Show Commands: j to q

show l2tp

To display Layer 2 Tunneling Protocol (L2TP) sessions, use the **show l2tp** command.

show l2tp {**summary** | *ip_address*}

Syntax Description

summary	Displays all L2TP sessions.
ip_address	IP address.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display a summary of all L2TP sessions:

```
(Cisco Controller) > show l2tp summary
LAC_IPaddr LTid LSid RTid RSid ATid ASid State
---------- ---- ---- ---- ---- ---- ---- -----
```

show lag eth-port-hash

To display the physical port used for specific MAC addresses, use the **show lag eth-port-hash** command.

show lag eth-port-hash *dest_MAC* [*source_MAC*]

Syntax Description

dest_MAC	MAC address to determine output port for non-IP packets.
source_MAC	(Optional) MAC address to determine output port for non-IP packets.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display the physical port used for a specific MAC address:

```
(Cisco Controller) > show lag eth-port-hash 11:11:11:11:11:11
Destination MAC 11:11:11:11:11:11 currently maps to port 1
```

show lag ip-port-hash

To display the physical port used for specific IP addresses, use the **show lag ip-port-hash** command.

show lag ip-port-hash *dest_IP* [*source_IP*]

Syntax Description

dest_IP	IP address to determine the output port for IP packets.
source_IP	(Optional) IP address to determine the output port for IP packets.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.
8.0	This command supports both— IPv4 and IPv6 addresses.

Usage Guidelines

For CAPWAP packets, enter the IP address of the access points. For EOIP packets, enter the IP address of the controller. For WIRED_GUEST packets, enter its IP address. For non-tunneled IP packets from controller, enter the destination IP address. For other non-tunneled IP packets, enter both destination and source IP addresses.

This command is applicable for both IPv4 and IPv6 addresses.

The following example shows how to display the physical port used for a specific IP address:

```
(Cisco Controller) > show lag ip-port-hash 192.168.102.138
Destination IP 192.168.102.138 currently maps to port 1
```

show lag summary

To display the current link aggregation (LAG) status, use the **show lag summary** command.

show lag summary

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display the current status of the LAG configuration:

```
(Cisco Controller) > show lag summary
LAG Enabled
```

show ldap

To display the Lightweight Directory Access Protocol (LDAP) server information for a particular LDAP server, use the **show ldap** command.

show ldap *index*

Syntax Description

index	LDAP server index. Valid values are from 1 to 17.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display the detailed LDAP server information:

```
(Cisco Controller) > show ldap 1
Server Index..................................... 1
Address.......................................... 2.3.1.4
Port............................................. 389
Enabled.......................................... Yes
User DN.......................................... name1
User Attribute................................... attr1
User Type........................................ username1
Retransmit Timeout............................... 3 seconds
Bind Method ..................................... Anonymous
```

Related Commands

config ldap

config ldap add

config ldap simple-bind

show ldap statistics

show ldap summary

show ldap statistics

To display all Lightweight Directory Access Protocol (LDAP) server information, use the **show ldap statistics** command.

show ldap statistics

Syntax Description

This command has no arguments or keywords.

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display the LDAP server statistics:

```
(Cisco Controller) > show ldap statistics
Server Index..................................... 1
Server statistics:
  Initialized OK................................. 0
  Initialization failed.......................... 0
  Initialization retries......................... 0
  Closed OK...................................... 0
Request statistics:
  Received....................................... 0
  Sent........................................... 0
  OK............................................. 0
  Success........................................ 0
  Authentication failed.......................... 0
  Server not found............................... 0
  No received attributes......................... 0
  No passed username............................. 0
  Not connected to server........................ 0
  Internal error................................. 0
  Retries........................................ 0
Server Index..................................... 2
...
```

Related Commands

config ldap

config ldap add

config ldap simple-bind

show ldap

show ldap summary

show ldap summary

To display the current Lightweight Directory Access Protocol (LDAP) server status, use the **show ldap summary** command.

show ldap summary

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display a summary of configured LDAP servers:

```
(Cisco Controller) > show ldap summary
Idx  Server Address   Port  Enabled
---  ---------------  ----  -------
1    2.3.1.4          389   Yes
2    10.10.20.22      389   Yes
```

Related Commands

config ldap

config ldap add

config ldap simple-bind

show ldap statistics

show ldap

show license all

To display information for all licenses on the controllers, use the **show license all** command.

show license all

Syntax Description

This command has no arguments or keywords.

Command Default

None.

This example shows how to display all the licenses:

```
> show license all
License Store: Primary License Storage
StoreIndex:  0  Feature: wplus-ap-count   Version: 1.0
        License Type: Permanent
        License State: Inactive
        License Count: 12/0/0
        License Priority: Medium
StoreIndex:  1  Feature: base   Version: 1.0
        License Type: Permanent
        License State: Active, Not in Use
        License Count: Non-Counted
        License Priority: Medium
StoreIndex:  2  Feature: wplus   Version: 1.0
        License Type: Permanent
        License State: Active, In Use
        License Count: Non-Counted
        License Priority: Medium
License Store: Evaluation License Storage
StoreIndex:  0  Feature: wplus   Version: 1.0
        License Type: Evaluation
        License State: Inactive
            Evaluation total period:  8 weeks  4 days
            Evaluation period left:  6 weeks  6 days
        License Count: Non-Counted
        License Priority: Low
StoreIndex:  1  Feature: wplus-ap-count   Version: 1.0
        License Type: Evaluation
        License State: Active, In Use
            Evaluation total period:  8 weeks  4 days
            Evaluation period left:  2 weeks  3 days
            Expiry date: Thu Jun 25 18:09:43 2009
        License Count: 250/250/0
        License Priority: High
StoreIndex:  2  Feature: base   Version: 1.0
        License Type: Evaluation
        License State: Inactive
            Evaluation total period:  8 weeks  4 days
            Evaluation period left:  8 weeks  4 days
        License Count: Non-Counted
        License Priority: Low
StoreIndex:  3  Feature: base-ap-count   Version: 1.0
        License Type: Evaluation
        License State: Active, Not in Use, EULA accepted
            Evaluation total period:  8 weeks  4 days
            Evaluation period left:  8 weeks  3 days
        License Count: 250/0/0
        License Priority: Low
```

This example shows how to view all the licenses on the Smart License mechanism:

```
(Cisco Controller) > show license all


Smart Licensing Status
======================

Smart Licensing is ENABLED

Registration:
  Status: REGISTERED
  Smart Account: vWLC-Prod
  Virtual Account: Default
  Export-Controlled Functionality: Allowed
  Initial Registration: SUCCEEDED on Dec 11 12:19:38 2015 UTC
  Last Renewal Attempt: None
  Next Renewal Attempt: Jun 08 12:19:37 2016 UTC
  Registration Expires: Dec 10 12:16:56 2016 UTC

License Authorization:
  Status: AUTHORIZED on Dec 11 12:20:12 2015 UTC
  Last Communication Attempt: SUCCEEDED on Dec 11 12:20:12 2015 UTC
  Next Communication Attempt: Jan 10 12:20:11 2016 UTC
  Communication Deadline: Mar 10 12:17:43 2016 UTC

--More-- or (q)uit

License Usage
==============

No licenses in use

Product Information
===================
UDI: PID:AIR-CTVM-K9,SN:91U8NQ5XDBE

Agent Version
=============
Smart Agent for Licensing: 1.4.0_rel/25
Component Versions: SA:1.4, SI:0.1, CH:rel_1, PK:x.x
```

show license capacity

To display the maximum number of access points allowed for this license on the Cisco 5500 Series Controller, the number of access points currently joined to the controller, and the number of access points that can still join the controller, use the **show license capacity** command.

show license capacity

Syntax Description

This command has no arguments or keywords.

Command Default

None.

This example shows how to display the license capacity:

```
> show license capacity
Licensed Feature    Max Count         Current Count     Remaining Count
-----------------------------------------------------------------------
AP Count            250               47                203
```

Related Commands

license install

show license all

show license detail

show license feature

show license image-level

show license summary

license modify priority

show license evaluation

show license detail

To display details of a specific license on the Cisco 5500 Series Controller, use the **show license detail** command.

show license detail *license-name*

Syntax Description

license-name	Name of a specific license.

Command Default

None.

This example shows how to display the license details:

```
> show license detail wplus
Feature: wplus           Period left: Life time
Index:  1       Feature: wplus   Version: 1.0
        License Type: Permanent
        License State: Active, In Use
        License Count: Non-Counted
        License Priority: Medium
        Store Index: 2
        Store Name: Primary License Storage
Index:  2       Feature: wplus   Version: 1.0
        License Type: Evaluation
        License State: Inactive
            Evaluation total period:  8 weeks  4 days
            Evaluation period left:  6 weeks  6 days
        License Count: Non-Counted
        License Priority: Low
        Store Index: 0
```

Related Commands

license install

show license agent

show license all

show license feature

show license image-level

show license summary

license modify priority

show license expiring

To display details of expiring licenses on the Cisco 5500 Series Controller, use the **show license expiring** command.

show license expiring

Syntax Description

This command has no arguments or keywords.

Command Default

None.

This example shows how to display the details of the expiring licenses:

```
> show license expiring
StoreIndex:  0  Feature: wplus   Version: 1.0
        License Type: Evaluation
        License State: Inactive
            Evaluation total period:  8 weeks  4 days
            Evaluation period left:  6 weeks  6 days
        License Count: Non-Counted
        License Priority: Low
StoreIndex:  1  Feature: wplus-ap-count   Version: 1.0
        License Type: Evaluation
        License State: Active, In Use
            Evaluation total period:  8 weeks  4 days
            Evaluation period left:  2 weeks  3 days
            Expiry date: Thu Jun 25 18:09:43 2009
        License Count: 250/250/0
        License Priority: High
StoreIndex:  2  Feature: base   Version: 1.0
        License Type: Evaluation
        License State: Inactive
            Evaluation total period:  8 weeks  4 days
            Evaluation period left:  8 weeks  4 days
        License Count: Non-Counted
        License Priority: Low
StoreIndex:  3  Feature: base-ap-count   Version: 1.0
        License Type: Evaluation
        License State: Active, Not in Use, EULA accepted
            Evaluation total period:  8 weeks  4 days
            Evaluation period left:  8 weeks  3 days
        License Count: 250/0/0
        License Priority: Low
```

Related Commands

license install

show license all

show license detail

show license in-use

show license summary

license modify priority

show license evaluation

show license evaluation

To display details of evaluation licenses on the Cisco 5500 Series Controller, use the **show license evaluation** command.

show license evaluation

Syntax Description

This command has no arguments or keywords.

Command Default

None.

This example shows how to display the details of the evaluation licenses:

```
> show license evaluation
StoreIndex:  0  Feature: wplus   Version: 1.0
        License Type: Evaluation
        License State: Inactive
            Evaluation total period:  8 weeks  4 days
            Evaluation period left:  6 weeks  6 days
        License Count: Non-Counted
        License Priority: Low
StoreIndex:  1  Feature: wplus-ap-count   Version: 1.0
        License Type: Evaluation
        License State: Active, In Use
            Evaluation total period:  8 weeks  4 days
            Evaluation period left:  2 weeks  3 days
            Expiry date: Thu Jun 25 18:09:43 2009
        License Count: 250/250/0
        License Priority: High
StoreIndex:  2  Feature: base   Version: 1.0
        License Type: Evaluation
        License State: Inactive
            Evaluation total period:  8 weeks  4 days
            Evaluation period left:  8 weeks  4 days
        License Count: Non-Counted
        License Priority: Low
StoreIndex:  3  Feature: base-ap-count   Version: 1.0
        License Type: Evaluation
        License State: Active, Not in Use, EULA accepted
            Evaluation total period:  8 weeks  4 days
            Evaluation period left:  8 weeks  3 days
        License Count: 250/0/0
        License Priority: Low
```

Related Commands

license install

show license all

show license detail

show license expiring

show license in-use

show license summary

license modify priority

show license feature

To display a summary of license-enabled features on the Cisco 5500 Series Controller, use the **show license feature** command.

show license feature

Syntax Description

This command has no arguments or keywords.

Command Default

None.

This example shows how to display the license-enabled features:

```
> show license feature
        Feature name Enforcement  Evaluation  Clear Allowed  Enabled
               wplus         yes         yes            yes      yes
      wplus-ap-count         yes         yes            yes      yes
                base          no         yes            yes       no
       base-ap-count         yes         yes            yes       no
```

Related Commands

license install

show license all

show license detail

show license expiring

show license image-level

show license in-use

show license summary

show license modify priority

show license evaluation

show license file

To display a summary of license-enabled features on the Cisco 5500 Series Controller, use the **show license file** command.

show license file

Syntax Description

This command has no arguments or keywords.

This example shows how to display the license files:

```
> show license file
License Store: Primary License Storage
  Store Index: 0
    License: 11 wplus-ap-count 1.0 LONG NORMAL STANDALONE EXCL 12_KEYS INFINIT
             E_KEYS NEVER NEVER NiL SLM_CODE CL_ND_LCK NiL *1AR5NS7M5AD8PPU400
              NiL NiL NiL 5_MINS <UDI><PID>AIR-CT5508-K9</PID><SN>RFD000P2D27<
             /SN></UDI> Pe0L7tv8KDUqo:zlPe423S5wasgM8G,tTs0i,7zLyA3VfxhnIe5aJa
             m63lR5l8JM3DPkr4O2DI43iLlKn7jomo3RFl1LjMRqLkKhiLJ2tOyuftQSq2bCAO6
             nR3wIb38xKi3t$<WLC>AQEBIQAB//++mCzRUbOhw28vz0czAY0iAm7ocDLUMb9ER0
             +BD3w2PhNEYwsBN/T3xXBqJqfC+oKRqwInXo3s+nsLU7rOtdOxoIxYZAo3LYmUJ+M
             FzsqlhKoJVlPyEvQ8H21MNUjVbhoN0gyIWsyiJaM8AQIkVBQFzhr10GYolVzdzfJf
             EPQIx6tZ++/Vtc/q3SF/5Ko8XCY=</WLC>
    Comment:
       Hash: iOGjuLlXgLhcTB113ohIzxVioHA=
. . .
```

Related Commands

license install

show license all

show license detail

show license expiring

show license feature

show license image-level

show license in-use

show license summary

show license evaluation

show license handle

To display the license handles on the Cisco 5500 Series Controller, use the **show license handle** command.

show license handle

Syntax Description

This command has no arguments or keywords.

Command Default

None.

This example shows how to display the license handles:

```
> show license handle
Feature: wplus                          , Handle Count: 1
    Units: 01( 0), ID: 0x5e000001, NotifyPC: 0x1001e8f4 LS-Handle (0x00000001),
Units: ( 1)
    Registered clients: 1
        Context 0x1051b610, epID 0x10029378
Feature: base                           , Handle Count: 0
    Registered clients: 1
        Context 0x1053ace0, epID 0x10029378
Feature: wplus-ap-count                 , Handle Count: 1
    Units: 250( 0), ID: 0xd4000002, NotifyPC: 0x1001e8f4        LS-Handle (0x000
00002), Units: (250)
    Registered clients: None
Feature: base-ap-count                  , Handle Count: 0
    Registered clients: None
Global Registered clients: 2
                Context 0x10546270, epID 0x100294cc
                Context 0x1053bae8, epID 0x100294cc
```

Related Commands

license install

show license all

show license detail

show license expiring

show license feature

show license image-level

show license in-use

show license summary

show license image-level

To display the license image level that is in use on the Cisco 5500 Series Controller, use the **show license image-level** command.

show license image-level

Syntax Description

This command has no arguments or keywords.

Command Default

None.

This example shows how to display the image level license settings:

```
> show license image-level
Module name  Image level  Priority  Configured  Valid license
wnbu         wplus        1         YES         wplus
             base         2         NO
 NOTE: wplus includes two additional features: Office Extend AP, Mesh AP.
```

Related Commands

license install

show license all

show license detail

show license expiring

show license feature

license modify priority

show license in-use

show license summary

show license in-use

To display the licenses that are in use on the Cisco 5500 Series Controller, use the **show license in-use** command.

show license in-use

Syntax Description

This command has no arguments or keywords.

Command Default

None.

This example shows how to display the licenses that are in use:

```
> show license in-use
StoreIndex:  2  Feature: wplus   Version: 1.0
        License Type: Permanent
        License State: Active, In Use
        License Count: Non-Counted
        License Priority: Medium
StoreIndex:  1  Feature: wplus-ap-count   Version: 1.0
        License Type: Evaluation
        License State: Active, In Use
            Evaluation total period:  8 weeks  4 days
            Evaluation period left:  2 weeks  3 days
            Expiry date: Thu Jun 25 18:09:43 2009
        License Count: 250/250/0
        License Priority: High
```

Related Commands

license install

show license all

show license detail

show license expiring

show license feature

show license image-level

show license modify priority

show license summary

show license permanent

show license evaluation

show license permanent

To display the permanent licenses on the Cisco 5500 Series Controller, use the **show license permanent** command.

show license permanent

Syntax Description

This command has no arguments or keywords.

Command Default

None.

This example shows how to display the permanent license's information:

```
> show license permanent
StoreIndex:  0  Feature: wplus-ap-count   Version: 1.0
        License Type: Permanent
        License State: Inactive
        License Count: 12/0/0
        License Priority: Medium
StoreIndex:  1  Feature: base   Version: 1.0
        License Type: Permanent
        License State: Active, Not in Use
        License Count: Non-Counted
        License Priority: Medium
StoreIndex:  2  Feature: wplus   Version: 1.0
        License Type: Permanent
        License State: Active, In Use
        License Count: Non-Counted
        License Priority: Medium
```

Related Commands

license install

show license all

show license detail

show license expiring

show license feature

show license image-level

show license in-use

show license summary

license modify priority

show license evaluation

show license status

To display the license status on the Cisco Wireless Controller, use the **show license status** command.

show license status

Syntax Description

This command has no arguments or keywords.

Command Default

None.

This example shows how to view the **license status** on the RTU license mechanism:

```
> show license status
                License Type Supported
        permanent  Non-expiring node locked license
        extension  Expiring node locked license
        evaluation Expiring non node locked license
                License Operation Supported
        install    Install license
        clear      Clear license
        annotate   Comment license
        save       Save license
        revoke     Revoke license
                Device status
        Device Credential type: DEVICE
        Device Credential Verification: PASS
        Rehost Type: DC_OR_IC
```

This example shows how to view the **license status** on the Smart License mechanism:

```
(Cisco Controller) >show license status

Smart Licensing is ENABLED

Registration:
  Status: REGISTERED
  Smart Account: vWLC-Prod
  Virtual Account: Default
  Export-Controlled Functionality: Allowed
  Initial Registration: SUCCEEDED on Dec 11 12:19:38 2015 UTC
  Last Renewal Attempt: None
  Next Renewal Attempt: Jun 08 12:19:37 2016 UTC
  Registration Expires: Dec 10 12:16:56 2016 UTC

License Authorization:
  Status: AUTHORIZED on Dec 11 12:20:12 2015 UTC
  Last Communication Attempt: SUCCEEDED on Dec 11 12:20:12 2015 UTC
  Next Communication Attempt: Jan 10 12:20:11 2016 UTC
  Communication Deadline: Mar 10 12:17:43 2016 UTC
```

show license statistics

To display license statistics on the Cisco 5500 Series Controller, use the **show license statistics** command.

show license statistics

Syntax Description

This command has no arguments or keywords.

Command Default

None.

This example shows how to display the license statistics:

```
> show license statistics
                Administrative statistics
        Install success count:       0
        Install failure count:       0
        Install duplicate count:     0
        Comment add count:           0
        Comment delete count:        0
        Clear count:                 0
c        Save count:                  0
        Save cred count:             0
                Client status
        Request success count     2
        Request failure count     0
        Release count             0
        Global Notify count       0
```

Related Commands

license install

show license all

show license detail

show license expiring

show license feature

show license image-level

show license in-use

show license summary

license modify priority

show license evaluation

show license summary

To see a brief summary of all licenses on the controllers, use the **show license summary** command.

show license summary

Syntax Description

This command has no arguments or keywords.

Command Default

None.

This example shows how to display a brief summary of all licenses:

```
> show license summary
Index 1 Feature: wplus
        Period left: Life time
        License Type: Permanent
        License State: Active, In Use
        License Count: Non-Counted
        License Priority: Medium
Index 2 Feature: wplus-ap-count
        Period left:  2 weeks  3 days
        License Type: Evaluation
        License State: Active, In Use
        License Count: 250/250/0
        License Priority: High
Index 3 Feature: base
        Period left: Life time
        License Type: Permanent
        License State: Active, Not in Use
        License Count: Non-Counted
        License Priority: Medium
Index 4 Feature: base-ap-count
        Period left:  8 weeks  3 days
        License Type: Evaluation
        License State: Active, Not in Use, EULA accepted
        License Count: 250/0/0
        License Priority: Low
```

This example shows how to view the **license summary** on the Smart License mechanism:

```
(Cisco Controller) >show license summary

Smart Licensing is ENABLED

Registration:
  Status: REGISTERED
  Smart Account: vWLC-Prod
  Virtual Account: Default
  Export-Controlled Functionality: Allowed
  Last Renewal Attempt: None
  Next Renewal Attempt: Jun 08 12:19:38 2016 UTC

License Authorization:
  Status: AUTHORIZED
  Last Communication Attempt: SUCCEEDED
  Next Communication Attempt: Jan 10 12:20:11 2016 UTC
```

show license udi

To display unique device identifier (UDI) values for licenses on the controllers, use the **show license udi** command.

show license udi

Syntax Description

This command has no arguments or keywords.

Command Default

None.

This example shows how to view the UDI values for licenses on the RTU license mechanism:

```
(Cisco Controller) > show license udi
Device# PID                     SN                      UDI
-------------------------------------------------------------------------------------
*0      AIR-CT5508-K9           RFD000P2D27             AIR-CT5508-K9:RFD000P2D27
```

This example shows how to view the UDI values for licenses on the Smart License mechanism:

```
(Cisco Controller) > show license udi

UDI: PID:AIR-CTVM-K9,SN:91U8NQ5XDBE
```

show license usage

To display the entitlement details and usage per handle and its entitlement tag, use the **show license usage** command.

show license usage

Command History

Release	Modification
8.2	This command was introduced in a 8.2 release.

This example shows how to display the entitlement details:

```
(Cisco Controller) >show license usage
```

show load-balancing

To display the status of the load-balancing feature, use the **show load-balancing** command.

show load-balancing

Syntax Description

This command has no arguments or keywords.

Command Default

None.

This example shows how to display the load-balancing status:

```
> show load-balancing
Aggressive Load Balancing..................... Enabled
Aggressive Load Balancing Window............... 0 clients
Aggressive Load Balancing Denial Count........... 3
Statistics
Total Denied Count............................. 10 clients
Total Denial Sent.............................. 20 messages
Exceeded Denial Max Limit Count................ 0 times
None 5G Candidate Count....................... 0 times
None 2.4G Candidate Count.................... 0 times
```

Related Commands

config load-balancing

show local-auth config

To display local authentication configuration information, use the **show local-auth config** command.

show local-auth config

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display the local authentication configuration information:

```
(Cisco Controller) > show local-auth config
User credentials database search order:
Primary ................................. Local DB
Configured EAP profiles:
Name ................................... fast-test
Certificate issuer ................... default
Enabled methods ...................... fast
Configured on WLANs .................. 2
EAP Method configuration:
EAP-TLS:
Certificate issuer ................... default
Peer verification options:
 Check against CA certificates ..... Enabled
 Verify certificate CN identity .... Disabled
 Check certificate date validity ... Enabled
EAP-FAST:
TTL for the PAC ...................... 3 600
Initial client message ............... <none>
Local certificate required ........... No
Client certificate required .......... No
Vendor certificate required .......... No
Anonymous provision allowed .......... Yes
Authenticator ID ..................... 7b7fffffff0000000000000000000000
Authority Information ................ Test
EAP Profile.................................. tls-prof
Enabled methods for this profile ......... tls
Active on WLANs ......................... 1 3EAP Method configuration:
EAP-TLS:
Certificate issuer used .............. cisco
Peer verification options:
 Check against CA certificates ..... disabled
```

```
Verify certificate CN identity .... disabled
Check certificate date validity ... disabled
```

Related Commands

clear stats local-auth

config local-auth active-timeout

config local-auth eap-profile

config local-auth method fast

config local-auth user-credentials

debug aaa local-auth

show local-auth certificates

show local-auth statistics

show local-auth statistics

To display local Extensible Authentication Protocol (EAP) authentication statistics, use the **show local-auth statistics** command:

show local-auth statistics

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display the local authentication certificate statistics:

```
(Cisco Controller) > show local-auth statistics
Local EAP authentication DB statistics:
Requests received ............................. 14
Responses returned ............................ 14
Requests dropped (no EAP AVP) ................. 0
Requests dropped (other reasons) ............... 0
Authentication timeouts ....................... 0
Authentication statistics:
  Method          Success         Fail
  ------------------------------------
  Unknown               0            0
  LEAP                  0            0
  EAP-FAST              2               0
  EAP-TLS               0            0
  PEAP                  0            0
Local EAP credential request statistics:
Requests sent to LDAP DB ...................... 0
Requests sent to File DB ...................... 2
Requests failed (unable to send) ............... 0
Authentication results received:
  Success ...................................... 2
  Fail ......................................... 0
Certificate operations:
Local device certificate load failures ......... 0
Total peer certificates checked ................ 0
Failures:
  CA issuer check .............................. 0
  CN name not equal to identity ................ 0
  Dates not valid or expired ................... 0
```

Related Commands

clear stats local-auth

config local-auth active-timeout

config local-auth eap-profile

config local-auth method fast

config local-auth user-credentials

debug aaa local-auth

show local-auth config

show local-auth certificates

show local-auth certificates

To display local authentication certificate information, use the **show local-auth certificates** command:

show local-auth certificates

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display the authentication certificate information stored locally:

```
(Cisco Controller) > show local-auth certificates
```

Related Commands

clear stats local-auth

config local-auth active-timeout

config local-auth eap-profile

config local-auth method fast

config local-auth user-credentials

debug aaa local-auth

show local-auth config

show local-auth statistics

show logging

To display the syslog facility logging parameters and buffer contents, use the **show logging** command.

show logging

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display the current settings and buffer content details:

```
(Cisco Controller) >show logging

(Cisco Controller) > config logging syslog host 10.92.125.52
System logs will be sent to 10.92.125.52 from now on

(Cisco Controller) > config logging syslog host 2001:9:6:40::623
System logs will be sent to 2001:9:6:40::623 from now on

(Cisco Controller) > show logging
Logging to buffer :
- Logging of system messages to buffer :
 - Logging filter level........................... errors
 - Number of system messages logged............... 1316
 - Number of system messages dropped.............. 6892
- Logging of debug messages to buffer ........... Disabled
 - Number of debug messages logged................ 0
 - Number of debug messages dropped............... 0
- Cache of logging  ............................. Disabled
- Cache of logging time(mins) ................... 10080
- Number of over cache time log dropped  ........ 0
Logging to console :
- Logging of system messages to console :
 - Logging filter level........................... disabled
 - Number of system messages logged............... 0
 - Number of system messages dropped.............. 8243
- Logging of debug messages to console .......... Enabled
 - Number of debug messages logged................ 0
 - Number of debug messages dropped............... 0
Logging to syslog :
- Syslog facility................................ local0
- Logging of system messages to console :
 - Logging filter level........................... disabled
 - Number of system messages logged............... 0
 - Number of system messages dropped.............. 8208
- Logging of debug messages to console .......... Enabled
 - Number of debug messages logged................ 0
 - Number of debug messages dropped............... 0
- Logging of system messages to syslog :
 - Logging filter level........................... errors
 - Number of system messages logged............... 1316
 - Number of system messages dropped.............. 6892
```

```
- Logging of debug messages to syslog ........... Disabled
 - Number of debug messages logged............... 0
 - Number of debug messages dropped.............. 0
- Number of remote syslog hosts................. 2
- syslog over tls............................... Disabled
  - Host 0...................................... 10.92.125.52
  - Host 1...................................... 2001:9:6:40::623
  - Host 2.....................................
Logging of RFC 5424............................. Disabled
Logging of Debug messages to file :
- Logging of Debug messages to file............. Disabled
- Number of debug messages logged............... 0
- Number of debug messages dropped............... 0
Logging of traceback........................... Enabled
```

show logging config-history

To view all the **config** commands executed from the time of reboot, use the **show logging config-history** command. This command is useful to understand the timestamp of execution of these commands, order of occurrence, source of command execution, and executed command history, which are lost after controller reboot or after you clear all the configuration.

show logging config-history

Syntax Description

This command has no arguments or keywords.

Command History

Release	Modification
8.8	This command was introduced.

show logging last-reset

To display the logging buffer saved on last reset or power cycle of the controller, use the **show logging last-reset** command.

show logging last-reset

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
8.0	This command was introduced in 8.0.140.0.

show logging flags

To display the existing flags, use the **show logging flags** command.

show logging flags *AP* | *Cilent*

Syntax Description

This command has no arguments or keywords.

Command Default

None.

This example shows how to display the current flags details:

```
> show logging flags
ID    username     Connection From   Idle Time    Login Time
-- ---------------  ---------------  ------------  ------------
00 admin            EIA-232          00:00:00      00:19:04
```

Related Commands

config logging flags close

show loginsession

To display the existing sessions, use the **show loginsession** command.

show loginsession

Syntax Description

This command has no arguments or keywords.

Command Default

None.

This example shows how to display the current session details:

```
> show loginsession
ID    username     Connection From   Idle Time    Session Time
-- ---------------  ---------------  ------------  ------------
00 admin            EIA-232          00:00:00      00:19:04
```

Related Commands

config loginsession close

show macfilter

To display the MAC filter parameters, use the **show macfilter** command.

show macfilter {**summary** | **detail***MAC* | **mesh** | {**wlan** *wlan-id*}}

Syntax Description

summary	Displays a summary of all MAC filter entries.
detail *MAC*	Displays details of a MAC filter entry.
mesh	Display a summary of all MESH AP MAC filter entries.
wlan *wlan-id*	Display a summary of all MAC filter entries on given wlan.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.
8.4	**wlan** *wlan-id* was added.

Usage Guidelines

The MAC delimiter (none, colon, or hyphen) for MAC addresses sent to RADIUS servers is displayed. The MAC filter table lists the clients that are always allowed to associate with a wireless LAN.

The following example shows how to display the detailed display of a MAC filter entry:

```
(Cisco Controller) >show macfilter detail xx:xx:xx:xx:xx:xx
MAC Address..................................... xx:xx:xx:xx:xx:xx
WLAN Identifier................................. Any
Interface Name.................................. management
Description..................................... RAP
```

The following example shows how to display a summary of the MAC filter parameters:

```
(Cisco Controller) > show macfilter summary
MAC Filter RADIUS Compatibility mode............. Cisco ACS
MAC Filter Delimiter............................. None
Local Mac Filter Table
MAC Address               WLAN Id          Description
-----------------------   --------------   --------------------------------
xx:xx:xx:xx:xx:xx         Any              RAP
xx:xx:xx:xx:xx:xx         Any              PAP2 (2nd hop)
xx:xx:xx:xx:xx:xx         Any              PAP1 (1st hop)
```

show mdns ap summary

To display all the access points for which multicast Domain Name System (mDNS) forwarding is enabled, use the **show mnds ap summary** command.

show mdns ap summary

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
7.5	This command was introduced.

The following is a sample output of the **show mnds ap summary** command:

```
(Cisco Controller) > show mdns ap summary

Number of mDNS APs............................ 2

AP Name              Ethernet MAC       Number of Vlans     VlanIdentifiers
---------          ----------------    -----------------   ------------------
ap-3500            cc:ef:48:72:0d:d9           0               Not applicable
ap-3600            00:22:bd:df:04:68           2                124,122
```

The following table describes the significant fields shown in the display.

Table 1: show mdns ap summary Field Descriptions

Field	Description
AP Name	Name of the mDNS access point (access point for which mDNS forwarding is enabled).
Ethernet MAC	MAC address of the mDNS access point.
Number of VLANs	Number of VLANs from which the access point snoops the mDNS advertisements from the wired side. An access point can snoop on a maximum of 10 VLANs.
VLAN Identifiers	Identifiers of the VLANs the access point snoops on.

show mdns domain-name-ip summary

To display the summary of the multicast Domain Name System (mDNS) domain names, use the **show mdns domain-name-ip summary** command.

show mdns domain-name-ip summary

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
7.5	This command was introduced.

Usage Guidelines

Each service advertisement contains a record that maps the domain name of the service provider to the IP address. The mapping also contains details such as the client MAC address, VLAN ID, Time to Live (TTL), and IPv4 address.

The following is a sample output of the **show mdns domain-name-ip summary** command:

```
(Cisco Controller) > show mdns domain-name-ip summary

Number of Domain Name-IP Entries................. 1

DomainName      MAC Address          IP Address        Vlan Id Type   TTL   Time left

                                                     (in seconds) (in seconds)
-------------   -------------        -----------       -------------------- ------

tixp77.local.   00:50:b6:4f:69:70    209.165. 202.128   999    mDNSAP 4725   906
```

The following table describes the significant fields shown in the display.

Table 2: show mdns domain-name-ip summary Field Descriptions

Field	Description
Domain Name	Domain name of the service provider.
MAC Address	MAC address of the service provider.
IP Address	IP address of the service provider.
VLAN ID	VLAN ID of the service provider.

Field	Description
Type	Origin of service that can be one of the following: • Wired • Wireless • Wired guest • mDNS AP
TTL	TTL value, in seconds, that determines the validity of the service offered by the service provider. The service provider is removed from the controller when the TTL expires.
Time Left	Time remaining, in seconds, before the service provider is removed from the controller.

show mdns profile

To display mDNS profile information, use the **show mdns profile** command.

show mdns profile {**summary** | **detailed** *profile-name*}

Syntax Description

summary	Displays the summary of the mDNS profiles.
detailed	Displays details of an mDNS profile.
profile-name	Name of the mDNS profile.

Command Default

None

Command History

Release	Modification
7.4	This command was introduced.

This example shows how to display a summary of all the mDNS profiles:

```
> show mdns profile summary
Number of Profiles............................... 2

ProfileName                       No. Of Services
-------------------------------  ---------------
default-mdns-profile                   5
profile1                               2
```

This example shows how to display the detailed information of an mDNS profile:

```
> show mdns profile detailed default-mdns-profile

Profile Name..................................... default-mdns-profile
Profile Id....................................... 1
No of Services................................... 5
Services......................................... AirPrint
                                                  AppleTV
                                                  HP_Photosmart_Printer_1
                                                  HP_Photosmart_Printer_2
                                                  Printer

No. Interfaces Attached.......................... 0
No. Interface Groups Attached.................... 0
No. Wlans Attached............................... 1
Wlan Ids......................................... 1
```

Related Commands

config mdns query interval

config mdns service

config mdns snooping

config interface mdns-profile

config interface group mdns-profile

config wlan mdns

config mdns profile

show mdns ap

config mdns ap

show mnds service

clear mdns service-database

debug mdns all

debug mdns error

debug mdns detail

debug mdns message

show mdns service

To display multicast Domain Name System (mDNS) service information, use the **show mnds service** command.

show mdns service {**summary** | **detailed** *service-name* | **not-learnt**}

Syntax Description

summary	Displays the summary of all mDNS services.
detailed	Displays the details of an mDNS service.
service-name	Name of the mDNS service.
not-learnt	Displays the summary of all the service advertisements that were received by the controller but were not discovered because the service query status was disabled. Service advertisements for all VLANs and origin types that are not learned are displayed in the output. The top 500 services appear in the summary list.

Command Default

None

Command History

Release	Modification
7.4	This command was introduced.
7.5	The **not-learnt** keyword was added.

The following is a sample output of the **show mnds summary** command:

```
Device > show mdns service summary

Number of Services............................. 5

Service-Name              LSS  Origin     No SP Service-string
------------------------  --------------   ------    --------
AirPrint                  Yes  Wireless    1      _ipp._tcp.local.
AppleTV                   Yes  Wireless    1      _airplay._tcp.local.
HP_Photosmart_Printer_1   Yes  Wireless    1      _universal._sub._ipp._tcp.local.
HP_Photosmart_Printer_2   No   Wired       0      _cups._sub._ipp._tcp.local.
Printer                   No   Wired       0      _printer._tcp.local.
```

The following is a sample output of the **show mnds service detailed** command:

```
Device > show mdns service detailed AirPrint

Service Name................................... AirPrint
Service Id..................................... 1
Service query status........................... Enabled
Service LSS status............................. Disabled
Service learn origin........................... Wired
Number of Profiles............................. 2
Profile........................................ student-profile, guest-profile
```

```
Number of Service Providers ..................... 2

Service Provider MAC-Address   AP Radio MAC    VLAN ID  Type     TTL   Time left
---------------- -----------   ------------    -------  ----     ----------------
user1          60:33:4b:2b:a6:9a -----              104  Wired    4500    4484
laptopa        00:21:1b:ea:36:60 3c:ce:73:1e:69:20  105  Wireless 4500    4484

Number of priority MAC addresses ................ 1

Sl.No        MAC Address         AP group name
-----    -------------------    --------------
1           44:03:a7:a3:04:45    AP_floor1
```

The following is a sample output of the **show mnds service not-learnt**command:

```
Device > show mdns service not-learnt

Number of Services............................... 4

Origin      VLAN     TTL     TTL left   Client MAC            AP-MAC
Service-string
                                (sec)     (sec)
----------  ------  ------   ------   ------------------  ------------------
----------------------
Wireless     106      120     105      00:21:6a:76:88:04   04:da:d2:b3:11:00
100.106.11.9.in-addr.arpa.
Wireless     106      120     112      00:21:6a:78:ff:82   04:da:d2:b3:11:00
102.106.11.9.in-addr.arpa.
Wireless     106      120     75        00:21:6a:78:ff:82   04:da:d2:b3:11:00
108.104.11.9.in-addr.arpa.
Wireless     106      120     119      00:21:6a:78:ff:82   04:da:d2:b3:11:00
_airplayit._tcp.local.
```

show media-stream client

To display the details for a specific media-stream client or a set of clients, use the **show media-stream client** command.

show media-stream client {*media-stream_name* | **summary**}

Syntax Description

media-stream_name	Name of the media-stream client of which the details is to be displayed.
summary	Displays the details for a set of media-stream clients.

Command Default

None.

This example shows how to display a summary media-stream clients:

```
> show media-stream client summary
Number of Clients.............................. 1
Client Mac         Stream Name  Stream Type  Radio WLAN  QoS    Status
-----------------  -----------  -----------  ----  ----  ------ -------
00:1a:73:dd:b1:12  mountainview  MC-direct    2.4   2     Video  Admitted
```

Related Commands

show media-stream group summary

show media-stream group detail

To display the details for a specific media-stream group, use the **show media-stream group detail** command.

show media-stream group detail *media-stream_name*

Syntax Description

media-stream_name	Name of the media-stream group.

Command Default

None.

This example shows how to display media-stream group configuration details:

```
> show media-stream group detail abc
Media Stream Name............................... abc
Start IP Address................................ 227.8.8.8
End IP Address.................................. 227.9.9.9
 RRC Parameters
 Avg Packet Size(Bytes)......................... 1200
 Expected Bandwidth(Kbps)....................... 300
 Policy......................................... Admit
 RRC re-evaluation.............................. periodic
 QoS............................................ Video
 Status......................................... Multicast-direct
 Usage Priority................................. 5
 Violation...................................... drop
```

Related Commands

show media-stream group summary

show media-stream group summary

To display the summary of the media stream and client information, use the **show media-stream group summary** command.

show media-stream group summary

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

This example shows how to display a summary of the media-stream group:

```
(Cisco Controller) > show media-stream group summary
Stream Name   Start IP       End IP         Operation Status
------------- -------------- -------------- ----------------
abc           227.8.8.8      227.9.9.9      Multicast-direct
```

Related Commands

show 802.11 media-stream client

show media-stream client

show media-stream group detail

show mesh ap

To display settings for mesh access points, use the **show mesh ap** command.

show mesh ap {**summary** | **tree**}

Syntax Description

summary	Displays a summary of mesh access point information including the name, model, bridge virtual interface (BVI) MAC address, United States Computer Emergency Response Team (US-CERT) MAC address, hop, and bridge group name.
tree	Displays a summary of mesh access point information in a tree configuration, including the name, hop counter, link signal-to-noise ratio (SNR), and bridge group name.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display a summary format:

```
(Cisco Controller) >show mesh ap summary
AP Name AP Model             BVI MAC              CERT MAC        Hop    Bridge Group Name
------------------  -------------------  -----------------  ------------------   -----  --
SB_RAP1 AIR-LAP1522AG-A-K9   00:1d:71:0e:d0:00  00:1d:71:0e:d0:00   0      sbox
SB_MAP1 AIR-LAP1522AG-A-K9   00:1d:71:0e:85:00  00:1d:71:0e:85:00   1      sbox
SB_MAP2 AIR-LAP1522AG-A-K9   00:1b:d4:a7:8b:00  00:1b:d4:a7:8b:00   2      sbox
SB_MAP3 AIR-LAP1522AG-A-K9   00:1d:71:0d:ee:00  00:1d:71:0d:ee:00   3      sbox
Number of Mesh APs............................. 4
Number of RAPs................................. 1
Number of MAPs................................. 3
```

The following example shows how to display settings in a hierarchical (tree) format:

```
(Cisco Controller) >show mesh ap tree
 ========================================================
||  AP Name [Hop Counter, Link SNR, Bridge Group Name] ||
 ========================================================
[Sector 1]
----------
SB_RAP1[0,0,sbox]
  |-SB_MAP1[1,32,sbox]
    |-SB_MAP2[2,27,sbox]
      |-SB_MAP3[3,30,sbox]
-------------------------------------------------------
Number of Mesh APs............................. 4
Number of RAPs................................. 1
Number of MAPs................................. 3
-------------------------------------------------------
```

show mesh astools stats

To display antistranding statistics for outdoor mesh access points, use the **show mesh astools stats** command.

show mesh astools stats [*cisco_ap*]

Syntax Description

cisco_ap	(Optional) Antistranding feature statistics for a designated mesh access point.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display anti-stranding statistics on all outdoor mesh access points:

```
(Cisco Controller) >show mesh astools stats
Total No of Aps stranded : 0
```

The following example shows how to display anti-stranding statistics for access point *sb_map1*:

```
(Cisco Controller) >show mesh astools stats sb_map1
Total No of Aps stranded : 0
```

show mesh backhaul

To check the current backhaul information, use the **show mesh backhaul** command.

show mesh backhaul *cisco_ap*

Syntax Description

cisco_ap	Name of the access point.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display the current backhaul:

```
(Cisco Controller) >show mesh backhaul
```

If the current backhaul is 5 GHz, the output is as follows:

```
Basic Basic Attributes for Slot  0
    Radio Type..................................... RADIO_TYPE_80211g
    Radio Role..................................... DOWNLINK ACCESS
    Administrative State .......................... ADMIN_ENABLED
    Operation State ............................... UP
      Current Tx Power Level ..................... 1
If the current backhaul is 2.4 GHz, the output is as follows:
Basic Attributes for Slot  1
    Radio Type..................................... RADIO_TYPE_80211a
    Radio Subband.................................. RADIO_SUBBAND_ALL
    Radio Role..................................... DOWNLINK ACCESS
    Administrative State .......................... ADMIN_ENABLED
    Operation State ............................... UP
      Current Tx Power Level ..................... 1
      Current Channel ............................ 165
      Antenna Type................................ EXTERNAL_ANTENNA
      External Antenna Gain (in .5 dBm units).... 0
Current Channel...................................6
Antenna Type.....................................Externa_ANTENNA
External Antenna Gain (in .5 dBm units)...........0
```

show mesh bgscan

To see the details of mesh background scan, use the **show mesh bgscan** command.

show mesh bgscan

Syntax Description

This command has no keywords or arguments.

Command Default

None

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
8.3	This command was introduced.

Example

```
Cisco Controller# show mesh bgscan

Background Scanning: enabled

Off Channel Neighbors
---------------------
Channel:165
Mac:5835.d9aa.9acf MissCnt:0 NDRespCnt:1078 HopCnt:1 AdjustedEase:4096
Flags: NEIGH BEACON
Mac:5017.ffdc.2eaf MissCnt:0 NDRespCnt:38 HopCnt:1 AdjustedEase:18648576 StickyEase:23448576

Flags: NEIGH PARENT BEACON

Channel:157
Mac:ece1.a930.bc8f MissCnt:0 NDRespCnt:5 HopCnt:1 AdjustedEase:3048576
Flags: NEIGH BEACON

Channel:161
Mac:f8c2.8883.fadf MissCnt:0 NDRespCnt:20 HopCnt:1 AdjustedEase:262144
Flags: NEIGH

Aligned Offchannel neighbors
----------------------------

Channel:165 (ON-CHANNEL)
Mac:5017.ffdc.2eaf Ease:18648576
Mac:5835.d9aa.9acf Ease:4096
Channel:157 (POTENTIAL OFFCHAN
NEL)
Mac:ece1.a930.bc8f Ease:3048576
Mac:0021.d8d6.a6cf Ease:0

Channel:161
Mac:f8c2.8883.fadf Ease:262144
```

show mesh cac

To display call admission control (CAC) topology and the bandwidth used or available in a mesh network, use the **show mesh cac** command.

show mesh cac {**summary** | {**bwused** {**voice** | **video**} | **access** | **callpath** | **rejected**} *cisco_ap*}

Syntax Description

summary	Displays the total number of voice calls and voice bandwidth used for each mesh access point.
bwused	Displays the bandwidth for a selected access point in a tree topology.
voice	Displays the mesh topology and the voice bandwidth used or available.
video	Displays the mesh topology and the video bandwidth used or available.
access	Displays access voice calls in progress in a tree topology.
callpath	Displays the call bandwidth distributed across the mesh tree.
rejected	Displays voice calls rejected for insufficient bandwidth in a tree topology.
cisco_ap	Mesh access point name.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display a summary of the call admission control settings:

```
(Cisco Controller) >show mesh cac summary
AP Name              Slot#    Radio  BW Used/Max  Calls
-----------------  -------  -----  -----------  -----
SB_RAP1              0        11b/g   0/23437      0
                     1        11a     0/23437      0
SB_MAP1              0        11b/g   0/23437      0
                     1        11a     0/23437      0
SB_MAP2              0        11b/g   0/23437      0
                     1        11a     0/23437      0
SB_MAP3              0        11b/g   0/23437      0
                     1        11a     0/23437      0
```

The following example shows how to display the mesh topology and the voice bandwidth used or available:

```
(Cisco Controller) >show mesh cac bwused voice SB_MAP1
AP Name                Slot#    Radio      BW Used/Max
-------------        -------  -----      -----------
    SB_RAP1              0      11b/g       0/23437
                         1      11a         0/23437
|   SB_MAP1              0      11b/g       0/23437
                         1      11a         0/23437
```

```
||  SB_MAP2              0      11b/g       0/23437
                         1      11a         0/23437
||| SB_MAP3              0      11b/g       0/23437
                         1      11a         0/23437
```

The following example shows how to display the access voice calls in progress in a tree topology:

```
(Cisco Controller) >show mesh cac access 1524_Map1
    AP Name             Slot#   Radio     Calls
    -------------      -------  -----    -----
    1524_Rap             0      11b/g      0
                         1      11a        0
                         2      11a        0
|   1524_Map1            0      11b/g      0
                         1      11a        0
                         2      11a        0
||  1524_Map2            0      11b/g      0
                         1      11a        0
                         2      11a        0
```

show mesh client-access

To display the backhaul client access configuration setting, use the **show mesh client-access** command.

show mesh client-access

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display backhaul client access configuration settings for a mesh access point:

```
(Cisco Controller) >show mesh client-access
Backhaul with client access status: enabled
Backhaul with client access extended status(3 radio AP): disabled
```

show mesh config

To display mesh configuration settings, use the **show mesh config** command.

show mesh config

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display global mesh configuration settings:

```
(Cisco Controller) >show mesh config
Mesh Range..................................... 12000
Mesh Statistics update period.................. 3 minutes
Backhaul with client access status............... disabled
Backhaul with extended client access status...... disabled
Background Scanning State...................... enabled
Backhaul Amsdu State........................... disabled
Mesh Security
   Security Mode............................... EAP
   External-Auth............................... disabled
   Use MAC Filter in External AAA server......... disabled
   Force External Authentication................ disabled
Mesh Alarm Criteria
   Max Hop Count............................... 4
   Recommended Max Children for MAP............. 10
   Recommended Max Children for RAP............. 20
   Low Link SNR................................ 12
   High Link SNR............................... 60
   Max Association Number...................... 10
   Association Interval........................ 60 minutes
   Parent Change Numbers....................... 3
Parent Change Interval..................... 60 minutes
Mesh Multicast Mode............................ In-Out
Mesh Full Sector DFS........................... enabled
Mesh Ethernet Bridging VLAN Transparent Mode..... disabled
Mesh DCA channels for serial backhaul APs........ enabled
Mesh Slot Bias................................. enabled
```

show mesh env

To display global or specific environment summary information for mesh networks, use the **show mesh env** command.

show mesh env {**summary** | *cisco_ap*}

Syntax Description

summary	Displays global environment summary information.
cisco_ap	Name of access point for which environment summary information is requested.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display global environment summary information:

```
(Cisco Controller) >show mesh env summary
AP Name             Temperature(C)  Heater   Ethernet  Battery
------------------  --------------  ------   --------  -------
ap1130:5f:be:90      N/A             N/A      DOWN     N/A
AP1242:b2.31.ea      N/A             N/A      DOWN     N/A
AP1131:f2.8d.92      N/A             N/A      DOWN     N/A
AP1131:46f2.98ac     N/A             N/A      DOWN     N/A
ap1500:62:39:70      -36             OFF      UP       N/A
```

The following example shows how to display an environment summary for an access point:

```
(Cisco Controller) >show mesh env SB_RAP1
AP Name..................................... SB_RAP1
AP Model.................................... AIR-LAP1522AG-A-K9
AP Role..................................... RootAP
Temperature................................. 21 C, 69 F
Heater...................................... OFF
Backhaul.................................... GigabitEthernet0
GigabitEthernet0 Status..................... UP
    Duplex.................................. FULL
    Speed................................... 100
    Rx Unicast Packets...................... 114754
    Rx Non-Unicast Packets.................. 1464
    Tx Unicast Packets...................... 9630
    Tx Non-Unicast Packets.................. 3331
GigabitEthernet1 Status..................... DOWN
  POE Out................................... OFF
Battery..................................... N/A
```

show mesh neigh

To display summary or detailed information about the mesh neighbors of a mesh access point, use the **show mesh neigh** command.

show mesh neigh {**detail** | **summary**} {*cisco_ap* | **all**}

Syntax Description

detail	Displays the channel and signal-to-noise ratio (SNR) details between the designated mesh access point and its neighbor.
summary	Displays the mesh neighbors for a designated mesh access point.
cisco_ap	Cisco lightweight access point name.
all	Displays all access points.

Note If an AP itself is configured with the **all**keyword, the **all**keyword access points take precedence over the AP that is named **all**.

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display a neighbor summary of an access point:

```
(Cisco Controller) >show mesh neigh summary RAP1
AP Name/Radio Mac Channel Rate  Link-Snr  Flags      State
----------------- ------- ----- -------- --------   --------
00:1D:71:0F:CA:00 157      54     6        0x0        BEACON
00:1E:14:48:25:00 157      24     1        0x0        BEACON
MAP1-BB00         157      54     41       0x11       CHILD BEACON
```

The following example shows how to display the detailed neighbor statistics of an access point:

```
(Cisco Controller) >show mesh neigh detail RAP1
AP MAC : 00:1E:BD:1A:1A:00 AP Name: HOR1522_MINE06_MAP_S_Dyke
backhaul rate 54
FLAGS : 860 BEACON
worstDv 255, Ant 0, channel 153, biters 0, ppiters 0
Numroutes 0, snr 0, snrUp 8, snrDown 8, linkSnr 8
adjustedEase 0, unadjustedEase 0
txParent 0, rxParent 0
poorSnr 0
lastUpdate 2483353214 (Sun Aug 4 23:51:58 1912)
parentChange 0
Per antenna smoothed snr values: 0 0 0 0
Vector through 00:1E:BD:1A:1A:00
```

The following table lists the output flags displayed for the **show mesh neigh detail** command.

Table 3: Output Flags for the show mesh neigh detail command

Output Flag	Description
AP MAC	MAC address of a mesh neighbor for a designated mesh access point.
AP Name	Name of the mesh access point.
FLAGS	Describes adjacency. The possible values are as follows: • UPDATED—Recently updated neighbor. • NEIGH—One of the top neighbors. • EXCLUDED—Neighbor is currently excluded. • WASEXCLUDED—Neighbor was recently removed from the exclusion list. • PERMSNR—Permanent SNR neighbor. • CHILD—A child neighbor. • PARENT—A parent neighbor. • NEEDUPDATE—Not a current neighbor and needs an update. • BEACON—Heard a beacon from this neighbor. • ETHER—Ethernet neighbor.
worstDv	Worst distance vector through the neighbor.
Ant	Antenna on which the route was received.
channel	Channel of the neighbor.
biters	Number of black list timeouts left.
ppiters	Number of potential parent timeouts left.
Numroutes	Number of distance routes.
snr	Signal to Noise Ratio.
snrUp	SNR of the link to the AP.
snrDown	SNR of the link from the AP.
linkSnr	Calculated SNR of the link.
adjustedEase	Ease to the root AP through this AP. It is based on the current SNR and threshold SNR values.
unadjustedEase	Ease to the root AP through this AP after applying correct for number of hops.
txParent	Packets sent to this node while it was a parent.
rxparent	Packets received from this node while it was a parent.

Output Flag	Description
poorSnr	Packets with poor SNR received from a node.
lastUpdate	Timestamp of the last received message for this neighbor
parentChange	When this node last became parent.
per antenna smoother SNR values	SNR value is populated only for antenna 0.

show mesh path

To display the channel and signal-to-noise ratio (SNR) details for a link between a mesh access point and its neighbor, use the **show mesh path** command.

show mesh path *cisco_ap*

Syntax Description

cisco_ap	Mesh access point name.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display channel and SNR details for a designated link path:

```
(Cisco Controller) >show mesh path mesh-45-rap1
AP Name/Radio Mac Channel Rate  Link-Snr  Flags      State
----------------- ------- ----- -------- --------   --------
MAP1-BB00         157      54     32       0x0       UPDATED NEIGH PARENT BEACON
RAP1              157      54     37       0x0        BEACON
```

show mesh per-stats

To display the percentage of packet errors for packets transmitted by the neighbors of a specified mesh access point, use the **show mesh per-stats** command.

show mesh per-stats summary {*cisco_ap* | **all**}

Syntax Description

summary	Displays the packet error rate stats summary.
cisco_ap	Name of mesh access point.
all	Displays all mesh access points.

Note If an AP itself is configured with the **all**keyword, the **all**keyword access points take precedence over the AP that is named **all**.

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

Usage Guidelines

The packet error rate percentage equals 1, which is the number of successfully transmitted packets divided by the number of total packets transmitted.

The following example shows how to display the percentage of packet errors for packets transmitted by the neighbors to a mesh access point:

```
(Cisco Controller) >show mesh per-stats summary ap_12
Neighbor MAC Address 00:0B:85:5F:FA:F0
Total Packets transmitted:              104833
Total Packets transmitted successfully: 104833
Total Packets retried for transmission: 33028
RTS Attempts:                           0
RTS Success:                            0
Neighbor MAC Address:                   00:0B:85:80:ED:D0
Total Packets transmitted:              0
Total Packets transmitted successfully: 0
Total Packets retried for transmission: 0
Neighbor MAC Address:                   00:17:94:FE:C3:5F
Total Packets transmitted:              0
Total Packets transmitted successfully: 0
Total Packets retried for transmission: 0
RTS Attempts:                           0
RTS Success:                            0
```

show mesh public-safety

To display 4.8-GHz public safety settings, use the **show mesh public-safety** command.

show mesh public-safety

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to view 4.8-GHz public safety settings:

```
(Cisco Controller) >(Cisco Controller) >show mesh public-safety
Global Public Safety status: disabled
```

show mesh queue-stats

To display the number of packets in a client access queue by type for a mesh access point, use the **show mesh queue-stats** command.

show mesh queue-stats {*cisco_ap* | **all**}

Note If an AP itself is configured with the **all**keyword, the **all**keyword access points take precedence over the AP that is named **all**.

Syntax Description

cisco_ap	Name of access point for which you want packet queue statistics.
all	Displays all access points.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display packet queue statistics for access point ap417:

```
(Cisco Controller) >show mesh queue-stats ap417
Queue Type Overflows Peak length Average length
---------- --------- ----------- --------------
Silver     0         1           0.000
Gold       0         4           0.004
Platinum   0         4           0.001
Bronze     0         0           0.000
Management 0         0           0.000
```

show mesh security-stats

To display packet error statistics for a specific access point, use the **show mesh security-stats** command.

show mesh security-stats {*cisco_ap* | **all**}

Syntax Description

cisco_ap	Name of access point for which you want packet error statistics.
all	Displays all access points.

Note If an AP itself is configured with the **all** keyword, the **all** keyword access points take precedence over the AP that is named **all**.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

Usage Guidelines

This command shows packet error statistics and a count of failures, timeouts, and successes with respect to associations and authentications as well as reassociations and reauthentications for the specified access point and its child.

The following example shows how to view packet error statistics for access point ap417:

```
(Cisco Controller) >show mesh security-stats ap417
AP MAC : 00:0B:85:5F:FA:F0
Packet/Error Statistics:
----------------------------
x Packets 14, Rx Packets 19, Rx Error Packets 0
Parent-Side Statistics:
-------------------------
Unknown Association Requests 0
Invalid Association Requests 0
Unknown Re-Authentication Requests 0
Invalid Re-Authentication Requests 0
Unknown Re-Association Requests 0
Invalid Re-Association Requests 0
Child-Side Statistics:
-------------------------
Association Failures 0
Association Timeouts 0
Association Successes 0
Authentication Failures 0
Authentication Timeouts 0
Authentication Successes 0
Re-Association Failures 0
Re-Association Timeouts 0
Re-Association Successes 0
Re-Authentication Failures 0
Re-Authentication Timeouts 0
Re-Authentication Successes 0
```

show mesh stats

To display the mesh statistics for an access point, use the **show mesh stats** command.

show mesh stats *cisco_ap*

Syntax Description

cisco_ap	Access point name.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display statistics of an access point:

```
(Cisco Controller) >show mesh stats RAP_AP1
RAP in state Maint
rxNeighReq 759978, rxNeighRsp 568673
txNeighReq 115433, txNeighRsp 759978
rxNeighUpd 8266447 txNeighUpd 693062
tnextchan 0, nextant 0, downAnt 0, downChan 0, curAnts 0
tnextNeigh 0, malformedNeighPackets 244, poorNeighSnr 27901
blacklistPackets 0, insufficientMemory 0
authenticationFailures 0
Parent Changes 1, Neighbor Timeouts 16625
```

show mgmtuser

To display the local management user accounts on the Cisco wireless LAN controller, use the **show mgmtuser** command.

show mgmtuser

Syntax Description

This command has no arguments or keywords.

Command Default

None.

This example shows how to display a list of management users:

```
> show mgmtuser
User Name                 Permissions    Description           Password Strength
-----------------------   ------------   --------------        ------------------
admin                     read-write                                     Weak
```

Related Commands

config mgmtuser add

config mgmtuser delete

config mgmtuser description

config mgmtuser password

show mobility anchor

To display the wireless LAN anchor export list for the Cisco wireless LAN controller mobility groups or to display a list and status of controllers configured as mobility anchors for a specific WLAN or wired guest LAN, use the **show mobility anchor** command.

show mobility anchor [**wlan** *wlan_id* | **guest-lan** *guest_lan_id*]

Syntax Description

wlan	(Optional) Displays wireless LAN mobility group settings.
wlan_id	Wireless LAN identifier from 1 to 512 (inclusive).
guest-lan	(Optional) Displays guest LAN mobility group settings.
guest_lan_id	Guest LAN identifier from 1 to 5 (inclusive).

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

Usage Guidelines

The status field display (see example) shows one of the following values:

- UP—The controller is reachable and able to pass data.
- CNTRL_PATH_DOWN—The mpings failed. The controller cannot be reached through the control path and is considered failed.
- DATA_PATH_DOWN—The epings failed. The controller cannot be reached and is considered failed.
- CNTRL_DATA_PATH_DOWN—Both the mpings and epings failed. The controller cannot be reached and is considered failed.

The following example shows how to display a mobility wireless LAN anchor list:

```
(Cisco Controller) >show mobility anchor
Mobility Anchor Export List
 WLAN ID     IP Address            Status
 -------     ---------------       ------
 12           192.168.0.15         UP
 GLAN ID     IP Address            Status
 -------     ---------------       -------
 1           192.168.0.9           CNTRL_DATA_PATH_DOWN
```

show mobility ap-list

To display the mobility AP list, use the **show mobility ap-list** command.

show mobility ap-list

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display the mobility AP list:

Note The AP name is displayed only with New Mobility. With Old Mobility, the AP name is displayed as `Unknown`.

```
(Cisco Controller) >show mobility ap-list
AP Name                      AP Radio MAC address      Controller          Learnt From
---------------------------  -----------------------   ---------------    -----------------
AP30e4.dbc5.38ab              b8:62:1f:e5:33:10         9.7.104.10           Self
```

show mobility foreign-map

To display a mobility wireless LAN foreign map list, use the **show mobility foreign-map** command.

show mobility foreign-map wlan *wlan_id*

Syntax Description

wlan	Displays the mobility WLAN foreign-map list.
wlan_id	Wireless LAN identifier between 1 and 512.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to get a mobility wireless LAN foreign map list:

```
(Cisco Controller) >show mobility foreign-map wlan 2
Mobility Foreign Map List
 WLAN ID               Foreign MAC Address                 Interface
 -------               -------------------                 ---------
   2                    00:1b:d4:6b:87:20                  dynamic-105
```

show mobility group member

To display the details of the mobility group members in the same domain, use the **show mobility group member** command.

show mobility group member hash

Syntax Description

hash	Displays the hash keys of the mobility group members in the same domain.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display the hash keys of the mobility group members:

```
(Cisco Controller) >show mobility group member hash
Default Mobility Domain............................. new-mob

 IP Address      Hash Key
-------------------------------------------------------

 9.2.115.68      a819d479dcfeb3e0974421b6e8335582263d9169

 9.6.99.10       0974421b6e8335582263d9169a819d479dcfeb3e

 9.7.7.7         feb3e0974421b6e8335582263d9169a819d479dc
```

show mobility oracle

To display the status of the mobility controllers known to the Mobility Oracle (MO) or display the details of the MO client database, use the **show mobility oracle** command.

show mobility oracle {**client** {**detail** | **summary**} | **summary**}

Syntax Description

client	Displays the MO client database.
detail	Displays details pertaining to a client in MO client database.
summary	Displays the summary of the MO database.

Command Default

None

Command History

Release	Modification
7.3.112.0	This command was introduced.

The following is a sample output of the **show mobility oracle summary** command:

```
(Cisco Controller) >show mobility oracle summary

Number of MCs.................................... 2

IP Address       MAC Address        Link Status        Client Count
---------------  -----------------  -----------------  -------------

9.71.104.10       88:43:e1:7d:fe:00  Control Path Down  0
9.71.104.250      e8:b7:48:a2:16:e0  Up                 2
```

The following is a sample output of the **show mobility oracle client summary** command:

```
(Cisco Controller) >show mobility oracle client summary

Number of Clients............................... 2

MAC Address       Anchor MC             Foreign MC        AssocTime
----------------- --------------------- ----------------- --------------

00:18:de:b0:5c:91 9.72.104.250           -                    0
00:1e:e5:f9:c9:e2 9.72.104.250           -                    0
```

The following is a sample output of the **show mobility oracle client detail** command:

```
(Cisco Controller) >show mobility oracle client detail 00:1e:e5:f9:c9:e2

Client MAC Address : ............................ 00:1e:e5:f9:c9:e2
Client IP address : ............................. 0.0.0.0
Anchor MC IP address : .......................... 9.71.104.250
Anchor MC NAT IP address : ...................... 9.71.104.250
Foreign MC IP address : ......................... -
Foreign MC NAT IP address : ..................... -
Client Association Time : ....................... 0
Client Entry update timestamp : ................. 1278543135.0
```

show mobility statistics

To display the statistics information for the Cisco wireless LAN controller mobility groups, use the **show mobility statistics** command.

show mobility statistics

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display statistics of the mobility manager:

```
(Cisco Controller) >show mobility statistics
Global Mobility Statistics
   Rx Errors..................................... 0
   Tx Errors..................................... 0
   Responses Retransmitted....................... 0
   Handoff Requests Received..................... 0
   Handoff End Requests Received................. 0
   State Transitions Disallowed.................. 0
   Resource Unavailable.......................... 0
Mobility Initiator Statistics
   Handoff Requests Sent......................... 0
   Handoff Replies Received...................... 0
   Handoff as Local Received..................... 2
   Handoff as Foreign Received................... 0
   Handoff Denys Received........................ 0
   Anchor Request Sent........................... 0
   Anchor Deny Received.......................... 0
   Anchor Grant Received......................... 0
   Anchor Transfer Received...................... 0
Mobility Responder Statistics
   Handoff Requests Ignored...................... 0
   Ping Pong Handoff Requests Dropped............ 0
   Handoff Requests Dropped...................... 0
   Handoff Requests Denied....................... 0
   Client Handoff as Local....................... 0
   Client Handoff as Foreign  ................... 0
   Client Handoff Inter Group ................... 0
   Anchor Requests Received...................... 0
   Anchor Requests Denied........................ 0
   Anchor Requests Granted....................... 0
   Anchor Transferred............................ 0
```

show mobility summary

To display the summary information for the controller mobility groups, use the **show mobility summary** command.

show mobility summary

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

Usage Guidelines

Some WLAN controllers may list no mobility security mode.

The following is a sample output of the **show mobility summary** command.

```
(Cisco Controller) >show mobility summary

Symmetric Mobility Tunneling (current) ..... Disabled
Symmetric Mobility Tunneling (after reboot) ..... Disabled
Mobility Protocol Port..................... 16666
Mobility Security Mode..................... Disabled
Default Mobility Domain.................... snmp_gui
Multicast Mode ............................ Disabled
Mobility Domain ID for 802.11r............ 0x66bd
Mobility Keepalive Interval................ 10
Mobility Keepalive Count................... 3
Mobility Group Members Configured.......... 1
Mobility Control Message DSCP Value........ 0
Controllers configured in the Mobility Group
MAC Address        IP Address       Group Name         Multicast IP  Status
00:1b:d4:6b:87:20    1.100.163.70     snmp_gui         0.0.0.0        Up
```

The following is a sample output of the **show mobility summary** command with new mobility architecture.

```
(Cisco Controller) >show mobility summary

Mobility Protocol Port..................... 16666
Default Mobility Domain.................... Mobility
Multicast Mode ............................ Disabled
Mobility Domain ID for 802.11r............ 0xb348
Mobility Keepalive Interval................ 10
Mobility Keepalive Count................... 3
Mobility Group Members Configured.......... 3
Mobility Control Message DSCP Value........ 0

Controllers configured in the Mobility Group
 IP Address  Public IP Address  Group Name     Multicast IP  MAC Address
Status
 9.71.106.2  9.72.106.2         Mobility      0.0.0.0      00:00:00:00:00:00  Control and
Data Path Down
```

```
 9.71.106.3  9.72.106.3         Mobility      0.0.0.0      00:00:00:00:00:00  Control and
Data Path Down
 9.71.106.69 9.72.106.69        Mobility      0.0.0.0      68:ef:bd:8e:5f:20          Up
```

show msglog

To display the message logs written to the controller database, use the **show msglog** command.

show msglog

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

Usage Guidelines

If there are more that 15 entries, you are prompted to display the messages shown in the example.

The following example shows how to display message logs:

```
 (Cisco Controller) >show msglog
Message Log Severity Level..................... ERROR
Thu Aug  4 14:30:08 2005  [ERROR] spam_lrad.c 1540: AP 00:0b:85:18:b6:50 associated. Last
AP failure was due to Link Failure
Thu Aug  4 14:30:08 2005  [ERROR] spam_lrad.c 13840: Updating IP info for AP 00:
0b:85:18:b6:50 -- static 0, 1.100.49.240/255.255.255.0, gtw 1.100.49.1
Thu Aug  4 14:29:32 2005  [ERROR] dhcpd.c 78: dhcp server: binding to 0.0.0.0
Thu Aug  4 14:29:32 2005  [ERROR] rrmgroup.c 733: Airewave Director: 802.11a switch group
reset
Thu Aug  4 14:29:32 2005  [ERROR] rrmgroup.c 733: Airewave Director: 802.11bg sw
itch group reset
Thu Aug  4 14:29:22 2005  [ERROR] sim.c 2841: Unable to get link state for primary port 0
of interface ap-manager
Thu Aug  4 14:29:22 2005  [ERROR] dtl_l2_dot1q.c 767: Unable to get USP
Thu Aug  4 14:29:22 2005  Previous message occurred 2 times
Thu Aug  4 14:29:14 2005  [CRITICAL] osapi_sem.c 794: Error!  osapiMutexTake called with
NULL pointer: osapi_bsntime.c:927
Thu Aug  4 14:29:14 2005  [CRITICAL] osapi_sem.c 794: Error!  osapiMutexTake called with
NULL pointer: osapi_bsntime.c:919
Thu Aug  4 14:29:14 2005  [CRITICAL] hwutils.c 1861: Security Module not found
Thu Aug  4 14:29:13 2005  [CRITICAL] bootos.c 791: Starting code...
```

show nac statistics

To display detailed Network Access Control (NAC) information about a Cisco wireless LAN controller, use the **show nac statistics** command.

show nac statistics

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display detailed statistics of network access control settings:

```
(Cisco Controller) > show nac statistics
Server Index..................................................... 1
Server Address...................................................
xxx.xxx.xxx.xxx
Number of requests sent.......................................... 0
Number of retransmissions........................................ 0
Number of requests received...................................... 0
Number of malformed requests received............................ 0
Number of bad auth requests received............................. 0
Number of pending requests....................................... 0
Number of timed out requests..................................... 0
Number of misc dropped request received.......................... 0
Number of requests sent.......................................... 0
```

Related Commands

show nac summary

config guest-lan nac

config wlan nac

debug nac

show nac summary

To display NAC summary information for a Cisco wireless LAN controller, use the **show nac summary** command.

show nac summary

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display a summary information of network access control settings:

```
(Cisco Controller) > show nac summary
NAC ACL Name ..............................................
Index  Server Address                                Port     State
-----  ---------------------------------------       ----     -----
1      xxx.xxx.xxx.xxx                               13336    Enabled
```

Related Commands

show nac statistics

config guest-lan nac

config wlan nac

debug nac

show network

To display the current status of 802.3 bridging for all WLANs, use the **show network** command.

show network

Syntax Description

This command has no arguments or keywords.

Command Default

None.

This example shows how to display the network details:

```
(Cisco Controller) > show network
```

Related Commands

config network

show network summary

show network multicast mgid detail

show network multicast mgid summary

show network summary

To display the network configuration of the Cisco wireless LAN controller, use the **show network summary** command.

show network summary

Syntax Description

This command has no arguments or keywords.

Command Default

None.

This example shows how to display a summary configuration:

```
(Cisco Controller) >show network summary
RF-Network Name............................ RF
Web Mode................................... Disable
Secure Web Mode............................ Enable
Secure Web Mode Cipher-Option High......... Disable
Secure Web Mode Cipher-Option SSLv2........ Disable
Secure Web Mode RC4 Cipher Preference...... Disable
OCSP....................................... Disabled
OCSP responder URL.........................
Secure Shell (ssh)......................... Enable
Telnet..................................... Enable
Ethernet Multicast Mode.................... Disable   Mode: Ucast
Ethernet Broadcast Mode.................... Disable
Ethernet Multicast Forwarding.............. Disable
Ethernet Broadcast Forwarding.............. Disable
AP Multicast/Broadcast Mode................ Unicast
IGMP snooping.............................. Disabled
IGMP timeout............................... 60 seconds
IGMP Query Interval........................ 20 seconds
MLD snooping............................... Disabled
MLD timeout................................ 60 seconds
MLD query interval......................... 20 seconds
User Idle Timeout.......................... 300 seconds
AP Join Priority........................... Disable
ARP Idle Timeout........................... 300 seconds
ARP Unicast Mode........................... Disabled
Cisco AP Default Master.................... Disable
Mgmt Via Wireless Interface................ Disable
Mgmt Via Dynamic Interface................. Disable
Bridge MAC filter Config................... Enable
Bridge Security Mode....................... EAP
Over The Air Provisioning of AP's.......... Enable
Apple Talk ................................ Disable
Mesh Full Sector DFS....................... Enable
AP Fallback ............................... Disable
Web Auth CMCC Support ..................... Disabled
Web Auth Redirect Ports ................... 80
Web Auth Proxy Redirect  .................. Disable
Web Auth Captive-Bypass   ................. Disable
Web Auth Secure Web  ...................... Enable
Fast SSID Change .......................... Disabled
AP Discovery - NAT IP Only ................ Enabled
IP/MAC Addr Binding Check ................. Enabled
CCX-lite status ........................... Disable
oeap-600 dual-rlan-ports .................. Disable
```

```
oeap-600 local-network ..................... Enable
mDNS snooping............................... Disabled
mDNS Query Interval......................... 15 minutes

Web Color Theme............................. Default
CAPWAP Prefer Mode.......................... IPv4
```

show netuser

To display the configuration of a particular user in the local user database, use the **show netuser** command.

show netuser {**detail** *user_name* | **guest-roles** | **summary**}

Syntax Description

detail	Displays detailed information about the specified network user.
user_name	Network user.
guest_roles	Displays configured roles for guest users.
summary	Displays a summary of all users in the local user database.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following is a sample output of the **show netuser summary** command:

```
(Cisco Controller) > show netuser summary
Maximum logins allowed for a given username ........Unlimited
```

The following is a sample output of the **show netuser detail** command:

```
(Cisco Controller) > show netuser detail john10
username..................................... abc
WLAN Id..................................... Any
Lifetime.................................... Permanent
Description................................. test user
```

Related Commands

config netuser add

config netuser delete

config netuser description

config netuser guest-role apply

config netuser wlan-id

config netuser guest-roles

show netuser guest-roles

To display a list of the current quality of service (QoS) roles and their bandwidth parameters, use the **show netuser guest-roles** command.

show netuser guest-roles

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

This example shows how to display a QoS role for the guest network user:

```
(Cisco Controller) > show netuser guest-roles
Role Name.............................. Contractor
 Average Data Rate................... 10
 Burst Data Rate.................... 10
 Average Realtime Rate.............. 100
 Burst Realtime Rate................ 100
Role Name.............................. Vendor
 Average Data Rate................... unconfigured
 Burst Data Rate.................... unconfigured
 Average Realtime Rate.............. unconfigured
 Burst Realtime Rate................ unconfigured
```

Related Commands

config netuser add

config netuser delete

config netuser description

config netuser guest-role apply

config netuser wlan-id

show netuser guest-roles

show netuser

show network multicast mgid detail

To display all the clients joined to the multicast group in a specific multicast group identification (MGID), use the **show network multicast mgid detail** command.

show network multicast mgid detail *mgid_value*

Syntax Description

mgid_value	Number between 550 and 4095.

Command Default

None.

This example shows how to display details of the multicast database:

```
> show network multicast mgid detail
Mgid ............................... 550
Multicast Group Address ............ 239.255.255.250
Vlan ............................... 0
Rx Packet Count .................... 807399588
No of clients ...................... 1
Client List .......................
  Client MAC       Expire TIme (mm:ss)
   00:13:02:23:82:ad   0:20
```

Related Commands

show network summary

show network multicast mgid detail

show network

show network multicast mgid summary

To display all the multicast groups and their corresponding multicast group identifications (MGIDs), use the **show network multicast mgid summary** command.

show network multicast mgid summary

Syntax Description

This command has no arguments or keywords.

Command Default

None.

This example shows how to display a summary of multicast groups and their MGIDs:

```
> show network multicast mgid summary
Layer2 MGID Mapping:
-------------------
InterfaceName            vlanId     MGID
---------------------------- ------  -----
management             0      0
test            0    9
wired          20     8
Layer3 MGID Mapping:
-------------------
Number of Layer3 MGIDs ................ 1
 Group address          Vlan    MGID
 ------------------  -----   ------
 239.255.255.250        0      550
```

Related Commands

show network summary

show network multicast mgid detail

show network

show network summary

To display the network configuration settings, use the **show network summary** command.

show network summary

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.
8.0	This command updated to display the IPv6 multicast details in the network summary.

The following example displays the output of the **show ipv6 summary** command:

```
(Cisco Controller) >show network summary
RF-Network Name............................ johnny
Web Mode................................... Enable
Secure Web Mode............................ Enable
Secure Web Mode Cipher-Option High.......... Disable
Secure Web Mode Cipher-Option SSLv2......... Disable
Secure Web Mode RC4 Cipher Preference....... Disable
OCSP....................................... Disabled
OCSP responder URL.........................
Secure Shell (ssh)......................... Enable
Telnet..................................... Enable
Ethernet Multicast Forwarding............... Enable
Ethernet Broadcast Forwarding............... Enable
IPv4 AP Multicast/Broadcast Mode............ Multicast   Address : 239.9.9.9
IPv6 AP Multicast/Broadcast Mode............ Multicast   Address : ff1e::6:9
IGMP snooping.............................. Enabled
IGMP timeout............................... 60 seconds
IGMP Query Interval........................ 20 seconds
MLD snooping............................... Enabled
MLD timeout................................ 60 seconds
MLD query interval......................... 20 seconds
User Idle Timeout.......................... 300 seconds
ARP Idle Timeout........................... 300 seconds
Cisco AP Default Master.................... Disable
AP Join Priority........................... Disable
Mgmt Via Wireless Interface................ Enable
Mgmt Via Dynamic Interface................. Enable
Bridge MAC filter Config................... Enable
Bridge Security Mode....................... EAP
Mesh Full Sector DFS....................... Enable
AP Fallback ............................... Enable
Web Auth CMCC Support ..................... Disabled
Web Auth Redirect Ports ................... 80
Web Auth Proxy Redirect  .................. Disable
Web Auth Captive-Bypass   ................. Disable
Web Auth Secure Web  ...................... Enable
Fast SSID Change .......................... Disabled
AP Discovery - NAT IP Only ................ Enabled
IP/MAC Addr Binding Check ................. Enabled
Link Local Bridging Status ................ Disabled
```

```
CCX-lite status ........................... Disable
oeap-600 dual-rlan-ports .................. Disable
oeap-600 local-network .................... Enable
oeap-600 Split Tunneling (Printers)......... Disable
WebPortal Online Client ................... 0
WebPortal NTF_LOGOUT Client ............... 0
mDNS snooping.............................. Disabled
mDNS Query Interval........................ 15 minutes
Web Color Theme............................ Default
L3 Prefer Mode............................. IPv4
```

show nmsp notify-interval summary

To display the Network Mobility Services Protocol (NMSP) configuration settings, use the **show nmsp notify-interval summary** command.

show nmsp notify-interval summary

Syntax Description

This command has no arguments or keywords.

Command Default

None.

This example shows how to display NMSP configuration settings:

```
> show nmsp notify-interval summary
NMSP Notification Interval Summary
 Client
        Measurement interval:    2 sec
 RFID
        Measurement interval:    8 sec
 Rogue AP
        Measurement interval:    2 sec
 Rogue Client
        Measurement interval:    2 sec
```

Related Commands

clear locp statistics

clear nmsp statistics

config nmsp notify-interval measurement

show nmsp statistics

show nmsp status

show nmsp status

To view the active NMSP connections status, use the **show nmsp status**command.

show nmsp status

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
8.3	This command was introduced.

This example shows the active nmsp connections status:

```
(Cisco Controller) >show nmsp status
```

show nmsp statistics

To display Network Mobility Services Protocol (NMSP) counters, use the **show nmsp statistics** command.

show nmsp statistics {**summary** | **connection all**}

Syntax Description

summary	Displays common NMSP counters.
connection all	Displays all connection-specific counters.

Command Default

None.

This example shows how to display a summary of common NMSP counters:

```
> show nmsp statistics summary
Send RSSI with no entry:                0
Send too big msg:                       0
Failed SSL write:                       0
Partial SSL write:                      0
SSL write attempts to want write:
Transmit Q full:0
Max Measure Notify Msg:                 0
Max Info Notify Msg:                    0
Max Tx Q Size:                          2
Max Rx Size:                            1
Max Info Notify Q Size:                 0
Max Client Info Notify Delay:           0
Max Rogue AP Info Notify Delay:         0
Max Rogue Client Info Notify Delay:     0
Max Client Measure Notify Delay:        0
Max Tag Measure Notify Delay:           0
Max Rogue AP Measure Notify Delay:      0
Max Rogue Client Measure Notify Delay: 0
Max Client Stats Notify Delay:          0
Max Tag Stats Notify Delay:             0
RFID Measurement Periodic :             0
RFID Measurement Immediate :            0
Reconnect Before Conn Timeout:          0
```

This example shows how to display all the connection-specific NMSP counters:

```
> show nmsp statistics connection all
NMSP Connection Counters
Connection 1 :
 Connection status:  UP
 Freed Connection:    0
 Nmsp Subscr Req:     0          NMSP Subscr Resp:   0
 Info Req:            1          Info Resp:          1
 Measure Req:         2          Measure Resp:        2
 Stats Req:           2          Stats Resp:          2
 Info Notify:         0          Measure Notify:      0
 Loc Capability:      2
 Location Req:        0          Location Rsp:        0
 Loc Subscr Req:      0          Loc Subscr Rsp:      0
 Loc Notif:           0
 Loc Unsubscr Req:    0          Loc Unsubscr Rsp:    0
```

```
IDS Get Req:         0          IDS Get Resp:        0
IDS Notif:           0
IDS Set Req:         0          IDS Set Resp:        0
```

Related Commands

show nmsp notify-interval summary

clear nmsp statistics

config nmsp notify-interval measurement

show nmsp status

show nmsp subscription

To display the Network Mobility Services Protocol (NMSP) services that are active on the controller, use the **show nmsp subscription** command.

show nmsp subscription {**summary** | **detail** *ip-addr*}

Syntax Description

summary	Displays all of the NMSP services to which the controller is subscribed.
detail	Displays details for all of the NMSP services to which the controller is subscribed.
ip-addr	Details only for the NMSP services subscribed to by a specific IPv4 or IPv6 address.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.
8.0	This command supports both IPv4 and IPv6 address formats.

This example shows how to display a summary of all the NMSP services to which the controller is subscribed:

```
> show nmsp subscription summary
Mobility Services Subscribed:
Server IP          Services
---------          --------
10.10.10.31        RSSI, Info, Statistics
```

This example shows how to display details of all the NMSP services:

```
> show nmsp subscription detail 10.10.10.31
Mobility Services Subscribed by 10.10.10.31
Services          Sub-services
--------          ------------
RSSI              Mobile Station, Tags,
Info              Mobile Station,
Statistics        Mobile Station, Tags,

> show nmsp subscription detail 2001:9:6:40::623
Mobility Services Subscribed by 2001:9:6:40::623
Services          Sub-services
--------          ------------
RSSI              Mobile Station, Tags,
Info              Mobile Station,
Statistics        Mobile Station, Tags,
```

show nmsp subscription summary

To view the mobility services subscribed on controller by Mobility Services Engine, use the **show nmsp subscription summary** command.

show nmsp subscription summary

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
8.3	This command was introduced.

This example shows the subscribed mobility services on controller:

```
(Cisco Controller) >show nmsp subscription summary
```

show ntp-keys

To display network time protocol authentication key details, use the **show ntp-keys** command.

show ntp-keys

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

This example shows how to display NTP authentication key details:

```
(Cisco Controller) > show ntp-keys
Ntp Authentication Key Details..................
      Key Index
     -----------
         1
         3
```

Related Commands

config time ntp

show ntp-keys

To display network time protocol authentication key details, use the **show ntp-keys** command.

show ntp-keys

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

This example shows how to display NTP authentication key details:

```
(Cisco Controller) > show ntp-keys
Ntp Authentication Key Details..................
      Key Index
     -----------
         1
         3
```

Related Commands

config time ntp

show opendns summary

To display OpenDNS configuration details, use the **show opendns summary** command.

show opendns summary

Syntax Description

This command has no keywords or arguments.

Command Default

None

Command History

Release	Modification
8.4	This command was introduced.

Example

The following example shows how to view an OpenDNS configuration:

```
(Cisco Controller) > show opendns summary

OpenDnsGlobalStatus............................ Enabled
OpenDns-ApiToken............................... 12

  Profile-Name                     Device ID                State
  ============                     ==============           =============
  guest1                            010a8501693bf162         Profile Registered


Profiles Mapped to WLANIDs
==========================

Profile Name                    WLAN IDs (Mapped)
----------------                -----------------
guest1                  7

Profiles Mapped to APGroup WLAN-IDs
===============================

Profile Name                   Site Name / WLAN IDs (Mapped)
----------------                -----------------
guest1                  NONE

Profiles Mapped to Local Policies

--More-- or (q)uit
==========================

Profile Name                    Local Policies (Mapped)
----------------                -----------------
guest1                  NONE
```

show pmk-cache

To display information about the pairwise master key (PMK) cache, use the **show pmk-cache** command.

show pmk-cache {**all** | *MAC*}

Syntax Description

all	Displays information about all entries in the PMK cache.
MAC	Information about a single entry in the PMK cache.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display information about a single entry in the PMK cache:

```
(Cisco Controller) >show pmk-cache xx:xx:xx:xx:xx:xx
```

The following example shows how to display information about all entries in the PMK cache:

```
(Cisco Controller) >show pmk-cache all
PMK Cache
                    Entry
Station             Lifetime   VLAN Override          IP Override
-----------------   --------   --------------------   ---------------
```

show pmipv6 domain

To display the summary information of a PMIPv6 domain, use the **show pmipv6 domain** command.

show pmipv6 domain *domain_name* **profile** *profile_name*

Syntax Description

domain_name	Name of the PMIPv6 domain. The domain name can be up to 127 case-sensitive alphanumeric characters.
profile	Specifies the PMIPv6 profile.
profile_name	Name of the profile associated with the PMIPv6 domain. The profile name can be up to 127 case-sensitive alphanumeric characters.

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display the summary information of a PMIPv6 domain:

```
(Cisco Controller) >show pmipv6 domain floor1 profile profile1
NAI: @example.com
APN: Example
LMA: Examplelma

NAI: *
APN: ciscoapn
LMA: ciscolma
```

show pmipv6 mag bindings

To display the binding information of a Mobile Access Gateway (MAG), use the **show pmipv6 mag binding** command.

show pmipv6 mag bindings [**lma** *lma_name* | **nai** *nai_string*]

Syntax Description

lma	(Optional) Displays the binding details of the MAG to an Local Mobility Anchor (LMA).
lma_name	Name of the LMA. The LMA name is case-sensitive and can be up to 127 alphanumeric characters.
nai	(Optional) Displays the binding details of the MAG to a client.
nai_string	Network Access Identifier (NAI) of the client. The NAI is case-sensitive and can be up to 127 alphanumeric characters. You can use all special characters except a colon.

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display the MAG bindings:

```
(Cisco Controller) >show pmipv6 mag binding
[Binding][MN]: Domain: D1, Nai: MN1@cisco.com
        [Binding][MN]: State: ACTIVE
        [Binding][MN]: Interface: Management
        [Binding][MN]: Hoa: 0xE0E0E02, att: 3, llid: aabb.cc00.c800
        [Binding][MN][LMA]: Id: LMA1
        [Binding][MN][LMA]: lifetime: 3600
        [Binding][MN][GREKEY]: Upstream: 102, Downstream: 1
```

show pmipv6 mag globals

To display the global PMIPv6 parameters of the Mobile Access Gateway (MAG), use the **show pmipv6 mag globals** command.

show pmipv6 mag globals

Syntax Description

This command has no arguments or keywords.

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display the global PMIPv6 parameters of a MAG:

```
(Cisco Controller) >show pmipv6 mag globals
Domain  : D1

MAG Identifier  : M1
        MAG Interface                   : Management
        Max Bindings                    : 10000
        Registration Lifetime           : 3600 (sec)
        BRI Init-delay time             : 1000 (msec)
        BRI Max-delay time              : 2000 (msec)
        BRI Max retries                 : 1
        Refresh time                    : 300 (sec)
        Refresh RetxInit time           : 1000 (msec)
        Refresh RetxMax time            : 32000 (msec)
        Timestamp option                : Enabled
        Validity Window                 : 7
        Peer#1:
                LMA Name: AN-LMA-5K      LMA IP: 209.165.201.10
        Peer#2:
                LMA Name: AN-LMA         LMA IP: 209.165.201.4
        Peer#3:
                LMA Name: AN-LMA         LMA IP: 209.165.201.4
```

show pmipv6 mag stats

To display the statistics of the Mobile Access Gateway (MAG), use the **show pmipv6 mag stats** command.

show pmipv6 mag stats [**domain** *domain_name* **peer** *lma_name*]

Syntax Description

domain	(Optional) Displays the MAG statistics for a Local Mobility Anchor (LMA) in the domain.
domain_name	Name of the PMIPv6 domain. The domain name is case-sensitive and can be up to 127 alphanumeric characters.
peer	(Optional) Displays the MAG statistics for an LMA.
lma_name	Name of the LMA. The LMA name is case sensitive and can be up to 127 alphanumeric characters.

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

Usage Guidelines

This table lists the descriptions of the LMA statistics.

Table 4: Descriptions of the LMA Statistics:

LMA Statistics	Description
PBU Sent	Total number of Proxy Binding Updates (PBUs) sent to the LMA by the MAG. PBU is a request message sent by the MAG to a mobile node's LMA for establishing a binding between the mobile node's interface and its current care-of address (Proxy-CoA).
PBA Received	Total number of Proxy Binding Acknowledgements (PBAs) received by the MAG from the LMA. PBA is a reply message sent by an LMA in response to a PBU message that it receives from a MAG.
PBRI Sent	Total number of Proxy Binding Revocation Indications (PBRIs) sent by the MAG to the LMA.
PBRI Received	Total number of PBRIs received from the LMA by the MAG.
PBRA Sent	Total number of Proxy Binding Revocation Acknowledgements (PBRAs) sent by the MAG to the LMA.
PBRA Received	Total number of PBRAs that the MAG receives from the LMA.
Number of Handoff	Number of handoffs between the MAG and the LMA.

The following example shows how to display the LMA statistics:

```
(Cisco Controller) >show pmipv6 mag stats
[M1]: Total Bindings    : 1
[M1]: PBU Sent          : 7
[M1]: PBA Rcvd          : 4
[M1]: PBRI Sent         : 0
[M1]: PBRI Rcvd         : 0
[M1]: PBRA Sent         : 0
[M1]: PBRA Rcvd         : 0
[M1]: No Of handoff     : 0
```

show pmipv6 profile summary

To display the summary of the PMIPv6 profiles, use the **show pmipv6 profile summary** command.

show pmipv6 profile summary

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display the summary of the PMIPv6 profiles:

```
(Cisco Controller) >show pmipv6 profile summary
 Profile Name    WLAN IDS (Mapped)
 ------------    -----------------
  Group1            6
```

show policy

To display the summary of the configured policies, and the details and statistics of a policy, use the **show policy** command.

show policy {**summary** | *policy-name* [**statistics**]}

Syntax Description

summary	Displays the summary of configured policies.
policy-name	Name of the policy.
statistics	(Optional) Displays the statistics of a policy.

Command Default

None

Command History

Release	Modification
7.5	This command was introduced.

The following is a sample output of the **show policy summary** command:

```
(Cisco Controller) > show policy summary

Number of Policies............................ 2

Policy Index Policy Name
------------ ----------------
1            student-FullAccess
2            teacher-FullAccess
```

The following example shows how to display the details of a policy:

```
(Cisco Controller) > show policy student-FullAccess

Policy Index..................................... 1
Match Role....................................... <none>
Match Eap Type................................... EAP-TLS
ACL.............................................. <none>
QOS.............................................. <none>
Average Data Rate................................ 0
Average Real Time Rate........................... 0
Burst Data Rate.................................. 0
Burst Real Time Rate............................. 0
Vlan Id.......................................... 155
Session Timeout.................................. 1800
Sleeping client timeout.......................... 12

Active Hours
------------
Start Time   End Time      Day
----------   --------      ---
```

```
Match Device Types
------------------
Android
```

The following example shows how to display the statistics of a policy:

```
(Cisco Controller) > show policy student-FullAccess statistics

Policy Index..................................... student-FullAccess
Matching Attributes None......................... 619
No Policy Match.................................. 224
Device Type Match................................ 0
EAP Type Match................................... 0
Role Type Match.................................. 0
Client Disconnected.............................. 4
Acl Applied...................................... 0
Vlan changed..................................... 614
Session Timeout Applied.......................... 4
QoS Applied...................................... 0
Avg Data Rate Applied............................ 0
Avg Real Time Rate Applied....................... 0
Burst Data Rate Applied.......................... 0
Burst Real Time Rate Applied..................... 0
Sleeping-Client-Timeout Applied.................. 0
```

show port

To see the controller port settings on an individual or global basis, use the **show port** command.

show port { *port-number* | **summary** | **detailed-info** | **vlan** }

Syntax Description

port-number	Port number of the physical interface.
summary	Displays a summary of all ports.
detailed-info	Displays detailed port information.
vlan	Displays VLAN port table summary.

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to display information about an individual controller port:

```
 (Cisco Controller) > show port 1             STP   Admin   Physical   Physical
  Link   Link    Mcast
Pr  Type   Stat   Mode     Mode      Status   Status  Trap   Appliance
 POE
-- ------- ---- ------- ---------- ---------- ------ ------- ---------
-------
1  Normal  Disa Enable  Auto       1000 Full  Down   Enable  Enable
N/A
```

Note Some controllers may not have multicast or Power over Ethernet (PoE) listed because they do not support those features.

The following example shows how to display a summary of all ports:

```
 (Cisco Controller) > show port summary             STP   Admin   Physical
Physical   Link   Link    Mcast
Pr  Type   Stat   Mode     Mode      Status   Status  Trap   Appliance
 POE SFPType
-- ------- ---- ------- ---------- ---------- ------ ------- ---------
-------------
1  Normal  Forw Enable  Auto       1000 Full  Up     Enable  Enable
N/A NotPresent
2  Normal  Disa Enable  Auto       1000 Full  Down   Enable  Enable
N/A NotPresent
3  Normal  Disa Enable  Auto       1000 Full  Down   Enable  Enable
N/A NotPresent
```

```
4  Normal  Disa Enable  Auto       1000 Full  Down   Enable  Enable
N/A NotPresent
```

Note Some controllers may have only one port listed because they have only one physical port.

show profiling policy summary

To display local device classification of the controller, use the **show profiling policy summary** command.

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
7.5	This command was introduced.

The following is a sample output of the **show profiling policy summary** command:

```
(Cisco Controller) > show profiling policy summary

Number of Builtin Classification Profiles: 88
ID   Name                                              Parent Min CM Valid
==== ================================================ ====== ====== =====

   0 Android                                             None     30   Yes

   1 Apple-Device                                        None     10   Yes

   2 Apple-MacBook                                          1     20   Yes

   3 Apple-iPad                                             1     20   Yes

   4 Apple-iPhone                                           1     20   Yes

   5 Apple-iPod                                             1     20   Yes

   6 Aruba-Device                                        None     10   Yes

   7 Avaya-Device                                        None     10   Yes

   8 Avaya-IP-Phone                                         7     20   Yes

   9 BlackBerry                                          None     20   Yes

  10 Brother-Device                                      None     10   Yes

  11 Canon-Device                                        None     10   Yes

  12 Cisco-Device                                        None     10   Yes

  13 Cisco-IP-Phone                                        12     20   Yes

  14 Cisco-IP-Phone-7945G                                  13     70   Yes
```

```
15 Cisco-IP-Phone-7975                          13     70   Yes
16 Cisco-IP-Phone-9971                          13     70   Yes
17 Cisco-DMP                                    12     20   Yes
18 Cisco-DMP-4400                               17     70   Yes
19 Cisco-DMP-4310                               17     70   Yes
20 Cisco-DMP-4305                               17     70   Yes
21 DLink-Device                               None     10   Yes
22 Enterasys-Device                           None     10   Yes
23 HP-Device                                  None     10   Yes
24 HP-JetDirect-Printer                         23     30   Yes
25 Lexmark-Device                             None     10   Yes
26 Lexmark-Printer-E260dn                       25     30   Yes
27 Microsoft-Device                           None     10   Yes
28 Netgear-Device                             None     10   Yes
29 NintendoWII                                None     10   Yes
30 Nortel-Device                              None     10   Yes
31 Nortel-IP-Phone-2000-Series                  30     20   Yes
32 SonyPS3                                    None     10   Yes
33 XBOX360                                      27     20   Yes
34 Xerox-Device                               None     10   Yes
35 Xerox-Printer-Phaser3250                     34     30   Yes
36 Aruba-AP                                      6     20   Yes
37 Cisco-Access-Point                           12     10   Yes
38 Cisco-IP-Conference-Station-7935             13     70   Yes
39 Cisco-IP-Conference-Station-7936             13     70   Yes
40 Cisco-IP-Conference-Station-7937             13     70   Yes
```

show qos

To display quality of service (QoS) information, use the **show qos** command.

show qos {**bronze** | **gold** | **platinum** | **silver**}

Syntax Description

bronze	Displays QoS information for the bronze profile of the WLAN.
gold	Displays QoS information for the gold profile of the WLAN.
platinum	Displays QoS information for the platinum profile of the WLAN.
silver	Displays QoS information for the silver profile of the WLAN.

Command Default

None.

This example shows how to display QoS information for the gold profile:

```
> show qos gold
Description..................................... For Video Applications
Maximum Priority................................ video
Unicast Default Priority........................ video
Multicast Default Priority...................... video
Per-SSID Rate Limits............................ UpstreamDownstream
Average Data Rate............................... 0 0
Average Realtime Data Rate...................... 0 0
Burst Data Rate................................. 0 0
Burst Realtime Data Rate........................ 0 0
Per-Client Rate Limits.......................... UpstreamDownstream
Average Data Rate............................... 0 0
Average Realtime Data Rate...................... 0 0
Burst Data Rate................................. 0 0
Burst Realtime Data Rate........................ 0 0
protocol........................................ none

802.11a Customized EDCA Settings:
ecwmin...................................... 3
ecwmax...................................... 4
aifs........................................ 7
txop........................................ 94

802.11a Customized packet parameter Settings:
Packet retry time........................... 3
Not retrying threshold...................... 100
Disassociating threshold.................... 500
Time out value.............................. 35
```

Related Commands

config qos protocol-type

show qos qosmap

To see the current QoS map configuration, use the **show qos** command.

show qos qosmap

Syntax Description

qosmap	Displays the current QoS map

Command Default

None

Command History

Release	Modification
8.1	This command was introduced.

The following example shows the current QoS map configuration:

```
show qos qosmap
```

show queue-info

To display all the message queue information pertaining to the system, use the **show queue-info** command.

show queue-info

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command History

Release	Modification
7.5	This command was introduced.

The following is a sample output of the **show queue-info** command.

```
(Cisco Controller) > show queue-info

Total message queue count = 123

Queue Name                  Allocated    InUse       MaxUsed
----------------------------------------------------------------
PRINTF-Q                       256          0           0
dtlqueue                       4096         0           6
GRE Queue                      100          0           1
dtlarpqueue                    4096         0           6
NIM-Q                          116          0           1
SIM-Q                          116          0           6
DHCP Client Queue              8            0           0
dhcpv6ProxyMsgQueue            250          0           0
FDQ-Q                          30300        0           3
dot1d_Queue                    512          0           29
Garp-Q                         256          0           1
dot3ad_queue                   1024         0           0
DEBUG-Q                        8192         0           8
LOGGER-Q                       8192         0           5
TS-Q                           256          0           0
```

The following table describes the significant fields shown in the display.

Table 5: show queue-info Field Descriptions

Field	Description
Queue Name	Name of the task message queue.
Allocated	Memory size, in bytes, of the message queue.
InUse	Queue that is currently used. A value of 0 indicates that there are no messages that have to be processed by the task.

Field	Description
MaxUsed	Maximum number of messages processed by the task after the controller is up.