

# show Commands

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#### show ap client-trace status

To view the AP client trace details, use the show ap client-trace status command.

show ap client-trace { events { all | mac word | system } | skb { drop-list | stats } | status } **Syntax Description** View client trace event information events all Displays all client trace events system Displays all system events mac Displays client trace events for specific MAC address word Specific client MAC address skb Displays client trace SKB information drop-list Displays client trace SKB drop list information stats Displays client trace SKB statistics status Displays client trace configuration Privileged EXEC (#) **Command Modes** 

Release Modification
8.1.111.0 This command was introduced.
The following example shows how to view the AP client trace status: cisco-ap# <b>show ap client-trace status</b>
To view the ARP table, use the <b>show arp</b> command.
show arp
arp Shows ARP table
User EXEC (>)
Privileged EXEC (#)
Release Modification
8.1.111.0 This command was introduced.
The following example shows a sample output of the command:
cisco-ap# <b>show arp</b>
Address Age (min)       Hardware Addr         9.11.8.1       0 84:80:2D:A0:D2:E6         9.11.32.111       0 3C:77:E6:02:33:3F

## show avc cft

I

To view the AVC client flow table information, use the **show avc cft** command.

Syntax Description	word Client MAC address
Command Modes	User EXEC (>)
	Privileged EXEC (#)

show avc cft word

#### Command History

ReleaseModification8.1.111.0This command was<br/>introduced.

The following example shows how to view the AVC client flow table: cisco-ap# show avc cft 02:35:2E:03:E0:F2

#### show avc nbar

To view the AVC NBAR information, use the show avc nbar command.

	show av	c nbar {statistics   build   ver
Syntax Description	statistics	s Displays NBAR build details
	build	Displays NBAR statistics
	version	Displays NBAR and PP version
Command Modes	User EXI	EC (>)
	Privilege	d EXEC (#)
Command History	Release	Modification
	8.1.111.0	This command was introduced.

The following example shows how to view the AVC NBAR build information:

cisco-ap# show avc nbar build

### show avc netflow flows

To list all the flows currently cached and to be sent to the Cisco WLC, use the **show avc netflow flows** command.

show avc netflow flows {download | upload}

Syntax Description	download Lists currently cached download flows		
	upload	Lists currently cached upload flows	
Command Modes	User EXEC	(>)	
	Privileged E	EXEC (#)	

#### Command History

ReleaseModification8.1.111.0This command was<br/>introduced.

The following example shows how to view all the currently cached flows:

cisco-ap# show avc netflow flows

#### show avc status

To list the AVC provisioning status per WLAN/VAP, use the show avc status command.

 show avc status

 Command Modes
 User EXEC (>)

 Privileged EXEC (#)

#### Command History Release Modification

8.1.111.0 This command was introduced.

The following example shows how to view AVC provisioning status per WLAN/VAP:

cisco-ap# show avc status

FNF-STATUS	AVC-QOS-STATUS
Disabled	Disabled
	Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled

## show boot

To show boot attributes, use the **show boot** command.

show boot

Command Modes	User EXEC (>) Privileged EXEC (#)		
Command History	Release Modification		
	8.1.111.0 This command was introduced.		
	The following example shows how to view boot attributes:		
	cisco-ap# <b>show boot</b>		

BOOT path-list: part2 Console Baudrate: 9600 Enable Break: yes Manual Boot: no Memory Debug: no Crashkernel:

### show capwap

To disaply CAPWAP options, use the **show capwap** command.

	show cap	wap [ip   mcast   traffic]
Syntax Description	client	CAPWAP client information
	ids	CAPWAP ID information
	ір	CAPWAP IP configuration
	location	CAPWAP location information
	mcast	CAPWAP multicast information
	pnp	PNP information
	traffic	CAPWAP traffic information
Command Modes	User EXI	EC (>)
	Privilege	d EXEC (#)
Command History	Release	Modification
	8.1.111.0	This command was introduced.

The following example shows how to view the CAPWAP multicast information:

cisco-ap# show capwap mcast

# show capwap client

To display CAPWAP client information, use the show capwap client command.

show capwap client {callinfo info | detailrcb | rcb | config | ha | msginfo | timers | traffic}

Syntax Description	callinfo info	CAPWAP client call information
	detailrcb	CAPWAP client detailed RCB information
	rcb	CAPWAP client RCB information
	config	CAPWAP client config information
	ha	CAPWAP client HA parameters
	msginfo	CAPWAP client messages information
	timers	CAPWAP client timers
	traffic	CAPWAP client 802.11 traffic information
Command Modes	User EXEC (>	>)
	Privileged EX	XEC (#)
Command History	Release Mo	dification
		s command was oduced.

The following example shows how to view CAPWAP client traffic information:

cisco-ap# show capwap client traffic

### show capwap client trace

To display CAPWAP trace, use the show capwap client trace command.

show capwap client trace {clear | delete | disable | save | start | stop}

Syntax Description	clear	Clears trace
	delete	Deletes trace
	disable	Disables trace at boot
	enable	Enables trace at boot

save	Saves trace	
start	Starts trace	
stop	Stops trace	
User EXI	EC (>)	
Privilege	d EXEC (#)	
Release	Modification	
8.1.111.0	This command was	
	start stop User EXI Privilege Release	start Starts trace

The following example shows how to view CAPWAP client trace:

cisco-ap# show capwap client trace

## show capwap ids sig

To disaplay CAPWAP ID signatures, use the show capwap ids sig command.

	show capwap ids sig [list   stats]		
Syntax Description	list	Signature list entries	
	stats	Signature attack statistics	
Command Modes		XEC (>) ged EXEC (#)	
Command History		se Modification	
	8.1.111	.0 This command was introduced.	

The following example show how to view CAPWAP ID signature statistics:

cisco-ap# show capwap ids sig stats

### show cdp

To display CDP options, use the **show cdp** command.

show cdp {entry device device-name | inline\_power | interface | neighbors | traffic}

L

Syntax Description	entry device device-name	Information for specific neighbor entry whose name you must enter
	inline_power	Inline power negotiation information
	interface	CDP interface status and configuration
	neighbors	CDP neighbor entries
	traffic	CDP statistics
Command Modes	Privileged EXEC (#)	
Command History	Release Modification	
	8.1.111.0 This command w introduced.	as
	introduced.	

The following example shows how to view information for a specific neighbor entry:

cisco-ap# show cdp entry device mydevice

## show class-map

To display CPL class map, use the show class-map command.

	show class-map	
Command Modes	User EXEC (>)	
	Privileged EXEC (#)	
Command History	Release Modification	
	8.1.111.0 This command was introduced.	

The following example shows how to view CPL class map:

cisco-ap# show class-map

# show cleanair debug

To display cleanair debug settings, use the show cleanair debug command.

show cleanair debug

**Command Modes** Privileged EXEC (#)

#### Command History

ReleaseModification8.1.111.0This command was<br/>introduced.

The following example shows how to view CleanAir debug settings:

cisco-ap# show cleanair debug

# show client statistics

To disaply client statistics, use the show client statistics command.

	show client statistics client-mac-address		
Syntax Description	client-mac-address	MAC address of the client	
Command Modes	Privileged EXEC (#	)	
Command History	Release Modificat	ion	
	8.1.111.0 This comr		

The following example shows how to view client statistics:

cisco-ap# show client statistics 70:DB:98:66:34:FA

### show clock

To display the system clock, use the **show clock** command.

	show clock
Command Modes	User EXEC (>)
	Privileged EXEC (#)
Command History	Release Modification
	8.1.111.0 This command was introduced.

The following example shows how to view the system clock:

cisco-ap# show clock

## show configuration

To display the contents of the non-volatile memory, use the show configuration command.

	show configuration rla	an
Command Modes	Privileged EXEC (#)	
Syntax Description	<b>rlan</b> Displays the RLA	AN configuration.
Command History	Release Modification	
	8.1.111.0 This comman	nd was introduced.
	8.9 This comman	nd was enhanced by adding <b>rlan</b> parameter.
	8.10.112.0 The output of	this command was enhanced to show the status of broken antenna detection.
	The following example s	shows how to view the AP configuration details:
	cisco-ap# <b>show config</b>	guration
	AP Name Admin State AP Mode	: AP58AC.78DC.C2F0 : Enabled : FlexConnect

THE TRAINED	
Admin State	: Enabled
AP Mode	: FlexConnect
AP Submode	: Not Configured
Location	: default location
Reboot Reason	: Reload command
AP Link LAG status	: Disabled
AP WSA Mode	: Enabled
Vlan Interface	: Disabled
Broken antenna detection	: Enabled (Global)
RSSI Failure Threshold	: 40
Weak RSSI	: 60
Detection Time	: 12
If any broken antenna?	: ALL
AP58AC.78DC.C2F0#	

## show controller ble

To view Bluetooth Low Energy radio interface parameter information, use the show controller ble command.

show controller ble ble-interface-number { {broadcast | counters | floor-tag floor-beacon-mac-addr |
interface | local | scan {brief | detail floor-beacon-mac-addr} | timers}

Syntax Description	ble-interface-number	BLE interface number that you must enter; Valid value is 0
	broadcast	Displays BLE broadcast summary information

counters	Displays BLE transport counters information
floor-tag floor-beacon-mac-addr	Displays sync data of the floor beacon whose MAC address you must specify
interface	Displays BLE interface summary information
local	Displays sync information of host BLE radio
scan brief	Displays brief BLE scan summary information
scan detail floor-beacon-mac-addr	Displays BLE scan summary information in detail; you must specify the floor beacon MAC address
timers	Displays BLE timers information

#### **Command Modes**

**Command History** 

Release Modification

8.7 This command was introduced.

#### Examples

To view the BLE timers information, use this command:

cisco-ap# show controller ble 0 timers

```
Timers

------

Scan timer status : Running

Scan timer interval : 10 secs

Scan started at : 0D:00H:04M:28S ago

Last scan done at : 0D:00H:00M:06S ago
```

If scanning is working as expected, the 'Last scan done at' time should always be less than or equal to the scan interval set.

#### show controllers dot11Radio

To display dot11 interface information, use the show controllers dot11Radio command.

 show controllers dot11Radio dot11-interface-no {antenna | { atfconfiguration | statistics} | bandselect

 | client { client-mac-addr | all detail } | frequency | powercfg | powerreg | radiostats | rate | vlan

 | wlan { wlan-id | all detail } }

 Gyntax Description

 dot11-interface-no
 Dot11Radio interface number.

 atf configuration
 Displays the AirTime Fairness configuration.

Displays the AirTime Fairness statistics.

atf statistics

	bandselect	Displays the bandselect statistics.
	antenna	Displays the antenna settings
	<b>client</b> client-mac-addr	Displays the details of the client whose MAC address is specified.
	detail	Displays the TID statistics for all the clients.
	frequency	Displays the frequency information.
	powercfg	Displays the configured power information.
	powerreg	Displays the transmit power information.
	radio-stats	Displays the radio statistics.
	rate	Displays the rate information.
	vlan	Displays the VLAN summary.
	wlan wlan-id	Displays the VLAN/WLAN details of the WLAN ID specified.
	detail	Displays the TID statistics for all the clients.
Command Modes	User EXEC (>)	
Command History	Release Modificat	ion
	8.1.111.0 This com	mand was introduced.
	8.9 This com	mand was enhanced by adding the <b>bandselect</b> , client all detail, wlan par

The following example shows how to view 802.11 interface information for interface number 1: cisco-ap# show controllers dot11Radio 1

# show controllers nss status

To display NSS information, use the show controllers nss status command.

\_\_\_\_

	show controllers nss status
Command Modes	User EXEC (>)
	Privileged EXEC (#)
Command History	Release Modification
	8.1.111.0 This command was introduced.

The following example shows how to view NSS information:

cisco-ap# show controllers nss status

### show controllers wired

To view the wired interface, use the show controllers wired command.

show controllers wired wired-interface-number

Syntax Description	wired-int	erface-number	Wired interface 3	number from 0 to		
Command Modes	Privileged	EXEC (#)				
Command History	Release	Modification				
		This command introduced.	was			
	The follow ID is 1:	ving example sh	nows how to view	v information about	the controllers' w	ired interface whose
	cisco-ap	# show contro	llers wired 1			
	wiredl	inet addr:9 DOWN BROADC RX packets: TX packets: collisions:	.11.8.104 Bca: AST RUNNING PRO 38600 errors:0 179018 errors: 0 txqueuelen:80	dr C8:8B:6A:33:5 st:9.255.255.255 DMISC MULTICAST dropped:1 overr 0 dropped:0 over 0 ) TX bytes:5472	Mask:255.255. MTU:2400 Metr uns:0 frame:0 runs:0 carrier:	255.255 ic:1
	Gig Emac	1 Counters				
	0 Broadc 0 65_TO_ 0 512_TO 0 Unicas 0 Crc er 0 Rx fif 0 Oversi	ast frames rx 127 byte fram _1023 byte fr t frames tx, rors sent, 0 p overrun, 0 ze rx, 0 Jabb	, 0 Multicast : es, 0 128_TO_2: ames, 0 1024_T( 0 Multicast fra Flow control r:		byte frames rx, 0 256_TO_511 by s, 0 Good octet cast frames tx,	s tx,

## show crypto

To view the crypto attributes, use the show crypto command.

show crypto

Command Modes	User EXEC (>)	
	Privileged EXEC (#)	
Command History	Release Modification	
	8.1.111.0 This command was introduced.	

The following example shows how to view the crypto attributes:

cisco-ap# show crypto

### show debug

To view the debugs enabled, use the **show debug** command.

	show debug		
Command Modes	User EXEC (>)		
	Privileged EXEC (#)		
Command History	Release Modification		
	8.1.111.0 This command was introduced.		

The following example shows how to view the debugs that are in enabled state: cisco-ap# show debug

## show dhcp

To view the status of Dynamic Host Configuration Protocol (DHCP), use the show dhcp command.

	show dhcp {lease   servers}					
Syntax Description	lease         Displays the DHCP addresses leased from a server					
	servers	Displays the known DHCP servers				
Command Modes	User EXI	EC (>)				
	Privilege	d EXEC (#)				

#### Command History

 Release
 Modification

 8.1.111.0
 This command was introduced.

The following example shows how to view the status of DHCP addresses leased from a server:

cisco-ap# show dhcp lease

#### show dot11 qos

To view the Quality of Service (QoS) parameters for 802.11 network, use the show dot11 qos command.

show dot11 qos

Command Modes Privileged EXEC (#)

Command History Release Modification

8.1.111.0 This command was introduced.

The following example shows how to view the Quality of Service (QoS) parameters for 802.11 network:

cisco-ap# show dot11 qos

#### show dot11 wlan wpa3

To view the WPA3 configuration on an 802.11 network, use the show dot11 wlan wpa3 command.

	show do	ot11 wlan wpa3 [1	transition]
Syntax Description	transit	ion	Shows details of WPA3 transition mode.
Command Modes	Privileg	ed EXEC (#)	
Command History	Release	Modification	
	8.10	This command wa introduced.	S

The following example shows how to view the WPA3 configuration on an 802.11 network: cisco-ap# show dot11 wlan wpa3

## show filesystems

To view the filesystem information, use the show filesystems command.

	show filesystems	
Command Modes	User EXEC (>)	
	Privileged EXEC (#)	
Command History	Release Modification	-
	8.1.111.0 This command was introduced.	-
	The following example shows how to vi	- ew the filesystem information:

cisco-ap# **show filesystems** 

Filesystem	Size	Used A	Available	Use%	Mounted	on
/dev/ubivol/storage	57.5M	1.9M	52.6M	48	/storage	e

#### show flash

To view the flash contents, use the show flash command.

show flash [cores [detail core-file-name ]| crash | syslogs]

Syntax Description	cores	Displays the core files in flash	-
	detail	Displays the core file contents	-
	core-file-n	ame The core file name	-
	crash	Displays the crash files in flash	-
	syslogs	Displays the syslogs files in flash	-
Command Modes	User EXE	C (>)	-
	Privileged	EXEC (#)	
	Release	Modification	
Command History	norouoo	inculton	

The following example shows how to view the details of a core file in flash:

cisco-ap# show flash cores detail filename1

### show flexconnect

To view the flexconnect information for an access point, use the **show flexconnect** command.

show flexconnect {calea | cckm | client [aaa-override | counter | priority] | dot11r | mcast | oeap | pmk | status | vlan-acl | wlan}

Syntax Description	calea	Displays the calea information	
	cckm	Displays the CCKM cache entry information	
	client	Displays the client information	
	aaa-override	Specifies the AAA override parameters	
	counter	Specifies the counter for all clients	
	priority	Specifies the client priority	
	dot11r	Displays the 802.11r cache entry information	
	mcast	Displays the multicast information	
	oeap	Displays the FlexConnect OEAP information	
	pmk	Displays the OKC or PMK cache entry information	
	status	Displays the standalone status	
	vlan-acl	Displays the VLAN ACL mapping	
	wlan	Displays the WLAN configuration	
Command Modes	User EXEC (	>)	
	Privileged EX		
Command History	 Release Mo	dification	
		is command was roduced.	

The following example shows how to view the information about a client of a FlexConnect AP:

cisco-ap# show flexconnect client

## show flexconnect oeap firewall

To view the OEAP firewall information, use the show flexconnect oeap firewall command.

Syntax Description	dmz	Displays the OEAP firewall DMZ information
	filtering	Displays the OEAP firewall filtering information
	forwarding	Displays the OEAP firewall port forwarding information
Command Modes	User EXEC (> Privileged EX	, ,
Command History	Release Mo	dification
		s command was oduced.

show flexconnect oeap firewall  $[dmz \mid filtering \mid forwarding]$ 

The following example shows how to view the OEAP firewall DMZ information:

cisco-ap# show flexconnect oeap firewall dmz

show flexconnect wlan [l2acl | qos | vlan]

### show flexconnect wlan

To view the WLAN configuration for Flexconnect AP mode, use the show flexconnect wlan command.

 Syntax Description
 12acl
 Specifies the Layer 2 ACL mapping for WLAN

 qos
 Specifies the QoS parameters for WLAN

 vlan
 Specifies the VLAN mapping for WLAN

 User EXEC (>)
 Privileged EXEC (#)

 Command History
 Release
 Modification

 8.1.111.0
 This command was introduced.

The following example shows how to view the WLAN Layer 2 ACL mapping for the Flexconnect AP:

cisco-ap# show flexconnect wlan 12acl

### show interfaces dot11Radio

To view the interface status and configuration for an 802.11 radio, use the **show interfaces dot11Radio** command.

show interfaces dot11Radio radio-interface-number {dfs | memory [memory-address length |
firmware] | mumimo wlan-number | sniffer | statistics | wlanwlan-id datapathcounters |
statistics }

Syntax Description	radio-interface-number	Specifies the interface number for 802.11 radio. The valid range is from 0 to 1				
	dfs Displays the DFS statistics					
	memory	nemory-address       Specifies the memory address. The valid range is between 0 and ffffffff         length       Specifies the length. The valid range is from 0 to 64         Tirmware       Dumps firmware logs				
	memory-address					
	length					
	firmware					
	mumimo					
	wlan-number	<i>n-number</i> The 802.11-specific value whose valid range is from 0 to 15.				
	sniffer	Displays the sniffer mode statistics				
	statistics	Displays the statistics information for 802.11 radio				
		Note Cisco 1852, 9117, 9130 APs do not include the beacon tx statistics under the 802.11 tx statistics counter.				
	wlan wlan-id	Displays the specified WLAN information				
	datapath	Displays the datapath counters.				
	counters	Displays the datapath counters and drops.				
Command Modes	Privileged EXEC (#)					
Command History	Release Modification					
	8.1.111.0 This command was introduced.					
	8.9 This command was enhanced by adding the <b>datapath</b> parameter.					
	The following example shows how to view the DFS statistics for a 802.11 interface whose number is 1:					
	cisco-ap# <b>show interf</b>	aces dot11Radio 1 dfs				
	DFS Data:					

Radar Det	cected:	:	0
Inactive	Radar	Detected:	0

# show interfaces network

To view the Linux network interfaces, use the show interfaces network command.

Command Modes	Privileged EXEC (#)		
Command History	Release Modification		
	8.1.111.0 This command was introduced.		

show interfaces network

The following example shows how to view the Linux network interfaces:

cisco-ap# show interfaces network

## show interfaces wired

To view the wired interface, use the show interfaces wired command.

Syntax Description	wired-interface-number	Wired interface number; valid range is between 0 to 3	
	MIB-stats	Displays the AP internal-Switch MIB counters.	
	datapath	Displays the datapath counters.	
	counters	Displays the datapath counters and drops.	
Command Modes	Privileged EXEC (#)		
Command History	Release Modification		
	8.1.111.0 This command was introduced.		
	8.9 This command was enhanced by adding the <b>datapath</b> parameter.		

cisco-ap# show interfaces wired 1

## show inventory

To view the physical inventory, use the **show inventory** command.

show inventory

**Command Modes** User EXEC (>)

Privileged EXEC (#)

Command History

8.1.111.0 This command was introduced.

The following example shows how to view the physical inventory:

cisco-ap# show inventory

**Release Modification** 

NAME: AP2800, DESCR: Cisco Aironet 2800 Series (IEEE 802.11ac) Access Point PID: AIR-AP2802I-D-K9 , VID: V01, SN: XXXXXXXXXX

### show ip

To view the IP information, use the show ip command.

	<pre>show ip {access-lists   interface brief   route   tunnel [eogre {domain   forwarding-tak   gateway}   fabric   summary  sip-snooping{ stats   status} ]}</pre>			
Syntax Description	access-lists	Lists the IP access lists		
	interface	Displays the IP interface status and configuration		
	brief	Displays the brief summary of IP status and configuration		
	route	Displays the IP routing table		
	tunnel	Displays the IP tunnel information		
	eogre	Displays the EoGRE tunnel information		
	domain	Displays the EoGRE tunnel domain information		
	forwarding-table	Displays the EoGRE tunnel encapsulation and decapsulation information		
	gateway	Displays the EoGRE tunnel gateway information		
	fabric	Displays the IP fabric tunnel information		
	summary	Displays the information for all tunnels		

	sip-snooping	Displays the SIP snooping options.				
	stats	Displays the transmitted and received SIP snooping statistics				
	status	status Displays the SIP snooping status.				
Command Modes	User EXEC (>)					
	Privileged EXEC (#)					
Command History	Release Modi	ification				
	8.1.111.0 This	command was introduced.				
	8.9 This	command was enhanced by adding the <b>sip-snooping</b> parameter.				

The following example shows how to view information about the lists the IP access lists: cisco-ap# show ip access-lists

# show lacp

To view the Link Aggregation Control Protocol (LACP) options, use the show lacp command.

	show lacp	{counters   internal   neighbors}
Syntax Description	counters	Displays traffic information
	internal	Displays internal information
	neighbors	Displays LACP neighbor entries
Command Modes	Privileged E	XEC (#)
Command History	Release M	odification
	0.111110 11	nis command was troduced.

The following example shows how to view the LACP traffic information:

cisco-ap# show lacp counters

# show logging

To view the contents of logging buffers, use the show logging command.

show logging

Command Modes	Privileged EXEC (#)			
Command History	Release Modification			
	8.1.111.0 This command was introduced.			

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The following example shows how to view the contents of logging buffers:

cisco-ap# show logging

1 EVEC (II)

### show memory

To display memory usage on an access point, use the show memory command.

	show memory [detail   pool   summary]			
Syntax Description	detail	Displays detailed system memory usage		
	pool	Displays system memory pool		
	summary	Display system memory usage statistics		
Command Modes	Privileged F	EXEC (#)		
Command History	Release Modification			

8.1.111.0 This command was introduced.

The following example shows how to view the system memory usage statistics:

cisco-ap# show m	emory					
Memory summary: MemTotal: 1030608 kB						
MemFree:	713832					
MemAvailable:	710492					
Buffers:	/10492	kВ				
Cached:	88224					
	00224	kВ				
SwapCached:	Ŭ					
Active:	28932					
Inactive:	82872					
Active(anon):	28900	kВ				
Inactive(anon):	82812	kВ				
Active(file):	32	kВ				
<pre>Inactive(file):</pre>	60	kВ				
Unevictable:	0	kВ				
Mlocked:	0	kВ				
SwapTotal:	0	kВ				
SwapFree:	0	kВ				
Dirty:	0	kВ				
Writeback:	0	kВ				
AnonPages:	23580	kВ				
Mapped:	11380	kВ				

Slab:	132140	kB			
SReclaimable:	3368	kB			
SUnreclaim:	128772	kB			
KernelStack:	864	kB			
PageTables:	748	kB			
NFS_Unstable:	0	kB			
Bounce:	0	kB			
WritebackTmp:	0	kB			
CommitLimit:	515304	kB			
Committed_AS:	193960	kB			
VmallocTotal:	1024000	kB			
VmallocUsed:	69808	kB			
VmallocChunk:	915324	kB			
System Memory	:				
	total	used	free	shared	buffers
Mem: 10	30608	316848	713760	0	0
-/+ buffers:		316848	713760		
Swap:	0	0	0		

88132 kB

# show policy-map

Shmem:

To view policy maps on access point, use the show policy-map command.

	show policy-map				
Command Modes	Privileged EXEC (#)				
Command History	Release Modification				
	8.1.111.0 This command was introduced.				

The following example shows how to view the policy maps on the access point:

cisco-apshow policy-map

# show processes

To view process utilization details, use the show processes command.

	showprocesses {cpu cpu-number   dmalloc {capwap   wcp}   status}					
Syntax Description	<b>cpu</b> <i>cpu-number</i> Displays the specified CPU's utilization of the processes; valid range of values for CPU number is between 0 to 3					
	dmalloc	Displays the process utilization of the dmalloc processes				
	capwap	Displays dmalloc statistics for CAPWAP				
	wcp	Displays dmalloc statistics for WCP				

	status         Displays watchdog process status					
Command Modes	odes Privileged EXEC (#)					
Command History	Release Mod	lification				
		command was oduced.				

The following example shows how to view the process watchdog status:

cisco-ap# show proces	ses status	
Process	Alive	Monitored
capwapd	True	True
switchdrvr	True	False
wcpd	True	True
kclick	True	True
cleanaird	True	True
mrvlfwd	True	True

#### show processes memory

To display the processes on the access point, use the show processes memory command.

**show processes memory** {**maps** | **smaps**} **pid** *pid-number* 

Syntax Description	maps	Displays maps for the processes			
	smaps	Displays smaps for the processes			
	pidProcess ID that you have the pid-number				
Command Modes	Privileged EX	EC (#)			
Command History	Release Mod	lification			
	8.1.111.0 This command was introduced.				
	The following	example shows how to view the list of			

The following example shows how to view the list of processes utilizing the memory on the access point:

cisco-ap# show processes memory

```
Mem total:1030608 anon:23876 map:11424 free:712728
slab:132748 buf:0 cache:88284 dirty:0 write:0
Swap total:0 free:0
PID VSZ^VSZRW RSS (SHR) DIRTY (SHR) STACK COMMAND
6227 56500 53464 1168 732 1144 732 132 /usr/sbin/mrvlfwd
6283 27536 20668 13032 2400 13032 2400 132 /usr/sbin/capwapd
6297 24880 10612 14536 1376 14536 1376 132 wcpd
```

6255	9612	6600	1508	1052	1508	1052	132	/usr/sbin/cleanaird
5122	9556	4144	2664	2012	2664	2012	132	/usr/bin/capwap_brain
29097	7148	1536	3560	2392	3556	2388	132	/usr/sbin/cisco shell
3142	6828	1216	2992	2264	2992	2264	132	/usr/sbin/cisco_shell
5106	4588	404	1912	1644	1912	1644	132	/usr/bin/fastcgi -s /tmp/fcgi sock
5108	4588	404	1912	1644	1912	1644	132	/usr/bin/slowfcgi -s /tmp/slow fcgi sock
6084	4544	452	928	360	928	360	132	/usr/sbin/lighttpd -f /etc/lighttpd.conf
6214	3692	344	1420	960	1420	960		tamd proc ap-tam 1 0 -debug err
6213	3556	340	1460	1104	1460	1104	132	tams proc -debug err
6133	3396	400	1196	976	1196	976	132	/usr/bin/poder agent
4689	3176	336	1012	812	1012	812	132	/usr/bin/sync log /storage/syslogs/13
6143	3140	304	1428	1204	1428	1204	132	/usr/bin/failover
4716	3136	284	616	436	616	436	132	watchdogd
6121	3116	280	988	820	988	820	132	bigacl d
5084	3112	272	952	804	952	804	132	/usr/bin/led core
6181	1884	320	1044	260	1044	260	132	perl /usr/bin/drt.pl
1	1596	196	492	412	492	412	132	init
30914	1596	196	428	344	428	344	132	top -m -b -n 1
6145	1596	196	248	176	248	176	132	{S80cisco} /bin/sh /etc/init.d/S80cisco
start								
30912	1592	192	424	356	424	356	132	{show process me} /bin/ash
/usr/k	oin/cli	scrip	ts/shc	w proc	ess me	emory.s	h 0 0	0 0 0 0 0 0 0
30911	1592	192	400	336	400	336		/bin/sh -c
/usr/k	oin/cli	scrip	ts/shc	w proc	ess me	mory.s	h 0 0	0 0 0 0 0 0 0 0   more
4684	1592	192	368	304	368	304	132 s	yslogd -S -s 100 -b 1 -L -R 255.255.255.255
30913	1592	192	332	264	332	264	132	more
4688	1584	184	344	284	344	284	132	klogd
4686	1584	184	320	264	320	264	132	printkd
30906	1584	184	284	228	284	228	132	sleep 10
29085	1452	332	640	416	640	416	132	/usr/sbin/dropbear -E -j -k -d
/stora	age/dro	pbear/	dropbe	ar dss	host	key -r	/sto	rage/dropbear/dropbear rsa host key
6209	1384	264	416	364	416	364	132	/usr/sbin/dropbear -E -j -k -d
/stora	age/dro	pbear/	dropbe	ar dss	host	key -r	/sto	rage/dropbear/dropbear rsa host key
8411	1096	212	444	336	444	336	132	dnsmasq -C /etc/dnsmasq.host.conf
6115	1096	212	436	340	436	340	132	dnsmasq -C /etc/dnsmasq.vaperr.conf

### show rrm

To view the Radio Resource Management (RRM) properties, use the show rrm command.

show rrm {hyperlocation [level1-list] | neighbor-list [details] | receive {configuration | statistics}}

Syntax Description	hyperlocation level1-list	Displays status of Cisco Hyperlocation on the AP
	neighbor-list	Displays neighbor-list statistics
	receive	Receive signal strength indicator (RSSI) of the AP
	rogue	Displays rogue-related information
Command Modes	Privileged EXEC (#)	
Command History	Release Modification	
	8.1.111.0 This command w introduced.	vas

#### **Usage Guidelines**

**nes** The following example shows how to view the level 1 channel scan list in Hyperlocation:

-		<b>m hyperlocation level1-list</b> 2.4GHz Band	
Channel	Width	Serving MAC Max Clients	
Level-1	List for	5GHz Band	
Channel	Width	Serving MAC Max Clients	

## show rrm rogue containment

To view rogue containment information on an access point, use the show rrm rogue containment command.

show rrm rogue containment {ignore | info} Dot11Radio radio-interface-number

Syntax Description	ignore	Displays list of rogue APs that are configured to be ignored
	info	Displays rogue contaimnent configuration and statistics for an AP
	Dot11Radio	Specifies the <b>Dot11Radio</b> interface keyword.
	radio-interface-number	Slot of the radio interface; valid values are 0 and 1
Command Modes	Privileged EXEC (#)	
Command History	Release Modification	
	8.1.111.0 This commar introduced.	nd was
	interface numbered 1: cisco-ap# show rrm r	shows how to view the rogue containment and statistics for the 802. rogue containment info Dotl1Radio 1 nfo and Stats for slot 1: ontain-type channels
	interface numbered 1: cisco-ap# show rrm r Rogue Containment In	rogue containment info DotllRadio 1 nfo and Stats for slot 1: ontain-type channels
	interface numbered 1: cisco-ap# show rrm r Rogue Containment In bssid client-addr co Request Status Submit	rogue containment info DotllRadio 1 nfo and Stats for slot 1: ontain-type channels s count t 0
	interface numbered 1: cisco-ap# show rrm r Rogue Containment In bssid client-addr co Request Status Submit Success	rogue containment info DotllRadio 1 nfo and Stats for slot 1: ontain-type channels s count t 0 s 0
	interface numbered 1: cisco-ap# show rrm r Rogue Containment In bssid client-addr co Request Status Submit Success Timeout	rogue containment info DotllRadio 1 nfo and Stats for slot 1: ontain-type channels s count t 0 s 0 t 0
	interface numbered 1: cisco-ap# show rrm r Rogue Containment In bssid client-addr co Request Status Submit Success	rogue containment info Dotl1Radio 1 nfo and Stats for slot 1: ontain-type channels s count t 0 s 0 t 0 r 0
	interface numbered 1: cisco-ap# show rrm r Rogue Containment In bssid client-addr co Request Status Submit Success Timeout Error	rogue containment info DotllRadio 1 nfo and Stats for slot 1: ontain-type channels s count t 0 s 0 t 0 r 0 d 0
	interface numbered 1: cisco-ap# show rrm r Rogue Containment In bssid client-addr co Request Status Submit Success Timeout Error Tuneo	rogue containment info Dotl1Radio 1 nfo and Stats for slot 1: ontain-type channels s count t 0 s 0 t 0 r 0 d 0 d 0
	interface numbered 1: cisco-ap# show rrm i Rogue Containment Ir bssid client-addr co Request Status Submit Success Timeout Erron Tuneo Flushed Bad Channel Tail Dropped	rogue containment info Dotl1Radio 1 nfo and Stats for slot 1: ontain-type channels s count t 0 s 0 t 0 r 0 d 0 d 0 d 0 d 0
	interface numbered 1: cisco-ap# show rrm i Rogue Containment Ir bssid client-addr co Request Status Submit Success Timeout Erron Tunec Flushed Bad Channel Tail Dropped Cancelled	rogue containment info Dotl1Radio 1 nfo and Stats for slot 1: ontain-type channels s count t 0 s 0 t 0 t 0 d 0 d 0 d 0 d 0 d 0 d 0 d 0 d
	interface numbered 1: cisco-ap# show rrm i Rogue Containment Ir bssid client-addr co Request Status Submit Success Timeout Erron Tuneo Flushed Bad Channel Tail Dropped	rogue containment info DotllRadio 1 nfo and Stats for slot 1: ontain-type channels s count t 0 s 0 t 0 t 0 d 0 d 0 d 0 d 0 d 0 d 0 d 0 d

#### show rrm rogue detection

To view RRM rogue detection configuration parameters, use the show rrm rogue detection command.

show rrm rogue detection {adhoc | ap | clients | config | rx-stats} Dot11Radio radio-interface-number

Syntax Description	adhoc	Displays the primary ad hoc rogue AP list for a 802.11 radio slot; valid values are 0 and 1
	ар	Displays rogue detection parameters for the AP for a 802.11 radio slot; valid values are 0 and 1
	clients	Displays primary list of rogue clients
	config	Displays rogue detection configuration on the AP
	rx-stats	Displays rogue detection receive statistics on the 802.11 interfaces of an AP
	Dot11Radio	Specifies 802.11 radio intereface
radi	radio-interface-number	The 802.11 radio interface number; valid values are 0 and 1
Command Modes	Privileged EXEC (#)	
-		

**Command History** 

**Release Modification** 

8.1.111.0 This command was introduced.

The following example shows how to view the RRM rogue detection configuration details:

cisco-ap# show rrm rogue detection config

```
Rogue Detection Configuration for Slot 0:
Rogue Detection Mode : Enabled
Roque Detection Report Interval : 10
Rogue Detection Minimum Rssi : -90
Rogue Detection Transient Interval : 0
Rogue Detection Flex Contain : Disabled
Rogue Detection Flex Contain Adhoc : Disabled
Rogue Detection Flex Contain SSID : Disabled
Rogue Containment Autorate : Disabled
Scan Duration : 180000
Channel Count : 11
Transient Threshold : 0
Roque Detection Configuration for Slot 1:
Rogue Detection Mode : Enabled
Rogue Detection Report Interval : 10
Rogue Detection Minimum Rssi : -90
Rogue Detection Transient Interval : 0
Roque Detection Flex Contain : Disabled
Rogue Detection Flex Contain Adhoc : Disabled
Rogue Detection Flex Contain SSID : Disabled
```

```
Rogue Containment Autorate : Disabled
Scan Duration : 180000
Channel Count : 25
Transient Threshold : 0
```

# show running-config

To display the contents of the currently running configuration on the access point, use the **show running-config** command.

#### show running-config

 Command Modes
 Privileged EXEC (#)

 Command History
 Release Modification

8.1.111.0 This command was introduced.

The following example shows how to view the contents of the currently running configuration on the access point:

```
cisco-ap# show running-config
```

AP Name	:	ap1540
Admin State	:	Enabled
AP Mode	:	Local
AP Submode	:	None
Location	:	default location
Reboot Reason	:	Config Mwar
Primary controller name	:	cisco 3504
Primary controller IP	:	<controller-ip-address></controller-ip-address>
Secondary controller name	:	
Secondary controller IP	:	
Tertiary controller name	:	
Tertiary controller IP	:	
Controller from DHCP offer	:	<controller-dhcp-server-address></controller-dhcp-server-address>
		<controller-dns-server-address></controller-dns-server-address>
AP join priority	:	1
IP Prefer-mode	:	IPv4
CAPWAP UDP-Lite	:	Unconfigured
Last Joined Controller name	:	wlc3504
DTLS Encryption State	:	Disabled
Discovery Timer	:	10
Heartbeat Timer	:	30
CDP State	:	Enabled
Watchdog monitoring	:	Enabled
IOX	:	Disabled
RRM State	:	Enabled
LSC State	:	Disabled
SSH State	:	Enabled
AP Username	:	admin
Session Timeout	:	0
Extlog Host	:	0.0.0.0
Extlog Flags	:	0
Extlog Status Interval	:	0
Syslog Host	:	<syslog-host-ip-address></syslog-host-ip-address>

L

· · · · · · · · · · · · · · · · · · ·	0 errors
Core Dump TFTP IP Addr :	011010
Core Dump File Compression :	Disabled
Core Dump Filename :	
Client Trace Status :	Enabled(All)
Client Trace All Clients :	Enabled
Client Trace Filter :	0x0000000E
Client Trace Out ConsoleLog:	Disabled
WLC Link LAG status :	Disabled
AP Link LAG status :	Disabled
AP WSA Mode :	Disabled

# show security data-corruption

To view data inconsistency errors, use the show security data-corruption command.

	show security data-corruption		
Syntax Description	This co	mmand has no arguments or keywords.	
Command Modes	Privileg	ed EXEC (#)	
Command History	Release	Modification	
	8.7	This command was introduced.	

#### **Examples**

The following example shows how to view data inconsistency errors:

cisco-ap# show security data-corruption

## show security system state

To view the current state of system-level security, use the show security system state command.

	show se	curity system state
Syntax Description	This co	nmand has no arguments or keywords.
Command Modes	Privileg	ed EXEC (#)
Command History	Release	Modification
	8.7	This command was introduced.

#### **Examples**

To view the current state of system-level security, use this command:

cisco-ap#	show security system state	
XSPACE:		
	Non-Executable stack:	Yes
	Non-Executable heap:	Yes
	Non-Writable text:	Yes
OSC:		
	Version:	1.1.0
SafeC:		
	Version:	3.1.1

The table below describes the significant fields shown in the display:

Table 1: show security system state Field Descriptions

Field	Description
Non-Executable stack	Indicates whether the system prevents execution from the stack
Non-Executable heap	Indicates whether the system prevents execution from the heap
Non-Writable text	Indicates whether the system prevents the text section from being writable
OSC version	Indicates the version of the OSC library used by the applications
SafeC version	Indicates the version of the SafeC library used by the applications

# show spectrum

To view the show commands of the spectrum firmware, use the show spectrum command.

	<pre>show spectrum {list   recover   status }</pre>		
Syntax Description	list	Lists the spectrum FW data files	
	recover	Displays the spectrum FW recover count	
	status	Displays the spectrum FW status	

**Command Modes** Privileged EXEC (#)

#### Command History

8.1.111.0 This command was introduced.

**Release Modification** 

The following example shows how to view the spectrum firmware status:

cisco-ap# **show spectrum status** 

```
Spectrum FW status slot 0:
 version: 1.15.4
 status: up, crashes 0, resets 0, radio reloads 0
 load:
          37.00 34.75 33.50 33.25
 NSI Key: 26c1bd25893a4b6dd3a00fe71735d067
 NSI: not configured
reg_wdog: 255 26309 0
 dfs_wdog: 0
 dfs freq: 0
Spectrum FW status slot 1:
 version: 1.15.4
 status: up, crashes 0, resets 0, radio reloads 0
           37.25 38.00 38.75 39.00
 load:
 NSI Key: 26c1bd25893a4b6dd3a00fe71735d067
 NSI:
           not configured
 reg_wdog: 255 26309 0
 dfs wdog: 0
 dfs freq: 0
```

#### show tech-support

To automatically run show commands that display system information, use the show tech-support command.

 Command Modes
 Privileged EXEC (#)

 Command History
 Release Modification

 8.1.111.0
 This command was introduced.

show tech-support

The following example shows how to automatically run show commands that display system information:

cisco-ap# show tech-support

#### show version

To view the software version information of the AP, use the show version command.

show version

Command Modes	Privileged EXEC (#)			
Command History	Release Modification			
	8.1.111.0 This command was introduced.			

The following example shows how to view the software version information of the AP:

cisco-ap# show version

### show trace dot11\_chn

To view off-channel events on 802.11 channel of an AP, use the show trace dot11\_chn command.

	show trac	show trace dot11_chn {enable   disable   statistics}		
Syntax Description	enable	Enables displaying of off-channel events on the 802.11 radio 0 and 1		
	disable	Disables displaying of off-channel events on the 802.11 radios 0 and 1		
	statistics	Displays off-channel event statistics on 802.11 radios 0 and 1		
Command Modes	Privileged EXEC (#)			
Command History	Release M	Modification		
		This command was introduced.		

#### Examples

The following example shows how to view off-channel event statistics on 802.11 radios:

cisco-ap# show trace dot11\_chn statistics

Dot11Radio0 Off-Channel Statistics: total\_count in\_prog\_count last-chan last-type last-dur 0 0 0 0 0 Dot11Radio1 Off-Channel Statistics: total\_count in\_prog\_count last-chan last-type last-dur 0 0 0 0 0 0

### show trace

To view trace logs on the AP, use the show trace command.

	show trace		
Command Modes	Privileged EXEC (#)		
Command History	Release Modification		
	8.1.111.0 This command was introduced.		

The following example shows how to view the trace logs on the AP:

cisco-ap# **show trace** 

### show wips

To view details of the AP that is configured in wIPS mode, use the show wips command.

show wips {alarm alarm-id | analyzer | buffer | channel channelno | infrastructure-device | neighbors | node mac mac-address | node number number | object | policy policy-id | policy ssid | session mac-address | stats | violation node mac-address | violation channel channel-number}

Syntax Description	alarm	Displays statistics of the configured alarm if the AP is configured in wIPS mode; valid values are between 0 and 255
	alarm-id	Alarm ID; valid values are between 0 and 255
	analyzer	Displays analyzer related statistics
	buffer	Displays statistics of the buffer
	channel	Displays channel related statistics
	channelno	Channel number; valid values are between 0 and 255
	infrastructure-device	Displays AP infrastructure information
	neighbors	Displays statistics of neighbors.
	node	Displays AP node information
	mac mac-address	MAC address of the node.
	node	Node.
	number number	Node number; valid values are between 1 and 500
	object	AP object store
	<pre>policy {policy-id  ssid</pre>	AP policy; you must specify either a policy ID or the policy SSID.
	session mac-address	Displays node session details; you must enter the MAC address of the node

stats	Displays AP statistics
violation	Tracks AP violations
node mac-address	Tracks node-based violations
channel channel-number alarm-id	Tracks channel-based violations; you must enter channel numbeer and alarm ID
Privileged EXEC (#)	
Release Modification	
8.1.111.0 This command was introduced.	
	violation         node mac-address         channel channel-number alarm-id         Privileged EXEC (#)         Release Modification         8.1.111.0 This command was

The following example shows how to view the wIPS statistics information on the AP:

cisco-ap# show wips stats