

# Common CLI Command Descriptions

---

## In This Chapter

This section provides information about common Command Line Interface (CLI) syntax and command usage.

Topics in this chapter include:

- [SAP syntax on page 848](#)

## Common Service Commands

### sap

**Syntax** [no] sap *sap-id*

**Description** This command specifies the physical port identifier portion of the SAP definition.

**Parameters** *sap-id* — Specifies the physical port identifier portion of the SAP definition.

The *sap-id* can be configured in one of the following formats:

Type	Syntax	Example
port-id	<i>slot/mda/port[.channel]</i>	1/1/5
null	<i>[port-id   bundle-id] bpgrp-id   lag-id   aps-id</i>	<i>port-id:</i> 1/1/3 <i>bundle-id:</i> bundle-ppp-1/1.1 <i>bpgrp-id:</i> bpgrp-ima-1 <i>lag-id:</i> lag-3 <i>aps-id:</i> aps-1
dot1q	<i>[port-id   bundle-id] bpgrp-id   lag-id   aps-id]:qtag1</i>	<i>port-id:qtag1:</i> 1/1/3:100 <i>bundle-id:</i> bundle-ppp-1/1.1 <i>bpgrp-id:</i> bpgrp-ima-1 <i>lag-id:qtag1:</i> lag-3:102 <i>aps-id:qtag1:</i> aps-1:27
qinq	<i>[port-id   bpgrp-id   lag-id]:qtag1.qtag2</i>	<i>port-id:qtag1.qtag2:</i> 1/1/3:100.10 <i>bpgrp-id:</i> bpgrp-ima-1 <i>lag-id:qtag1.qtag2:</i> lag-10:
atm	<i>[port-id   aps-id   bundle-id   bpgrp-id][:vpi/vci   vpi   vpi1.vpi2]</i> <i>[port-id   aps-id [:vpi/vci   vpi   vpi1.vpi2   cp.conn-prof-id]</i>	<i>port-id:</i> 1/1/1 <i>aps-id:</i> aps-1 <i>vpi/vci:</i> 16/26 <i>vpi:</i> 16 <i>vpi1.vpi2:</i> 16.200 <i>cp.conn-prof-id:</i> 1/2/1:cp.2
frame-relay	<i>[port-id   aps-id ]:dlci</i>	<i>port-id:</i> 1/1/1:100 <i>bundle-id:</i> bundle-fr-3/1.1:100 <i>aps-id:</i> aps-1 <i>dlci:</i> 16
cisco-hdlc	<i>slot/mda/port.channel</i>	<i>port-id:</i> 1/1/3.1

7750 SR:

<b>Values</b>	<i>sap-id</i>		
dot1q		port-id bundle-id bpgrp-id lag-id aps-id pw-id>:qtag1	
qinq		port-id bundle-id bpgrp-id lag-id pw-id>:qtag1.qtag2	
atm		<port-id aps-id>[:vpi/vci vpi vpi1.vpi2 cp.conn-prof-id]	
		cp	keyword
		conn-prof-id	1..8000
frame		port-id aps-id:dldci	
cisco-hdlc		slot/mda/port.channel	
cem		slot/mda/port.channel	
ima-grp		bundle-id>[:vpi/vci vpi vpi1.vpi2 cp.conn-prof-id]	
		cp	keyword
		conn-prof-id	1..8000
port-id		slot/mda/port[.channel]	
bundle-id		bundle-<type>-slot/mda.bundle-num	
		bundle	keyword
		type	ima, fr, ppp
		bundle-num	1..336
bpgrp-id		bpgrp-<type>-<bpgrp-num>	
		bpgrp	keyword
		type	ima, ppp
		bpgrp-num	1..2000
aps-id		aps-<group-id>[.channel]	
		aps	keyword
		group-id	1..64
ccag-id		ccag-id.path-id[cc-type]<cc-id	
		ccag	keyword
		id	1..8
		path-id	a, b
		cc-type	.sap-net, .net-sap
		cc-id	0..4094
eth-tunnel		eth-tunnel-id[:eth-tun-sap-id]	
		id	1..1024
		eth-tun-sap-id	0..4094
lag-id		lag-id	
		lag	keyword
		id	1..200
pw-id		pw-id	
		pw	keyword
		id	1..10239
qtag1		*, 0..4094	
qtag2		* 0..4094	
sap-id		pw-<id>:<qtag1>[:<qtag2>]	
		pw-id	keyword
		id	identifier for the pw-port [1..10239]
		qtag1	value of the first 802.1 qtag
		qtag2	value of the second 802.1 qtag

```

vpi      0..4095 (NNI)
         0..255 (UNI)
vci      1, 2, 5..65535
dlci     16..1022
tunnel-id tunnel-id.private|public:tag
         tunnel keyword
         id      1..16
         tag     0..4094
    
```

*bundle-id* — Specifies the multilink bundle to be associated with this IP interface. The **bundle** keyword must be entered at the beginning of the parameter.

The command syntax must be configured as follows:

```

bundle-id:          bundle-type-slot-id/mda-slot.bundle-num
bundle-id value range: 1 — 336
    
```

For example:

```

*A:ALA-12>config# port bundle-ppp-5/1.1
*A:ALA-12>config>port# multilink-bundle
    
```

*bggrp-id* — Specifies the bundle protection group ID to be associated with this IP interface. The **bggrp** keyword must be entered at the beginning of the parameter.

The command syntax must be configured as follows:

```

bggrp-id:          bggrp-type-bggrp-num
type:              ima
bggrp-num value range: 1 — 2000
    
```

For example:

```

*A:ALA-12>config# port bggrp-ima-1
*A:ALA-12>config>service>vpls$ sap bggrp-ima-1
    
```

*qtag1, qtag2* — Specifies the encapsulation value used to identify the SAP on the port or sub-port. If this parameter is not specifically defined, the default value is 0.

```

Values    qtag1:          * | 0 — 4094
              qtag2 :          * | 0 — 4094
    
```

The values depends on the encapsulation type configured for the interface. The following table describes the allowed values for the port and encapsulation types.

Port Type	Encap-Type	Allowed Values	Comments
Ethernet	Null	0	The SAP is identified by the port.
Ethernet	Dot1q	0 — 4094	The SAP is identified by the 802.1Q tag on the port. Note that a 0 qtag1 value also accepts untagged packets on the dot1q port.

Ethernet	QinQ	qtag1: 0 — 4094 qtag2: 0 — 4094	The SAP is identified by two 802.1Q tags on the port. Note that a 0 qtag1 value also accepts untagged packets on the Dot1q port.
SONET/SDH	IPCP	-	The SAP is identified by the channel. No BCP is deployed and all traffic is IP.
SONET/SDH TDM	BCP-Null	0	The SAP is identified with a single service on the channel. Tags are assumed to be part of the customer packet and not a service delimiter.
SONET/SDH TDM	BCP-Dot1q	0 — 4094	The SAP is identified by the 802.1Q tag on the channel.
SONET/SDH TDM	Frame Relay	16 — 991	The SAP is identified by the data link connection identifier (DLCI).
SONET/SDH ATM	ATM	vpi (NNI) 0 — 4095 vpi (UNI) 0 — 255 vci 1, 2, 5 — 65535	The SAP is identified by port or by PVPC or PVCC identifier (vpi, vpi/vci, or vpi range)

**sap ipsec-*id*.private|public:*tag*** — This parameter associates an IPsec group SAP with this interface. This is the public side for an IPsec tunnel. Tunnels referencing this IPsec group in the private side may be created if their local IP is in the subnet of the interface subnet and the routing context specified matches with the one of the interface.

This context will provide a SAP to the tunnel. The operator may associate an ingress and egress QoS policies as well as filters and virtual scheduling contexts. Internally this creates an Ethernet SAP that will be used to send and receive encrypted traffic to and from the MDA. Multiple tunnels can be associated with this SAP. The “tag” will be a dot1q value. The operator may see it as an identifier. The range is limited to 1 — 4095.

*pw-id* — Specifies the SAP identifier for PW-SAPs,

