



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

events	View client trace event information
all	Displays all client trace events
system	Displays all system events
mac	Displays client trace events for specific MAC address
<i>word</i>	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

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

show arp

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

show arp

Syntax Description

arp Shows ARP table

Command Modes

User EXEC (>)
Privileged EXEC (#)

Command History

Release Modification

8.1.111.0 This command was introduced.

The following example shows a sample output of the command:

```
cisco-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*

Syntax Description	<i>word</i> Client MAC address
---------------------------	--------------------------------

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

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-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	
client	CAPWAP client information
ids	CAPWAP ID information
ip	CAPWAP IP configuration
location	CAPWAP location information
mcast	CAPWAP multicast information
pnp	PNP information
traffic	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-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 <i>info</i>	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 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-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

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-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}]
```

Syntax Description	list	Signature list entries
	stats	Signature attack statistics
Command Modes	User EXEC (>)	
	Privileged EXEC (#)	
Command History	Release	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**}

Syntax Description	
entry device <i>device-name</i>	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 was 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

Release Modification

8.1.111.0 This command was introduced.

The following example shows how to view CleanAir debug settings:

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


show client statistics

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

show client statistics *client-mac-address*

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

Command Modes	Privileged EXEC (#)
----------------------	---------------------

Command History	Release	Modification
	8.1.111.0	This command was introduced.

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 rlan

Command Modes

Privileged EXEC (#)

Syntax Description

Command History

Release	Modification
8.1.111.0	This command was introduced.
8.9	This command was enhanced by adding rlan parameter.
8.10.112.0	The output of this command was enhanced to show the status of broken antenna detection.

The following example shows how to view the AP configuration details:

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

```
AP Name           : AP58AC.78DC.C2F0
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		
	<i>ble-interface-number</i>	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 <i>floor-beacon-mac-addr</i>	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 <i>floor-beacon-mac-addr</i>	Displays BLE scan summary information in detail; you must specify the floor beacon MAC address
	timers	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-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 } }
```

Syntax	Description
<i>dot11-interface-no</i>	Dot11Radio interface number.
atf configuration	Displays the AirTime Fairness configuration.
atf statistics	Displays the AirTime Fairness statistics.
bandselect	Displays the bandselect statistics.
antenna	Displays the antenna settings
client <i>client-mac-addr</i>	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 <i>wlan-id</i>	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 Modification

8.1.111.0 This command was introduced.

8.9 This command was enhanced by adding the **bandselect** ,**client all detail** , **wlan** parameters.

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	<i>wired-interface-number</i> Wired interface number from 0 to 3				
Command Modes	Privileged EXEC (#)				
Command History	<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-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-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 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-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 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-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		
	cores	Displays the core files in flash
	detail	Displays the core file contents
	<i>core-file-name</i>	The core file name
	crash	Displays the crash files in flash
	syslogs	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-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 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-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

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 EXEC (#)

Command History

Release	Modification
8.1.111.0	This command was introduced.

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

```
cisco-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	
l2acl	Specifies the Layer 2 ACL mapping for WLAN
qos	Specifies the QoS parameters for WLAN
vlan	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-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 datapathcounters | statistics }
```

Syntax Description	
<i>radio-interface-number</i>	Specifies the interface number for 802.11 radio. The valid range is from 0 to 1
dfs	Displays the DFS statistics
memory	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
firmware	Dumps firmware logs
mumimo	Displays the multiuser MIMO statistics information
<i>wlan-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
wlan <i>wlan-id</i>	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 **datapath** parameter.

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

```
cisco-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

Command Modes	Privileged EXEC (#)
----------------------	---------------------

Command History	Release	Modification
	8.1.111.0	This command was introduced.

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.

show interfaces wired *wired-interface-number* {**MIB-stats** | **datapath counters**}

Syntax Description	
<i>wired-interface-number</i>	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 **datapath** parameter.

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

```
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

Release Modification

8.1.111.0 This command was
introduced.

The following example shows how to view the physical inventory:

```
cisco-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 | sip-snooping { stats | status} ] }
```

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	Displays the SIP snooping status.

Command Modes
User EXEC (>)
Privileged EXEC (#)

Command History	Release	Modification
	8.1.111.0	This command was introduced.
	8.9	This command was enhanced by adding the sip-snooping 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 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-ap# show lacp counters
```

show logging

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

show logging

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

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

```
cisco-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-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

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

cpu <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
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

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-ap# show processes status
      Process           Alive           Monitored
      capwap            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
	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-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 [level-list] | neighbor-list [details] | receive {configuration | statistics}}
```

Syntax Description

hyperlocation <i>level-list</i>	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 was introduced.

Usage Guidelines

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

```
cisco-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 Dot11Radio 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-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		
adhoc		Displays the primary ad hoc rogue AP list for a 802.11 radio slot; valid values are 0 and 1
ap		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 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-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-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 spectrum

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

show spectrum {list | recover | status }

Syntax Description	list	recover	status
	Lists the spectrum FW data files	Displays the spectrum FW recover count	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-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

Command Modes	Privileged EXEC (#)
----------------------	---------------------

Command History	Release	Modification
	8.1.111.0	This command was introduced.

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 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** **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-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-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
<i>alarm-id</i>	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
<i>channelno</i>	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 <i>mac-address</i>	MAC address of the node.
node	Node.
number <i>number</i>	Node number; valid values are between 1 and 500
object	AP object store
policy { <i>policy-id</i> ssid }	AP policy; you must specify either a policy ID or the policy SSID.
session <i>mac-address</i>	Displays node session details; you must enter the MAC address of the node
stats	Displays AP statistics
violation	Tracks AP violations
node <i>mac-address</i>	Tracks node-based violations
channel <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-ap# show wips stats
```