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:

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

Type	Syntax	Example
port-id	*slot*/*mda*/*port*[.*channel*]	2/1/11 1/2/3.1
null	[*port-id* | *bundle-id*| *bpgrp-id* | *lag-id* | *aps-id*]	*port-id*: 1/1/3 *bundle-id*: bundle-ppp-1/1.1 *bpgrp-id*: bpgrp-ima-1 *lag-id*: lag-63 *aps-id*: aps-1
dot1q	[*port-id* | *bundle-id*| *bpgrp-id* | *lag-id* | *aps-id*]:qtag1	*port-id*:qtag1: 1/1/3:100 *bundle-id*: bundle-ppp-1/1.1 *bpgrp-id*: bpgrp-ima-1 *lag-id*:qtag1:lag-63:102 *aps-id*:qtag1: aps-1:27
qinq	[*port-id* | *bundle-id*| *bpgrp-id* | *lag-id*]:qtag1.qtag2	*port-id*:qtag1.qtag2: 1/1/3:100.10 *bundle-id*: bundle-ppp-1/1.1 *bpgrp-id*: bpgrp-ima-1 *lag-id*:qtag1.qtag2: lag-10:
atm	[*port-id* | *aps-id* | *bundle-id* | *bpgrp-id*][:vpi/vci |vpi |vpi1.vpi2]	port-id: 1/1/1 aps-id: aps-1 *bundle-id*: bundle-ima-1/1.1 bundle-ppp-1/1.1 *bpgrp-id*: bpgrp-ima-1 vpi/vci: 16/26 vpi: 16 vpi1.vpi2: 16.200
frame-relay	[*port-id* | *aps-id*]:dlci	*port-id*: 1/1/1:100 *aps-id*: aps-1 *dlci*: 16
cisco-hdlc	*slot/mda/port.channel*	*port-id*: 1/1/3.1

Values: *sap-id*:

	null	[*port-id* | *bundle-id* | *bpgrp-id* | *lag-id* | *aps-id*]
	dot1q	[*port-id* | *bundle-id* | *bpgrp-id* | *lag-id* | *aps-id*]:*qtag1*
	qinq	[*port-id* | *bundle-id* | *bpgrp-id* | *lag-id*]:*qtag1.qtag2*
	atm	[*port-id* | *aps-id*][:*vpi/vci*|*vpi*| *vpi1.vpi2*]

frame	[*port-id* | *aps-id*]:*dlci*		
cisco-hdlc	*slot/mda/port.channel*		
cem	*slot/mda/port.channel*		
ima-grp	[*bundle-id*[:vpi/vci|vpi|*vpi1.vpi2*]		
port-id	*slot/mda/port*[*.channel*]		
bundle-id	bundle-*type-slot/mda.bundle-num*		
	bundle	keyword	
	type	ima, fr, ppp	
	bundle-num	1 — 256	
bpgrp-id	bpgrp-*type-bpgrp-num*		
	bpgrp	keyword	
	type	ima, ppp	
	bpgrp-num	1 — 1280	
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-tunnel-id		
	tunnel-id	1 — 1024	
	eth-tunnel-sap-id	0 — 4094	
lag-*id*	lag-*id*		
	lag	keyword	
	id	1 — 800	
qtag1	0 — 4094		
qtag2	*, 0 — 4094		
vpi	NNI: 0 — 4095		
	UNI: 0 — 255		
vci	1, 2, 5 — 65535		
dlci	16 — 1022		
ipsec-id	ipsec-*id*.private | public:tag		
	ipsec	keyword	
	id	1 — 4	
	tag	0 — 4094	
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 — 256

For example:

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

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

The command syntax must be configured as follows:

bpgrp-id: bpgrp-*type-bpgrp-num*
type: ima
bpgrp-num value range: 1 — 1280

For example:

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

qtag1, qtag2 — Specifies the encapsulation value used to identify the SAP on the port or sub-port. If this parameter is not specificially 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.

port

Syntax **port** *port-id*

Description This command specifies a port identifier.

Parameters *port-id* — The *port-id* can be configured in one of the following formats:

Values port-id slot/mda/port[.channel]
bundle-id bundle-*type-slot/mda.bundle-num*
bundle keyword
type ima|ppp
bundle-num 1 — 256
bpgrp-id bpgrp-*type-bpgrp-num*
bpgrp keyword
type ima, ppp
bpgrp-num 1 — 256
aps-id aps-*group-id*[.*channel*]
aps keyword
group-id 1 — 64
ccag-id ccag-*id.<path-id>*[*cc-type*]
ccag keyword
id 1 — 8
path-id a, b
cc-type [.sap-net|.net-sap]
eth-tunnel-id - eth-tunnel-*id*
eth-tunnel keyword
id 1 — 1024
lag-id lag-*id*
lag keyword
id 1— 800