**Aerohive (classification) QoS Test Case**

Document #:

Group: QA

Date: 08/08/2006

Revision: 1.0

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| --- | --- | --- | --- |
| **Version** | **Name** | **Date** | **Brief Description** |
| 1.0 | Feng Yun | 08/08/2006 | Created |
| 2.0 | fengyun | 04/12/2008 | updated |
| 2.1 | yfeng | 12/29/2009 | Add a test case for bug 10838 |
| 2.2 | yfeng | 02/02/2010 | Add test case 1.5.9 for interface/ssid-only function on agros project |
|  |  |  |  |

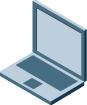
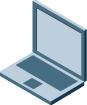
**1 Introduction**

This document describes the test process of Aerohive QoS traffic classification based on 802.1p/802.1Q,802.11,diffsever,interface,mac,service in Mesh Network. Each Aerohive MP (Mesh Point) can act as either a MPP (Mesh Portal Point) to connect to Internet or an AP (Access Point) to communicate with mobile work stations.

**1. 1QoS\_Traffic\_Policing\_classification\_Test Case**

**1. 2 Test bed topology**

#### 1.2.1 Top1



**STA1**

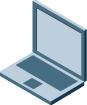
**STA3**

**MP**

**Portal**

**switch**

**Radius**



**STA2**

**1. 3 Required tools and device**

- ixchariot

-aerohive MP.

-computer

-airo peek

-send ip tools

-ethernet

-hub

### 1. 4 Test case overview

|  |  |  |  |
| --- | --- | --- | --- |
| Test point | Test item | PRI | Test result |
| QoS classification | Test classification base on 8021p/8021Q | High | Pass/Failed |
| Test classification base on 80211e | High |  |
| Test classification base on diffsever | High |  |
| Test classification base on mac | High |  |
| Test classification base on interface | High |  |
| Test classification base on service | High |  |

**1. 5 Test Procedures**

**Notice:**

All packet generated need do a circle. When tag=0.you should set mapping class 0-7. And tag=1, set mapping class 0-7…etc. tag include 0-7. Mapping class inculed 0-7

When out interface is wifi0 or wifi1. Packet of aerohive class 1-5 will be queued and packet of class 6-7 will be forwarded. When out interface is eth0, packet of all class will be forwarded.

#### 1.5.1 Test classification base on 8021p/8021Q

##### 1.5.1.1 Case1

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_1 | **Priority** | Accept |
| **Description** | Test classification, package of 8021p(0) mapping aerohive-calss 0.  Ethernet interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** |  | | |
| **Test procedure** | portal:  - Set “qos classifier-profile aaa 8021p” on CLI  - Set “qos classifier-map 8021p 0 0” on CLI  - Set “interface eth0 qos-classifier aaa” on CLI  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta1’s mac”  - Set “\_kdebug fe basic”  - STA1generates 8021p(0) traffic,then send to STA3. | | |
| **Expected output** | - Sniffering the traffic from STA2 incoming interface  - Verify the received traffic class from STA1 is 0  - look over kdebug message  2008-03-18 11:23:43 debug [qos,ah\_classifier.c,214]: Classifier(eth0:802.1p) priority=0 qos=0  2008-03-18 11:23:43 debug [fe,ah\_kafe\_pkt.c,261]: (i) eth0 18.18.20.4->18.18.20.11(18212) ttl(128) icmp-echo-req 60 bytes  2008-03-18 11:23:43 debug [fe,ah\_mac\_sess.c,1303]: MAC session (id [3]) found  2008-03-18 11:23:43 debug [fe,ah\_qos\_main.c,146]: QoS: ingress pkt fwd(eth0) profile=4096 qos=0  2008-03-18 11:23:43 debug [fe,ah\_kafe\_pkt.c,438]: set nhop 0019:7700:0118 ttl 15  2008-03-18 11:23:43 debug [fe,ah\_kafe\_pkt.c,412]: wifi1.1 Tx 0016:d432:9159 -> 0019:7700:0110 type 0x0800 74 bytes  2008-03-18 11:23:43 debug [fe,ah\_kafe\_pkt.c,810]: wifi1.1 stuff ah-hdr nhop 0019:7700:0118 ttl 15  2008-03-18 11:23:43 debug [fe,ah\_kafe\_pkt.c,261]: (o) wifi1.1 18.18.20.4->18.18.20.11(18212) ttl(128) icmp-echo-req 74 bytes  2008-03-18 11:23:43 debug [fe,ah\_qos\_main.c,185]: QoS: pkt queued  2008-03-18 11:23:43 debug [fe,ah\_qos\_queue.c,517]: Tx:wifi1.1:1> 0016:d432:9159->0019:7700:0110 profile idx=0 pkt\_len=74 q\_len=0 QoS buf=0 | | |
| **Comment** | Eth0 is ethernet point. Priority is high | | |

##### 1.5.1.2 Case2

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_2 | **Priority** | High |
| **Description** | Test classification, package of 8021p(0) mapping aerohive-calss 1-7.  Ethernet interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** |  | | |
| **Test procedure** | portal:  - Set “qos classifier-profile aaa 8021p” on CLI  - Set “qos classifier-map 8021p 0 (1-7)” on CLI  - Set “interface eth0 qos-classifier aaa” on CLI  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta1’s mac”  - Set “\_kdebug fe basic”  - STA1generates 8021p(0) traffic,then send to STA3. | | |
| **Expected output** | - Sniffering the traffic from STA2 incoming interface  - Verify the received traffic class from STA1 is 1-7  - look over kdebug message  2008-03-18 11:23:43 debug [qos,ah\_classifier.c,214]: Classifier(eth0:802.1p) priority=0 qos=1-7  2008-03-18 11:23:43 debug [fe,ah\_kafe\_pkt.c,261]: (i) eth0 18.18.20.4->18.18.20.11(18212) ttl(128) icmp-echo-req 60 bytes  2008-03-18 11:23:43 debug [fe,ah\_mac\_sess.c,1303]: MAC session (id [3]) found  2008-03-18 11:23:43 debug [fe,ah\_qos\_main.c,146]: QoS: ingress pkt fwd(eth0) profile=4096 qos=1-7  2008-03-18 11:23:43 debug [fe,ah\_kafe\_pkt.c,438]: set nhop 0019:7700:0118 ttl 15  2008-03-18 11:23:43 debug [fe,ah\_kafe\_pkt.c,412]: wifi1.1 Tx 0016:d432:9159 -> 0019:7700:0110 type 0x0800 74 bytes  2008-03-18 11:23:43 debug [fe,ah\_kafe\_pkt.c,810]: wifi1.1 stuff ah-hdr nhop 0019:7700:0118 ttl 15  2008-03-18 11:23:43 debug [fe,ah\_kafe\_pkt.c,261]: (o) wifi1.1 18.18.20.4->18.18.20.11(18212) ttl(128) icmp-echo-req 74 bytes  2008-03-18 11:23:43 debug [fe,ah\_qos\_main.c,185]: QoS: pkt queued  2008-03-18 11:23:43 debug [fe,ah\_qos\_queue.c,517]: Tx:wifi1.1:1> 0016:d432:9159->0019:7700:0110 profile idx=0 pkt\_len=74 q\_len=0 QoS buf=0 | | |
| **Comment** | Eth0 is ethernet point. Priority is high | | |

##### 1.5.1.3 Case3

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_3 | **Priority** | High |
| **Description** | Test classification, package of 8021p(1-7) mapping aerohive-calss 0-7.  Ethernet interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** |  | | |
| **Test procedure** | portal:  - Set “qos classifier-profile aaa 8021p” on CLI  - Set “qos classifier-map 8021p (1-7) (0-7)” on CLI  - Set “interface eth0 qos-classifier aaa” on CLI  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta1’s mac”  - Set “\_kdebug fe basic”  - STA1generates 8021p(1-7) traffic,then send to STA3. | | |
| **Expected output** | - Sniffering the traffic from STA2 incoming interface  - Verify the received traffic class from STA1 is 0-7  - look over kdebug message  2008-03-18 11:23:43 debug [qos,ah\_classifier.c,214]: Classifier(eth0:802.1p) priority=1-7 qos=0-7  2008-03-18 11:23:43 debug [fe,ah\_kafe\_pkt.c,261]: (i) eth0 18.18.20.4->18.18.20.11(18212) ttl(128) icmp-echo-req 60 bytes  2008-03-18 11:23:43 debug [fe,ah\_mac\_sess.c,1303]: MAC session (id [3]) found  2008-03-18 11:23:43 debug [fe,ah\_qos\_main.c,146]: QoS: ingress pkt fwd(eth0) profile=4096 qos=0-7  2008-03-18 11:23:43 debug [fe,ah\_kafe\_pkt.c,438]: set nhop 0019:7700:0118 ttl 15  2008-03-18 11:23:43 debug [fe,ah\_kafe\_pkt.c,412]: wifi1.1 Tx 0016:d432:9159 -> 0019:7700:0110 type 0x0800 74 bytes  2008-03-18 11:23:43 debug [fe,ah\_kafe\_pkt.c,810]: wifi1.1 stuff ah-hdr nhop 0019:7700:0118 ttl 15  2008-03-18 11:23:43 debug [fe,ah\_kafe\_pkt.c,261]: (o) wifi1.1 18.18.20.4->18.18.20.11(18212) ttl(128) icmp-echo-req 74 bytes  2008-03-18 11:23:43 debug [fe,ah\_qos\_main.c,185]: QoS: pkt queued  2008-03-18 11:23:43 debug [fe,ah\_qos\_queue.c,517]: Tx:wifi1.1:1> 0016:d432:9159->0019:7700:0110 profile idx=0 pkt\_len=74 q\_len=0 QoS buf=0 | | |
| **Comment** | Eth0 is ethernet point. Priority is high | | |

#### 1.5.2 Test classification base on 8011e

##### 1.5.2.1 Case1

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_4 | **Priority** | Accept |
| **Description** | Test classification, package(class 0 80211e) mapping calss 7.wifi0 | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile 80211e 80211e  ssid DeathKnight qos-classifier 80211e  qos classifier-map 80211e 0 7 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates 80211e(0) traffic,then send to STA1. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming interface  - Verify the received traffic class from STA2 is 7  - look over kdebug message  1970-01-01 00:56:18 debug [fe,ah\_kafe\_pkt.c,261]: (i) wifi0.1 18.18.21.13->18.18.21.254(41) ttl(64) UDP 2453->2000 28 bytes  1970-01-01 00:56:18 debug [fe,ah\_mac\_sess.c,1299]: no MAC sess found  1970-01-01 00:56:18 debug [fe,ah\_route\_lookup.c,129]: dst route lookup 0000:0c17:5415: GET\_ROUTE dev(eth0) nhop(0000:0000:0000) flag (0xc11) upid (0)  1970-01-01 00:56:18 debug [fe,ah\_route\_lookup.c,129]: dst route lookup 0019:7d28:3884: GET\_ROUTE dev(wifi0.1) nhop(0019:7700:00c0) flag (0xc03) upid (0)  1970-01-01 00:56:18 debug [fe,ah\_mac\_sess.c,646]: mac sess id [9] created, ageout time 300 sec  1970-01-01 00:56:18 debug [fe,ah\_qos\_main.c,290]: QoS: first pkt L2 session (wifi0.1->eth0) upid=0 src=0 dst=0  1970-01-01 00:56:18 debug [qos,ah\_classifier.c,223]: Classifier(wifi0.1:802.11e) user priority=0 qos=7  1970-01-01 00:56:18 debug [fe,ah\_qos\_main.c,146]: QoS: ingress pkt fwd(wifi0.1) profile=0 qos=7  1970-01-01 00:56:18 debug [fe,ah\_kafe\_pkt.c,412]: eth0 Tx 0019:7d28:3884 -> 0000:0c17:5415 type 0x0800 42 bytes  1970-01-01 00:56:18 debug [fe,ah\_kafe\_pkt.c,261]: (o) eth0 18.18.21.13->18.18.21.254(41) ttl(64) UDP 2453->2000 42 bytes  1970-01-01 00:56:18 debug [fe,ah\_qos\_main.c,190]: QoS: pkt forwarded | | |
| **Comment** |  | | |

##### 1.5.2.2 Case2

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_5 | **Priority** | High |
| **Description** | Test classification, package(class 0 80211e) mapping calss 0-7.wifi0 | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile 80211e 80211e  ssid DeathKnight qos-classifier 80211e  qos classifier-map 80211e 0 7 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2 generates 80211e(0) traffic,then send to STA1. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming interface  - Verify the received traffic class from STA2 is 0-7  - look over kdebug message  1970-01-01 00:56:18 debug [fe,ah\_kafe\_pkt.c,261]: (i) wifi0.1 18.18.21.13->18.18.21.254(41) ttl(64) UDP 2453->2000 28 bytes  1970-01-01 00:56:18 debug [fe,ah\_mac\_sess.c,1299]: no MAC sess found  1970-01-01 00:56:18 debug [fe,ah\_route\_lookup.c,129]: dst route lookup 0000:0c17:5415: GET\_ROUTE dev(eth0) nhop(0000:0000:0000) flag (0xc11) upid (0)  1970-01-01 00:56:18 debug [fe,ah\_route\_lookup.c,129]: dst route lookup 0019:7d28:3884: GET\_ROUTE dev(wifi0.1) nhop(0019:7700:00c0) flag (0xc03) upid (0)  1970-01-01 00:56:18 debug [fe,ah\_mac\_sess.c,646]: mac sess id [9] created, ageout time 300 sec  1970-01-01 00:56:18 debug [fe,ah\_qos\_main.c,290]: QoS: first pkt L2 session (wifi0.1->eth0) upid=0 src=0 dst=0  1970-01-01 00:56:18 debug [qos,ah\_classifier.c,223]: Classifier(wifi0.1:802.11e) user priority=0 qos=(0-7)  1970-01-01 00:56:18 debug [fe,ah\_qos\_main.c,146]: QoS: ingress pkt fwd(wifi0.1) profile=0 qos=(0-7)  1970-01-01 00:56:18 debug [fe,ah\_kafe\_pkt.c,412]: eth0 Tx 0019:7d28:3884 -> 0000:0c17:5415 type 0x0800 42 bytes  1970-01-01 00:56:18 debug [fe,ah\_kafe\_pkt.c,261]: (o) eth0 18.18.21.13->18.18.21.254(41) ttl(64) UDP 2453->2000 42 bytes  1970-01-01 00:56:18 debug [fe,ah\_qos\_main.c,190]: QoS: pkt forwarded | | |
| **Comment** |  | | |

##### 1.5.2.3 Case3

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_6 | **Priority** | High |
| **Description** | Test classification, package(class 0-7 80211e) mapping calss 0-7.wifi0 | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile 80211e 80211e  ssid DeathKnight qos-classifier 80211e  qos classifier-map 80211e 0 7 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates 80211e(0-7) traffic,then send to STA1. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming interface  - Verify the received traffic class from STA2 is (0-7)  - look over kdebug message  1970-01-01 00:56:18 debug [fe,ah\_kafe\_pkt.c,261]: (i) wifi0.1 18.18.21.13->18.18.21.254(41) ttl(64) UDP 2453->2000 28 bytes  1970-01-01 00:56:18 debug [fe,ah\_mac\_sess.c,1299]: no MAC sess found  1970-01-01 00:56:18 debug [fe,ah\_route\_lookup.c,129]: dst route lookup 0000:0c17:5415: GET\_ROUTE dev(eth0) nhop(0000:0000:0000) flag (0xc11) upid (0)  1970-01-01 00:56:18 debug [fe,ah\_route\_lookup.c,129]: dst route lookup 0019:7d28:3884: GET\_ROUTE dev(wifi0.1) nhop(0019:7700:00c0) flag (0xc03) upid (0)  1970-01-01 00:56:18 debug [fe,ah\_mac\_sess.c,646]: mac sess id [9] created, ageout time 300 sec  1970-01-01 00:56:18 debug [fe,ah\_qos\_main.c,290]: QoS: first pkt L2 session (wifi0.1->eth0) upid=0 src=0 dst=0  1970-01-01 00:56:18 debug [qos,ah\_classifier.c,223]: Classifier(wifi0.1:802.11e) user priority=(0-7) qos=(0-7)  1970-01-01 00:56:18 debug [fe,ah\_qos\_main.c,146]: QoS: ingress pkt fwd(wifi0.1) profile=0 qos=(0-7)  1970-01-01 00:56:18 debug [fe,ah\_kafe\_pkt.c,412]: eth0 Tx 0019:7d28:3884 -> 0000:0c17:5415 type 0x0800 42 bytes  1970-01-01 00:56:18 debug [fe,ah\_kafe\_pkt.c,261]: (o) eth0 18.18.21.13->18.18.21.254(41) ttl(64) UDP 2453->2000 42 bytes  1970-01-01 00:56:18 debug [fe,ah\_qos\_main.c,190]: QoS: pkt forwarded | | |
| **Comment** |  | | |

**Wifi1 interface is access interface**

##### 1.5.2.4 Case4

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_7 | **Priority** | Accept |
| **Description** | Test classification, package(class 0 80211e) mapping calss 7.wifi1 | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | ssid DeathKnight  interface wifi1 mode access  interface wifi1 ssid DeathKnight  qos classifier-profile 80211e 80211e  ssid DeathKnight qos-classifier 80211e  qos classifier-map 80211e 0 7 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates 80211e(0) traffic,then send to STA1. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming interface  - Verify the received traffic class from STA2 is (7)  - look over kdebug message  1970-01-02 06:10:39 debug [fe]: (i) wifi1.1 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1728->10000 28 bytes  1970-01-02 06:10:39 debug [fe]: no MAC sess found  1970-01-02 06:10:39 debug [fe]: dst route lookup 001d:0f0a:0c28: GET\_ROUTE dev(eth0) nhop(0000:0000:0000) flag (0xc11)  1970-01-02 06:10:39 debug [fe]: owner flag set  1970-01-02 06:10:39 debug [fe]: dst route lookup 000f:b59c:8954: GET\_ROUTE dev(wifi1.1) nhop(0019:7700:0110) flag (0xc03)  1970-01-02 06:10:39 debug [fe]: owner flag set  1970-01-02 06:10:39 debug [fe]: mac sess id [2] created, ageout time 300 sec  1970-01-02 06:10:39 debug [fe]: QoS: first pkt (wifi1.1->eth0) upid=0 src=0 dst=0  1970-01-02 06:10:39 debug [qos]: Classifier(wifi1.1:802.11e) user priority=0 qos=7  1970-01-02 06:10:39 debug [fe]: QoS: ingress pkt fwd(wifi1.1) profile=0 qos=7  1970-01-02 06:10:39 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-02 06:10:39 debug [fe]: (o) eth0 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1728->10000 42 bytes  1970-01-02 06:10:39 debug [fe]: QoS: pkt forwarded | | |
| **Comment** |  | | |

##### 1.5.2.5 Case5

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_8 | **Priority** | High |
| **Description** | Test classification, package(class 0 80211e) mapping calss 0-6.wifi1 | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | ssid DeathKnight  interface wifi1 mode access  interface wifi1 ssid DeathKnight  qos classifier-profile 80211e 80211e  ssid DeathKnight qos-classifier 80211e  qos classifier-map 80211e 0 0-6 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates 80211e(0) traffic,then send to STA1. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming interface  - Verify the received traffic class from STA2 is (0-6)  - look over kdebug message  1970-01-02 06:10:39 debug [fe]: (i) wifi1.1 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1728->10000 28 bytes  1970-01-02 06:10:39 debug [fe]: no MAC sess found  1970-01-02 06:10:39 debug [fe]: dst route lookup 001d:0f0a:0c28: GET\_ROUTE dev(eth0) nhop(0000:0000:0000) flag (0xc11)  1970-01-02 06:10:39 debug [fe]: owner flag set  1970-01-02 06:10:39 debug [fe]: dst route lookup 000f:b59c:8954: GET\_ROUTE dev(wifi1.1) nhop(0019:7700:0110) flag (0xc03)  1970-01-02 06:10:39 debug [fe]: owner flag set  1970-01-02 06:10:39 debug [fe]: mac sess id [2] created, ageout time 300 sec  1970-01-02 06:10:39 debug [fe]: QoS: first pkt (wifi1.1->eth0) upid=0 src=0 dst=0  1970-01-02 06:10:39 debug [qos]: Classifier(wifi1.1:802.11e) user priority=0 qos=0-6  1970-01-02 06:10:39 debug [fe]: QoS: ingress pkt fwd(wifi1.1) profile=0 qos=0-6  1970-01-02 06:10:39 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-02 06:10:39 debug [fe]: (o) eth0 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1728->10000 42 bytes  1970-01-02 06:10:39 debug [fe]: QoS: pkt forwarded | | |
| **Comment** |  | | |

##### 1.5.2.6 Case6

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_9 | **Priority** | High |
| **Description** | Test classification, package(class 1-7 80211e) mapping calss 0-7.wifi1 | | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | ssid DeathKnight  interface wifi1 mode access  interface wifi1 ssid DeathKnight  qos classifier-profile 80211e 80211e  ssid DeathKnight qos-classifier 80211e  qos classifier-map 80211e 1-7 0-7 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates 80211e(1-7) traffic,then send to STA1. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming interface  - Verify the received traffic class from STA2 is (0-6)  - look over kdebug message  1970-01-02 06:10:39 debug [fe]: (i) wifi1.1 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1728->10000 28 bytes  1970-01-02 06:10:39 debug [fe]: no MAC sess found  1970-01-02 06:10:39 debug [fe]: dst route lookup 001d:0f0a:0c28: GET\_ROUTE dev(eth0) nhop(0000:0000:0000) flag (0xc11)  1970-01-02 06:10:39 debug [fe]: owner flag set  1970-01-02 06:10:39 debug [fe]: dst route lookup 000f:b59c:8954: GET\_ROUTE dev(wifi1.1) nhop(0019:7700:0110) flag (0xc03)  1970-01-02 06:10:39 debug [fe]: owner flag set  1970-01-02 06:10:39 debug [fe]: mac sess id [2] created, ageout time 300 sec  1970-01-02 06:10:39 debug [fe]: QoS: first pkt (wifi1.1->eth0) upid=0 src=0 dst=0  1970-01-02 06:10:39 debug [qos]: Classifier(wifi1.1:802.11e) user priority=1-7 qos=0-7  1970-01-02 06:10:39 debug [fe]: QoS: ingress pkt fwd(wifi1.1) profile=0 qos=0-7  1970-01-02 06:10:39 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-02 06:10:39 debug [fe]: (o) eth0 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1728->10000 42 bytes  1970-01-02 06:10:39 debug [fe]: QoS: pkt forwarded | | |
| **Comment** |  | | |

##### 1.5.2.7 Case7

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_10 | **Priority** | High |
| **Description** | Test classification, package(class 0-7 80211e) mapping calss 0-7.wifi1is backhaul interface | | |
| **Test topology** | SW======Portal- - - - - MP- - - STA2  |  STA1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi0 mode access  interface wifi0 ssid DeathKnight  qos classifier-profile 80211e 80211e  ssid DeathKnight qos-classifier 80211e  qos marker-map 80211e 2 0-7 | | |
| **Test procedure** | MP:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 dst-port pkt’s dst port”  - Set “\_kdebug fe basic”  - STA1generates 80211e(0) traffic,then send to STA2. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming interface  - Verify the received traffic class from STA2 is (0-6)  - look over kdebug message  1970-01-02 07:47:21 debug [fe]: (i) wifi1.1 18.18.21.12->18.18.21.16(41) ttl(64) UDP 2350->10000 28 bytes  1970-01-02 07:47:21 debug [fe]: no MAC sess found  1970-01-02 07:47:21 debug [fe]: dst route lookup 0014:a5b1:0b36: GET\_ROUTE dev(wifi0.1) nhop(0019:7700:00c0) flag (0xc03)  1970-01-02 07:47:21 debug [fe]: owner flag set  1970-01-02 07:47:21 debug [fe]: dst route lookup 000f:b59c:8954: GET\_ROUTE dev(wifi1.1) nhop(0019:7700:0118) flag (0x402)  1970-01-02 07:47:21 debug [fe]: owner flag not set  1970-01-02 07:47:21 debug [fe]: mac sess id [6] created, ageout time 300 sec  1970-01-02 07:47:21 debug [fe]: QoS: first pkt (wifi1.1->wifi0.1) upid=0 src=0 dst=0  1970-01-02 07:47:21 debug [qos]: Classifier(wifi1.1:802.11e) user priority=0/1/2/3/4/5/6/7 qos=2/0/1/3/4/5/6/7  1970-01-02 07:47:21 debug [fe]: QoS: ingress pkt fwd(wifi1.1) profile=0 qos=2/0/1/3/4/5/6/7  1970-01-02 07:47:21 debug [fe]: wifi0.1 Tx 000f:b59c:8954 -> 0014:a5b1:0b36 type 0x0800 42 bytes  1970-01-02 07:47:21 debug [fe]: (o) wifi0.1 18.18.21.12->18.18.21.16(41) ttl(64) UDP 2350->10000 42 bytes  1970-01-02 07:47:21 debug [fe]: QoS: pkt forwarded | | |
| **Comment** |  | | |

#### 1.5.3 Test classification base on diffserv

##### 1.5.1.1 Case1

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_11 | **Priority** | Accept |
| **Description** | Test classification, package(class 0 diffserv) mapping calss 0. Eth0 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile diff diffserv  interface eth0 qos-classifier diff  qos classifier-map diffserv 0 0 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta1’s mac”  - Set “\_kdebug fe basic”  - STA1generates DSCP(0) traffic,then send to STA2. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming interface  - Verify the received traffic dscp from STA2 is 00  - look over kdebug message  1970-01-02 06:44:34 debug [fe]: (i) eth0 18.18.21.7->18.18.21.12(41) ttl(64) UDP 2793->10000 46 bytes  1970-01-02 06:44:34 debug [fe]: MAC session (id [4]) found  1970-01-02 06:44:34 debug [qos]: Classifier(eth0:DSCP) DSCP=0 qos=0  1970-01-02 06:44:34 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=0  1970-01-02 06:44:34 debug [fe]: wifi0.1 Tx 001d:0f0a:0c28 -> 000f:b59c:8954 type 0x0800 60 bytes  1970-01-02 06:44:34 debug [fe]: (o) wifi0.1 18.18.21.7->18.18.21.12(41) ttl(64) UDP 2793->10000 60 bytes  1970-01-02 06:44:34 debug [fe]: QoS: pkt queued  1970-01-02 06:44:34 debug [fe]: Tx:wifi0.1> 001d:0f0a:0c28->000f:b59c:8954 profile idx=0 pkt\_len=60 q\_len=0 QoS buf=0 | | |
| **Comment** |  | | |

##### 1.5.1.2 Case2

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_12 | **Priority** | High |
| **Description** | Test classification, package(class 0 diffserv) mapping calss 1-7. Eth0 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile diff diffserv  interface eth0 qos-classifier diff  qos classifier-map diffserv 0 1-7 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta1’s mac”  - Set “\_kdebug fe basic”  - STA1generates DSCP(0) traffic,then send to STA2. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming interface  - look over kdebug message  1970-01-02 06:44:34 debug [fe]: (i) eth0 18.18.21.7->18.18.21.12(41) ttl(64) UDP 2793->10000 46 bytes  1970-01-02 06:44:34 debug [fe]: MAC session (id [4]) found  1970-01-02 06:44:34 debug [qos]: Classifier(eth0:DSCP) DSCP=0 qos=1-7  1970-01-02 06:44:34 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=1-7  1970-01-02 06:44:34 debug [fe]: wifi0.1 Tx 001d:0f0a:0c28 -> 000f:b59c:8954 type 0x0800 60 bytes  1970-01-02 06:44:34 debug [fe]: (o) wifi0.1 18.18.21.7->18.18.21.12(41) ttl(64) UDP 2793->10000 60 bytes  1970-01-02 06:44:34 debug [fe]: QoS: pkt queued  1970-01-02 06:44:34 debug [fe]: Tx:wifi0.1> 001d:0f0a:0c28->000f:b59c:8954 profile idx=0 pkt\_len=60 q\_len=0 QoS buf=0 | | |
| **Comment** |  | | |

##### 1.5.1.3 Case3

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_13 | **Priority** | High |
| **Description** | Test classification, package(class 1-63 diffserv) mapping calss 0-7. Eth0 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile diff diffserv  interface eth0 qos-classifier diff  qos classifier-map diffserv 0 0 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta1’s mac”  - Set “\_kdebug fe basic”  - STA1generates DSCP(0) traffic,then send to STA2. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming interface  - Verify the received traffic dscp from STA2 is 00  - look over kdebug message  1970-01-02 06:44:34 debug [fe]: (i) eth0 18.18.21.7->18.18.21.12(41) ttl(64) UDP 2793->10000 46 bytes  1970-01-02 06:44:34 debug [fe]: MAC session (id [4]) found  1970-01-02 06:44:34 debug [qos]: Classifier(eth0:DSCP) DSCP=1-63 qos=0-7  1970-01-02 06:44:34 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=0-7  1970-01-02 06:44:34 debug [fe]: wifi0.1 Tx 001d:0f0a:0c28 -> 000f:b59c:8954 type 0x0800 60 bytes  1970-01-02 06:44:34 debug [fe]: (o) wifi0.1 18.18.21.7->18.18.21.12(41) ttl(64) UDP 2793->10000 60 bytes  1970-01-02 06:44:34 debug [fe]: QoS: pkt queued  1970-01-02 06:44:34 debug [fe]: Tx:wifi0.1> 001d:0f0a:0c28->000f:b59c:8954 profile idx=0 pkt\_len=60 q\_len=0 QoS buf=0 | | |
| **Comment** |  | | |

##### 1.5.1.4 Case4

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_14 | **Priority** | High |
| **Description** | Test classification, package(class 0 diffserv) mapping calss 0. Wifi0 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile diff diffserv  ssid DeathKnight qos-classifer diff  qos classifier-map diffserv 0 0 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates DSCP(0) traffic,then send to STA1. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming interface  - Verify the received traffic dscp from STA2 is 00  - look over kdebug message  1970-01-02 07:09:26 debug [fe]: (i) wifi0.1 18.18.21.12->18.18.21.7(41) ttl(64) UDP 2477->10000 28 bytes  1970-01-02 07:09:26 debug [fe]: MAC session (id [10]) found  1970-01-02 07:09:26 debug [qos]: Classifier(wifi0.1:DSCP) DSCP=0 qos=0  1970-01-02 07:09:26 debug [fe]: QoS: ingress pkt fwd(wifi0.1) profile=0 qos=0  1970-01-02 07:09:26 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-02 07:09:26 debug [fe]: (o) eth0 18.18.21.12->18.18.21.7(41) ttl(64) UDP 2477->10000 42 bytes  1970-01-02 07:09:26 debug [fe]: QoS: pkt forwarded | | |
| **Comment** |  | | |

##### 1.5.1.5 Case5

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_15 | **Priority** | High |
| **Description** | Test classification, package(class 0 diffserv) mapping calss 1-7. Wifi0 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile diff diffserv  ssid DeathKnight qos-classifer diff  qos classifier-map diffserv 0 1-7 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates DSCP(0) traffic,then send to STA1. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming interface  - Verify the received traffic dscp from STA2 is 00  - look over kdebug message  1970-01-02 07:09:26 debug [fe]: (i) wifi0.1 18.18.21.12->18.18.21.7(41) ttl(64) UDP 2477->10000 28 bytes  1970-01-02 07:09:26 debug [fe]: MAC session (id [10]) found  1970-01-02 07:09:26 debug [qos]: Classifier(wifi0.1:DSCP) DSCP=0 qos=1-7  1970-01-02 07:09:26 debug [fe]: QoS: ingress pkt fwd(wifi0.1) profile=0 qos=1-7  1970-01-02 07:09:26 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-02 07:09:26 debug [fe]: (o) eth0 18.18.21.12->18.18.21.7(41) ttl(64) UDP 2477->10000 42 bytes  1970-01-02 07:09:26 debug [fe]: QoS: pkt forwarded | | |
| **Comment** |  | | |

##### 1.5.1.6 Case6

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_16 | **Priority** | High |
| **Description** | Test classification, package(class 1-63 diffserv) mapping calss 0-7. Wifi0 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile diff diffserv  ssid DeathKnight qos-classifer diff  qos classifier-map diffserv 1-63 0-7 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates DSCP(1-63) traffic,then send to STA1. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming interface  - Verify the received traffic dscp from STA2 is 00  - look over kdebug message  1970-01-02 07:09:26 debug [fe]: (i) wifi0.1 18.18.21.12->18.18.21.7(41) ttl(64) UDP 2477->10000 28 bytes  1970-01-02 07:09:26 debug [fe]: MAC session (id [10]) found  1970-01-02 07:09:26 debug [qos]: Classifier(wifi0.1:DSCP) DSCP=1-63 qos=0-7  1970-01-02 07:09:26 debug [fe]: QoS: ingress pkt fwd(wifi0.1) profile=0 qos=0-7  1970-01-02 07:09:26 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-02 07:09:26 debug [fe]: (o) eth0 18.18.21.12->18.18.21.7(41) ttl(64) UDP 2477->10000 42 bytes  1970-01-02 07:09:26 debug [fe]: QoS: pkt forwarded | | |
| **Comment** |  | | |

##### 1.5.1.7 Case7

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_17 | **Priority** | High |
| **Description** | Test classification, package(class 0-63 diffserv) mapping calss 0-7. Wifi1 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | ssid DeathKnight  interface wifi1 mode access  interface wifi1 ssid DeathKnight  qos classifier-profile diff diffserv  ssid DeathKnight qos-classifier diff  qos classifier-map diffserv 0-63 0-7 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates DSCP(0-63) traffic,then send to STA1. | | |
| **Expected output** | - Sniffering the traffic from STA2 incoming interface  - look over kdebug message  AH-000110#1970-01-02 07:06:40 debug [fe]: (i) wifi1.1 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1935->10000 28 bytes  1970-01-02 07:06:40 debug [fe]: no MAC sess found  1970-01-02 07:06:40 debug [fe]: dst route lookup 001d:0f0a:0c28: GET\_ROUTE dev(eth0) nhop(0000:0000:0000) flag (0xc11)  1970-01-02 07:06:40 debug [fe]: owner flag set  1970-01-02 07:06:40 debug [fe]: dst route lookup 000f:b59c:8954: GET\_ROUTE dev(wifi1.1) nhop(0019:7700:0110) flag (0xc03)  1970-01-02 07:06:40 debug [fe]: owner flag set  1970-01-02 07:06:40 debug [fe]: mac sess id [2] created, ageout time 300 sec  1970-01-02 07:06:40 debug [fe]: QoS: first pkt (wifi1.1->eth0) upid=0 src=0 dst=0  1970-01-02 07:06:40 debug [qos]: Classifier(wifi1.1:DSCP) DSCP=0-63 qos=0-7  1970-01-02 07:06:40 debug [fe]: QoS: ingress pkt fwd(wifi1.1) profile=0 qos=0-7  1970-01-02 07:06:40 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-02 07:06:40 debug [fe]: (o) eth0 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1935->10000 42 bytes  1970-01-02 07:06:40 debug [fe]: QoS: pkt forwarded | | |
| **Comment** |  | | |

#### 1.5.4 Test classification base on interface

##### 1.5.1.1 Case1

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_18 | **Priority** | Accept |
| **Description** | Test classification, incoming interface(eth0) mapping class 0 | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile interface interface/ssid  interface eth0 qos-classifer interface  qos classifier-map interface eth0 0 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta1’s mac”  - Set “\_kdebug fe basic”  - STA1generates traffic,then send to STA2. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming interface  - Verify the received traffic class from STA1 is 0  - look over kdebug message  1970-01-02 07:20:46 debug [fe]: (i) eth0 18.18.21.45->18.18.21.12(41) ttl(64) UDP 1697->10000 46 bytes  1970-01-02 07:20:46 debug [fe]: MAC session (id [10]) found  1970-01-02 07:20:46 debug [qos]: Classifier(interface) qos=0  1970-01-02 07:20:46 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=0  1970-01-02 07:20:46 debug [fe]: wifi0.1 Tx 0016:d432:9159 -> 000f:b59c:8954 type 0x0800 60 bytes  1970-01-02 07:20:46 debug [fe]: (o) wifi0.1 18.18.21.45->18.18.21.12(41) ttl(64) UDP 1697->10000 60 bytes  1970-01-02 07:20:46 debug [fe]: QoS: pkt queued  1970-01-02 07:20:46 debug [fe]: Tx:wifi0.1> 0016:d432:9159->000f:b59c:8954 profile idx=0 pkt\_len=60 q\_len=0 QoS buf=0 | | |
| **Comment** |  | | |

##### 1.5.1.2 Case2

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_19 | **Priority** | High |
| **Description** | Test classification, incoming interface(eth0) mapping class 1-7 | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile interface interface/ssid  interface eth0 qos-classifer interface  qos classifier-map interface eth0 1-7 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta1’s mac”  - Set “\_kdebug fe basic”  - STA1generates traffic,then send to STA2. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming interface  - look over kdebug message  1970-01-02 07:20:46 debug [fe]: (i) eth0 18.18.21.45->18.18.21.12(41) ttl(64) UDP 1697->10000 46 bytes  1970-01-02 07:20:46 debug [fe]: MAC session (id [10]) found  1970-01-02 07:20:46 debug [qos]: Classifier(interface) qos=1-7  1970-01-02 07:20:46 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=1-7  1970-01-02 07:20:46 debug [fe]: wifi0.1 Tx 0016:d432:9159 -> 000f:b59c:8954 type 0x0800 60 bytes  1970-01-02 07:20:46 debug [fe]: (o) wifi0.1 18.18.21.45->18.18.21.12(41) ttl(64) UDP 1697->10000 60 bytes  1970-01-02 07:20:46 debug [fe]: QoS: pkt queued  1970-01-02 07:20:46 debug [fe]: Tx:wifi0.1> 0016:d432:9159->000f:b59c:8954 profile idx=0 pkt\_len=60 q\_len=0 QoS buf=0 | | |
| **Comment** |  | | |

##### 1.5.1.3 Case3

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_20 | **Priority** | High |
| **Description** | Test classification, incoming pkt base on ssid(wifi0) mapping class 0-7 | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile ssid interface/ssid  ssid DeathKnight qos-classifier ssid  qos classifier-map ssid DeathKnight 0-7 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates traffic,then send to STA1. (A)  - STA1generates traffic,then send to STA2.(B) | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming interface  - look over kdebug message  (A)  1970-01-02 07:27:31 debug [fe]: (i) wifi0.1 18.18.21.12->18.18.21.7(41) ttl(64) UDP 2024->10000 28 bytes  1970-01-02 07:27:31 debug [fe]: MAC session (id [3]) found  1970-01-02 07:27:31 debug [qos]: Classifier(interface) qos=0-7  1970-01-02 07:27:31 debug [fe]: QoS: ingress pkt fwd(wifi0.1) profile=0 qos=0-7  1970-01-02 07:27:31 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-02 07:27:31 debug [fe]: (o) eth0 18.18.21.12->18.18.21.7(41) ttl(64) UDP 2024->10000 42 bytes  1970-01-02 07:27:31 debug [fe]: QoS: pkt forwarded  (B)  1970-01-02 07:30:20 debug [fe]: (i) eth0 18.18.21.45->18.18.21.12(41) ttl(64) UDP 1575->10000 46 bytes  1970-01-02 07:30:20 debug [fe]: MAC session (id [5]) found  1970-01-02 07:30:20 debug [qos]: Classifier(interface) qos=0-7  1970-01-02 07:30:20 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=0-7  1970-01-02 07:30:20 debug [fe]: wifi0.1 Tx 0016:d432:9159 -> 000f:b59c:8954 type 0x0800 60 bytes  1970-01-02 07:30:20 debug [fe]: (o) wifi0.1 18.18.21.45->18.18.21.12(41) ttl(64) UDP 1575->10000 60 bytes  1970-01-02 07:30:20 debug [fe]: QoS: pkt queued  1970-01-02 07:30:20 debug [fe]: Tx:wifi0.1> 0016:d432:9159->000f:b59c:8954 profile idx=0 pkt\_len=60 q\_len=0 QoS buf=0 | | |
| **Comment** |  | | |

##### 1.5.1.4 Case4

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_21 | **Priority** | High |
| **Description** | Test classification, incoming pkt base on ssid(wifi1) mapping class 0-7 | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi1 mode access  interface wifi1 ssid DeathKnight  qos classifier-profile ssid interface/ssid  ssid DeathKnight qos-classifier ssid  qos classifier-map ssid DeathKnight 0-7 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_ff id 2 src-mac sta1’s mac”  - Set “\_kdebug fe basic”  - STA2generates traffic,then send to STA1. (A)  - STA1generates traffic,then send to STA2.(B) | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming interface  - look over kdebug message  (A)  1970-01-02 07:33:31 debug [fe]: (i) wifi1.1 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1200->10000 28 bytes  1970-01-02 07:33:31 debug [fe]: MAC session (id [1]) found  1970-01-02 07:33:31 debug [qos]: Classifier(interface) qos=0-7  1970-01-02 07:33:31 debug [fe]: QoS: ingress pkt fwd(wifi1.1) profile=0 qos=0-7  1970-01-02 07:33:31 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-02 07:33:31 debug [fe]: (o) eth0 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1200->10000 42 bytes  1970-01-02 07:33:31 debug [fe]: QoS: pkt forwarded  (B)  1970-01-02 07:34:33 debug [fe]: (i) eth0 18.18.21.45->18.18.21.12(41) ttl(64) UDP 2398->10000 46 bytes  1970-01-02 07:34:33 debug [fe]: MAC session (id [9]) found  1970-01-02 07:34:33 debug [qos]: Classifier(interface) qos=0-7  1970-01-02 07:34:33 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=0-7  1970-01-02 07:34:33 debug [fe]: wifi1.1 Tx 0016:d432:9159 -> 000f:b59c:8954 type 0x0800 60 bytes  1970-01-02 07:34:33 debug [fe]: (o) wifi1.1 18.18.21.45->18.18.21.12(41) ttl(64) UDP 2398->10000 60 bytes  1970-01-02 07:34:33 debug [fe]: QoS: pkt queued  1970-01-02 07:34:33 debug [fe]: Tx:wifi1.1> 0016:d432:9159->000f:b59c:8954 profile idx=0 pkt\_len=60 q\_len=0 QoS buf=0 | | |
| **Comment** |  | | |

#### 1.5.5 Test classification base on oui

##### 1.5.1.1 Case1

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_22 | **Priority** | Accept |
| **Description** | Test classification, Incoming pkt base on oui mapping to class 0 Ethernet interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile mac mac  interface eth0 qos-classifer mac  qos classifier-map mac 0016d4 qos 0-7  **notice 0016d4 is STA1’s oui** | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta1’s mac”  - Set “\_kdebug fe basic”  - STA1generates traffic,then send to STA2. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming mac  - look over kdebug message  1970-01-02 07:50:57 debug [fe]: (i) eth0 18.18.21.45->18.18.21.12(41) ttl(64) UDP 2843->10000 46 bytes  1970-01-02 07:50:57 debug [fe]: MAC session (id [5]) found  1970-01-02 07:50:57 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=0-7  1970-01-02 07:50:57 debug [fe]: wifi1.1 Tx 0016:d432:9159 -> 000f:b59c:8954 type 0x0800 60 bytes  1970-01-02 07:50:57 debug [fe]: (o) wifi1.1 18.18.21.45->18.18.21.12(41) ttl(64) UDP 2843->10000 60 bytes  1970-01-02 07:50:57 debug [fe]: QoS: pkt queued  1970-01-02 07:50:57 debug [fe]: Tx:wifi1.1> 0016:d432:9159->000f:b59c:8954 profile idx=0 pkt\_len=60 q\_len=0 QoS buf=0 | | |
| **Comment** |  | | |

##### 1.5.1.2 Case2

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_23 | **Priority** | High |
| **Description** | Test classification, Incoming pkt base on oui , action permit Ethernet interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile mac mac  interface eth0 qos-classifer mac  qos classifier-map mac 0016d4 qos 0 action permit  **notice 0016d4 is STA1’s oui** | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta1’s mac”  - Set “\_kdebug fe basic”  - STA1generates traffic,then send to STA2. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming mac  - look over kdebug message  1970-01-02 07:50:57 debug [fe]: (i) eth0 18.18.21.45->18.18.21.12(41) ttl(64) UDP 2843->10000 46 bytes  1970-01-02 07:50:57 debug [fe]: MAC session (id [5]) found  1970-01-02 07:50:57 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=0  1970-01-02 07:50:57 debug [fe]: wifi1.1 Tx 0016:d432:9159 -> 000f:b59c:8954 type 0x0800 60 bytes  1970-01-02 07:50:57 debug [fe]: (o) wifi1.1 18.18.21.45->18.18.21.12(41) ttl(64) UDP 2843->10000 60 bytes  1970-01-02 07:50:57 debug [fe]: QoS: pkt queued  1970-01-02 07:50:57 debug [fe]: Tx:wifi1.1> 0016:d432:9159->000f:b59c:8954 profile idx=0 pkt\_len=60 q\_len=0 QoS buf=0 | | |
| **Comment** |  | | |

##### 1.5.1.3 Case3

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_24 | **Priority** | High |
| **Description** | Test classification, Incoming pkt base on oui , action deny Ethernet interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile mac mac interface eth0 qos-classifer mac  qos classifier-map mac 0016d4 qos 0 action deny  **notice 0016d4 is STA1’s oui** | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta1’s mac”  - Set “\_kdebug fe basic”  - STA1generates traffic,then send to STA2. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming mac  - look over kdebug message  1970-01-02 07:54:23 debug [fe]: (i) eth0 18.18.21.45->18.18.21.12(41) ttl(64) UDP 1516->10000 46 bytes  1970-01-02 07:54:23 debug [fe]: MAC session (id [5]) found  1970-01-02 07:54:23 debug [fe]: pkt(eth0) dropped by classifier qos=0  1970-01-02 07:54:23 debug [fe]: (!) eth0 18.18.21.45->18.18.21.12(41) ttl(64) UDP 1516->10000 46 bytes | | |
| **Comment** |  | | |

##### 1.5.1.4 Case4

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_25 | **Priority** | High |
| **Description** | Test classification, Incoming pkt base on oui , action permit/log Ethernet interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile mac mac interface eth0 qos-classifer mac  qos classifier-map mac 0016d4 qos 0 action permit  qos classifier-map mac 0016d4 action log  **notice 0016d4 is STA1’s oui** | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta1’s mac”  - Set “\_kdebug fe basic”  - STA1generates traffic,then send to STA2. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming mac  - look over kdebug message  1970-01-02 07:50:57 debug [fe]: (i) eth0 18.18.21.45->18.18.21.12(41) ttl(64) UDP 2843->10000 46 bytes  1970-01-02 07:50:57 debug [fe]: MAC session (id [5]) found  1970-01-02 07:50:57 debug [qos]: 001d:0f0a:0c28 -> 000f:b59c:8954 qos=0 action=5  1970-01-02 07:50:57 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=0  1970-01-02 07:50:57 debug [fe]: wifi1.1 Tx 0016:d432:9159 -> 000f:b59c:8954 type 0x0800 60 bytes  1970-01-02 07:50:57 debug [fe]: (o) wifi1.1 18.18.21.45->18.18.21.12(41) ttl(64) UDP 2843->10000 60 bytes  1970-01-02 07:50:57 debug [fe]: QoS: pkt queued  1970-01-02 07:50:57 debug [fe]: Tx:wifi1.1> 0016:d432:9159->000f:b59c:8954 profile idx=0 pkt\_len=60 q\_len=0 QoS buf=0 | | |
| **Comment** |  | | |

##### 1.5.1.5 Case5

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_26 | **Priority** | High |
| **Description** | Test classification, Incoming pkt base on oui , action deny/log Ethernet interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile mac mac interface eth0 qos-classifer mac  qos classifier-map mac 0016d4 qos 0 action deny  qos classifier-map mac 0016d4 action log  **notice 0016d4 is STA1’s oui** | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta1’s mac”  - Set “\_kdebug fe basic”  - STA1generates traffic,then send to STA2. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming mac  - look over kdebug message  1970-01-02 07:54:23 debug [fe]: (i) eth0 18.18.21.45->18.18.21.12(41) ttl(64) UDP 1516->10000 46 bytes 1970-01-02 07:54:23 debug [fe]: MAC session (id [5]) found  1970-01-02 07:54:23 debug [qos]: 001d:0f0a:0c28 -> 000f:b59c:8954 qos=0 action=6  1970-01-02 07:54:23 debug [fe]: pkt(eth0) dropped by classifier qos=0  1970-01-02 07:54:23 debug [fe]: (!) eth0 18.18.21.45->18.18.21.12(41) ttl(64) UDP 1516->10000 46 bytes | | |
| **Comment** |  | | |

##### 1.5.1.6 Case6

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_27 | **Priority** | High |
| **Description** | Test classification, Incoming pkt base on oui mapping to class 0-7 wifi0 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile mac mac  ssid DeathKnight qos-classifer mac  qos classifier-map mac 000fb5 qos 0-7  **notice 000fb5 is STA2’s oui** | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates traffic,then send to STA1. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming mac  - look over kdebug message  1970-01-02 08:08:07 debug [fe]: (i) wifi0.1 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1976->10000 28 bytes  1970-01-02 08:08:07 debug [fe]: MAC session (id [9]) found  1970-01-02 08:08:07 debug [fe]: QoS: ingress pkt fwd(wifi0.1) profile=0 qos=0-7  1970-01-02 08:08:07 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-02 08:08:07 debug [fe]: (o) eth0 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1976->10000 42 bytes  1970-01-02 08:08:07 debug [fe]: QoS: pkt forwarded | | |
| **Comment** |  | | |

##### 1.5.1.7 Case7

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_28 | **Priority** | High |
| **Description** | Test classification, Incoming pkt base on oui action permit wifi0 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile mac mac  ssid DeathKnight qos-classifer mac  qos classifier-map mac 000fb5 qos 0 action permit  **notice 000fb5 is STA2’s oui** | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates traffic,then send to STA1. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming mac  - look over kdebug message  1970-01-02 08:08:07 debug [fe]: (i) wifi0.1 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1976->10000 28 bytes  1970-01-02 08:08:07 debug [fe]: MAC session (id [9]) found  1970-01-02 08:08:07 debug [fe]: QoS: ingress pkt fwd(wifi0.1) profile=0 qos=0  1970-01-02 08:08:07 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-02 08:08:07 debug [fe]: (o) eth0 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1976->10000 42 bytes  1970-01-02 08:08:07 debug [fe]: QoS: pkt forwarded | | |
| **Comment** |  | | |

##### 1.5.1.8 Case8

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_29 | **Priority** | High |
| **Description** | Test classification, Incoming pkt base on oui action deny wifi0 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile mac mac  ssid DeathKnight qos-classifer mac  qos classifier-map mac 000fb5 qos 0 action deny  **notice 000fb5 is STA2’s oui** | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates traffic,then send to STA1. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming mac  - look over kdebug message  1970-01-02 08:07:04 debug [fe]: (i) wifi0.1 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1773->10000 28 bytes  1970-01-02 08:07:04 debug [fe]: no MAC sess found  1970-01-02 08:07:04 debug [fe]: dst route lookup 001d:0f0a:0c28: GET\_ROUTE dev(eth0) nhop(0000:0000:0000) flag (0xc11)  1970-01-02 08:07:04 debug [fe]: owner flag set  1970-01-02 08:07:04 debug [fe]: dst route lookup 000f:b59c:8954: GET\_ROUTE dev(wifi0.1) nhop(0019:7700:0110) flag (0xc03)  1970-01-02 08:07:04 debug [fe]: owner flag set  1970-01-02 08:07:04 debug [fe]: mac sess id [9] created, ageout time 300 sec  1970-01-02 08:07:04 debug [fe]: QoS: first pkt (wifi0.1->eth0) upid=0 src=0 dst=0  1970-01-02 08:07:04 debug [fe]: pkt(wifi0.1) dropped by classifier qos=0  1970-01-02 08:07:04 debug [fe]: (!) wifi0.1 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1773->10000 28 bytes | | |
| **Comment** |  | | |

##### 1.5.1.9 Case9

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_30 | **Priority** | High |
| **Description** | Test classification, Incoming pkt base on oui action permit/log wifi0 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile mac mac  ssid DeathKnight qos-classifer mac  qos classifier-map mac 000fb5 qos 0 action permit  qos classifier-map mac 000fb5 action log  **notice 000fb5 is STA2’s oui** | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates traffic,then send to STA1. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming mac  - look over kdebug message  1970-01-02 08:08:07 debug [fe]: (i) wifi0.1 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1976->10000 28 bytes  1970-01-02 08:08:07 debug [fe]: MAC session (id [9]) found  1970-01-02 08:08:07 debug [qos]: 000f:b59c:8954 -> 001d:0f0a:0c28 qos=0 action=5  1970-01-02 08:08:07 debug [fe]: QoS: ingress pkt fwd(wifi0.1) profile=0 qos=0  1970-01-02 08:08:07 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-02 08:08:07 debug [fe]: (o) eth0 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1976->10000 42 bytes  1970-01-02 08:08:07 debug [fe]: QoS: pkt forwarded | | |
| **Comment** |  | | |

##### 1.5.1.10 Case10

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_31 | **Priority** | High |
| **Description** | Test classification, Incoming pkt base on oui action deny/log wifi0 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile mac mac  ssid DeathKnight qos-classifer mac  qos classifier-map mac 000fb5 qos 0 action deny  qos classifier-map mac 000fb5 action log  **notice 000fb5 is STA2’s oui** | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates traffic,then send to STA1. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming mac  - look over kdebug message  1970-01-02 08:08:42 debug [fe]: (i) wifi0.1 18.18.21.12->18.18.21.7(41) ttl(64) UDP 2093->10000 28 bytes  1970-01-02 08:08:42 debug [fe]: MAC session (id [9]) found  1970-01-02 08:08:42 debug [qos]: 000f:b59c:8954 -> 001d:0f0a:0c28 qos=0 action=6  1970-01-02 08:08:42 debug [fe]: pkt(wifi0.1) dropped by classifier qos=0  1970-01-02 08:08:42 debug [fe]: (!) wifi0.1 18.18.21.12->18.18.21.7(41) ttl(64) UDP 2093->10000 28 bytes | | |
| **Comment** |  | | |

##### 1.5.1.11 Case11

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_32 | **Priority** | High |
| **Description** | Test classification, Incoming pkt base on oui mapping to class 0-7 wifi1 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi1 mode access  interface wifi1 ssid DeathKnight  qos classifier-profile mac mac  ssid DeathKnight qos-classifer mac  qos classifier-map mac 000fb5 qos 0-7  **notice 000fb5 is STA2’s oui** | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates traffic,then send to STA1. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming mac  - look over kdebug message  1970-01-02 08:08:07 debug [fe]: (i) wifi1.1 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1976->10000 28 bytes  1970-01-02 08:08:07 debug [fe]: MAC session (id [9]) found  1970-01-02 08:08:07 debug [fe]: QoS: ingress pkt fwd(wifi1.1) profile=0 qos=0-7  1970-01-02 08:08:07 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-02 08:08:07 debug [fe]: (o) eth0 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1976->10000 42 bytes  1970-01-02 08:08:07 debug [fe]: QoS: pkt forwarded | | |
| **Comment** |  | | |

##### 1.5.1.12 Case12

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_33 | **Priority** | High |
| **Description** | Test classification, Incoming pkt base on oui action permit wifi1 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi1 mode access  interface wifi1 ssid DeathKnight  qos classifier-profile mac mac  ssid DeathKnight qos-classifer mac  qos classifier-map mac 000fb5 qos 0 action permit  **notice 000fb5 is STA2’s oui** | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates traffic,then send to STA1. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming mac  - look over kdebug message  1970-01-02 08:08:07 debug [fe]: (i) wifi1.1 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1976->10000 28 bytes  1970-01-02 08:08:07 debug [fe]: MAC session (id [9]) found  1970-01-02 08:08:07 debug [fe]: QoS: ingress pkt fwd(wifi1.1) profile=0 qos=0  1970-01-02 08:08:07 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-02 08:08:07 debug [fe]: (o) eth0 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1976->10000 42 bytes  1970-01-02 08:08:07 debug [fe]: QoS: pkt forwarded | | |
| **Comment** |  | | |

##### 1.5.1.13 Case13

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_34 | **Priority** | High |
| **Description** | Test classification, Incoming pkt base on oui action deny wifi1 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi1 mode access  interface wifi1 ssid DeathKnight  qos classifier-profile mac mac  ssid DeathKnight qos-classifer mac  qos classifier-map mac 000fb5 qos 0 action deny  **notice 000fb5 is STA2’s oui** | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates traffic,then send to STA1. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming mac  - look over kdebug message  1970-01-02 08:07:04 debug [fe]: (i) wifi1.1 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1773->10000 28 bytes  1970-01-02 08:07:04 debug [fe]: no MAC sess found  1970-01-02 08:07:04 debug [fe]: dst route lookup 001d:0f0a:0c28: GET\_ROUTE dev(eth0) nhop(0000:0000:0000) flag (0xc11)  1970-01-02 08:07:04 debug [fe]: owner flag set  1970-01-02 08:07:04 debug [fe]: dst route lookup 000f:b59c:8954: GET\_ROUTE dev(wifi0.1) nhop(0019:7700:0110) flag (0xc03)  1970-01-02 08:07:04 debug [fe]: owner flag set  1970-01-02 08:07:04 debug [fe]: mac sess id [9] created, ageout time 300 sec  1970-01-02 08:07:04 debug [fe]: QoS: first pkt (wifi0.1->eth0) upid=0 src=0 dst=0  1970-01-02 08:07:04 debug [fe]: pkt(wifi1.1) dropped by classifier qos=0  1970-01-02 08:07:04 debug [fe]: (!) wifi1.1 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1773->10000 28 bytes | | |
| **Comment** |  | | |

##### 1.5.1.14 Case14

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_35 | **Priority** | High |
| **Description** | Test classification, Incoming pkt base on oui action permit/log wifi0 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi1 mode access  interface wifi1 ssid DeathKnight  qos classifier-profile mac mac  ssid DeathKnight qos-classifer mac  qos classifier-map mac 000fb5 qos 0 action permit  qos classifier-map mac 000fb5 action log  **notice 000fb5 is STA2’s oui** | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates traffic,then send to STA1. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming mac  - look over kdebug message  1970-01-02 08:08:07 debug [fe]: (i) wifi1.1 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1976->10000 28 bytes  1970-01-02 08:08:07 debug [fe]: MAC session (id [9]) found  1970-01-02 08:08:07 debug [qos]: 000f:b59c:8954 -> 001d:0f0a:0c28 qos=0 action=5  1970-01-02 08:08:07 debug [fe]: QoS: ingress pkt fwd(wifi1.1) profile=0 qos=0  1970-01-02 08:08:07 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-02 08:08:07 debug [fe]: (o) eth0 18.18.21.12->18.18.21.7(41) ttl(64) UDP 1976->10000 42 bytes  1970-01-02 08:08:07 debug [fe]: QoS: pkt forwarded | | |
| **Comment** |  | | |

##### 1.5.1.15 Case15

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_36 | **Priority** | High |
| **Description** | Test classification, Incoming pkt base on oui action deny/log wifi1 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi1 mode access  interface wifi1 ssid DeathKnight  qos classifier-profile mac mac  ssid DeathKnight qos-classifer mac  qos classifier-map mac 000fb5 qos 0 action deny  qos classifier-map mac 000fb5 action log  **notice 000fb5 is STA2’s oui** | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates traffic,then send to STA1. | | |
| **Expected output** | - Sniffering the traffic from STA1 incoming mac  - look over kdebug message  1970-01-02 08:08:42 debug [fe]: (i) wifi1.1 18.18.21.12->18.18.21.7(41) ttl(64) UDP 2093->10000 28 bytes 1970-01-02 08:08:42 debug [fe]: MAC session (id [9]) found  1970-01-02 08:08:42 debug [qos]: 000f:b59c:8954 -> 001d:0f0a:0c28 qos=0 action=6  1970-01-02 08:08:42 debug [fe]: pkt(wifi1.1) dropped by classifier qos=0  1970-01-02 08:08:42 debug [fe]: (!) wifi1.1 18.18.21.12->18.18.21.7(41) ttl(64) UDP 2093->10000 28 bytes | | |
| **Comment** |  | | |

#### 1.5.6 Test classification base on service

##### 1.5.6.1 Case1

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_37 | **Priority** | Accept |
| **Description** | Test classification, base on service(protocol=6 port=1-65535) mapping class 0-7 Ethernet interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile service service interface eth0 qos-classifier service  service telent protocol tcp port 23(1-65535)  qos classifier-map service telnet qos 0-7 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta1’s mac”  - Set “\_kdebug fe basic”  - STA1generates traffic,then send to STA2. | | |
| **Expected output** | - look over kdebug message  AH-000110#1970-01-02 21:47:59 debug [fe]: (i) eth0 18.18.21.7->18.18.21.11(18938) ttl(128) TCP 4745->23 48 bytes  1970-01-02 21:47:59 debug [fe]: MAC session (id [10]) found  1970-01-02 21:47:59 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=0-7  1970-01-02 21:47:59 debug [fe]: wifi0.1 Tx 001d:0f0a:0c28 -> 000f:b59c:8954 type 0x0800 62 bytes  1970-01-02 21:47:59 debug [fe]: (o) wifi0.1 18.18.21.7->18.18.21.11(18938) ttl(128) TCP 4745->23 62 bytes  1970-01-02 21:47:59 debug [fe]: QoS: pkt queued  1970-01-02 21:47:59 debug [fe]: Tx:wifi0.1> 001d:0f0a:0c28->000f:b59c:8954 profile idx=0 pkt\_len=62 q\_len=0 QoS buf=0 | | |
| **Comment** |  | | |

##### 1.5.6.2 Case2

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_38 | **Priority** | High |
| **Description** | Test classification, base on service(protocol=17 port=1-65535) mapping class 0-7 Ethernet interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile service service interface eth0 qos-classifier service  service udp1 protocol udp port 1-65535  qos classifier-map service udp1 qos 0-7 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta1’s mac”  - Set “\_kdebug fe basic”  - STA1generates traffic,then send to STA2. | | |
| **Expected output** | - look over kdebug message  AH-000110#1970-01-02 22:00:32 debug [fe]: (i) eth0 18.18.21.7->18.18.21.11(41) ttl(64) UDP 1685->1-65535 46 bytes  1970-01-02 22:00:32 debug [fe]: MAC session (id [10]) found  1970-01-02 22:00:32 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=0-7  1970-01-02 22:00:32 debug [fe]: wifi0.1 Tx 001d:0f0a:0c28 -> 000f:b59c:8954 type 0x0800 60 bytes  1970-01-02 22:00:32 debug [fe]: (o) wifi0.1 18.18.21.7->18.18.21.11(41) ttl(64) UDP 1685->1 60 bytes  1970-01-02 22:00:32 debug [fe]: QoS: pkt queued  1970-01-02 22:00:32 debug [fe]: Tx:wifi0.1> 001d:0f0a:0c28->000f:b59c:8954 profile idx=0 pkt\_len=60 q\_len=0 QoS buf=0 | | |
| **Comment** |  | | |

**Notice: if you set protocol=1. And proto(255) will be instead of icmp-rep**

##### 1.5.6.3 Case3

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_39 | **Priority** | High |
| **Description** | Test classification, base on service(protocol=1-255) mapping class 0-7 Ethernet interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile service service interface eth0 qos-classifier service  service pro protocol 1-255  qos classifier-map service pro qos 0-7 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta1’s mac”  - Set “\_kdebug fe basic”  - STA1generates traffic,then send to STA2. | | |
| **Expected output** | - look over kdebug message  1970-01-02 23:51:57 debug [fe]: (i) eth0 10.155.30.230->10.155.30.99(4660) ttl(255) proto(1-255) 46 bytes  1970-01-02 23:51:57 debug [fe]: no MAC sess found  1970-01-02 23:51:57 debug [fe]: dst route lookup 0014:7871:9d26: GET\_ROUTE dev(wifi0.1) nhop(0019:7700:00c0) flag (0xc03)  1970-01-02 23:51:57 debug [fe]: owner flag set  1970-01-02 23:51:57 debug [fe]: dst route lookup 0000:e850:ac0e: GET\_ROUTE dev(eth0) nhop(0000:0000:0000) flag (0xc11)  1970-01-02 23:51:57 debug [fe]: owner flag set  1970-01-02 23:51:57 debug [fe]: mac sess id [12] created, ageout time 300 sec  1970-01-02 23:51:57 debug [fe]: QoS: first pkt (eth0->wifi0.1) upid=0 src=0 dst=0  1970-01-02 23:51:57 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=0-7  1970-01-02 23:51:57 debug [fe]: wifi0.1 Tx 0000:e850:ac0e -> 0014:7871:9d26 type 0x0800 60 bytes  1970-01-02 23:51:57 debug [fe]: (o) wifi0.1 10.155.30.230->10.155.30.99(4660) ttl(255) proto(255) 60 bytes  1970-01-02 23:51:57 debug [fe]: QoS: pkt queued  1970-01-02 23:51:57 debug [fe]: Tx:wifi0.1> 0000:e850:ac0e->0014:7871:9d26 profile idx=0 pkt\_len=60 q\_len=0 QoS buf=0 | | |
| **Comment** |  | | |

##### 1.5.6.4 Case4

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_40 | **Priority** | High |
| **Description** | Test classification, base on service, action permit/log Ethernet interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile service service interface eth0 qos-classifier service  service udp1 protocol udp port 1  qos classifier-map service udp1 qos 0  qos classifier-map service udp1 action log | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta1’s mac”  - Set “\_kdebug fe basic”  - STA1generates traffic,then send to STA2. | | |
| **Expected output** | - look over kdebug message  1970-01-05 00:46:43 debug [fe]: (i) eth0 18.18.21.45->18.18.21.11(41) ttl(64) UDP 2622->1 46 bytes  1970-01-05 00:46:43 debug [fe]: no MAC sess found  1970-01-05 00:46:43 debug [fe]: dst route lookup 000f:b59c:8954: GET\_ROUTE dev(wifi0.1) nhop(0019:7700:0110) flag (0xc03)  1970-01-05 00:46:43 debug [fe]: owner flag set  1970-01-05 00:46:43 debug [fe]: dst route lookup 0016:d432:9159: GET\_ROUTE dev(eth0) nhop(0000:0000:0000) flag (0xc11)  1970-01-05 00:46:43 debug [fe]: owner flag set  1970-01-05 00:46:43 debug [fe]: mac sess id [4] created, ageout time 300 sec  1970-01-05 00:46:43 debug [fe]: QoS: first pkt (eth0->wifi0.1) upid=0 src=0 dst=0  1970-01-05 00:46:43 info [flow]: service:udp1 18.18.21.45 -> 18.18.21.11 proto=17 port=1 qos=0  1970-01-05 00:46:43 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=0  1970-01-05 00:46:43 debug [fe]: wifi0.1 Tx 0016:d432:9159 -> 000f:b59c:8954 type 0x0800 60 bytes  1970-01-05 00:46:43 debug [fe]: (o) wifi0.1 18.18.21.45->18.18.21.11(41) ttl(64) UDP 2622->1 60 bytes  1970-01-05 00:46:43 debug [fe]: QoS: pkt queued  1970-01-05 00:46:43 debug [fe]: Tx:wifi0.1> 0016:d432:9159->000f:b59c:8954 profile idx=0 pkt\_len=60 q\_len=0 QoS buf=0 | | |
| **Comment** |  | | |

##### 1.5.6.5 Case5

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_41 | **Priority** | High |
| **Description** | Test classification, base on service, action deny/log Ethernet interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile service service interface eth0 qos-classifier service  service udp1 protocol udp port 1  qos classifier-map service udp1 qos 0  qos classifier-map service udp1 action log  qos classifier-map service udp1 action deny | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta1’s mac”  - Set “\_kdebug fe basic”  - STA1generates traffic,then send to STA2. | | |
| **Expected output** | - look over kdebug message  1970-01-05 00:49:28 debug [fe]: (i) eth0 18.18.21.45->18.18.21.11(41) ttl(64) UDP 1158->1 46 bytes  1970-01-05 00:49:28 debug [fe]: MAC session (id [5]) found  1970-01-05 00:49:28 info [flow]: service:udp1 18.18.21.45 -> 18.18.21.11 proto=17 port=1 qos=0  1970-01-05 00:49:28 debug [fe]: pkt(eth0) dropped by classifier qos=0  1970-01-05 00:49:28 debug [fe]: (!) eth0 18.18.21.45->18.18.21.11(41) ttl(64) UDP 1158->1 46 bytes | | |
| **Comment** |  | | |

##### 1.5.6.6 Case6

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_42 | **Priority** | High |
| **Description** | Test classification, base on service(protocol=6 port=1-65535) mapping class 0-7 WiFi0 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile service service ssid DeathKnight qos-classifier service  service telent protocol tcp port 23(1-65535)  qos classifier-map service telnet qos 0-7 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates traffic,then send to STA1.  - Check backhaul packets(STA1->STA2) | | |
| **Expected output** | - look over kdebug message  1970-01-05 00:57:13 debug [fe]: (i) wifi0.1 18.18.21.11->10.190.0.9(28809) ttl(128) TCP 1813->23 49 bytes  1970-01-05 00:57:13 debug [fe]: MAC session (id [1]) found  1970-01-05 00:57:13 debug [fe]: QoS: ingress pkt fwd(wifi0.1) profile=0 qos=0-7  1970-01-05 00:57:13 debug [fe]: eth0 Tx 000f:b59c:8954 -> 0000:0c17:5415 type 0x0800 63 bytes  1970-01-05 00:57:13 debug [fe]: (o) eth0 18.18.21.11->10.190.0.9(28809) ttl(128) TCP 1813->23 63 bytes  1970-01-05 00:57:13 debug [fe]: QoS: pkt forwarded  1970-01-05 00:57:13 debug [fe]: (i) eth0 10.190.0.9->18.18.21.11(33832) ttl(63) TCP 23->1813 52 bytes  1970-01-05 00:57:13 debug [fe]: MAC session (id [1]) found  1970-01-05 00:57:13 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=0-7  1970-01-05 00:57:13 debug [fe]: wifi0.1 Tx 0000:0c17:5415 -> 000f:b59c:8954 type 0x0800 66 bytes  1970-01-05 00:57:13 debug [fe]: (o) wifi0.1 10.190.0.9->18.18.21.11(33832) ttl(63) TCP 23->1813 66 bytes  1970-01-05 00:57:13 debug [fe]: QoS: pkt queued  1970-01-05 00:57:13 debug [fe]: Tx:wifi0.1> 0000:0c17:5415->000f:b59c:8954 profile idx=0 pkt\_len=66 q\_len=0 QoS buf=0 | | |
| **Comment** |  | | |

##### 1.5.6.7 Case7

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_43 | **Priority** | High |
| **Description** | Test classification, base on service(protocol=17 port=1-65535) mapping class 0-7 WiFI0 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile service service ssid DeathKnight qos-classifier service  service udp1 protocol udp port 1-65535  qos classifier-map service udp1 qos 0-7 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates traffic,then send to STA1.  - Check backhaul packet | | |
| **Expected output** | - look over kdebug message  1970-01-05 01:05:27 debug [fe]: (i) wifi0.1 18.18.21.11->18.18.21.7(41) ttl(64) UDP 2046->1 28 bytes  1970-01-05 01:05:27 debug [fe]: no MAC sess found  1970-01-05 01:05:27 debug [fe]: dst route lookup 001d:0f0a:0c28: GET\_ROUTE dev(eth0) nhop(0000:0000:0000) flag (0xc11)  1970-01-05 01:05:27 debug [fe]: owner flag set  1970-01-05 01:05:27 debug [fe]: dst route lookup 000f:b59c:8954: GET\_ROUTE dev(wifi0.1) nhop(0019:7700:0110) flag (0xc03)  1970-01-05 01:05:27 debug [fe]: owner flag set  1970-01-05 01:05:27 debug [fe]: mac sess id [1] created, ageout time 300 sec  1970-01-05 01:05:27 debug [fe]: QoS: first pkt (wifi0.1->eth0) upid=0 src=0 dst=0  1970-01-05 01:05:27 debug [fe]: QoS: ingress pkt fwd(wifi0.1) profile=0 qos=0-7  1970-01-05 01:05:27 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-05 01:05:27 debug [fe]: (o) eth0 18.18.21.11->18.18.21.7(41) ttl(64) UDP 2046->1 42 bytes  1970-01-05 01:05:27 debug [fe]: QoS: pkt forwarded | | |
| **Comment** |  | | |

**Notice: if you set protocol=1. And proto(255) will be instead of icmp-rep**

##### 1.5.6.8 Case8

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_44 | **Priority** | High |
| **Description** | Test classification, base on service(protocol=1-255) mapping class 0-7 WiFi0 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile service service ssid DeathKnight qos-classifier service  service pro protocol 1-255  qos classifier-map service pro qos 0-7 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates traffic,then send to STA1. | | |
| **Expected output** | - look over kdebug message  1970-01-02 23:51:57 debug [fe]: (i) wifi0.1 10.155.30.230->10.155.30.99(4660) ttl(255) proto(1-255) 46 bytes  1970-01-02 23:51:57 debug [fe]: no MAC sess found  1970-01-02 23:51:57 debug [fe]: dst route lookup 0014:7871:9d26: GET\_ROUTE dev(eth0) nhop(0019:7700:00c0) flag (0xc03)  1970-01-02 23:51:57 debug [fe]: owner flag set  1970-01-02 23:51:57 debug [fe]: dst route lookup 0000:e850:ac0e: GET\_ROUTE dev(wifi0.1) nhop(0000:0000:0000) flag (0xc11)  1970-01-02 23:51:57 debug [fe]: owner flag set  1970-01-02 23:51:57 debug [fe]: mac sess id [12] created, ageout time 300 sec  1970-01-02 23:51:57 debug [fe]: QoS: first pkt (wifi0.1->eth0) upid=0 src=0 dst=0  1970-01-02 23:51:57 debug [fe]: QoS: ingress pkt fwd(wifi0.1) profile=0 qos=0-7  1970-01-02 23:51:57 debug [fe]: eth0 Tx 0000:e850:ac0e -> 0014:7871:9d26 type 0x0800 60 bytes  1970-01-02 23:51:57 debug [fe]: (o) eth0 10.155.30.230->10.155.30.99(4660) ttl(255) proto(255) 60 bytes  1970-01-02 23:51:57 debug [fe]: QoS: pkt forward | | |
| **Comment** |  | | |

##### 1.5.6.9 Case9

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_45 | **Priority** | High |
| **Description** | Test classification, base on service, action permit/log WiFi interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile service service ssid DeathKnight qos-classifier service  service udp1 protocol udp port 1  qos classifier-map service udp1 qos 0  qos classifier-map service udp1 action log | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates traffic,then send to STA1. | | |
| **Expected output** | - look over kdebug message  1970-01-05 01:11:31 debug [fe]: (i) wifi0.1 18.18.21.11->18.18.21.7(41) ttl(64) UDP 1234->1 28 bytes  1970-01-05 01:11:31 debug [fe]: MAC session (id [6]) found  1970-01-05 01:11:31 info [flow]: service:udp1 18.18.21.11 -> 18.18.21.7 proto=17 port=1 qos=0  1970-01-05 01:11:31 debug [fe]: QoS: ingress pkt fwd(wifi0.1) profile=0 qos=0  1970-01-05 01:11:31 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-05 01:11:31 debug [fe]: (o) eth0 18.18.21.11->18.18.21.7(41) ttl(64) UDP 1234->1 42 bytes  1970-01-05 01:11:31 debug [fe]: QoS: pkt forwarded | | |
| **Comment** |  | | |

##### 1.5.6.10 Case10

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_46 | **Priority** | High |
| **Description** | Test classification, base on service, action deny/log WiFi0 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi0 ssid DeathKnight  qos classifier-profile service service ssid DeathKnight qos-classifier service  service udp1 protocol udp port 1  qos classifier-map service udp1 qos 0  qos classifier-map service udp1 action log  qos classifier-map service udp1 action deny | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates traffic, then send to STA1. | | |
| **Expected output** | - look over kdebug message  1970-01-05 01:13:24 debug [fe]: (i) wifi0.1 18.18.21.11->18.18.21.7(41) ttl(64) UDP 1603->1 28 bytes  1970-01-05 01:13:24 debug [fe]: no MAC sess found  1970-01-05 01:13:24 debug [fe]: dst route lookup 001d:0f0a:0c28: GET\_ROUTE dev(eth0) nhop(0000:0000:0000) flag (0xc11)  1970-01-05 01:13:24 debug [fe]: owner flag set  1970-01-05 01:13:24 debug [fe]: dst route lookup 000f:b59c:8954: GET\_ROUTE dev(wifi0.1) nhop(0019:7700:0110) flag (0xc03)  1970-01-05 01:13:24 debug [fe]: owner flag set  1970-01-05 01:13:24 debug [fe]: mac sess id [2] created, ageout time 300 sec  1970-01-05 01:13:24 debug [fe]: QoS: first pkt (wifi0.1->eth0) upid=0 src=0 dst=0  1970-01-05 01:13:24 info [flow]: service:udp1 18.18.21.11 -> 18.18.21.7 proto=17 port=1 qos=0  1970-01-05 01:13:24 debug [fe]: pkt(wifi0.1) dropped by classifier qos=0  1970-01-05 01:13:24 debug [fe]: (!) wifi0.1 18.18.21.11->18.18.21.7(41) ttl(64) UDP 1603->1 28 bytes | | |
| **Comment** |  | | |

##### 1.5.6.11 Case11

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_47 | **Priority** | High |
| **Description** | Test classification, base on service(protocol=6 port=1-65535) mapping class 0-7 WiFi1 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi1 mode access  interface wifi1 ssid DeathKnight qos classifier-profile service service  ssid DeathKnight qos-classifier service  service telent protocol tcp port 23(1-65535)  qos classifier-map service telnet qos 0-7 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates traffic,then send to STA1.  - Check backhaul packets(STA1->STA2) | | |
| **Expected output** | - look over kdebug message  1970-01-05 00:57:13 debug [fe]: (i) wifi1.1 18.18.21.11->10.190.0.9(28809) ttl(128) TCP 1813->23 49 bytes  1970-01-05 00:57:13 debug [fe]: MAC session (id [1]) found  1970-01-05 00:57:13 debug [fe]: QoS: ingress pkt fwd(wifi1.1) profile=0 qos=0-7  1970-01-05 00:57:13 debug [fe]: eth0 Tx 000f:b59c:8954 -> 0000:0c17:5415 type 0x0800 63 bytes  1970-01-05 00:57:13 debug [fe]: (o) eth0 18.18.21.11->10.190.0.9(28809) ttl(128) TCP 1813->23 63 bytes  1970-01-05 00:57:13 debug [fe]: QoS: pkt forwarded  1970-01-05 00:57:13 debug [fe]: (i) eth0 10.190.0.9->18.18.21.11(33832) ttl(63) TCP 23->1813 52 bytes  1970-01-05 00:57:13 debug [fe]: MAC session (id [1]) found  1970-01-05 00:57:13 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=0-7  1970-01-05 00:57:13 debug [fe]: wifi1.1 Tx 0000:0c17:5415 -> 000f:b59c:8954 type 0x0800 66 bytes  1970-01-05 00:57:13 debug [fe]: (o) wifi1.1 10.190.0.9->18.18.21.11(33832) ttl(63) TCP 23->1813 66 bytes  1970-01-05 00:57:13 debug [fe]: QoS: pkt queued  1970-01-05 00:57:13 debug [fe]: Tx:wifi1.1> 0000:0c17:5415->000f:b59c:8954 profile idx=0 pkt\_len=66 q\_len=0 QoS buf=0 | | |
| **Comment** |  | | |

##### 1.5.6.12 Case12

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_48 | **Priority** | High |
| **Description** | Test classification, base on service(protocol=17 port=1-65535) mapping class 0-7 WiFI1 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi1 mode access  interface wifi1 ssid DeathKnight  qos classifier-profile service service  ssid DeathKnight qos-classifier service  service udp1 protocol udp port 1-65535  qos classifier-map service udp1 qos 0-7 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates traffic,then send to STA1.  - Check backhaul packet | | |
| **Expected output** | - look over kdebug message  1970-01-05 01:05:27 debug [fe]: (i) wifi1.1 18.18.21.11->18.18.21.7(41) ttl(64) UDP 2046->1 28 bytes  1970-01-05 01:05:27 debug [fe]: no MAC sess found  1970-01-05 01:05:27 debug [fe]: dst route lookup 001d:0f0a:0c28: GET\_ROUTE dev(eth0) nhop(0000:0000:0000) flag (0xc11)  1970-01-05 01:05:27 debug [fe]: owner flag set  1970-01-05 01:05:27 debug [fe]: dst route lookup 000f:b59c:8954: GET\_ROUTE dev(wifi1.1) nhop(0019:7700:0110) flag (0xc03)  1970-01-05 01:05:27 debug [fe]: owner flag set  1970-01-05 01:05:27 debug [fe]: mac sess id [1] created, ageout time 300 sec  1970-01-05 01:05:27 debug [fe]: QoS: first pkt (wifi1.1->eth0) upid=0 src=0 dst=0  1970-01-05 01:05:27 debug [fe]: QoS: ingress pkt fwd(wifi1.1) profile=0 qos=0-7  1970-01-05 01:05:27 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-05 01:05:27 debug [fe]: (o) eth0 18.18.21.11->18.18.21.7(41) ttl(64) UDP 2046->1 42 bytes  1970-01-05 01:05:27 debug [fe]: QoS: pkt forwarded | | |
| **Comment** |  | | |

**Notice: if you set protocol=1. And proto(255) will be instead of icmp-rep**

##### 1.5.6.13 Case13

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_49 | **Priority** | High |
| **Description** | Test classification, base on service(protocol=1-255) mapping class 0-7 WiFi1 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi1 mode access  interface wifi1 ssid DeathKnight  qos classifier-profile service service  ssid DeathKnight qos-classifier service  service pro protocol 1-255  qos classifier-map service pro qos 0-7 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates traffic,then send to STA1. | | |
| **Expected output** | - look over kdebug message  1970-01-02 23:51:57 debug [fe]: (i) wifi1.1 10.155.30.230->10.155.30.99(4660) ttl(255) proto(1-255) 46 bytes  1970-01-02 23:51:57 debug [fe]: no MAC sess found  1970-01-02 23:51:57 debug [fe]: dst route lookup 0014:7871:9d26: GET\_ROUTE dev(eth0) nhop(0019:7700:00c0) flag (0xc03)  1970-01-02 23:51:57 debug [fe]: owner flag set  1970-01-02 23:51:57 debug [fe]: dst route lookup 0000:e850:ac0e: GET\_ROUTE dev(wifi1.1) nhop(0000:0000:0000) flag (0xc11)  1970-01-02 23:51:57 debug [fe]: owner flag set  1970-01-02 23:51:57 debug [fe]: mac sess id [12] created, ageout time 300 sec  1970-01-02 23:51:57 debug [fe]: QoS: first pkt (wifi1.1->eth0) upid=0 src=0 dst=0  1970-01-02 23:51:57 debug [fe]: QoS: ingress pkt fwd(wifi1.1) profile=0 qos=0-7  1970-01-02 23:51:57 debug [fe]: eth0 Tx 0000:e850:ac0e -> 0014:7871:9d26 type 0x0800 60 bytes  1970-01-02 23:51:57 debug [fe]: (o) eth0 10.155.30.230->10.155.30.99(4660) ttl(255) proto(255) 60 bytes  1970-01-02 23:51:57 debug [fe]: QoS: pkt forward | | |
| **Comment** |  | | |

##### 1.5.6.14 Case14

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_50 | **Priority** | High |
| **Description** | Test classification, base on service, action permit/log WiFi1 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi1 mode access  interface wifi1 ssid DeathKnight  qos classifier-profile service service  ssid DeathKnight qos-classifier service  service udp1 protocol udp port 1  qos classifier-map service udp1 qos 0  qos classifier-map service udp1 action log | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates traffic,then send to STA1. | | |
| **Expected output** | - look over kdebug message  1970-01-05 01:11:31 debug [fe]: (i) wifi1.1 18.18.21.11->18.18.21.7(41) ttl(64) UDP 1234->1 28 bytes  1970-01-05 01:11:31 debug [fe]: MAC session (id [6]) found  1970-01-05 01:11:31 info [flow]: service:udp1 18.18.21.11 -> 18.18.21.7 proto=17 port=1 qos=0  1970-01-05 01:11:31 debug [fe]: QoS: ingress pkt fwd(wifi1.1) profile=0 qos=0  1970-01-05 01:11:31 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-05 01:11:31 debug [fe]: (o) eth0 18.18.21.11->18.18.21.7(41) ttl(64) UDP 1234->1 42 bytes  1970-01-05 01:11:31 debug [fe]: QoS: pkt forwarded | | |
| **Comment** |  | | |

##### 1.5.6.15 Case15

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_51 | **Priority** | High |
| **Description** | Test classification, base on service, action deny/log WiFi1 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | **Portal:**  ssid DeathKnight  interface wifi1 mode access  interface wifi1 ssid DeathKnight  qos classifier-profile service service ssid DeathKnight qos-classifier service  service udp1 protocol udp port 1  qos classifier-map service udp1 qos 0  qos classifier-map service udp1 action log  qos classifier-map service udp1 action deny | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates traffic, then send to STA1. | | |
| **Expected output** | - look over kdebug message  1970-01-05 01:13:24 debug [fe]: (i) wifi1.1 18.18.21.11->18.18.21.7(41) ttl(64) UDP 1603->1 28 bytes  1970-01-05 01:13:24 debug [fe]: no MAC sess found  1970-01-05 01:13:24 debug [fe]: dst route lookup 001d:0f0a:0c28: GET\_ROUTE dev(eth0) nhop(0000:0000:0000) flag (0xc11)  1970-01-05 01:13:24 debug [fe]: owner flag set  1970-01-05 01:13:24 debug [fe]: dst route lookup 000f:b59c:8954: GET\_ROUTE dev(wifi1.1) nhop(0019:7700:0110) flag (0xc03)  1970-01-05 01:13:24 debug [fe]: owner flag set  1970-01-05 01:13:24 debug [fe]: mac sess id [2] created, ageout time 300 sec  1970-01-05 01:13:24 debug [fe]: QoS: first pkt (wifi1.1->eth0) upid=0 src=0 dst=0  1970-01-05 01:13:24 info [flow]: service:udp1 18.18.21.11 -> 18.18.21.7 proto=17 port=1 qos=0  1970-01-05 01:13:24 debug [fe]: pkt(wifi1.1) dropped by classifier qos=0  1970-01-05 01:13:24 debug [fe]: (!) wifi1.1 18.18.21.11->18.18.21.7(41) ttl(64) UDP 1603->1 28 bytes | | |
| **Comment** |  | | |

#### 1.5.7 priority on four methods

##### 1.5.6.1 Case1

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_52 | **Priority** | High |
| **Description** | Test classification, priority service/oui/interface/ssid/8021p on Ethernet interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | Ssid DeathKnight  Interface wifi0 ssid DeathKnight  Qos classifier-profile mixed service  Qos classifier-profile mixed mac  Qos classifier-profile mixed interface/ssid  Qos classifier-profile mixed 8021p  Interface eth0 qos-classifier mixed  Service mixed protocol upd port 1  Qos classifier-map service mixed qos 3 action log  Qos classifier-map service mixed qos 3 action permit  Qos classifier-map oui 0016d4 qos 2 action log  Qos classifier-map oui 0016d4 qos 2 action permit  Qos classifier-map interface eth0 1  Qos classifier-map 8021p 0 0 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta1’s mac”  - Set “\_kdebug fe basic”  - STA1generates traffic(udp port=1),then send to STA2.  0016d4 is sta1’s oui | | |
| **Expected output** | - look over kdebug message  **Check1:**  1970-01-05 01:28:21 debug [fe]: (i) eth0 18.18.21.45->18.18.21.11(41) ttl(64) UDP 2780->1 46 bytes  1970-01-05 01:28:21 debug [fe]: MAC session (id [6]) found  1970-01-05 01:28:21 info [flow]: service:mixed 18.18.21.45 -> 18.18.21.11 proto=17 port=1 qos=3  1970-01-05 01:28:21 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=3  1970-01-05 01:28:21 debug [fe]: wifi0.1 Tx 0016:d432:9159 -> 000f:b59c:8954 type 0x0800 60 bytes  1970-01-05 01:28:21 debug [fe]: (o) wifi0.1 18.18.21.45->18.18.21.11(41) ttl(64) UDP 2780->1 60 bytes  1970-01-05 01:28:21 debug [fe]: QoS: pkt queued  1970-01-05 01:28:21 debug [fe]: Tx:wifi0.1> 0016:d432:9159->000f:b59c:8954 profile idx=0 pkt\_len=60 q\_len=0 QoS buf=0  CLI executed:  No interface eth0 qos-classifier  No qos classifier-profile mixed service  Interface eth0 qos-classifier mixed  Send above traffic again  **Check 2:**  1970-01-05 01:32:14 debug [fe]: (i) eth0 18.18.21.45->18.18.21.11(41) ttl(64) UDP 1541->1 46 bytes  1970-01-05 01:32:14 debug [fe]: MAC session (id [6]) found  1970-01-05 01:32:14 debug [qos]: 0016:d432:9159 -> 000f:b59c:8954 qos=2 action=5  1970-01-05 01:32:14 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=2  1970-01-05 01:32:14 debug [fe]: wifi0.1 Tx 0016:d432:9159 -> 000f:b59c:8954 type 0x0800 60 bytes  1970-01-05 01:32:14 debug [fe]: (o) wifi0.1 18.18.21.45->18.18.21.11(41) ttl(64) UDP 1541->1 60 bytes  1970-01-05 01:32:14 debug [fe]: QoS: pkt queued  1970-01-05 01:32:14 debug [fe]: Tx:wifi0.1> 0016:d432:9159->000f:b59c:8954 profile idx=0 pkt\_len=60 q\_len=0 QoS buf=0  CLI executed:  No interface eth0 qos-classifier  No qos classifier-profile mixed mac  Interface eth0 qos-classifier mixed  Send above traffic again  **Check3:**  1970-01-05 01:34:01 debug [fe]: (i) eth0 18.18.21.45->18.18.21.11(41) ttl(64) UDP 1890->1 46 bytes  1970-01-05 01:34:01 debug [fe]: MAC session (id [6]) found  1970-01-05 01:34:01 debug [qos]: Classifier(interface) qos=1  1970-01-05 01:34:01 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=1  1970-01-05 01:34:01 debug [fe]: wifi0.1 Tx 0016:d432:9159 -> 000f:b59c:8954 type 0x0800 60 bytes  1970-01-05 01:34:01 debug [fe]: (o) wifi0.1 18.18.21.45->18.18.21.11(41) ttl(64) UDP 1890->1 60 bytes  1970-01-05 01:34:01 debug [fe]: QoS: pkt queued  1970-01-05 01:34:01 debug [fe]: Tx:wifi0.1> 0016:d432:9159->000f:b59c:8954 profile idx=0 pkt\_len=60 q\_len=0 QoS buf=0  CLI executed:  No interface eth0 qos-classifier  No qos classifier-profile mixed interface/ssid  Interface eth0 qos-classifier mixed  Send above traffic again  **Check 4:**  1970-01-05 01:35:45 debug [fe]: (i) eth0 18.18.21.45->18.18.21.11(41) ttl(64) UDP 2230->1 46 bytes  1970-01-05 01:35:45 debug [fe]: MAC session (id [6]) found  1970-01-05 01:35:45 debug [qos]: Classifier(eth0:802.1p) priority=0 qos=0  1970-01-05 01:35:45 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=0  1970-01-05 01:35:45 debug [fe]: wifi0.1 Tx 0016:d432:9159 -> 000f:b59c:8954 type 0x0800 60 bytes  1970-01-05 01:35:45 debug [fe]: (o) wifi0.1 18.18.21.45->18.18.21.11(41) ttl(64) UDP 2230->1 60 bytes  1970-01-05 01:35:45 debug [fe]: QoS: pkt queued  1970-01-05 01:35:45 debug [fe]: Tx:wifi0.1> 0016:d432:9159->000f:b59c:8954 profile idx=0 pkt\_len=60 q\_len=0 QoS buf=0 | | |
| **Comment** |  | | |

##### 1.5.6.2 Case2

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_53 | **Priority** | High |
| **Description** | Test classification, priority. priority service/oui/interface/ssid/80211e on wifi0 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | Ssid DeathKnight  Interface wifi0 ssid DeathKnight  Qos classifier-profile mixed service  Qos classifier-profile mixed mac  Qos classifier-profile mixed interface/ssid  Qos classifier-profile mixed 80211e  Ssid DeathKnight qos-classifier mixed  Service mixed protocol upd port 1  Qos classifier-map service mixed qos 3 action log  Qos classifier-map service mixed qos 3 action permit  Qos classifier-map oui 0016d4 qos 2 action log  Qos classifier-map oui 0016d4 qos 2 action permit  Qos classifier-map ssid DeathKnight 1  Qos classifier-map 80211e 0 0 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates traffic(udp port=1),then send to STA1.  000fb5 is sta2’s oui | | |
| **Expected output** | - look over kdebug message  **Check1:**  1970-01-05 01:40:06 debug [fe]: (i) wifi0.1 18.18.21.11->18.18.21.7(41) ttl(64) UDP 2835->1 28 bytes  1970-01-05 01:40:06 debug [fe]: MAC session (id [5]) found  1970-01-05 01:40:06 info [flow]: service:mixed 18.18.21.11 -> 18.18.21.7 proto=17 port=1 qos=3  1970-01-05 01:40:06 debug [fe]: QoS: ingress pkt fwd(wifi0.1) profile=0 qos=3  1970-01-05 01:40:06 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-05 01:40:06 debug [fe]: (o) eth0 18.18.21.11->18.18.21.7(41) ttl(64) UDP 2835->1 42 bytes  CLI executed:  No ssid DeathKnight qos-classifier  No qos classifier-profile mixed service  Ssid DeathKnight qos-classifier mixed  Send above traffic again  **Check 2:**  1970-01-05 01:44:04 debug [fe]: (i) wifi0.1 18.18.21.11->18.18.21.7(41) ttl(64) UDP 1612->1 28 bytes  1970-01-05 01:44:04 debug [fe]: MAC session (id [5]) found  1970-01-05 01:44:04 debug [qos]: 000f:b59c:8954 -> 001d:0f0a:0c28 qos=2 action=5  1970-01-05 01:44:04 debug [fe]: QoS: ingress pkt fwd(wifi0.1) profile=0 qos=2  1970-01-05 01:44:04 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-05 01:44:04 debug [fe]: (o) eth0 18.18.21.11->18.18.21.7(41) ttl(64) UDP 1612->1 42 bytes  1970-01-05 01:44:04 debug [fe]: QoS: pkt forwarded  CLI executed:  No ssid DeathKnight qos-classifier  No qos classifier-profile mixed mac  Ssid DeathKnight qos-classifier mixed  Send above traffic again  **Check3:**  1970-01-05 01:48:11 debug [fe]: (i) wifi0.1 18.18.21.11->18.18.21.7(41) ttl(64) UDP 1651->1 28 bytes  1970-01-05 01:48:11 debug [fe]: MAC session (id [5]) found  1970-01-05 01:48:11 debug [qos]: Classifier(interface) qos=1  1970-01-05 01:48:11 debug [fe]: QoS: ingress pkt fwd(wifi0.1) profile=0 qos=1  1970-01-05 01:48:11 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-05 01:48:11 debug [fe]: (o) eth0 18.18.21.11->18.18.21.7(41) ttl(64) UDP 1651->1 42 bytes  1970-01-05 01:48:11 debug [fe]: QoS: pkt forwarded  CLI executed:  No ssid DeathKnight qos-classifier  No qos classifier-profile mixed interface/ssid  Ssid DeathKnight qos-classifier mixed  Send above traffic again  **Check 4:**  1970-01-05 01:50:59 debug [fe]: (i) wifi0.1 18.18.21.11->18.18.21.7(41) ttl(64) UDP 2203->1 28 bytes  1970-01-05 01:50:59 debug [fe]: MAC session (id [5]) found  1970-01-05 01:50:59 debug [qos]: Classifier(wifi0.1:802.11e) user priority=0 qos=0  1970-01-05 01:50:59 debug [fe]: QoS: ingress pkt fwd(wifi0.1) profile=0 qos=0  1970-01-05 01:50:59 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-05 01:50:59 debug [fe]: (o) eth0 18.18.21.11->18.18.21.7(41) ttl(64) UDP 2203->1 42 bytes  1970-01-05 01:50:59 debug [fe]: QoS: pkt forwarded | | |
| **Comment** |  | | |

##### 1.5.6.3 Case3

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_54 | **Priority** | High |
| **Description** | Test classification, priority. priority service/oui/interface/ssid/differv on wifi1 interface | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | Ssid DeathKnight  Interface wifi1 mode access  Interface wifi1 ssid DeathKnight  Qos classifier-profile mixed service  Qos classifier-profile mixed mac  Qos classifier-profile mixed interface/ssid  Qos classifier-profile mixed diff  Ssid DeathKnight qos-classifier mixed  Service mixed protocol upd port 1  Qos classifier-map service mixed qos 3 action log  Qos classifier-map service mixed qos 3 action permit  Qos classifier-map oui 0016d4 qos 2 action log  Qos classifier-map oui 0016d4 qos 2 action permit  Qos classifier-map ssid DeathKnight 1  Qos classifier-map diff 0 0 | | |
| **Test procedure** | portal:  - Set “\_kdebug qos classifi”on CLI  - Set “\_ff id 1 src-mac sta2’s mac”  - Set “\_kdebug fe basic”  - STA2generates traffic(udp port=1),then send to STA1.  000fb5 is sta2’s oui | | |
| **Expected output** | - look over kdebug message  **Check1:**  1970-01-05 01:54:36 debug [fe]: (i) wifi1.1 18.18.21.11->18.18.21.7(41) ttl(64) UDP 2908->1 28 bytes  1970-01-05 01:54:36 debug [fe]: MAC session (id [11]) found  1970-01-05 01:54:36 info [flow]: service:mixed 18.18.21.11 -> 18.18.21.7 proto=17 port=1 qos=3  1970-01-05 01:54:36 debug [fe]: QoS: ingress pkt fwd(wifi1.1) profile=0 qos=3  1970-01-05 01:54:36 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-05 01:54:36 debug [fe]: (o) eth0 18.18.21.11->18.18.21.7(41) ttl(64) UDP 2908->1 42 bytes  1970-01-05 01:54:36 debug [fe]: QoS: pkt forwarded  CLI executed:  No ssid DeathKnight qos-classifier  No qos classifier-profile mixed service  Ssid DeathKnight qos-classifier mixed  Send above traffic again  **Check 2:**  1970-01-05 01:56:05 debug [fe]: (i) wifi1.1 18.18.21.11->18.18.21.7(41) ttl(64) UDP 1202->1 28 bytes  1970-01-05 01:56:05 debug [fe]: MAC session (id [2]) found  1970-01-05 01:56:05 debug [qos]: 000f:b59c:8954 -> 001d:0f0a:0c28 qos=2 action=5  1970-01-05 01:56:05 debug [fe]: QoS: ingress pkt fwd(wifi1.1) profile=0 qos=2  1970-01-05 01:56:05 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-05 01:56:05 debug [fe]: (o) eth0 18.18.21.11->18.18.21.7(41) ttl(64) UDP 1202->1 42 bytes  CLI executed:  No ssid DeathKnight qos-classifier  No qos classifier-profile mixed mac Ssid DeathKnight qos-classifier mixed  Send above traffic again  **Check3:**  1970-01-05 01:58:30 debug [fe]: (i) wifi1.1 18.18.21.11->18.18.21.7(41) ttl(64) UDP 1672->1 28 bytes  1970-01-05 01:58:30 debug [fe]: MAC session (id [8]) found  1970-01-05 01:58:30 debug [qos]: Classifier(interface) qos=1  1970-01-05 01:58:30 debug [fe]: QoS: ingress pkt fwd(wifi1.1) profile=0 qos=1  1970-01-05 01:58:30 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-05 01:58:30 debug [fe]: (o) eth0 18.18.21.11->18.18.21.7(41) ttl(64) UDP 1672->1 42 bytes  1970-01-05 01:58:30 debug [fe]: QoS: pkt forwarded  CLI executed:  No ssid DeathKnight qos-classifier  No qos classifier-profile mixed interface/ssid  Ssid DeathKnight qos-classifier mixed  Send above traffic again  **Check 4:**  1970-01-05 01:59:35 debug [fe]: (i) wifi1.1 18.18.21.11->18.18.21.7(41) ttl(64) UDP 1884->1 28 bytes  1970-01-05 01:59:35 debug [fe]: MAC session (id [8]) found  1970-01-05 01:59:35 debug [qos]: Classifier(wifi1.1:DSCP) DSCP=0 qos=0  1970-01-05 01:59:35 debug [fe]: QoS: ingress pkt fwd(wifi1.1) profile=0 qos=0  1970-01-05 01:59:35 debug [fe]: eth0 Tx 000f:b59c:8954 -> 001d:0f0a:0c28 type 0x0800 42 bytes  1970-01-05 01:59:35 debug [fe]: (o) eth0 18.18.21.11->18.18.21.7(41) ttl(64) UDP 1884->1 42 bytes  1970-01-05 01:59:35 debug [fe]: QoS: pkt forwarded | | |
| **Comment** |  | | |

#### 1.5.8 System testing feed back

##### 1.5.8.4 Case1

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | Ft\_classification\_55 | **Priority** | High |
| **Description** | Test memory leak for CLI”show qos counter user”---bug10838 | | |
| **Test topology** | Top1 | | |
| **Device Configuration** | Ssid DeathKnight  Interface wifi1 mode access  Interface wifi1 ssid DeathKnight  Qos classifier-profile mixed service  Qos classifier-profile mixed mac  Qos classifier-profile mixed interface/ssid  Qos classifier-profile mixed diff  Ssid DeathKnight qos-classifier mixed  Service mixed protocol upd port 1  Qos classifier-map service mixed qos 3 action log  Qos classifier-map service mixed qos 3 action permit  Qos classifier-map oui 0016d4 qos 2 action log  Qos classifier-map oui 0016d4 qos 2 action permit  Qos classifier-map ssid DeathKnight 1  Qos classifier-map diff 0 0 | | |
| **Test procedure** | Use a monitor script in system testing. Always execute the CLI “show qos counter user” every one minute. See the memory and FE module can not be killed.  - Set “show qos counter user” on monitor script  - STA2generates traffic(udp port=1),then send to STA1.  000fb5 is sta2’s oui | | |
| **Expected output** |  | | |
| **Comment** |  | | |

#### 1.5.9 Test classification base on interface/ssid-only

##### 1.5.9.1 Check interface/ssid-only exclusive

|  |  |  |  |
| --- | --- | --- | --- |
| **Case ID** | QoS\_classification\_Function\_interface\_ssid-only\_1 | | |
| **Priority** | High | **Automation Flag** | NA |
| **Topology to use** | Topo1 | | |
| **Description** | Check Interface/ssid-only exclusive | | |
| **Pre-condition** | *Empty configure* | | |
| **Test procedure** | 1. Execute CLI “*qos classifier-profile 11 interface/ssid-only*” to create a new classifier-profile and execute CLI “*show classifier-profile 11*” 2. Show running-config 3. Execute CLI “*qos classifier-profile 22 interface/ssid-only*” to create another classifier-profile | | |
| **Expect result** | 1. Will create profile successfully   *AH-0c0e00#qos classifier-profile 11 interface/ssid-only*  *AH-0c0e00#show qos cl*  *AH-0c0e00#show qos classifier-p*  *AH-0c0e00#show qos classifier-profile 11*  *OUI=Organizationally Unique Identifier; IF/SSID=Eth0 interface or SSID; Serv=Service;*  *DS=Differentiated Services Code Point; SSID=Service Set Identifier;*  *QoS classifier profile table*  *Total profiles = 1*  *No. Profile Name 802.1p 802.11e DS OUI IF/SSID Serv IF/SSID-Only*  *--------------------------------------------------------------------------------------*  *1 11 - - - - - - X*  *AH-0c0e00#*   1. Corressponding CLI has displayed on the running-config   *AH-0c0e00#show running-config | inc 11*  *qos classifier-profile 11 interface/ssid-only*  *AH-0c0e00#*   1. Will pop up error message:   *AH-0c0e00#qos classifier-profile 22 interface/ssid-only*  *The interface/ssid-only option cannot be combined with any other classification method in the same classification profile.*  *ERROR: Invalid parameter(s)* | | |
| **Comment** |  | | |

##### 1.5.9.2 Check interface/ssid-only function on ssid

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | QoS\_classification\_Function\_interface\_ssid-only\_2 | | |
| Priority | High | Automation Flag | NA |
| Topology to use | Topo1 | | |
| Description | Check Interface/ssid-only function on ssid  If testing time enough, need change the classifier-map base on interface/ssid to 0-7, check the mapping class correctly. | | |
| Pre-condition | *Qos marker-profile diff diffserv*  *Interface eth0 qos-marker diff*  *Qos classifier-profile 11 interface/ssid-only*  *Ssid ekahau*  *Interface wifi0 ssid ekahau*  *ssid ekahau qos-classifier 11*  *qos classifier-map ssid ekahau 4*  *turn on debug \_kdebug qos classifer(eng version valid)*  *\_ff id 1 protocol 1*  *\_kdebug fe basic* | | |
| Test procedure | 1. Station connected AP with ssid ekahau. Ping from station to PC which is on Ethernet line. Turn on debug to see and capture the packet by PC 2. Clear IP/MAC session, and ping from PC to station. Capture the packet by wireless | | |
| Expect result | 1. Can see the ping packet has classified by aerohive class 4   Debug:  *2010-02-03 08:03:48 debug [fe]: (i) wifi0.2 10.155.30.1->10.155.30.166(759) ttl(128) icmp-echo-req 60 bytes*  *2010-02-03 08:03:48 debug [fe]: MAC session (id [5]) found*  *2010-02-03 08:03:48 debug [fe]: QoS: ingress pkt fwd(wifi0.2) profile=0 qos=4*  *2010-02-03 08:03:48 debug [fe]: eth0 Tx 0021:0028:1ed6 -> 001d:099c:0414 type 0x0800 74 bytes*  *2010-02-03 08:03:48 debug [fe]: (o) eth0 10.155.30.1->10.155.30.166(759) ttl(128) icmp-echo-req 74 bytes*  *2010-02-03 08:03:48 debug [fe]: QoS: pkt forwarded*  *2010-02-03 08:03:48 debug [fe]: (i) eth0 10.155.30.166->10.155.30.1(28420) ttl(128) icmp-echo-reply 60 bytes*  *2010-02-03 08:03:48 debug [fe]: MAC session (id [5]) found*  *2010-02-03 08:03:48 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=4*  *2010-02-03 08:03:48 debug [fe]: wifi0.2 Tx 001d:099c:0414 -> 0021:0028:1ed6 type 0x0800 74 bytes*  *2010-02-03 08:03:48 debug [fe]: (o) wifi0.2 10.155.30.166->10.155.30.1(28420) ttl(128) icmp-echo-reply 74 bytes*  *2010-02-03 08:03:48 debug [fe]: QoS: pkt queued*  *2010-02-03 08:03:48 debug [fe]: Tx:wifi0.2:0> 001d:099c:0414->0021:0028:1ed6 profile idx=0 pkt\_len=74 q\_len=0 QoS buf=0*  Packet captured to comfirm the the packet has classified by aerohive class 4 and mark aerohive class 4 to DSCP     1. Can see the ping packet has classified by aerohive class 4   Turn on debug:  *2010-02-03 08:12:00 debug [fe]: (i) eth0 10.155.30.166->10.155.30.1(30804) ttl(128) icmp-echo-req 60 bytes*  *2010-02-03 08:12:00 debug [fe]: MAC session (id [47]) found*  *2010-02-03 08:12:00 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=4*  *2010-02-03 08:12:00 debug [fe]: wifi0.2 Tx 001d:099c:0414 -> 0021:0028:1ed6 type 0x0800 74 bytes*  *2010-02-03 08:12:00 debug [fe]: (o) wifi0.2 10.155.30.166->10.155.30.1(30804) ttl(128) icmp-echo-req 74 bytes*  *2010-02-03 08:12:00 debug [fe]: QoS: pkt queued*  *2010-02-03 08:12:00 debug [fe]: Tx:wifi0.2:0> 001d:099c:0414->0021:0028:1ed6 profile idx=0 pkt\_len=74 q\_len=0 QoS buf=0*  *2010-02-03 08:12:01 debug [fe]: fe station [0018:8e20:1d45] joined (roamed to) self*  *2010-02-03 08:12:01 debug [fe]: (i) wifi0.2 10.155.30.1->10.155.30.166(990) ttl(128) icmp-echo-reply 60 bytes*  *2010-02-03 08:12:01 debug [fe]: MAC session (id [47]) found*  *2010-02-03 08:12:01 debug [fe]: QoS: ingress pkt fwd(wifi0.2) profile=0 qos=4*  *2010-02-03 08:12:01 debug [fe]: eth0 Tx 0021:0028:1ed6 -> 001d:099c:0414 type 0x0800 74 bytes*  *2010-02-03 08:12:01 debug [fe]: (o) eth0 10.155.30.1->10.155.30.166(990) ttl(128) icmp-echo-reply 74 bytes*   * + 1. *8:12:01 debug [fe]: QoS: pkt forwarded*   Packet captured to comfirm the the packet has classified by aerohive class 4 and mark aerohive class 4 to DSCP | | |
|  |  | | |

##### 1.5.9.3 Check interface/ssid-only function on Ethernet interface

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | QoS\_classification\_Function\_interface\_ssid-only\_3 | | |
| Priority | High | Automation Flag | NA |
| Topology to use | Topo1 | | |
| Description | Check Interface/ssid-only function on Ethernet interface  If testing time enough, need change the classifier-map base on interface/ssid to 0-7, check the mapping class correctly. | | |
| Pre-condition | *Qos marker-profile diff diffserv*  *Ssid ekahau qos-marker diff*  *Qos classifier-profile 11 interface/ssid-only*  *Ssid ekahau*  *Interface wifi0 ssid ekahau*  *Interface eth0 qos-classifier 11*  *Interface eth0 qos-marker diff*  *qos classifier-map interface eth0 3*  *turn on debug \_kdebug qos classifer(eng version valid)*  *\_ff id 1 protocol 1*  *\_kdebug fe basic* | | |
| Test procedure | 1. Station connected AP with ssid ekahau. Ping from station to PC which is on Ethernet line. Turn on debug to see and capture the packet by PC 2. Clear IP/MAC session, and ping from PC to station. Capture the packet by wireless | | |
| Expect result | 1. Can see the ping packet has classified by aerohive class 3   Debug:  *2010-02-03 08:22:44 debug [fe]: (i) eth0 10.155.30.166->10.155.30.1(33678) ttl(128) icmp-echo-req 60 bytes*  *2010-02-03 08:22:44 debug [fe]: MAC session (id [47]) found*  *2010-02-03 08:22:44 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=3*  *2010-02-03 08:22:44 debug [fe]: wifi0.2 Tx 001d:099c:0414 -> 0021:0028:1ed6 type 0x0800 74 bytes*  *2010-02-03 08:22:44 debug [fe]: (o) wifi0.2 10.155.30.166->10.155.30.1(33678) ttl(128) icmp-echo-req 74 bytes*  *2010-02-03 08:22:44 debug [fe]: QoS: pkt queued*  *2010-02-03 08:22:44 debug [fe]: Tx:wifi0.2:0> 001d:099c:0414->0021:0028:1ed6 profile idx=0 pkt\_len=74 q\_len=0 QoS buf=0*  *2010-02-03 08:22:44 debug [fe]: (i) wifi0.2 10.155.30.1->10.155.30.166(1263) ttl(128) icmp-echo-reply 60 bytes*  *2010-02-03 08:22:44 debug [fe]: MAC session (id [47]) found*  *2010-02-03 08:22:44 debug [fe]: QoS: ingress pkt fwd(wifi0.2) profile=0 qos=3*  *2010-02-03 08:22:44 debug [fe]: eth0 Tx 0021:0028:1ed6 -> 001d:099c:0414 type 0x0800 74 bytes*  *2010-02-03 08:22:44 debug [fe]: (o) eth0 10.155.30.1->10.155.30.166(1263) ttl(128) icmp-echo-reply 74 bytes*  *2010-02-03 08:22:44 debug [fe]: QoS: pkt forwarded*  *2010-02-03 08:22:45 debug [fe]: (i) eth0 10.155.30.166->10.155.30.1(33686) ttl(128) icmp-echo-req 60 bytes*  Packet captured to comfirm the the packet has classified by aerohive class 3 and mark aerohive class 3 to DSCP     1. Can see the ping packet has classified by aerohive class 3   Debug:  *2010-02-03 08:24:53 debug [fe]: (i) wifi0.2 10.155.30.1->10.155.30.166(1313) ttl(128) icmp-echo-req 60 bytes*  *2010-02-03 08:24:53 debug [fe]: MAC session (id [50]) found*  *2010-02-03 08:24:53 debug [fe]: QoS: ingress pkt fwd(wifi0.2) profile=0 qos=3*  *2010-02-03 08:24:53 debug [fe]: eth0 Tx 0021:0028:1ed6 -> 001d:099c:0414 type 0x0800 74 bytes*  *2010-02-03 08:24:53 debug [fe]: (o) eth0 10.155.30.1->10.155.30.166(1313) ttl(128) icmp-echo-req 74 bytes*  *2010-02-03 08:24:53 debug [fe]: QoS: pkt forwarded*  *2010-02-03 08:24:53 debug [fe]: (i) eth0 10.155.30.166->10.155.30.1(34098) ttl(128) icmp-echo-reply 60 bytes*  *2010-02-03 08:24:53 debug [fe]: MAC session (id [50]) found*  *2010-02-03 08:24:53 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=3*  *2010-02-03 08:24:53 debug [fe]: wifi0.2 Tx 001d:099c:0414 -> 0021:0028:1ed6 type 0x0800 74 bytes*  *2010-02-03 08:24:53 debug [fe]: (o) wifi0.2 10.155.30.166->10.155.30.1(34098) ttl(128) icmp-echo-reply 74 bytes*  *2010-02-03 08:24:53 debug [fe]: QoS: pkt queued*  *2010-02-03 08:24:53 debug [fe]: Tx:wifi0.2:0> 001d:099c:0414->0021:0028:1ed6 profile idx=0 pkt\_len=74 q\_len=0 QoS buf=0*  Packet captured to comfirm the the packet has classified by aerohive class 3 and mark aerohive class 3 to DSCP | | |
|  |  | | |

##### 1.5.9.4 Check interface/ssid-only function compatible with default qos classification

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | QoS\_classification\_Function\_interface\_ssid-only\_4 | | |
| Priority | High | Automation Flag | NA |
| Topology to use | Topo1 | | |
| Description | Check Interface/ssid-only function on ssid  If testing time enough, need change the classifier-map base on interface/ssid to 0-7, check the mapping class correctly. | | |
| Pre-condition | *Qos marker-profile diff diffserv*  *Interface eth0 qos-marker diff*  *Qos classifier-profile 11 interface/ssid-only*  *Ssid ekahau*  *Interface wifi0 ssid ekahau*  *ssid ekahau qos-classifier 11*  *qos classifier-map ssid ekahau 4*  *ssid performance-qos*  *interface wifi1 ssid performance-qos*  *turn on debug \_kdebug qos classifer(eng version valid)*  *\_ff id 1 protocol 1*  *\_kdebug fe basic* | | |
| Test procedure | 1. Station1 connected AP with ssid ekahau.station 2 connected AP with ssid performance-qos. Ping from station1 to PC which is on Ethernet line. The class should be 4. Ping from station 2 to PC which is on Ethernet line. The class should be 2   Turn on debug to see   1. Clear IP/MAC session, and ping from PC to station1. The class should be 4. Ping from PC to station2, the class should be 2 | | |
| Expect result | 1. Can see the ping packet has classified by aerohive class 4 on station 1. Can see the ping packet has classified by aerohive class 2 on station 2   Debug:  Station 1:  *AH-0c0e00#2010-02-03 08:42:47 debug [fe]: (i) wifi0.2 10.155.30.1->10.155.30.166(1771) ttl(128) icmp-echo-req 60 bytes*  *2010-02-03 08:42:47 debug [fe]: no MAC sess found*  *2010-02-03 08:42:47 debug [fe]: dst route lookup 001d:099c:0414: GET\_ROUTE dev(eth0) nhop(0019:770c:0e00) mp (0019:770c:0e00) flag (0xc11) upid (0)*  *2010-02-03 08:42:47 debug [fe]: dst route lookup 0021:0028:1ed6: GET\_ROUTE dev(wifi0.2) nhop(0019:770c:0e00) mp (0019:770c:0e00) flag (0x1c03) upid (0)*  *2010-02-03 08:42:47 debug [fe]: mac sess id [3] created, ageout time 300 sec*  *2010-02-03 08:42:47 debug [fe]: QoS: first pkt L2 session (wifi0.2->eth0) upid=0 src=0(1) dst=0*  *2010-02-03 08:42:47 debug [fe]: QoS: ingress pkt fwd(wifi0.2) profile=0 qos=4*  *2010-02-03 08:42:47 debug [fe]: eth0 Tx 0021:0028:1ed6 -> 001d:099c:0414 type 0x0800 74 bytes*  *2010-02-03 08:42:47 debug [fe]: (o) eth0 10.155.30.1->10.155.30.166(1771) ttl(128) icmp-echo-req 74 bytes*  *2010-02-03 08:42:47 debug [fe]: QoS: pkt forwarded*  *2010-02-03 08:42:47 debug [fe]: (i) eth0 10.155.30.166->10.155.30.1(43730) ttl(128) icmp-echo-reply 60 bytes*  *2010-02-03 08:42:47 debug [fe]: MAC session (id [3]) found*  *2010-02-03 08:42:47 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=4*  *2010-02-03 08:42:47 debug [fe]: wifi0.2 Tx 001d:099c:0414 -> 0021:0028:1ed6 type 0x0800 74 bytes*  *2010-02-03 08:42:47 debug [fe]: (o) wifi0.2 10.155.30.166->10.155.30.1(43730) ttl(128) icmp-echo-reply 74 bytes*  *2010-02-03 08:42:47 debug [fe]: QoS: pkt queued*  Station 2:  *2010-02-03 08:52:59 debug [fe]: (i) wifi1.1 10.155.30.12->10.155.30.166(421) ttl(128) icmp-echo-req 60 bytes*  *2010-02-03 08:52:59 debug [fe]: MAC session (id [45]) found*  *2010-02-03 08:52:59 debug [fe]: QoS: ingress pkt fwd(wifi1.1) profile=1 qos=2*  *2010-02-03 08:52:59 debug [fe]: eth0 Tx 001c:bf46:2c08 -> 001d:099c:0414 type 0x0800 74 bytes*  *2010-02-03 08:52:59 debug [fe]: (o) eth0 10.155.30.12->10.155.30.166(421) ttl(128) icmp-echo-req 74 bytes*  *2010-02-03 08:52:59 debug [fe]: QoS: pkt forwarded*  *2010-02-03 08:52:59 debug [fe]: (i) eth0 10.155.30.166->10.155.30.12(48649) ttl(128) icmp-echo-reply 60 bytes*  *2010-02-03 08:52:59 debug [fe]: MAC session (id [45]) found*  *2010-02-03 08:52:59 debug [fe]: QoS: ingress pkt fwd(eth0) profile=1 qos=2*  *2010-02-03 08:52:59 debug [fe]: wifi1.1 Tx 001d:099c:0414 -> 001c:bf46:2c08 type 0x0800 74 bytes*  *2010-02-03 08:52:59 debug [fe]: (o) wifi1.1 10.155.30.166->10.155.30.12(48649) ttl(128) icmp-echo-reply 74 bytes*  *2010-02-03 08:52:59 debug [fe]: QoS: pkt queued*  *2010-02-03 08:52:59 debug [fe]: Tx:wifi1.1:1> 001d:099c:0414->001c:bf46:2c08 profile idx=1 pkt\_len=74 q\_len=0 QoS buf=0*   1. Can see the ping packet has classified by aerohive class 4 on station 1. Can see the ping packet has classified by aerohive class 2 on station 2   Debug:  Station 1:  *2010-02-03 08:55:40 debug [fe]: (i) eth0 10.155.30.166->10.155.30.1(49326) ttl(128) icmp-echo-req 60 bytes*  *2010-02-03 08:55:40 debug [fe]: MAC session (id [14]) found*  *2010-02-03 08:55:40 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=4*  *2010-02-03 08:55:40 debug [fe]: wifi0.2 Tx 001d:099c:0414 -> 0021:0028:1ed6 type 0x0800 74 bytes*  *2010-02-03 08:55:40 debug [fe]: (o) wifi0.2 10.155.30.166->10.155.30.1(49326) ttl(128) icmp-echo-req 74 bytes*  *2010-02-03 08:55:40 debug [fe]: QoS: pkt queued*  *2010-02-03 08:55:40 debug [fe]: Tx:wifi0.2:0> 001d:099c:0414->0021:0028:1ed6 profile idx=0 pkt\_len=74 q\_len=0 QoS buf=0*  *2010-02-03 08:55:40 debug [fe]: (i) wifi0.2 10.155.30.1->10.155.30.166(2100) ttl(128) icmp-echo-reply 60 bytes*  *2010-02-03 08:55:40 debug [fe]: MAC session (id [14]) found*  *2010-02-03 08:55:40 debug [fe]: QoS: ingress pkt fwd(wifi0.2) profile=0 qos=4*  *2010-02-03 08:55:40 debug [fe]: eth0 Tx 0021:0028:1ed6 -> 001d:099c:0414 type 0x0800 74 bytes*  *2010-02-03 08:55:40 debug [fe]: (o) eth0 10.155.30.1->10.155.30.166(2100) ttl(128) icmp-echo-reply 74 bytes*  *2010-02-03 08:55:40 debug [fe]: QoS: pkt forwarded*  Station 2:  *2010-02-03 08:57:09 debug [fe]: (i) eth0 10.155.30.166->10.155.30.12(49690) ttl(128) icmp-echo-req 60 bytes*  *2010-02-03 08:57:09 debug [fe]: MAC session (id [25]) found*  *2010-02-03 08:57:09 debug [fe]: QoS: ingress pkt fwd(eth0) profile=1 qos=2*  *2010-02-03 08:57:09 debug [fe]: wifi1.1 Tx 001d:099c:0414 -> 001c:bf46:2c08 type 0x0800 74 bytes*  *2010-02-03 08:57:09 debug [fe]: (o) wifi1.1 10.155.30.166->10.155.30.12(49690) ttl(128) icmp-echo-req 74 bytes*  *2010-02-03 08:57:09 debug [fe]: QoS: pkt queued*  *2010-02-03 08:57:09 debug [fe]: Tx:wifi1.1:1> 001d:099c:0414->001c:bf46:2c08 profile idx=1 pkt\_len=74 q\_len=0 QoS buf=0*  *2010-02-03 08:57:09 debug [fe]: (i) wifi1.1 10.155.30.12->10.155.30.166(2953) ttl(128) icmp-echo-reply 60 bytes*  *2010-02-03 08:57:09 debug [fe]: MAC session (id [25]) found*  *2010-02-03 08:57:09 debug [fe]: QoS: ingress pkt fwd(wifi1.1) profile=1 qos=2*  *2010-02-03 08:57:09 debug [fe]: eth0 Tx 001c:bf46:2c08 -> 001d:099c:0414 type 0x0800 74 bytes*  *2010-02-03 08:57:09 debug [fe]: (o) eth0 10.155.30.12->10.155.30.166(2953) ttl(128) icmp-echo-reply 74 bytes*  *2010-02-03 08:57:09 debug [fe]: QoS: pkt forwarded* | | |
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##### 1.5.9.5 Check abnormal action which use interface/ssid-only for two interface

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| Case ID | QoS\_classification\_Function\_interface\_ssid-only\_5 | | |
| Priority | Low | Automation Flag | NA |
| Topology to use | Topo1 | | |
| Description | Check abnormal action which use interface/ssid-only for two interface | | |
| Pre-condition | *Qos marker-profile diff diffserv*  *Interface eth0 qos-marker diff*  *Qos classifier-profile 11 interface/ssid-only*  *Ssid ekahau*  *Interface wifi0 ssid ekahau*  *ssid ekahau qos-classifier 11*  *interface eth0 qos-classifier 11*  *ssid performance-qos security protocol-suite open*  *interface wifi1 ssid performance-qos*  *turn on debug \_kdebug qos classifer(eng version valid)*  *\_ff id 1 protocol 1*  *\_kdebug fe basic* | | |
| Test procedure | 1. Station1 connected AP with ssid ekahau. Ping from station1 to PC which is on Ethernet line. The class should be 2   Turn on debug to see   1. Clear IP/MAC session, and ping from PC to station1. The class should be 2. 2. Execute CLI “*qos classifier-map ssid ekahau 4*”. Ping from station1 to PC 3. Ping from PC to station | | |
| Expect result | 1. Can see the ping packet has classified by aerohive class 2 on station 1.   Debug:  *2010-02-03 09:17:57 debug [fe]: (i) wifi0.2 10.155.30.1->10.155.30.166(2659) ttl(128) icmp-echo-req 60 bytes*  *2010-02-03 09:17:57 debug [fe]: MAC session (id [14]) found*  *2010-02-03 09:17:57 debug [fe]: QoS: ingress pkt fwd(wifi0.2) profile=0 qos=2*  *2010-02-03 09:17:57 debug [fe]: eth0 Tx 0021:0028:1ed6 -> 001d:099c:0414 type 0x0800 74 bytes*  *2010-02-03 09:17:57 debug [fe]: (o) eth0 10.155.30.1->10.155.30.166(2659) ttl(128) icmp-echo-req 74 bytes*  *2010-02-03 09:17:57 debug [fe]: QoS: pkt forwarded*  *2010-02-03 09:17:57 debug [fe]: (i) eth0 10.155.30.166->10.155.30.1(57691) ttl(128) icmp-echo-reply 60 bytes*  *2010-02-03 09:17:57 debug [fe]: MAC session (id [14]) found*  *2010-02-03 09:17:57 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=2*  *2010-02-03 09:17:57 debug [fe]: wifi0.2 Tx 001d:099c:0414 -> 0021:0028:1ed6 type 0x0800 74 bytes*  *2010-02-03 09:17:57 debug [fe]: (o) wifi0.2 10.155.30.166->10.155.30.1(57691) ttl(128) icmp-echo-reply 74 bytes*  *2010-02-03 09:17:57 debug [fe]: QoS: pkt queued*  *2010-02-03 09:17:57 debug [fe]: Tx:wifi0.2:0> 001d:099c:0414->0021:0028:1ed6 profile idx=0 pkt\_len=74 q\_len=0 QoS buf=0*   1. Can see the ping packet has classified by aerohive class 2 on station 1.   Debug  *2010-02-03 09:19:07 debug [fe]: (i) eth0 10.155.30.166->10.155.30.1(58065) ttl(128) icmp-echo-req 60 bytes*  *2010-02-03 09:19:07 debug [fe]: MAC session (id [52]) found*  *2010-02-03 09:19:07 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=2*  *2010-02-03 09:19:07 debug [fe]: wifi0.2 Tx 001d:099c:0414 -> 0021:0028:1ed6 type 0x0800 74 bytes*  *2010-02-03 09:19:07 debug [fe]: (o) wifi0.2 10.155.30.166->10.155.30.1(58065) ttl(128) icmp-echo-req 74 bytes*  *2010-02-03 09:19:07 debug [fe]: QoS: pkt queued*  *2010-02-03 09:19:07 debug [fe]: Tx:wifi0.2:0> 001d:099c:0414->0021:0028:1ed6 profile idx=0 pkt\_len=74 q\_len=0 QoS buf=0*  *2010-02-03 09:19:07 debug [fe]: (i) wifi0.2 10.155.30.1->10.155.30.166(2686) ttl(128) icmp-echo-reply 60 bytes*  *2010-02-03 09:19:07 debug [fe]: MAC session (id [52]) found*  *2010-02-03 09:19:07 debug [fe]: QoS: ingress pkt fwd(wifi0.2) profile=0 qos=2*  *2010-02-03 09:19:07 debug [fe]: eth0 Tx 0021:0028:1ed6 -> 001d:099c:0414 type 0x0800 74 bytes*  *2010-02-03 09:19:07 debug [fe]: (o) eth0 10.155.30.1->10.155.30.166(2686) ttl(128) icmp-echo-reply 74 bytes*  *2010-02-03 09:19:07 debug [fe]: QoS: pkt forwarded*  *2010-02-03 09:19:10 debug [fe]: get station ip 0018:8e20:1d45*   1. AP can not crash   From the testing, see debug:  *AH-0c0e00#2010-02-03 09:20:25 debug [fe]: (i) wifi0.2 10.155.30.1->10.155.30.166(2725) ttl(128) icmp-echo-req 60 bytes*  *2010-02-03 09:20:25 debug [fe]: MAC session (id [52]) found*  *2010-02-03 09:20:25 debug [fe]: QoS: ingress pkt fwd(wifi0.2) profile=0 qos=4*  *2010-02-03 09:20:25 debug [fe]: eth0 Tx 0021:0028:1ed6 -> 001d:099c:0414 type 0x0800 74 bytes*  *2010-02-03 09:20:25 debug [fe]: (o) eth0 10.155.30.1->10.155.30.166(2725) ttl(128) icmp-echo-req 74 bytes*  *2010-02-03 09:20:25 debug [fe]: QoS: pkt forwarded*  *2010-02-03 09:20:25 debug [fe]: (i) eth0 10.155.30.166->10.155.30.1(58376) ttl(128) icmp-echo-reply 60 bytes*  *2010-02-03 09:20:25 debug [fe]: MAC session (id [52]) found*  *2010-02-03 09:20:25 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=2*  *2010-02-03 09:20:25 debug [fe]: wifi0.2 Tx 001d:099c:0414 -> 0021:0028:1ed6 type 0x0800 74 bytes*  *2010-02-03 09:20:25 debug [fe]: (o) wifi0.2 10.155.30.166->10.155.30.1(58376) ttl(128) icmp-echo-reply 74 bytes*  *2010-02-03 09:20:25 debug [fe]: QoS: pkt queued*  *2010-02-03 09:20:25 debug [fe]: Tx:wifi0.2:0> 001d:099c:0414->0021:0028:1ed6 profile idx=0 pkt\_len=74 q\_len=0 QoS buf=0*   1. AP can not crash   From the testing, see debug:  *2010-02-03 09:20:45 debug [fe]: (i) eth0 10.155.30.166->10.155.30.1(58494) ttl(128) icmp-echo-req 60 bytes*  *2010-02-03 09:20:45 debug [fe]: MAC session (id [52]) found*  *2010-02-03 09:20:45 debug [fe]: QoS: ingress pkt fwd(eth0) profile=0 qos=2*  *2010-02-03 09:20:45 debug [fe]: wifi0.2 Tx 001d:099c:0414 -> 0021:0028:1ed6 type 0x0800 74 bytes*  *2010-02-03 09:20:45 debug [fe]: (o) wifi0.2 10.155.30.166->10.155.30.1(58494) ttl(128) icmp-echo-req 74 bytes*  *2010-02-03 09:20:45 debug [fe]: QoS: pkt queued*  *2010-02-03 09:20:45 debug [fe]: Tx:wifi0.2:0> 001d:099c:0414->0021:0028:1ed6 profile idx=0 pkt\_len=74 q\_len=0 QoS buf=0*  *2010-02-03 09:20:45 debug [fe]: (i) wifi0.2 10.155.30.1->10.155.30.166(2754) ttl(128) icmp-echo-reply 60 bytes*  *2010-02-03 09:20:45 debug [fe]: MAC session (id [52]) found*  *2010-02-03 09:20:45 debug [fe]: QoS: ingress pkt fwd(wifi0.2) profile=0 qos=4*  *2010-02-03 09:20:45 debug [fe]: eth0 Tx 0021:0028:1ed6 -> 001d:099c:0414 type 0x0800 74 bytes*  *2010-02-03 09:20:45 debug [fe]: (o) eth0 10.155.30.1->10.155.30.166(2754) ttl(128) icmp-echo-reply 74 bytes*  *2010-02-03 09:20:45 debug [fe]: QoS: pkt forwarded* | | |
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##### 1.5.9.6 Check interface/ssid-only compatible with management packet

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| Case ID | QoS\_classification\_Function\_interface\_ssid-only\_6 | | |
| Priority | High | Automation Flag | NA |
| Topology to use | Topo1 | | |
| Description | Check Interface/ssid-only compatible with management packet | | |
| Pre-condition | *Qos marker-profile diff diffserv*  *Interface eth0 qos-marker diff*  *Qos classifier-profile 11 interface/ssid-only*  *Ssid ekahau*  *Interface wifi0 ssid ekahau*  *ssid ekahau qos-classifier 11*  *qos classifier-map ssid ekahau 3*  *turn on debug \_kdebug qos classifer(eng version valid)*  *\_ff id 1 protocol 1*  *\_kdebug fe basic* | | |
| Test procedure | 1. Station connected AP with ssid ekahau. Ping from station to AP Turn on debug to see 2. Clear IP/MAC session, and ping from AP to station. Turn on debug to see | | |
| Expect result | 1. Can see the ping packet has classified by aerohive class 5   Debug:  *AH-0c0e00#2010-02-05 06:19:28 debug [fe]: (i) wifi0.3 10.155.30.35->10.155.30.51(64513) ttl(128) icmp-echo-req 60 bytes*  *2010-02-05 06:19:28 debug [fe]: no MAC sess found*  *2010-02-05 06:19:28 debug [fe]: dst route lookup 0019:770c:0e00: TO-SELF dev(eth0) nhop(0000:0000:0000) mp (0019:770c:0e00) flag (0x41) upid (4096)*  *2010-02-05 06:19:28 debug [fe]: dst route lookup 0026:b654:b335: GET\_ROUTE dev(wifi0.3) nhop(0019:770c:0e00) mp (0019:770c:0e00) flag (0x1c03) upid (0)*  *2010-02-05 06:19:28 debug [fe]: mac sess id [43] created, ageout time 300 sec*  *2010-02-05 06:19:28 debug [fe]: QoS: first pkt L2 session (wifi0.3->eth0) upid=4096 src=0(0) dst=4096*  *2010-02-05 06:19:28 debug [fe]: QoS: ingress pkt fwd(wifi0.3) profile=4096 qos=5*  *2010-02-05 06:19:28 debug [fe]: set pkt to self*  *2010-02-05 06:19:28 debug [fe]: swap incoming dev wifi0.3 -> mgt0*  *2010-02-05 06:19:28 debug [fe]: allow to self-pak, dst-ip 10.155.30.51,allow-arp 0 allow-dhcp 0 allow-forwardng 0*  *2010-02-05 06:19:28 debug [fe]: deliver pak to self on mgt0*  *2010-02-05 06:19:28 debug [fe]: (u) mgt0 10.155.30.35->10.155.30.51(64513) ttl(128) icmp-echo-req 60 bytes*  *2010-02-05 06:19:28 debug [fe]: mark pkt as from self*  *2010-02-05 06:19:28 debug [fe]: (d) mgt0 10.155.30.51->10.155.30.35(62342) ttl(64) icmp-echo-reply 74 bytes*  *2010-02-05 06:19:28 debug [fe]: inject pkt back into flow from mgt0 xmit*  *2010-02-05 06:19:28 debug [fe]: (i) mgt0 10.155.30.51->10.155.30.35(62342) ttl(64) icmp-echo-reply 60 bytes*  *2010-02-05 06:19:28 debug [fe]: MAC session (id [43]) found*  *2010-02-05 06:19:28 debug [fe]: QoS: host pkt fwd(mgt0) qos=5 profile=0*  *2010-02-05 06:19:28 debug [fe]: wifi0.3 Tx 0019:770c:0e00 -> 0026:b654:b335 type 0x0800 74 bytes*  *2010-02-05 06:19:28 debug [fe]: (o) wifi0.3 10.155.30.51->10.155.30.35(62342) ttl(64) icmp-echo-reply 74 bytes*  *2010-02-05 06:19:28 debug [fe]: QoS: pkt queued*  *2010-02-05 06:19:28 debug [fe]: Tx:wifi0.3:0> 0019:770c:0e00->0026:b654:b335 profile idx=0 pkt\_len=74 q\_len=0 QoS buf=0*   1. Can see the ping packet has classified by aerohive class 5   Debug:  *2010-02-05 06:21:00 debug [fe]: (d) mgt0 10.155.30.51->10.155.30.35(62346) ttl(64) icmp-echo-req 98 bytes*  *2010-02-05 06:21:00 debug [fe]: inject pkt back into flow from mgt0 xmit*  *2010-02-05 06:21:00 debug [fe]: (i) mgt0 10.155.30.51->10.155.30.35(62346) ttl(64) icmp-echo-req 84 bytes*  *2010-02-05 06:21:00 debug [fe]: no MAC sess found*  *2010-02-05 06:21:00 debug [fe]: dst route lookup 0026:b654:b335: GET\_ROUTE dev(wifi0.3) nhop(0019:770c:0e00) mp (0019:770c:0e00) flag (0x1c03) upid (0)*  *2010-02-05 06:21:00 debug [fe]: dst route lookup 0019:770c:0e00: TO-SELF dev(eth0) nhop(0000:0000:0000) mp (0019:770c:0e00) flag (0x41) upid (4096)*  *2010-02-05 06:21:00 debug [fe]: mac sess id [6] created, ageout time 300 sec*  *2010-02-05 06:21:00 debug [fe]: QoS: first pkt L2 session (mgt0->wifi0.3) upid=4096 src=4096(1) dst=0*  *2010-02-05 06:21:00 debug [fe]: QoS: host pkt fwd(mgt0) qos=5 profile=0*  *2010-02-05 06:21:00 debug [fe]: wifi0.3 Tx 0019:770c:0e00 -> 0026:b654:b335 type 0x0800 98 bytes*  *64 bytes from 10.155.30.35: icmp\_seq=1 ttl=128 time=4.63 ms*  *2010-02-05 06:21:00 debug [fe]: (o) wifi0.3 10.155.30.51->10.155.30.35(62346) ttl(64) icmp-echo-req 98 bytes*  *2010-02-05 06:21:00 debug [fe]: QoS: pkt queued*  *2010-02-05 06:21:00 debug [fe]: Tx:wifi0.3:0> 0019:770c:0e00->0026:b654:b335 profile idx=0 pkt\_len=98 q\_len=0 QoS buf=0*  *2010-02-05 06:21:00 debug [fe]: (i) wifi0.3 10.155.30.35->10.155.30.51(64517) ttl(128) icmp-echo-reply 84 bytes*  *2010-02-05 06:21:00 debug [fe]: MAC session (id [6]) found*  *2010-02-05 06:21:00 debug [fe]: QoS: ingress pkt fwd(wifi0.3) profile=4096 qos=5*  *2010-02-05 06:21:00 debug [fe]: set pkt to self*  *2010-02-05 06:21:00 debug [fe]: swap incoming dev wifi0.3 -> mgt0*  *2010-02-05 06:21:00 debug [fe]: allow to self-pak, dst-ip 10.155.30.51,allow-arp 0 allow-dhcp 0 allow-forwarding 0*  *2010-02-05 06:21:00 debug [fe]: deliver pak to self on mgt0*  *2010-02-05 06:21:00 debug [fe]: (u) mgt0 10.155.30.35->10.155.30.51(64517) ttl(128) icmp-echo-reply 84 bytes*  *2010-02-05 06:21:01 debug [fe]: mark pkt as from self* | | |
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