 classifier control classifier management classifier ip classifier data classifier udp ap profile default-ap-profile packet-capture pc_default-ap-profile capwap backup primary WISM-Central4 10.240.222.44 ssh</pre>

Site Tag Configuration

Table 34: Site Tag Configuration

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>flexconnect group NACHA ap add mac-address</pre>	<pre>wireless tag site NACHA flex-profile NACHA</pre>
<pre>flexconnect group NACHA ap add 6c:41:6a:29:5b:cf</pre>	<pre>wireless tag site NACHA flex-profile NACHA</pre>

Attaching tags to AP

Table 35: Attaching tags to AP

AireOS CLIs	Cisco Catalyst 9800 Series Wireless Controller CLIs
<pre>config flexconnect group SIN-SingaporeChangi ap add mac-address</pre>	<pre>ap mac-address policy-tag FCG_SIN-SingaporeChangi site-tag SIN-SingaporeChangi</pre>
<pre>config flexconnect group SIN-SingaporeChangi ap add 00:06:f6:16:c2:5b</pre>	<pre>ap 0006.f616.c25b policy-tag FCG_SIN-SingaporeChangi site-tag SIN-SingaporeChangi</pre>