

Show Commands

debug

Syntax `debug [application]`

Context `show`

Description This command displays set debug points.

Parameters *application* — Display which debug points have been set.

Values Some examples of applications include service, ip, ospf, ospf3, bgp, mtrace, isis, mpls, rsvp, ldp, mirror, vrrp, system, filter, lag and oam

Output

```
*A:EsrC# show debug
debug
  mirror-source 100
    subscriber "user1" ingress
    subscriber "user2" fc be h2 h1 nc egress
    subscriber "user3" ingress egress
    subscriber "user4" sap 1/1/2:1 fc af ef nc ingress
    subscriber "user5" sap 1/1/2:1 egress
    subscriber "user6" sap 1/1/2:1 fc be l2 af h2 ef nc ingress egress
    subscriber "user7" sap 1/1/2:1 ip 1.1.0.7 fc l1 h2 ingress
    subscriber "user8" sap 1/1/2:1 ip 1.1.0.8 fc af l1 h2 ef nc egress
    subscriber "user9" sap 1/1/2:1 ip 1.1.0.9 ingress egress
    subscriber "user10" sap 1/1/2:1 mac 00:00:01:00:00:01 fc be l2 l1 h1 nc ingress
    subscriber "user11" sap 1/1/2:1 mac 00:00:01:00:00:02 fc be l1 h2 ef h1 egress
    subscriber "user12" sap 1/1/2:1 mac 00:00:01:00:00:03 fc be ef ingress egress
    subscriber "user13" sap 1/1/2:1 ip 1.1.0.13 mac 00:00:01:00:00:01 fc be ef h1
  ingress
    subscriber "user14" sap 1/1/2:1 ip 1.1.0.14 mac 00:00:01:00:00:02 egress
    subscriber "user15" sap 1/1/2:1 ip 1.1.0.15 mac 00:00:01:00:00:03 fc af l1 ef nc
  ingress egress
    subscriber "user16" sla-profile "sla1" ingress
    subscriber "user17" sla-profile "sla2" egress
    subscriber "user18" sla-profile "sla3" fc be af h2 ingress egress
  no shutdown
  exit
exit
*A:EsrC#

*A:alul# show debug
debug
  mirror-source 101
    port 1/1/1 ingress
    no shutdown
  exit
  mirror-source 102
    port 1/1/3 egress
    no shutdown
  exit
exit
*A:alul#
```

active-subscribers

Syntax **active-subscribers summary**
active-subscribers [**subscriber** *sub-ident-string* [**sap** *sap-id* **sla-profile** *sla-profile-name*]]
[detail|mirror]
active-subscribers hierarchy [**subscriber** *sub-ident-string*]

Context show>service

Description This command displays active subscriber information.

Parameters *sub-ident-string* — Specifies an existing subscriber identification string.
sap *sap-id* — Specifies the physical port identifier portion of the SAP definition. See “Common CLI Command Descriptions” on page 639 for command syntax.
sla-profile-name — Displays an existing SLA profile name.
hierarchy — Displays the subscriber hierarchy.
summary — Displays subscriber summary.

Sample Output

```
*A:EsrC# show service active-subscribers mirror
=====
Active Subscribers
=====
Subscriber user1 (sub1)
-----
SLA Profile Instance sap:lag-8:1 - sla:sla1
-----
IP Address      MAC Address      Origin
-----
1.1.0.1         00:00:01:00:00:01 Static
                  Ingress mirror:   100   12 af 11 nc
-----
SLA Profile Instance sap:lag-8:11 - sla:sla1
-----
IP Address      MAC Address      Origin
-----
11.1.0.1        00:00:01:00:00:01 Static
                  Ingress mirror:   100   12 af 11 nc
-----
Subscriber user10 (sub1)
-----
SLA Profile Instance sap:lag-8:1 - sla:sla1
-----
IP Address      MAC Address      Origin
-----
1.1.0.10        00:00:01:00:00:01 Static
                  Ingress mirror:   100   af ef h1 nc
-----
Subscriber user11 (sub1)
-----
SLA Profile Instance sap:lag-8:1 - sla:sla1
-----
IP Address      MAC Address      Origin
-----
```

```

1.1.0.11      00:00:01:00:00:02 Static
              Egress mirror:      100  12 ef h1
-----
Subscriber user12 (sub1)
-----
SLA Profile Instance sap:lag-8:1 - sla:sla1
-----
IP Address      MAC Address      Origin
-----
1.1.0.12      00:00:01:00:00:03 Static
              Ingress mirror:      100  be 12 af 11 h2 ef h1 nc
              Egress mirror:      100  be 12 af 11 h2 ef h1 nc
-----
Subscriber user13 (sub1)
-----
SLA Profile Instance sap:lag-8:1 - sla:sla1
-----
IP Address      MAC Address      Origin
-----
1.1.0.13      00:00:01:00:00:01 Static
              Ingress mirror:      100  11 ef h1
-----
Subscriber user14 (sub1)
-----
SLA Profile Instance sap:lag-8:1 - sla:sla1
-----
IP Address      MAC Address      Origin
-----
1.1.0.14      00:00:01:00:00:02 Static
              Egress mirror:      100  12 h2 ef h1
-----
Subscriber user15 (sub1)
-----
SLA Profile Instance sap:lag-8:1 - sla:sla1
-----
IP Address      MAC Address      Origin
-----
1.1.0.15      00:00:01:00:00:03 Static
              Ingress mirror:      100  11 nc
              Egress mirror:      100  11 nc
-----
Subscriber user16 (sub1)
-----
SLA Profile Instance sap:lag-8:1 - sla:sla1
-----
IP Address      MAC Address      Origin
-----
1.1.0.16      00:00:01:00:00:01 Static
              Ingress mirror:      100  be 12 af nc
-----
SLA Profile Instance sap:lag-8:11 - sla:sla1
-----
IP Address      MAC Address      Origin
-----
11.1.0.16     00:00:01:00:00:01 Static
              Ingress mirror:      100  be 12 af nc
-----
Subscriber user17 (sub1)
-----
SLA Profile Instance sap:lag-8:1 - sla:sla2
-----

```

Show Commands

```
IP Address      MAC Address      Origin
-----
1.1.0.17        00:00:01:00:00:01 Static
                  Egress mirror:    100   af l1 h1
-----
SLA Profile Instance sap:lag-8:11 - sla:sla2
-----
IP Address      MAC Address      Origin
-----
11.1.0.17       00:00:01:00:00:01 Static
                  Egress mirror:    100   af l1 h1
-----
Subscriber user18 (sub1)
-----
SLA Profile Instance sap:lag-8:1 - sla:sla3
-----
IP Address      MAC Address      Origin
-----
1.1.0.18        00:00:01:00:00:01 Static
                  Ingress mirror:   100   h2
                  Egress mirror:   100   h2
-----
SLA Profile Instance sap:lag-8:11 - sla:sla3
-----
IP Address      MAC Address      Origin
-----
11.1.0.18       00:00:01:00:00:01 Static
                  Ingress mirror:   100   h2
                  Egress mirror:   100   h2
-----
Subscriber user2 (sub1)
-----
SLA Profile Instance sap:lag-8:1 - sla:sla1
-----
IP Address      MAC Address      Origin
-----
1.1.0.2         00:00:01:00:00:01 Static
                  Egress mirror:    100   be l2 af l1 h2 ef h1 nc
-----
SLA Profile Instance sap:lag-8:11 - sla:sla1
-----
IP Address      MAC Address      Origin
-----
11.1.0.2        00:00:01:00:00:01 Static
                  Egress mirror:    100   be l2 af l1 h2 ef h1 nc
-----
Subscriber user3 (sub1)
-----
SLA Profile Instance sap:lag-8:1 - sla:sla1
-----
IP Address      MAC Address      Origin
-----
1.1.0.3         00:00:01:00:00:01 Static
                  Ingress mirror:   100   be l2 af l1 h2 ef h1 nc
                  Egress mirror:   100   be l2 af l1 h2 ef h1 nc
-----
SLA Profile Instance sap:lag-8:11 - sla:sla1
-----
IP Address      MAC Address      Origin
-----
11.1.0.3        00:00:01:00:00:01 Static
```

```

                Ingress mirror:    100   be 12 af 11 h2 ef h1 nc
                Egress  mirror:    100   be 12 af 11 h2 ef h1 nc
    -----

```

Subscriber user4 (sub1)

 SLA Profile Instance sap:lag-8:1 - sla:sla1

```

IP Address      MAC Address      Origin
-----
1.1.0.4        00:00:01:00:00:01 Static
                Ingress mirror:    100   be 12 af 11 h2 ef h1 nc
    -----

```

Subscriber user5 (sub1)

 SLA Profile Instance sap:lag-8:1 - sla:sla1

```

IP Address      MAC Address      Origin
-----
1.1.0.5        00:00:01:00:00:01 Static
                Egress  mirror:    100   be 12 af 11 h2 ef h1 nc
    -----

```

Subscriber user6 (sub1)

 SLA Profile Instance sap:lag-8:1 - sla:sla1

```

IP Address      MAC Address      Origin
-----
1.1.0.6        00:00:01:00:00:01 Static
                Ingress mirror:    100   be af 11 h2
                Egress  mirror:    100   be af 11 h2
    -----

```

Subscriber user7 (sub1)

 SLA Profile Instance sap:lag-8:1 - sla:sla1

```

IP Address      MAC Address      Origin
-----
1.1.0.7        00:00:01:00:00:01 Static
                Ingress mirror:    100   be 12 af 11 h2 ef h1 nc
    -----

```

Subscriber user8 (sub1)

 SLA Profile Instance sap:lag-8:1 - sla:sla1

```

IP Address      MAC Address      Origin
-----
1.1.0.8        00:00:01:00:00:01 Static
                Egress  mirror:    100   be af 11 h1 nc
    -----

```

Subscriber user9 (sub1)

 SLA Profile Instance sap:lag-8:1 - sla:sla1

```

IP Address      MAC Address      Origin
-----
1.1.0.9        00:00:01:00:00:01 Static
                Ingress mirror:    100   be 12 af 11 h2 ef h1 nc
                Egress  mirror:    100   be 12 af 11 h2 ef h1 nc
    -----

```

=====
 *A:EsrC#

service-using

Syntax `service-using [mirror]`

Context `show>service`

Description Displays mirror services.
If no optional parameters are specified, all services defined on the system are displayed.

Parameters `mirror` — Displays mirror services.

Output **Show Service-Using Mirror** — The following table describes service-using mirror output fields:

Label	Description
Service Id	The service identifier.
Type	Specifies the service type configured for the service ID.
Adm	The desired state of the service.
Opr	The operating state of the service.
CustomerID	The ID of the customer who owns this service.
Last Mgmt Change	The date and time of the most recent management-initiated change to this service.

Sample Output

```
A:ALA-48# show service service-using mirror
=====
Services [mirror]
=====
ServiceId   Type      Adm   Opr      CustomerId  Last Mgmt Change
-----
218         Mirror    Up    Down     1            04/08/2007 13:49:57
318         Mirror    Down  Down     1            04/08/2007 13:49:57
319         Mirror    Up    Down     1            04/08/2007 13:49:57
320         Mirror    Up    Down     1            04/08/2007 13:49:57
1000        Mirror    Down  Down     1            04/08/2007 13:49:57
1216        Mirror    Up    Down     1            04/08/2007 13:49:57
1412412     Mirror    Down  Down     1            04/08/2007 13:49:57
-----
Matching Services : 7
=====
A:ALA-48#
```

li

Syntax **li**

Context show

Description Displays Lawful Intercept (LI) information.

li-source

Syntax **li-source** [*service-id*]

Context show>li

Description Displays Lawful Intercept mirror configuration and operation information.

Parameters *service-id* — Specifies the service ID.

Values 1 — 2147483647

Sample Output

```
*A:siml38# show li li-source 2
=====
Mirror Service
=====
Service Id       : 2                Type           : Ether
Admin State     : Up                Oper State     : Up
Forwarding Class : be                Remote Sources : No
Slice           : 0
Destination SDP : 1000 (100.1.1.2)    Egress Label  : 4000
Signaling       : None

-----
Local Sources
-----
Admin State     : Up

- IP Filter     1                Entry 1
=====
*A:siml38#
```

filter

Syntax **li-ip** *filter-name* {**counter** | **associations**}
li-ip *filter-name* **entry** *entry-id* [**counters**]
li-ipv6 *filter-name* {**counter** | **associations**}
li-ipv6 *filter-name* **entry** *entry-id* [**counters**]

Context show>li

Description Displays Lawful Intercept mirror IPv4 or IPv6 address filter configuration and operation information.

Show Commands

Parameters *filter-name* — Specifies the LI filter name.
entry-id — Specifies the LI filter entry.
counter — Specifies LI filter counter information.
counter — Specifies LI filter association information.

log

Syntax **log**
Context show>li
Description Displays Lawful Intercept event log information.

log-id

Syntax **log-id** [*log-id*] [**severity** *severity-level*] [**application** *application*] [**sequence** *from-seq* [*to-seq*]] [**count** *count*] [**router** *router-instance* [**expression**]] [**subject** *subject* [**regexp**]] [**ascending** | **descending**]
Context show>li>log
Description Displays information for specified log.
Parameters *log-id* — Specifies the log ID.
Values 1 — 100
severity-level — Specifies the severity level.
Values cleared, indeterminate, critical, major, minor, warning
application — Specifies the application name.
Values bgp, cflowd, chassis, debug, igmp, lldp, mirror, ospf, pim, port, snmp, system, user, vtrr
from-seq [*to-seq*] — Specifies the sequence value.
Values 1 — 4294967295
count — Specifies the count.
Values 1 — 4294967295
subject — Specifies a subject string to match.
reexp — Specifies to use a regular expression match.
ascending|*descending* — Specifies the sort direction
router-instance — Specifies the router instance.

status

Syntax	status
Context	show>li
Description	Displays Lawful Intercept status information.

Sample Output

```
*A:siml38# show li status
=====
Lawful Intercept Status Information
=====
LI Booted Config Status      : fail
LI Local Save Allowed        : yes
Separate LI administration   : no
Last LI Config Save Time     : N/A
Last Config Save Result      : none
Changes Since Last Save      : yes
Last LI Config Modified Time : 2008/01/11 10:24:30
=====
*A:siml38#
```

mobile-gateway

Syntax	mobile-gateway target <target-type> id <target-id>
Context	show>li
Description	Displays Lawful Intercept mirror configuration and operation information.
Parameters	<i>target-type</i> — Specifies the type of surveillance target identifier to be provisioned. <i>id string</i> — uniquely identifies a target for the interception up to 15 characters in length.

Sample Output

```
show li mobile-gateway target imsi id 123456789099005
=====
LI Target Information
=====
Target id (imsi)           : 123456789099005
Intercept type             : iricc      Df peer                : lliid: xyz123
-----
Number of targets : 1
=====
show li mobile-gateway target
=====
LI Target Information
=====
Target id (imsi)           : 123456789099005
Intercept type             : iricc      Df peer                : lliid: xyz123
```

Show Commands

```
-----  
-----  
Target id (imsi)          : 123456789099007  
Intercept type           : iricc      Df peer           : lliid: abc123  
-----  
-----  
  
Number of targets : 2  
=====
```

LI summary

```
=====
```

Total targets	: 10000	Total peers	: 1
Total IRI targets	: 0	Total IRI-CC targets:	10000
X3 transport type	: UDP	ULIC header: v1	Local interface : 10.10.7.1
Router context	: Base	Operator-id:	op_id
IRI-DSCP	: af41CC-DSCP: af41		

```
=====
```

mirror

Syntax `mirror mirror-dest service-id`

Context show

Description This command displays mirror configuration and operation information.

Parameters *service-id* — Specify the mirror service ID.

Output **Mirroring Output** — The following table describes the mirroring output fields:

Label	Description
Service Id	The service ID associated with this mirror destination.
Type	Entries in this table have an implied storage type of “volatile”. The configured mirror source information is not persistent.
Admin State	Up — The mirror destination is administratively enabled. Down — The mirror destination is administratively disabled.
Oper State	Up — The mirror destination is operationally enabled. Down — The mirror destination is operationally disabled.
Forwarding Class	The forwarding class for all packets transmitted to the mirror destination.
Remote Sources	Yes — A remote source is configured. No — A remote source is not configured.
Enable Port Id	Yes — PPP Port ID Mirroring is enabled. No — PPP Port ID Mirroring is disabled.
Slice	The value of the slice-size, the maximum portion of the mirrored frame that will be transmitted to the mirror destination. Any frame larger than the slice-size will be truncated to this value before transmission to the mirror destination. A value of 0 indicates that mirrored packet truncation based on slice size is disabled.
Destination SAP	The ID of the access port where the Service Access Point (SAP) associated with this mirror destination service is defined.
Egr QoS Policy	This value indicates the egress QoS policy ID. A value of 0 indicates that no QoS policy is specified.

Sample Output

```
A:SR7# show mirror mirror-dest 1000
=====
Mirror Service
```

Show Commands

```
=====
Service Id      : 1000                Type           : Ether
Admin State     : Up                  Oper State      : Down
Forwarding Class : be                 Remote Sources: No
Slice           : 0
Destination SAP : 1/1/1              Egr QoS Policy: 1
-----
Local Sources
-----
Admin State     : Up
- Port          : 1/1/2                Egress Ingress
=====
A:SR7#
```

```
A:ALA-123>config>mirror# show mirror mirror-dest 500
```

```
=====
Mirror Service
=====
Service Id      : 500                Type           : Ether
Admin State     : Up                  Oper State      : Up
Forwarding Class : be                 Remote Sources: Yes
Destination SAP : 1/1/2              Egr QoS Policy: 1
-----
Remote Sources
-----
Far End         : 10.20.1.45          Ingress Label  : 131070
-----
Local Sources
-----
Admin State     : Up
No Mirror Sources configured
=====
A:ALA-123>config>mirror#
```

```
A:ALA-456# show mirror mirror-dest 500
```

```
=====
Mirror Service
=====
Service Id      : 500                Type           : Ether
Admin State     : Up                  Oper State      : Up
Forwarding Class : be                 Remote Sources: No
Destination SDP  : 144 (10.20.1.44)   Egress Label   : 131070
Signaling       : TLDP
-----
Local Sources
-----
Admin State     : Up
No Mirror Sources configured
=====
A:ALA-456#
```

```
A:NS042650115# show mirror mirror-dest 100
```

```
=====
Mirror Service
=====
Service Id      : 100                Type           : PPP
Admin State     : Up                  Oper State      : Up
Forwarding Class : be                 Remote Sources: No
-----
```

```

Slice          : 0          Enable Port Id: Yes
Destination SDP : 100 (2.2.2.2) Egress Label : 131070
Signaling:     : TLDP
    
```

 Local Sources

```

Admin State      : Up
No Mirror Sources configured
    
```

=====

*A:EsrC# show mirror mirror-dest 100

=====

```

Mirror Service
-----
Service Id      : 100          Type          : Ether
Description     : Added by createMirrorDestination 100
Admin State     : Up          Oper State    : Up
Forwarding Class : be          Remote Sources: No
Slice          : 0
Destination SAP : 1/1/5:100    Egr QoS Policy: 1
    
```

 Local Sources

```

Admin State      : Up
-Subs user1      :                               Ing
-Subs user2      :                               Egr
                                     FC be h2 h1 nc
-Subs user3      :                               Egr Ing
-Subs user4      : 1/1/2:1                       Ing
                                     FC af ef nc
-Subs user5      : 1/1/2:1                       Egr
-Subs user6      : 1/1/2:1                       Egr Ing
                                     FC be l2 af h2 ef nc
-Subs user7      : 1/1/2:1                       Ing
      IP 1.1.0.7
-Subs user8      : 1/1/2:1                       Egr
      IP 1.1.0.8
-Subs user9      : 1/1/2:1                       Egr Ing
      IP 1.1.0.9
-Subs user10     : 1/1/2:1                       Ing
      MAC 00:00:01:00:00:01 FC be l2 l1 h1 nc
-Subs user11     : 1/1/2:1                       Egr
      MAC 00:00:01:00:00:02 FC be l1 h2 ef h1
-Subs user12     : 1/1/2:1                       Egr Ing
      MAC 00:00:01:00:00:03 FC be ef
-Subs user13     : 1/1/2:1                       Ing
      IP 1.1.0.13 MAC 00:00:01:00:00:01 FC be ef h1
-Subs user14     : 1/1/2:1                       Egr
      IP 1.1.0.14 MAC 00:00:01:00:00:02
-Subs user15     : 1/1/2:1                       Egr Ing
      IP 1.1.0.15 MAC 00:00:01:00:00:03 FC af l1 ef nc
-Subs user16     :                               Ing
      SLA sla1
-Subs user17     :                               Egr
      SLA sla2
-Subs user18     :                               Egr Ing
      SLA sla3
                                     FC be af h2
    
```

=====

A:EsrC#

Debug Commands

subscriber

Syntax **subscriber** *sub-ident-string* [**sap** *sap-id* [**ip** *ip-address*] [**mac** *ieee-address*]]**sla-profile** *sla-profile-name*] [**fc** {[**be**] [**l2**] [**af**] [**l1**] [**h2**] [**ef**] [**h1**] [**nc**]}] {[**ingress**] [**egress**]}]
no subscriber *sub-ident-string*

Context debug>mirroring-source

Description This command adds hosts of a subscriber to mirroring service.

Parameters *sub-ident-string* — Specifies the name of the subscriber identification policy.

sap-id — Specifies the physical port identifier portion of the SAP definition. See “Common CLI Command Descriptions” on page 639 for command syntax.

ip *ip-address* — The service IP address (system IP address) of the remote 7750 SR7450 ESS7710 SR device sending LI traffic.

Values 1.0.0.1 — 223.255.255.254

mac *mac-address* — Specify this optional parameter when defining a static host. The MAC address must be specified for **anti-spoof ip-mac** and **arp-populate**. Multiple static hosts may be configured with the same MAC address given that each definition is distinguished by a unique IP address.

sla-profile *sla-profile-name* — Specifies the SLA profile name.

Values 32 characters maximum.

fc — The name of the forwarding class with which to associate LI traffic.

Values be, l2, af, l1, h2, ef, h1, nc

ingress — Specifies information for the ingress policy.

egress — Specifies information for the egress policy.

ingress-label

Syntax **ingress-label** *label* [*label* ...up to 8 max]
no ingress-label [*label* [*label* ...up to 8 max]]

Context debug>mirror-source

Description This command configures mirroring of ingress MPLS frames with a specific MPLS label to a mirror destination.