

## **Smart Licensing Commands**

This module describes the commands used to configure Smart Licensing.

For detailed information about Smart Licensing concepts, configuration tasks, and examples, see the *Implementing Smart Licensing on Cisco IOS XR Software* module in *System Management Configuration Guide for Cisco ASR 9000 Series Routers*.

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### license smart enable

To enable Smart Licensing for your product, use the **license smart enable**command in the Administration Configuration mode. Use the **no** form of this command to disable Smart Licensing and return to the default traditional mode of licensing.

license smart enable no license smart enable

**Syntax Description** This command has no keywords or arguments.

**Command Default** By default, traditional licensing mode is on.

Command Modes Administration configuration

<b>Command History</b>	Release	Modification
	Release 5.2.0	This command was introduced.

**Usage Guidelines** 

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

Smart Licensing components are packaged into the asr9k mini image. By default, traditional licensing mode is on. Use the **license smart enable** command to switch to the Smart Licensing model.

### Task ID Task ID Operation

pkg-mgmt Read, Write, Execute

### Example

This example shows how to run the command to enable Smart Licensing, and the configuration with Smart Licensing enabled.

```
RP/0/RSP0/CPU0:router(admin)# configure
RP/0/RSP0/CPU0:router(admin-config)#license smart enable
RP/0/RSP0/CPU0:router(admin-config)#show config
Building configuration...
!! IOS XR Configuration 5.2.0.19I
license smart enable
end
```

## show license all

To display all entitlements in use the show license all command in the Administration mode.

ommand has no	o keywords or arguments	
nistration		
ise Modifi	ication	
	ommand was introduced.	
f the user group		oup associated with a task group that includes appropriate task you from using a command, contact your AAA administrator
ID Operation	-	
ngmt Read	-	
lea .0 .1fass	lease This co .0 use this command . If the user group assistance.	ease       Modification         lease       This command was introduced.         .0       Ise this command, you must be in a user group assignment is preventing assistance.         .1 If the user group assignment is preventing assistance.

### Example

This example displays the use of the show license all command.

RP/0/RSP0/CPU0:router(admin) #show license all

### show license certificate

To display details of the licensing certificate use the **show license certificate** command in the Administration mode.

### show license certificate

Syntax Description	This comma	This command has no keywords or arguments.		
Command Default	None			
Command Modes	Administrat	tion		
Command History	Release	Modification		
	Release 5.2.0	This command was introduced.		

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

## Task ID Task ID Operation pkg-mgmt Read

#### Example

This example shows the output of the show license certificate command.

```
RP/0/RSP0/CPU0:router(admin)#show license cert
Licensing Certificates:
ID Cert Info:
Start Date: Mon Mar10 2014 05:58:28 UTC.
Expiry Date:Tue Mar10 2015 05:58:28 UTC
Serial Number: 34506
Version: 3
Subject/SN: 144a76ed-75de-4a8e-969e-30cf683c
Common Name: 5daab5111895b37e21e164dacc::1,2
ID Cert Info:
Start Date: Fri Jun14 2013 20:18:52 UTC.
Serial Number: 3
Expiry Date:Sun Apr24 2033 21:55:42 UTC
Version: 3
```

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### show license entitlement

To display the details of the various entitlements you own use the **show license entitlement** command in the Administration mode.

### show license entitlement

Syntax Description	This comm	This command has no keywords or arguments.					
Command Default	None						
Command Modes	Administra	ation					
Command History	Release	Modific	ation				
	Release 5.2.0	This cor	nmand was introduced.				
Usage Guidelines		user group a		oup associated with a task group that includes appropriate task g you from using a command, contact your AAA administrator			
Task ID	Task ID	Operation					
	pkg-mgmt	Read					

### Example

This example shows the output of the **show license entitlement** command.

```
RP/0/RSP0/CPU0:router(admin)#show license entitlement
Entitlement:Tag: regid.2014-04.com.cisco.S-A9K-IVRF-LIC,1.0_0bb7,
Version: 1.0, Enforce Mode: Authorized
Requested Time : Mon May 19 2014 16:59:24 PST,
Requested Count: 1 Vendor String:
Tag: S-A9K-iVRF-LIC, Version: 1.0, Enforce Mode: Waiting
Requested Time : Mon Mar 10 2014 11:33:12 UTC,
Requested Count: 1 Vendor String:
Tag: regid.2014-04.com.cisco.S-A9K-IVRF-LIC,1.0_1bealf,
Version: 1.0, Not In Use
Requested Time : NA, Requested Count: NA
Vendor String:
Tag:S-A9K-9001-AIP-LIC,Version:1.0,Enforce Mode:Eval period
```

## show license features (chassis)

To display the licenses that are supported on a given chassis, use the **show license features** command in the Administration mode.

### show license features

Syntax Description	This command has no keywords or arguments.		
Command Default	None		
Command Modes	Administrat	ion	
Command History	Release	Modification	
	Release 5.2.0	This command was introduced.	

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

## Task ID Task ID Operation pkg-mgmt Read

### Example

This example shows the output for the show license features command.

```
RP/0/RSP0/CPU0:router(admin) #show license features
Platform Feature ID:
A9K-iVRF-LIC
A9K-9001-AIP-LIC
A9K-9001-OPT-LIC
A9K-NVSAT1-LIC
A9K-NVSAT1-LIC
A9K-NVSAT20-LIC
A9K-NVSAT20-LIC
A9K-NVSAT5-LIC
A9K-NVSAT5S-LIC
A9K-NVSAT20S-LIC
A9K-NVCCLUSTR-LIC
A9K-9001-MOB-LIC
```

## show license ha

To display the Smart Licensing high availability status, whether it is in active or standby mode, use the **show license ha** command in the Administration mode.

show license ha

Syntax Description	This command has no keywords or arguments.						
Command Default	None	None					
Command Modes	Administra	ation					
Command History	Release	Modifi	cation	-			
	Release 5.2.0	This co	mmand was introduced.				
Usage Guidelines		user group		roup associated with a task group that includes appropriate task g you from using a command, contact your AAA administrator			
Task ID	Task ID	Operation					
	pkg-mgmt	Read					
	Example						
	This exam	ple shows t	he output of the <b>show li</b>	cense ha command.			

RP/0/RSP0/CPU0:router(admin)#show license ha HA Info: RP Role: Active Chassis Role: Active HA Sudi: Role: Active PID:ASR-9001,SN:FOC1741NC0Z

## show license pool

To display the pool to which the device belongs, use the **show license pool** command in the Administration mode.

### show license pool

Syntax Description	This comm	This command has no keywords or arguments.				
Command Default	None	None				
Command Modes	Administra	Administration				
Command History	Release	Modification				
	Release 5.2.0	This command was introduced.				

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

# Task ID Task ID Operation pkg-mgmt Read

### Example

This example shows the output of the show license pool command.

RP/0/RSP0/CPU0:router(admin)#show license pool Assigned Pool Info: IMC0 POOL L

## show license register-status

To display the Smart Licensing registration status, use the **show license register-status**command in the Administration mode.

### show license register-status

Syntax Description	This comm	This command has no keywords or arguments.			
Command Default	None	None			
Command Modes	Administrat	tion			
Command History	Release	Modification			
	Release 5.2.0	This command was introduced.			

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

# Task ID Task ID Operation pkg-mgmt Read

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#### Example

This example shows the output for the show license register-status command.

```
RP/0/RSP0/CPU0:router(admin)#show license register-status
Registration Status: Completed
Step 3
for connectivity issues with the Cisco license
manager or register the device with a new token
ID.
Registration Start Time: Fri May 02 2014 17:19:53 PST
Next ID Cert Renew Time: Wed Oct 29 2014 17:21:55 PST
Next ID Cert Expiration Time: May02 2015 17:18:50 PST
Last Response Time: Fri May 02 2014 17:20:11 PST
Last Response Message: OK
```

### show license scheduler

To display the Smart Licensing scheduler information use the **show license scheduler** command in the Administration mode.

### show license scheduler

Syntax Description	This comma	This command has no keywords or arguments.		
Command Default	None			
Command Modes	Administrat	tion		
Command History	Release	Modification		
	Release 5.2.0	This command was introduced.		

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

## Task ID Task ID Operation pkg-mgmt Read

### Example

This example shows how to use the **show license scheduler** command, and its output.

```
RP/0/RSP0/CPU0:router(admin)#show license scheduler
Upcoming Scheduled Jobs:
   Job Name: Daily Job
       Recurring: Yes,
                           Cancelled: No
       Next Run Time : Sat May 31 2014 03:58:02 PST
    Job Name: Authorization Renewal Job
       Recurring: No,
                         Cancelled: Yes
       Next Run Time : NA
    Job Name: Init Flag Check Job
       Recurring: No,
                        Cancelled: Yes
       Next Run Time : NA
    Job Name: Evaluation Expiration Check Job
       Recurring: No, Cancelled: No
       Next Run Time : Wed Aug 20 2014 11:18:42 PST
    Job Name: Register Period Expiration Check Job
       Recurring: No, Cancelled: No
       Next Run Time : Fri May 30 2014 04:15:06 PST
```

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## show license status (compliance)

To display the compliance status of Smart Licensing, use the **show license status** command in the Administration mode.

### show license status

Syntax Description This command has no keywords or arguments.

 Command Default
 None

 Command Modes
 Administration

Command History	Release	Modification
	Release 5.2.0	This command was introduced.

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

# Task ID Task ID Operation pkg-mgmt Read

### Example

This example shows you to use show license status command to display the current status of your license.

RP/0/RSP0/CPU0:router(admin)#show license status Compliance Status: Eval period

## show license udi (smart)

To display the Smart Licensing UDI, use the show license udi command in the Administration mode.

	show lice	show license udi					
Syntax Description	This comn	This command has no keywords or arguments.					
Command Default	None						
Command Modes	Administra	ation					
Command History	Release	Modific	ation				
	Release 5.2.0	This co	mmand was introduced.				
Usage Guidelines		user group		oup associated with a task group that includes appropriate task g you from using a command, contact your AAA administrator			
Task ID	Task ID	Operation					
	pkg-mgmt	Read					
	Example						

This example shows you how to use the show license udi command, and a sample output.

```
RP/0/RSP0/CPU0:router#admin
RP/0/RSP0/CPU0:router(admin)#show license udi
UDI:
PID:ASR-9001,SN:FOC1741NC0Z
```

## show license version

To display the Smart Licensing version information, use the show license version in the Administration mode.

	show license version					
Syntax Description	This comm	This command has no keywords or arguments.				
Command Default	None					
Command Modes	Administr	Administration				
Command History	Release	Modifi	cation			
	Release 5.2.0	This co	mmand was introduced.			
Usage Guidelines		user group		oup associated with a task group that includes appropriate task you from using a command, contact your AAA administrator		
Task ID	Task ID	Operation				
	pkg-mgmt	Read				
	Example					

This example displays how to use the show license version command, and the output.

RP/0/RSP0/CPU0:router(admin)#show license version Cisco Smart Licensing Agent, Version 1.1.0\_dev/240

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#### Smart Licensing Commands