



## 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

<b>events</b>	View client trace event information
<b>all</b>	Displays all client trace events
<b>system</b>	Displays all system events
<b>mac</b>	Displays client trace events for specific MAC address
<i>word</i>	Specific client MAC address
<b>skb</b>	Displays client trace SKB information
<b>drop-list</b>	Displays client trace SKB drop list information
<b>stats</b>	Displays client trace SKB statistics
<b>status</b>	Displays client trace configuration

## Command Modes

Privileged EXEC (#)

## Command History

Release	Modification
8.1.111.0	This command was introduced.

The following example shows how to view the AP client trace status:

```
cisco-wave2-ap# show ap client-trace status
```

# show arp

To view the ARP table, use the **show arp** command.

## show arp

<b>Syntax Description</b>	<b>arp</b> Shows ARP table
<b>Command Modes</b>	User EXEC (>) Privileged EXEC (#)
<b>Command History</b>	<b>Release Modification</b>
	8.1.111.0 This command was introduced.

The following example shows a sample output of the command:

```
cisco-wave2-ap# show arp

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

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

**show avc cft** *word*

<b>Syntax Description</b>	<i>word</i> Client MAC address
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<b>Command Modes</b>	User EXEC (>) Privileged EXEC (#)
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<b>Command History</b>	<b>Release</b> <b>Modification</b>
	8.1.111.0 This command was introduced.

The following example shows how to view the AVC client flow table:

```
cisco-wave2-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 avc nbar {statistics |build |version}
```

## Syntax Description

**statistics** Displays NBAR build details

**build** Displays NBAR statistics

**version** Displays NBAR and PP version

## 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 AVC NBAR build information:

```
cisco-wave2-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	
<b>download</b>	Lists currently cached download flows
<b>upload</b>	Lists currently cached upload flows

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 all the currently cached flows:

```
cisco-wave2-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-wave2-ap# show avc status
```

```
VAP FNF-STATUS AVC-QOS-STATUS
 0 Disabled Disabled
 1 Disabled Disabled
 2 Disabled Disabled
 3 Disabled Disabled
 4 Disabled Disabled
 5 Disabled Disabled
 6 Disabled Disabled
 7 Disabled Disabled
 8 Disabled Disabled
 9 Disabled Disabled
10 Disabled Disabled
11 Disabled Disabled
12 Disabled Disabled
13 Disabled Disabled
14 Disabled Disabled
15 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-wave2-ap# show boot
BOOT path-list:      part2
Console Baudrate:   9600
Enable Break:       yes
Manual Boot:        no
Memory Debug:       no
Crashkernel:
```

# show capwap

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

```
show capwap [{ip|mcast|traffic}]
```

Syntax Description	
<b>client</b>	CAPWAP client information
<b>ids</b>	CAPWAP ID information
<b>ip</b>	CAPWAP IP configuration
<b>location</b>	CAPWAP location information
<b>mcast</b>	CAPWAP multicast information
<b>pnp</b>	PNP information
<b>traffic</b>	CAPWAP traffic information

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 CAPWAP multicast information:

```
cisco-wave2-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	
<b>callinfo</b> <i>info</i>	CAPWAP client call information
<b>detailrcb</b>	CAPWAP client detailed RCB information
<b>rcb</b>	CAPWAP client RCB information
<b>config</b>	CAPWAP client config information
<b>ha</b>	CAPWAP client HA parameters
<b>msginfo</b>	CAPWAP client messages information
<b>timers</b>	CAPWAP client timers
<b>traffic</b>	CAPWAP client 802.11 traffic information

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 CAPWAP client traffic information:

```
cisco-wave2-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	
<b>clear</b>	Clears trace
<b>delete</b>	Deletes trace
<b>disable</b>	Disables trace at boot
<b>enable</b>	Enables trace at boot
<b>save</b>	Saves trace
<b>start</b>	Starts trace
<b>stop</b>	Stops trace

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 CAPWAP client trace:

```
cisco-wave2-ap# show capwap client trace
```

# show capwap ids sig

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

```
show capwap ids sig [{list |stats}]
```

<b>Syntax Description</b>	<b>list</b>	Signature list entries
	<b>stats</b>	Signature attack statistics
<b>Command Modes</b>	User EXEC (>) Privileged EXEC (#)	
<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	8.1.111.0	This command was introduced.

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

```
cisco-wave2-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**}

## Syntax Description

<b>entry device</b> <i>device-name</i>	Information for specific neighbor entry whose name you must enter
<b>inline_power</b>	Inline power negotiation information
<b>interface</b>	CDP interface status and configuration
<b>neighbors</b>	CDP neighbor entries
<b>traffic</b>	CDP statistics

## Command Modes

Privileged EXEC (#)

## Command History

### Release Modification

8.1.111.0 This command was introduced.

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

```
cisco-wave2-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-wave2-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**

---

**Release Modification**

---

8.1.111.0 This command was introduced.

---

The following example shows how to view CleanAir debug settings:

```
cisco-wave2-ap# show cleanair debug
```



# show client statistics

To display client statistics, use the **show client statistics** command.

**show client statistics** *client-mac-address*

---

<b>Syntax Description</b>	<i>client-mac-address</i> MAC address of the client
---------------------------	---

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<b>Command Modes</b>	Privileged EXEC (#)
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---

<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	8.1.111.0	This command was introduced.

---

The following example shows how to view client statistics:

```
cisco-wave2-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-wave2-ap# show clock
```

# show configuration

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

## show configuration

---

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

---

The following example shows how to view contents of non-volatile memory:

```
cisco-wave2-ap# show configuration
```

# 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		
	<i>ble-interface-number</i>	BLE interface number that you must enter; Valid value is 0
	<b>broadcast</b>	Displays BLE broadcast summary information
	<b>counters</b>	Displays BLE transport counters information
	<b>floor-tag</b> <i>floor-beacon-mac-addr</i>	Displays sync data of the floor beacon whose MAC address you must specify
	<b>interface</b>	Displays BLE interface summary information
	<b>local</b>	Displays sync information of host BLE radio
	<b>scan brief</b>	Displays brief BLE scan summary information
	<b>scan detail</b> <i>floor-beacon-mac-addr</i>	Displays BLE scan summary information in detail; you must specify the floor beacon MAC address
	<b>timers</b>	Displays BLE timers information

**Command Modes** Privileged EXEC (#)

## Command History

### Release Modification

8.7 This command was introduced.

## Examples

To view the BLE timers information, use this command:

```
cisco-wave2-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 } | client { client-mac-addr | } | frequency | powercfg | powerreg | radiostats | rate | vlan | wlan { wlan-id } }
```

Syntax	Description
<i>dot11-interface-no</i>	Dot11Radio interface number.
<b>atf configuration</b>	Displays the AirTime Fairness configuration.
<b>atf statistics</b>	Displays the AirTime Fairness statistics.
<b>antenna</b>	Displays the antenna settings
<b>frequency</b>	Displays the frequency information.
<b>powercfg</b>	Displays the configured power information.
<b>powerreg</b>	Displays the transmit power information.
<b>radio-stats</b>	Displays the radio statistics.
<b>rate</b>	Displays the rate information.
<b>vlan</b>	Displays the VLAN summary.
<b>wlan</b> <i>wlan-id</i>	Displays the VLAN/WLAN details of the WLAN ID specified.

**Command Modes** User EXEC (>)

Command History	Release	Modification
	8.1.111.0	This command was introduced.

The following example shows how to view 802.11 interface information for interface number 1:

```
cisco-wave2-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-wave2-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*

<b>Syntax Description</b>	<i>wired-interface-number</i> Wired interface number from 0 to 3				
<b>Command Modes</b>	Privileged EXEC (#)				
<b>Command History</b>	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>8.1.111.0</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	8.1.111.0	This command was introduced.
Release	Modification				
8.1.111.0	This command was introduced.				

The following example shows how to view information about the controllers' wired interface whose ID is 1:

```
cisco-wave2-ap# show controllers wired 1

wired1    Link encap:Ethernet  HWaddr C8:8B:6A:33:59  eMac Status: DOWN
          inet addr:9.11.8.104  Bcast:9.255.255.255  Mask:255.255.255.255
          DOWN BROADCAST RUNNING PROMISC MULTICAST  MTU:2400  Metric:1
          RX packets:38600 errors:0 dropped:1 overruns:0 frame:0
          TX packets:179018 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:80
          RX bytes:3812643 (3.6 MiB)  TX bytes:54721869 (52.1 MiB)

Gig Emacl Counters
-----
0 Good octets rx, 0 Bad octets rx, 0 Unicast frames rx,
0 Broadcast frames rx, 0 Multicast frames rx, 0 64 byte frames rx,
0 65_TO_127 byte frames, 0 128_TO_255 byte frames, 0 256_TO_511 byte frames,
0 512_TO_1023 byte frames, 0 1024_TO_MAX byte frames, 0 Good octets tx,
0 Unicast frames tx, 0 Multicast frames tx, 0 Broadcast frames tx,
0 Crc errors sent, 0 Flow control rx, 0 Flow control tx,
0 Rx fifo overrun, 0 Undersized rx, 0 Fragments rx,
0 Oversize rx, 0 Jabber rx, 0 Mac rx error,
0 Bad crc event, 0 Collision, 0 Late collision,
```

# 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-wave2-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-wave2-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	
<b>lease</b>	Displays the DHCP addresses leased from a server
<b>servers</b>	Displays the known DHCP servers

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 status of DHCP addresses leased from a server:

```
cisco-wave2-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**

---

<b>Command Modes</b>	Privileged EXEC (#)
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---

<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	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-wave2-ap# show dot11 qos
```

# 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 view the filesystem information:

```
cisco-wave2-ap# show filesystems
```

```
Filesystem          Size      Used Available Use% Mounted on
/dev/ubivol/storage 57.5M     1.9M     52.6M     4% /storage
```

# show flash

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

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

Syntax Description		
<b>cores</b>	Displays the core files in flash	
<b>detail</b>	Displays the core file contents	
<i>core-file-name</i>	The core file name	
<b>crash</b>	Displays the crash files in flash	
<b>syslogs</b>	Displays the syslogs files in flash	

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 details of a core file in flash:

```
cisco-wave2-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
<b>calea</b>	Displays the calea information
<b>cckm</b>	Displays the CCKM cache entry information
<b>client</b>	Displays the client information
<b>aaa-override</b>	Specifies the AAA override parameters
<b>counter</b>	Specifies the counter for all clients
<b>priority</b>	Specifies the client priority
<b>dot11r</b>	Displays the 802.11r cache entry information
<b>mcast</b>	Displays the multicast information
<b>oeap</b>	Displays the FlexConnect OEAP information
<b>pmk</b>	Displays the OKC or PMK cache entry information
<b>status</b>	Displays the standalone status
<b>vlan-acl</b>	Displays the VLAN ACL mapping
<b>wlan</b>	Displays the WLAN configuration

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 information about a client of a FlexConnect AP:

```
cisco-wave2-ap# show flexconnect client
```

# show flexconnect oeap firewall

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

```
show flexconnect oeap firewall [{dmz |filtering |forwarding}]
```

---

**Syntax Description**

<b>dmz</b>	Displays the OEAP firewall DMZ information
<b>filtering</b>	Displays the OEAP firewall filtering information
<b>forwarding</b>	Displays the OEAP firewall port forwarding information

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**Command Modes**

User EXEC (>)  
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 OEAP firewall DMZ information:

```
cisco-wave2-ap# show flexconnect oeap firewall dmz
```

## show flexconnect wlan

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

```
show flexconnect wlan [{l2acl | qos | vlan}]
```

Syntax Description	
<b>l2acl</b>	Specifies the Layer 2 ACL mapping for WLAN
<b>qos</b>	Specifies the QoS parameters for WLAN
<b>vlan</b>	Specifies the VLAN mapping for WLAN

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 WLAN Layer 2 ACL mapping for the Flexconnect AP:

```
cisco-wave2-ap# show flexconnect wlan l2acl
```



## 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 | statistics }
```

Syntax Description	
<i>radio-interface-number</i>	Specifies the interface number for 802.11 radio. The valid range is from 0 to 1
<b>dfs</b>	Displays the DFS statistics
<b>memory</b>	Displays the dump radio memory
<i>memory-address</i>	Specifies the memory address. The valid range is between 0 and ffffffff
<i>length</i>	Specifies the length. The valid range is from 0 to 64
<b>firmware</b>	Dumps firmware logs
<b>mumimo</b>	Displays the multiuser MIMO statistics information
<i>wlan-number</i>	The 802.11-specific value whose valid range is from 0 to 15.
<b>sniffer</b>	Displays the sniffer mode statistics
<b>statistics</b>	Displays the statistics information for 802.11 radio
<b>wlan</b> <i>wlan-id</i>	Displays the specified WLAN information

**Command Modes** Privileged EXEC (#)

**Command History** **Release** **Modification**

8.1.111.0 This command was introduced.

The following example shows how to view the DFS statistics for a 802.11 interface whose number is 1:

```
cisco-wave2-ap# show interfaces dot11Radio 1 dfs
```

```
DFS Data:
Radar Detected:          0
Inactive Radar Detected: 0
```

# show interfaces network

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

## show interfaces network

---

<b>Command Modes</b>	Privileged EXEC (#)
----------------------	---------------------

---

<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	8.1.111.0	This command was introduced.

---

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

```
cisco-wave2-ap# show interfaces network
```

# show interfaces wired

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

**show interfaces wired** *wired-interface-number* [**MIB-stats**]

---

<b>Syntax Description</b>	<i>wired-interface-number</i>	Wired interface number; valid range is between 0 to 3
---------------------------	-------------------------------	---

---

<b>MIB-stats</b>	Displays the AP internal-Switch MIB counters.
------------------	---

---

---

<b>Command Modes</b>	Privileged EXEC (#)
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---

---

<b>Command History</b>	<b>Release</b>	<b>Modification</b>
------------------------	----------------	---------------------

---

8.1.111.0	This command was introduced.
-----------	------------------------------

---

The following example shows how to view the wired interface whose number is 1:

```
cisco-wave2-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**

---

**Release Modification**

---

8.1.111.0 This command was  
introduced.

---

The following example shows how to view the physical inventory:

```
cisco-wave2-ap# show inventory
```

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

# show ip

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

```
show ip {access-lists | interface brief | route | tunnel [eogre {domain | forwarding-table | gateway} | fabric | summary| ]}
```

Syntax Description	
<b>access-lists</b>	Lists the IP access lists
<b>interface</b>	Displays the IP interface status and configuration
<b>brief</b>	Displays the brief summary of IP status and configuration
<b>route</b>	Displays the IP routing table
<b>tunnel</b>	Displays the IP tunnel information
<b>eogre</b>	Displays the EoGRE tunnel information
<b>domain</b>	Displays the EoGRE tunnel domain information
<b>forwarding-table</b>	Displays the EoGRE tunnel encapsulation and decapsulation information
<b>gateway</b>	Displays the EoGRE tunnel gateway information
<b>fabric</b>	Displays the IP fabric tunnel information
<b>summary</b>	Displays the information for all tunnels

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 information about the lists the IP access lists:

```
cisco-wave2-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	
<b>counters</b>	Displays traffic information
<b>internal</b>	Displays internal information
<b>neighbors</b>	Displays LACP neighbor entries

Command Modes	
	Privileged EXEC (#)

Command History	Release	Modification
	8.1.111.0	This command was introduced.

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

```
cisco-wave2-ap# show lacp counters
```

# show logging

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

## **show logging**

---

<b>Command Modes</b>	Privileged EXEC (#)
----------------------	---------------------

---

<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	8.1.111.0	This command was introduced.

---

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

```
cisco-wave2-ap# show logging
```

# 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 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-wave2-ap# show memory
Memory summary:
MemTotal:          1030608 kB
MemFree:           713832 kB
MemAvailable:     710492 kB
Buffers:           0 kB
Cached:           88224 kB
SwapCached:       0 kB
Active:           28932 kB
Inactive:         82872 kB
Active(anon):     28900 kB
Inactive(anon):  82812 kB
Active(file):     32 kB
Inactive(file):  60 kB
Unevictable:     0 kB
Mlocked:         0 kB
SwapTotal:       0 kB
SwapFree:        0 kB
Dirty:           0 kB
Writeback:       0 kB
AnonPages:       23580 kB
Mapped:          11380 kB
Shmem:           88132 kB
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:	1030608	316848	713760	0	0
-/+ buffers:		316848	713760		
Swap:	0	0	0		

# show policy-map

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

## show policy-map

---

<b>Command Modes</b>	Privileged EXEC (#)
----------------------	---------------------

---

<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	8.1.111.0	This command was introduced.

---

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

```
cisco-wave2-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 the CPU number is between 0 to 3
<b>dmalloc</b>	Displays the process utilization of the dmalloc processes
<b>capwap</b>	Displays dmalloc statistics for CAPWAP
<b>wcp</b>	Displays dmalloc statistics for WCP
<b>status</b>	Displays watchdog process status

## Command Modes

Privileged EXEC (#)

## Command History

### Release Modification

8.1.111.0 This command was introduced.

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

```
cisco-wave2-ap# show processes status
Process           Alive           Monitored
  capwap           True            True
  switchdrvr      True            False
  wcp              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
	pid	Process ID that you have to specify <i>pid-number</i>

**Command Modes** Privileged EXEC (#)

Command History	Release	Modification
	8.1.111.0	This command was introduced.

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

```
cisco-wave2-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/mrvlfd
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/slowcgi -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  960 132 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/bin/cli_scripts/show_process_memory.sh 0 0 0 0 0 0 0 0 0
30911 1592  192  400  336  400  336 132 /bin/sh -c
/usr/bin/cli_scripts/show_process_memory.sh 0 0 0 0 0 0 0 0 0 | more
```

```
4684 1592 192 368 304 368 304 132 syslogd -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
/storage/dropbear/dropbear_dss_host_key -r /storage/dropbear/dropbear_rsa_host_key
6209 1384 264 416 364 416 364 132 /usr/sbin/dropbear -E -j -k -d
/storage/dropbear/dropbear_dss_host_key -r /storage/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

<b>hyperlocation</b> <i>level1-list</i>	Displays status of Cisco Hyperlocation on the AP
<b>neighbor-list</b>	Displays neighbor-list statistics
<b>receive</b>	Receive signal strength indicator (RSSI) of the AP
<b>rogue</b>	Displays rogue-related information

## Command Modes

Privileged EXEC (#)

## Command History

### Release Modification

8.1.111.0 This command was introduced.

## Usage Guidelines

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

```
cisco-wave2-ap# show rrm hyperlocation level1-list
Level-1 List for 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 containment configuration and statistics for an AP
	Dot11Radio	Specifies the <b>Dot11Radio</b> interface keyword.
	<i>radio-interface-number</i>	Slot of the radio interface; 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 rogue containment and statistics for the 802.11 interface numbered 1:

```
cisco-wave2-ap# show rrm rogue containment info Dot11Radio 1
Rogue Containment Info and Stats for slot 1:
bssid client-addr contain-type channels

Request Status count
      Submit      0
      Success     0
      Timeout     0
      Error       0
      Tuned       0
      Flushed     0
      Bad Channel 0
      Tail Dropped 0
      Cancelled   0
NDP DFS Tx Cancelled 0
      Tx Failed   0
      Created     0
```

# 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		
<b>adhoc</b>		Displays the master adhoc rogue AP list for a 802.11 radio slot; valid values are 0 and 1
<b>ap</b>		Displays rogue detection parameters for the AP for a 802.11 radio slot; valid values are 0 and 1
<b>clients</b>		Displays master list of rogue clients
<b>config</b>		Displays rogue detection configuration on the AP
<b>rx-stats</b>		Displays rogue detection receive statistics on the 802.11 interfaces of an AP
<b>Dot11Radio</b>		Specifies 802.11 radio interface
<i>radio-interface-number</i>		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-wave2-ap# show rrm rogue detection config
```

```
Rogue Detection Configuration for Slot 0:
Rogue Detection Mode : Enabled
Rogue 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
```

```
Rogue Detection Configuration for Slot 1:
Rogue Detection Mode : Enabled
Rogue 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 : 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-wave2-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>
Secondary controller name :
Secondary controller IP :
Tertiary controller name :
Tertiary controller IP  :
Controller from DHCP offer : <controller-dhcp-server-address>
Controller from DNS server : <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 Facility        : 0
Syslog Level           : errors
Core Dump TFTP IP Addr :
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 command has no arguments or keywords.

---

**Command Modes** Privileged EXEC (#)

---

**Command History**

---

**Release Modification**

---

8.7	This command was introduced.
-----	------------------------------

---

## **Examples**

The following example shows how to view data inconsistency errors:

```
cisco-wave2-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 security system state

**Syntax Description** This command has no arguments or keywords.

**Command Modes** Privileged 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-wave2-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.

**show spectrum {list |recover |status }**

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	Release	Modification
	8.1.111.0	This command was introduced.

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

```
cisco-wave2-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
  load:    37.25 38.00 38.75 39.00
  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.

## show tech-support

---

<b>Command Modes</b>	Privileged EXEC (#)
----------------------	---------------------

---

<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	8.1.111.0	This command was introduced.

---

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

```
cisco-wave2-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-wave2-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 trace dot11_chn {enable |disable |statistics}
```

Syntax Description	enable	disable	statistics
	Enables displaying of off-channel events on the 802.11 radio 0 and 1	Disables displaying of off-channel events on the 802.11 radios 0 and 1	Displays off-channel event statistics on 802.11 radios 0 and 1

**Command Modes** Privileged EXEC (#)

Command History	Release	Modification
	8.1.111.0	This command was introduced.

### Examples

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

```
cisco-wave2-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
```

# 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-wave2-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
<b>alarm</b>	Displays statistics of the configured alarm if the AP is configured in wIPS mode; valid values are between 0 and 255
<i>alarm-id</i>	Alarm ID; valid values are between 0 and 255
<b>analyzer</b>	Displays analyzer related statistics
<b>buffer</b>	Displays statistics of the buffer
<b>channel</b>	Displays channel related statistics
<i>channelno</i>	Channel number; valid values are between 0 and 255
<b>infrastructure-device</b>	Displays AP infrastructure information
<b>neighbors</b>	Displays statistics of neighbors.
<b>node</b>	Displays AP node information
<b>mac</b> <i>mac-address</i>	MAC address of the node.
<b>node</b>	Node.
<b>number</b> <i>number</i>	Node number; valid values are between 1 and 500
<b>object</b>	AP object store
<b>policy</b> { <i>policy-id</i>   <b>ssid</b> }	AP policy; you must specify either a policy ID or the policy SSID.
<b>session</b> <i>mac-address</i>	Displays node session details; you must enter the MAC address of the node
<b>stats</b>	Displays AP statistics
<b>violation</b>	Tracks AP violations
<b>node</b> <i>mac-address</i>	Tracks node-based violations
<b>channel</b> <i>channel-number alarm-id</i>	Tracks channel-based violations; you must enter channel number and alarm ID

**Command Modes** Privileged EXEC (#)

---

**Command History**

---

**Release Modification**

---

8.1.111.0 This command was introduced.

---

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

```
cisco-wave2-ap# show wips stats
```