



Secure Domain Router Commands on Cisco ASR 9000 Series Routers

Secure domain routers (SDRs) provide a means of partitioning a router into multiple, independent routers. SDRs perform routing functions in the same manner as a physical router, but share resources with the rest of the system. For example, the applications, configurations, protocols, and routing tables assigned to an SDR belong to that SDR only, but other functions such as chassis control, switch fabric, and partitioning are shared with the rest of the system.

Cisco ASR 9000 Series Aggregation Services Routers are single-shelf routers that support only one SDR per shelf; therefore, the Cisco ASR 9000 Series Routers supports only the admin plane software infrastructure of SDR with a default configuration that is loaded at router startup. Designated shelf controller (DSC) is supported for debug and show command purposes; configuration command functions are not supported. DSC in the Cisco ASR 9000 Series Router is always the active route-switch processor (RSP).

For detailed information about secure domain router concepts, configuration tasks, and examples, refer to the *Configuring Secure Domain Routers on Cisco ASR 9000 Series Routers* module in *Cisco ASR 9000 Series Aggregation Services Routers System Management Configuration Guide*.

show sdr

To display information about the currently defined secure domain routers (SDRs), use the **show sdr** command in EXEC mode or administration EXEC mode.

Administration EXEC Mode

```
show sdr [name sdr-name [detail] | summary]
```

EXEC Mode

```
show sdr [detail]
```

Syntax Description

name <i>sdr-name</i>	(Optional. Administration EXEC mode only) Specific SDR.
detail	(Optional) Displays more detailed information for a specific SDR.
summary	(Optional. Administration EXEC mode only) Displays summary information about all SDRs in the system.

Defaults

Administration EXEC Mode

- Displays information for the owner SDR.
- If you are logged into a specific SDR as the admin user, then information about the local SDR is displayed.

EXEC Mode

- Displays information about the local SDR.

Command Modes

EXEC
Administration EXEC

Command History

Release	Modification
Release 3.7.2	This command was introduced on the Cisco ASR 9000 Series Routers.

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes the proper task IDs. If you suspect user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

Use the **show sdr** command in administration EXEC mode to display the inventory of nodes in the owner SDR or in a specific named SDR. The **show sdr** command in EXEC mode displays the inventory of nodes in the current SDR.

Task ID

Task ID	Operations
system	read

Examples

The following example shows sample output from the **show sdr** command in EXEC mode:

```
RP/0/RSP0/CPU0:asr9k# show sdr
```

```
SDR Inventory
```

```
-----
```

Type	NodeName	NodeState	RedState	PartnerName
LC (2)	0/1/CPU0	IOS XR RUN	NONE	NONE
LC (2)	0/6/CPU0	IOS XR RUN	NONE	NONE
RP (0)	0/RSP0/CPU0	IOS XR RUN	Active	0/RSP1/CPU0
RP (0)	0/RSP1/CPU0	IOS XR RUN	Standby	0/RSP0/CPU0

[Table 64](#) describes the significant fields shown in the display.

Table 64 *show sdr Field Descriptions*

Field	Description
Type	Type of card, which can be Linecard, RP or DRP.
NodeName	Name of the node, expressed in the <i>rack/slot/module</i> notation.
NodeState	Run state of the card, which can be failure, present, booting, running, and so on.
RedState	Redundancy state of the card, which can be active, standby, or none.
PartnerName	Partner of the card, expressed in the <i>rack/slot/module</i> notation.

The following example shows sample output from the **show sdr** command in administration EXEC mode with the **summary** keyword:

```
RP/0/RSP0/CPU0:asr9k(admin)# show sdr summary
```

```
SDRs Configured:
```

SDR-Names	SDRid	dSDRSC	StbydSDRSC	Primary1	Primary2	MacAddr
Owner 0011.92da.b400	0	0/RSP0/CPU0	0/RSP1/CPU0	0/RSP0/CPU0	0/RSP1/CPU0	
RACK1-RPs 0011.92da.b401	1	1/RSP0/CPU0	1/RSP1/CPU0	1/RSP0/CPU0	1/RSP1/CPU0	
DRP_ACROSS_RK	2	0/13/CPU0	1/9/CPU0	1/9/CPU0	0/13/CPU0	0011.92da.b402
PRECONFIG-R1	3	NONE	NONE	0/2/CPU0	NONE	0011.92da.b403
R2-PRECONFIG	4	NONE	NONE	0/4/CPU0	NONE	0011.92da.b404

[Table 65](#) describes the significant fields shown in the display.

Table 65 *show sdr summary Field Descriptions*

Field	Description
SDRid	Identifier of the SDR.
Primary1	Configured primary node.
Primary2	Configured primary node pair.
MacAddr	MAC address associated with the SDR.

■ show sdr