

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 *Cisco IOS XR Licensing* webpage.

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crypto ca http-proxy

To enable communication with the certification authority to retrieve the Certificate Revocation List (CRL) use the **crypto ca http-proxy** command in the XR Config mode.

crypto ca http-proxy *server-IP-Address* **port** *number*

Syntax Description

http-proxy *server-IP-address*	Specifies the host IP address.
port *number*	http-proxy server port number. The range is from 1-65535.

Command Default

No default.

Command Modes

XR Config mode

Command History

Release	Modification
Release 7.0.2	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, Write, Execute

Examples

This example shows how to run the command to enable communication with the certification authority to retrieve the Certificate Revocation List (CRL).

```
Router# configure
Router(config)# crypto ca http-proxy 10.10.10.1 port 1
```

license smart deregister

To cancel device registration from Cisco Smart Software Manager (CSSM), use the **license smart deregister** command in the XR EXEC mode.

license smart deregister

Syntax Description

This command has no keywords or arguments.

Command Default

None

Command Modes

XR EXEC mode

Command History

Release	Modification
Release 7.11.1	This command was introduced.

Usage Guidelines

This command is not applicable to Smart Licensing using Policy (SLP).

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	Execute

Examples

The following example shows output for the **license smart deregister** command on Cisco IOS XR:

```
Router# license smart deregister
```

license smart factory reset

To clear all licensing information from the trusted store and memory, except the evaluation period count down and the Specific License Reservation (SLR) sequence number, use the **license smart factory reset** command in XR EXEC mode.

license smart factory reset

Syntax Description

reset	Clears all saved smart licensing information.

Command Default

None

Command Modes

XR EXEC mode

Command History

Release	Modification
Release 24.1.1	This command was introduced.

Usage Guidelines

To ensure the smart agent functions properly, you must execute the following commands to restart the smart license server after executing the **license smart factory reset** command:

- **process restart smartlicserver**
- **process restart plat_sl_client**

Task ID

Task ID	Operation
pkg-mgmt	execute

Examples

The following example shows output for the **license smart factory reset** command on Cisco IOS XR:

```
Router# license smart factory reset
```

license smart flexible-consumption

To enable Flexible Consumption Model (FCM), use the **license smart flexible-consumption** command in XR Config mode.

license smart flexible-consumption

Syntax Description

This command has no keywords or arguments.

Command Default

None

Command Modes

XR Config mode

Command History

Release	Modification
Release 7.3.1	This command was introduced.

Usage Guidelines

No specific guidelines impact the use of this command.

Task ID

Task ID	Operation
pkg-mgmt	read, write

Examples

The following example shows how to enable FCM licensing on routers running Cisco IOS XR:

```
Router# configure
Router(config)# license smart flexible-consumption enable
Router(config)# commit
```

The following example shows how to verify the FCM configuration:

```
Router# show running-config license smart flexible-consumption enable
Wed Sep 25 01:56:05.909 UTC
license smart flexible-consumption enable
```

license smart import

To import Smart Licensing authorization codes, policies, trust codes and other licensing elements, use the **license smart import** command in XR EXEC mode.

license smart import *filepath_filename*

Syntax Description

filepath_filename	Specifies the complete path to a file, including the filename.

Command Default

None

Command Modes

XR EXEC mode

Command History

Release	Modification
Release 24.1.1	This command was introduced.

Usage Guidelines

No specific guidelines impact the use of this command.

Task ID

Task ID	Operation
pkg-mgmt	execute

Examples

The following example shows output for the **license smart import** command on Cisco IOS XR:

```
Router# license smart import tftp://203.0.113.5/auto/tftp-abc/test.txt
```

license smart proxy

To configure the smart licensing proxy settings, use the **license smart proxy** command in XR Config mode.

license smart proxy { **hostname** *ip address* | *hostname* | **port** *port-id* }

Syntax Description

hostname *ip address* | *hostname*	Enter the IP Address or hostname of the proxy server.
port *port-number*	Specifies the proxy port. Enter the proxy port number ranging from 0-65535.

Syntax Description This command has no keywords or arguments.

Command Default None

Command Modes XR Config mode

Command History

Release	Modification
Release 24.1.1	This command was introduced.

Usage Guidelines Configures a proxy for the Smart transport mode. When a proxy is configured, licensing messages are sent to the proxy along with the final destination URL (CSSM). The proxy sends the message on to CSSM. Provide the address and port information.

Task ID

Task ID	Operation
pkg-mgmt	read, write

Examples The following example shows output for the **license smart proxy** command on Cisco IOS XR:

```
Router# configure
Router(config)# license smart proxy hostname address
```

license smart reservation

To enable or disable the license reservation, use the **license smart reservation** command in XR Config mode.

license smart reservation

Syntax Description

This command has no keywords or arguments.

Command Default

None

Command Modes

XR Config mode

Command History

Release	Modification
Release 7.3.2	This command was introduced.

Usage Guidelines

No specific guidelines impact the use of this command.

Task ID

Task ID	Operation
pkg-mgmt	read, write

Examples

The following example shows output for the **license smart reservation** command on Cisco IOS XR:

```
Router# configure
Router(config)# license smart reservation
```

The following example shows output for the **no license smart reservation** command on Cisco IOS XR:

```
Router# configure
Router(config)# no license smart reservation
```

license smart register idtoken

To register a device with the token generated from Cisco Smart Software Manager (CSSM), use the **license smart register idtoken** command in XR EXEC mode.

license smart register idtoken *token_ID* { **force** }

Syntax Description

token_ID	Device with the token generated from CSSM.
force	(Optional) Forcefully registers your device irrespective of whether the device is registered or not.

Command Default

None

Command Modes

XR EXEC mode

Command History

Release	Modification
Release 7.11.1	This command was introduced.

Usage Guidelines

This command is not applicable to Smart Licensing using Policy (SLP).

Use the existing token in place of token_ID attribute.

If you do not have a token, then generate a new token from the CSSM portal.

For information on how to generate a new token, see Generate Product Registration Token from the Portal topic in the latest release of System Management Configuration Guide for respective platform in Cisco.com

Use this command to register the devices in Smart Licensing.

Task ID

Task ID	Operation
pkg-mgmt	execute

Examples

The following example shows output for the **license smart register idtoken** command on Cisco IOS XR:

```
Router# license smart register idtoken
MjczNDMwZWYtNDAzMS00NjNmLWJmMTQtMzM1YmRhZDAxZWNmLTE3MjA1O
TE3%3WVk3VzFYeDVxc0xSaEZqNjhtNERGMnc5UHZK%0AU1RMYz0%3D%0A
```

license smart save

To save Smart Licensing authorization codes, policies, trust codes and other licensing elements, use the **license smart save** command in XR EXEC mode.

license smart save { **usage** { **all** | **days** *days* | **rum-id** *rum-ID* | **unreported** } { *filepath_filename* } } | { **trust-request** *filepath_filename* }

Syntax Description

license smart save { **usage** { **all** | **days** *days* | **rum-id** *rum-ID* | **unreported** } { *filepath_filename* } }	Saves RUM reports (license usage information) in the specified location. You must specify one of these options: • **all**: Saves all RUM reports. • **days** *days*: Saves RUM report for the last n number of days (excluding the current day). Enter a number. The valid range is 0 to 365. For example, if you enter 3, RUM reports of the last three days are saved. • **rum-Id** *rum-ID*: Saves a specified RUM ID. The valid value range is 0 to 18446744073709551615. • **unreported**: Saves all unreported RUM reports. • *filepath_filename*: Saves the specified usage information to a file. Specify the absolute path to the file, including the filename.
trust-request *filepath_filename*	Saves the trust code request for the active product instance in the specified location. For *filepath_filename*, specify the absolute path to the file, including the filename.

Command Default

None

Command Modes

XR EXEC mode

Command History

Release	Modification
Release 24.1.1	This command was introduced.

Usage Guidelines

No specific guidelines impact the use of this command.

Task ID

Task ID	Operation
pkg-mgmt	execute

Examples

This example shows how you can save all license usage information to a specified location:

```
Router#  license smart save usage all tftp://203.0.113.5/auto/tftp-abc/test.txt
```

This example shows how you can save trust code request for the active product instance in the specified location:

```
Router#  license smart save trust-request tftp://203.0.113.5/auto/tftp-abc/test.txt
```

license smart sync

To synchronize the Smart Licensing status, use the **license smart sync** command in the XR EXEC mode.

license smart sync all

Syntax Description

all	Specifies codes for all devices in HA config.

Syntax Description

This command has no keywords or arguments.

Command Default

None

Command Modes

XR EXEC mode

Command History

Release	Modification
Release 24.1.1	This command was introduced.

Usage Guidelines

To manually trigger the first RUM report, you can enter the **license smart sync** command in privileged EXEC mode. Normally, the product instance automatically sends this report at the scheduled time, according to the policy. Along with this first report, if applicable, it sends a request for a UDI-tied trust code.

Task ID

Task ID	Operation
pkg-mgmt	execute

Examples

The following example shows output for the **license smart sync all** command on Cisco IOS XR:

```
Router# license smart sync all
```

license smart transport

To configure the transport mode, use the **license smart transport** command in the XR Config mode.

license smart transport { **callhome** | **cslu** | **off** | **smart** }

Syntax Description

callhome	Use call home as transport.
cslu	Use CSLU as transport.
off	It disables the transport functionality.
smart	Use smart transport.

Syntax Description This command has no keywords or arguments.

Command Default The cslu transport is default only in on-premises deployments.

Command Modes XR Config mode

Command History

Release	Modification
Release 24.1.1	This command was introduced.

Usage Guidelines No specific guidelines impact the use of this command.

Task ID

Task ID	Operation
pkg-mgmt	read, write

Examples The following example shows output for the **license smart transport cslu** command on Cisco IOS XR:

```
Router# configure
Router(config)# license smart transport cslu
```

license smart url

To configure the transport URL, use the **license smart url** command in XR Config mode.

license smart url { **cslu** | **smart** } <*url*>

Syntax Description

cslu <*url*>	Set the CSLU URL.
smart <*url*>	Set the smart transport URL.

Syntax Description

This command has no keywords or arguments.

Command Default

None

Command Modes

XR Config mode

Command History

Release	Modification
Release 24.1.1	This command was introduced.

Usage Guidelines

Use the **show license status** command in XR EXEC mode, to check if the URL is exactly as shown in https://smartreceiver.cisco.com/licservice/license. If it is not, reconfigure the **license smart url** command in XR Config mode.

Task ID

Task ID	Operation
pkg-mgmt	read, write

Examples

The following example shows output for the **license smart url** command on Cisco IOS XR:

```
Router# configure
Router(config)# license smart url smart https://smartreceiver.cisco.com/licservice/license
```

Verify using **show license status** command in XR EXEC mode.

```
Router# show license status
Wed Sep 25 06:05:47.028 UTC

Utility:
  Status: DISABLED

Smart Licensing Using Policy:
  Status: ENABLED

Account Information:
  Smart Account: <none>
  Virtual Account: <none>

Data Privacy:
  Sending Hostname: yes
```

```
    Callhome hostname privacy: DISABLED
    Smart Licensing hostname privacy: DISABLED
  Version privacy: DISABLED

Transport:
  Type: cslu
  Cslu address: https://smartreceiver.cisco.com/licservice/license
  Proxy:
    Not Configured
  VRF:
```

license smart trust idtoken

To establish trust between a Smart Licensing using Policy (SLP) enabled Cisco device and the Smart Software Manager (SSM) on-premises, use the **license smart trust idtoken** *id_token_value* command in XR EXEC mode.

license smart trust idtoken *id_token_value* **all** { **force** }

Syntax Description

id_token_value	Provide id token received from backend.
all	Establish trust with backend for all CSLU.
force	(Optional) Force backend to re-establish trust.

Syntax Description

This command has no keywords or arguments.

Command Default

None

Command Modes

XR EXEC mode

Command History

Release	Modification
Release 24.1.1	This command was introduced.

Usage Guidelines

No specific guidelines impact the use of this command.

Task ID

Task ID	Operation
pkg-mgmt	execute

Examples

The following example shows output for the **license smart trust idtoken** command on Cisco IOS XR:

```
Router# license smart trust idtoken MjczNDMwZWYtNDAzMS00NjNmLWJmMTQtMzM1YmRhZDAxZWNmLTE3MjA1OTE3%3WVk3VzFYeDVxc0xSaEZqNjhtNERGMnc5UHZK%0AU1RMYz0%3D%0A all force
```

process restart plat_sl_client

To restart the platform SL client process, use the **process restart plat_sl_client** command in XR EXEC mode.

process restart plat_sl_client [**location** [*node-id path* | **all**]]

Syntax Description

location	(Optional) Specifies the node to reload.
node-id	(Optional) The *node-id* argument is expressed in the *rack/slot/module* notation
path	(Optional) Specifies the storage device and directory path.
all	(Optional) The **all** keyword specifies all RP nodes.

Command Default

None

Command Modes

XR EXEC mode

Command History

Release	Modification
Release 6.0.1	This command was introduced.

Usage Guidelines

Execute the **process restart plat_sl_client** command after a factory reset to ensure the smart agent functions properly.

Do not include curly braces {}, parentheses (), or square brackets [] in the currently active running configuration loaded on the Cisco IOS XR Router, as these characters cause the plat_sl_client process to crash when the plat_sl_client process is restarted using the **process restart plat_sl_client** command.

Task ID

Task ID	Operation
cisco-support	execute

Examples

The following example shows output for the **process restart plat_sl_client** command on Cisco IOS XR:

```
Router# process restart plat_sl_client
Router:Oct  3 13:06:24.534 UTC: sysmgr_control[65814]: %OS-SYSMGR-4-PROC_RESTART_NAME :
User cisco (con0_RSP0_C
```

process restart smartlicserver

To restart the smart license server process, use the **process restart smartlicserver** command in XR EXEC mode.

process restart smartlicserver [**location** [*node-id path* | **all**]]

Syntax Description

location	(Optional) Specifies the node to reload.
node-id	(Optional) The *node-id* argument is expressed in the *rack/slot/module* notation
path	(Optional) Specifies the storage device and directory path.
all	(Optional) The **all** keyword specifies all RP nodes.

Command Default

None

Command Modes

XR EXEC mode

Command History

Release	Modification
Release 6.0.1	This command was introduced.

Usage Guidelines

Execute the **process restart smartlicserver** command after a factory reset to ensure the smart agent functions properly.

Task ID

Task ID	Operation
cisco-support	execute

Examples

The following example shows output for the **process restart smartlicserver** command on Cisco IOS XR:

```
Router# process restart smartlicserver
Router:Oct  3 12:41:30.880 UTC: sysmgr_control[68360]: %OS-SYSMGR-4-PROC_RESTART_NAME :
User cisco (con0_RSP0_C
```

show license all

To display all entitlements in use the **show license all** command in XR EXEC mode.

show license all

Syntax Description

This command has no keywords or arguments.

Command Default

None

Command Modes

XR EXEC mode

Command History

Release	Modification
Release 5.2.0	This command was introduced.

Usage Guidelines

No specific guidelines impact the use of this command.

Examples

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

```
Router# show license all

Thu May  9 09:41:05.800 UTC

Smart Licensing Status
======================

Smart Licensing is ENABLED

License Conversion:
  Automatic Conversion Enabled: True

Export Authorization Key:
  Features Authorized:
    <none>

Utility:
  Status: DISABLED

Smart Licensing Using Policy:
  Status: ENABLED

Account Information:
  Smart Account: <none>
  Virtual Account: <none>
```

show license rum

To display information about Resource Utilization Measurement reports (RUM report) available on the product instance, including report IDs, the current processing state of a report, error information (if any), and to save the detailed or summarized view that is displayed, use the **show license rum** command in the XR EXEC mode.

show license rum id all [detail]

Syntax Description

id	Displays RUM report information based on the license name.
all	Specify a particular license name to display all RUM reports for that license, or use the **all** keyword to display all RUM reports available on the product instance.
detail	Displays detailed RUM report information. You can use this to display detailed information by license name and detailed information by RUM report ID.

Command Default

None

Command Modes

XR EXEC mode

Command History

Release	Modification
Release 24.1.1	This command was introduced.

Usage Guidelines

A RUM report is a license usage report, which the product instance generates, to fulfil reporting requirements as specified by the policy. An acknowledgement (ACK) is a response from CSSM and provides information about the status of a RUM report. Once the ACK for a report is available on the product instance, it indicates that the corresponding RUM report is no longer required and can be deleted. You can use the **show license rum** command to:

Display information about the available RUM reports on the product instance - filtered by ID or license name.

Display a short summary of the information or display a detailed view of the information.

Track a RUM report throughout its lifecycle (from the time it is first generated until its acknowledgement from CSSM). By displaying the current processing state and condition of a report you can ascertain if and when there is a problem in the reporting workflow.

Save the displayed information. The CLI displays information about up to 200 reports. If there are more than 200 reports on the product instance and you want to view information about all of them, save the displayed info in a .txt file and export to the desired location to view.

To display a statistical view of RUM report information (the total number of reports on the product instance, the number of reports that have a corresponding ACK, the number of reports waiting for an ACK etc.) refer

to the Usage Report Summary: section of the show license all and show license tech privileged EXEC commands.

The show license tech command also provides RUM report related information that the Cisco technical support team can use to troubleshoot, if there are problems with RUM reporting.

Task ID

Task ID	Operation
pkg-mgmt	Execute

Examples

The following example shows output for the **show license rum id all** command on Cisco IOS XR:

```
Router# show license rum id all
Tue Jun 18 00:27:40.389 UTC
Smart Licensing Usage Report:
====================================
Report Id,          State,    Flag, Feature Name
1718664968          ACK       N     8KSW_B_SIA
1718664969          ACK       N     8KSW_C_SIA
1718664970          ACK       N     8KSW_D_SIA
1718664971          ACK       N     8KE_PRM_100G_RTU
1718664972          ACK       N     8KSW_B_SIA
1718664973          ACK       N     8KSW_C_SIA
1718664974          ACK       N     8KSW_D_SIA
1718664975          ACK       N     8KE_PRM_100G_RTU
1718664976          ACK       N     8KE_ADN_100G_RTU
1718664977          ACK       N     8KSW_B_SIA
1718664978          ACK       N     8KSW_C_SIA
1718664979          ACK       N     8KSW_D_SIA
1718664980          ACK       N     8KE_ADN_100G_RTU
1718664981          ACK       N     8KSW_B_SIA
1718664982          ACK       N     8KSW_C_SIA
1718664983          ACK       N     8KSW_D_SIA
1718664984          ACK       N     8KE_ESS_100G_RTU
1718664985          ACK       N     8KE_ADN_100G_RTU
1718664986          OPEN      N     8KSW_B_SIA
1718664987          OPEN      N     8KSW_C_SIA
1718664988          OPEN      N     8KSW_D_SIA
1718664989          OPEN      N     8KE_ADN_100G_RTU
```

The following example shows output for the **show license rum id all detail** command on Cisco IOS XR:

```
Router# show license rum  id  all  detail
Tue Jun 18 00:28:01.307 UTC
Smart Licensing Usage Report Detail:
====================================
Report Id: 1718664968
  Metric Name: ENTITLEMENT
  Feature Name: 8KSW_B_SIA
  Metric Value: regid.2024-03.com.cisco.8KSW_B_SIA,1.0_dda2a110-f0be-453c-8f82-6362ea7fde74

  UDI: PID:8808,SN:FOX2412PNUY
  Previous Report Id: 0,    Next Report Id: 1718664972
  Version: 2.0
  State: ACK,      State Change Reason: ACKED
  Close Reason: SMART
  Start Time: Jun 17 2024 22:56:55 UTC,      End Time: Jun 17 2024 23:05:32 UTC
  Storage State: DELETED,  Storage State Change Reason: PROCESSED
  Transaction ID: 0 ()
  Transaction Message: <none>
  Report Size: 1320(0)
```

```
Report Id: 1718664969
  Metric Name: ENTITLEMENT
  Feature Name: 8KSW_C_SIA
  Metric Value: regid.2024-03.com.cisco.8KSW_C_SIA,1.0_aaf74680-e8ed-4293-8794-352952cdf64f

  UDI: PID:8808,SN:FOX2412PNUY
  Previous Report Id: 0,    Next Report Id: 1718664973
  Version: 2.0
  State: ACK,      State Change Reason: ACKED
  Close Reason: SMART
  Start Time: Jun 17 2024 22:56:57 UTC,      End Time: Jun 17 2024 23:05:33 UTC
  Storage State: DELETED,  Storage State Change Reason: PROCESSED
  Transaction ID: 0 ()
  Transaction Message: <none>
  Report Size: 1320(0)

Report Id: 1718664970
  Metric Name: ENTITLEMENT
  Feature Name: 8KSW_D_SIA
  Metric Value: regid.2024-03.com.cisco.8KSW_D_SIA,1.0_601a512c-6644-4d4b-8e8b-9d5414d7d196

  UDI: PID:8808,SN:FOX2412PNUY
  Previous Report Id: 0,    Next Report Id: 1718664974
  Version: 2.0
  State: ACK,      State Change Reason: ACKED
  Close Reason: SMART
  Start Time: Jun 17 2024 22:56:58 UTC,      End Time: Jun 17 2024 23:05:33 UTC
  Storage State: DELETED,  Storage State Change Reason: PROCESSED
  Transaction ID: 0 ()
  Transaction Message: <none>
  Report Size: 1320(0)

Report Id: 1718664971
  Metric Name: ENTITLEMENT
  Feature Name: 8KE_PRM_100G_RTU
  Metric Value:
regid.2023-05.com.cisco.8KE_PRM_100G_RTU,1.0_b3e036df-810f-41a8-9c44-1ec757967f66
  UDI: PID:8808,SN:FOX2412PNUY
  Previous Report Id: 0,    Next Report Id: 1718664975
  Version: 2.0
  State: ACK,      State Change Reason: ACKED
  Close Reason: SMART
  Start Time: Jun 17 2024 23:05:34 UTC,      End Time: Jun 17 2024 23:05:35 UTC
  Storage State: DELETED,  Storage State Change Reason: PROCESSED
  Transaction ID: 0 ()
  Transaction Message: <none>
  Report Size: 1153(0)

Report Id: 1718664972
  Metric Name: ENTITLEMENT
  Feature Name: 8KSW_B_SIA
  Metric Value: regid.2024-03.com.cisco.8KSW_B_SIA,1.0_dda2a110-f0be-453c-8f82-6362ea7fde74

  UDI: PID:8808,SN:FOX2412PNUY
  Previous Report Id: 1718664968,    Next Report Id: 1718664977
  Version: 2.0
  State: ACK,      State Change Reason: ACKED
  Close Reason: SMART
  Start Time: Jun 17 2024 23:05:32 UTC,      End Time: Jun 17 2024 23:18:40 UTC
  Storage State: DELETED,  Storage State Change Reason: PROCESSED
  Transaction ID: 0 ()
  Transaction Message: <none>
  Report Size: 1218(0)
```

```
Report Id: 1718664973
  Metric Name: ENTITLEMENT
  Feature Name: 8KSW_C_SIA
  Metric Value: regid.2024-03.com.cisco.8KSW_C_SIA,1.0_aaf74680-e8ed-4293-8794-352952cdf64f

  UDI: PID:8808,SN:FOX2412PNUY
  Previous Report Id: 1718664969,    Next Report Id: 1718664978
  Version: 2.0
  State: ACK,      State Change Reason: ACKED
  Close Reason: SMART
  Start Time: Jun 17 2024 23:05:33 UTC,      End Time: Jun 17 2024 23:18:41 UTC
  Storage State: DELETED,  Storage State Change Reason: PROCESSED
  Transaction ID: 0 ()
  Transaction Message: <none>
  Report Size: 1218(0)
```

show license udi (smart)

To display the Smart Licensing UDI, use the **show license udi** command in XR EXEC mode.

show license udi

Syntax Description

This command has no keywords or arguments.

Command Default

None

Command Modes

XR EXEC mode

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

Examples

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

```
Router# show license udi
UDI:
PID:ASR-9001,SN:FOC1741NC0Z
```

show license platform detail

To display smart license detail, use the **show license platform detail** command in the XR EXEC mode.

show license platform detail

Syntax Description

This command has no keywords or arguments.

Command Default

None

Command Modes

XR EXEC mode

Command History

Release	Modification
Release 7.11.1	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

Examples

The following example shows output for the **show license platform detail** command on Cisco IOS XR:

```
Router# show license platform detail
Wed May  8 06:29:33.782 UTC
Collection: LAST: Wed May 08 2024 06:27:38 UTC
            NEXT: Wed May 08 2024 07:27:38 UTC
Reporting:  LAST: Wed May 08 2024 06:27:38 UTC
            NEXT: Thu May 09 2024 06:27:38 UTC
SIA Status: In Compliance
Parameters: Collection interval:          60 minute(s)
            Reporting  interval:        1440 minute(s)
            Throughput gauge:        1000000 Kbps

================================================
Feature/Area system
   Name:  System
   Status:   ACTIVE
   Flags: CONFIG


   [ 1] Name:  Product: ASR9K 8x100GE-CM Right to Use
        Entitlement Tag:
regid.2015-06.com.cisco.A9K-8X100GE-CM,1.0_f05eb271-27f3-4169-b143-0b468072f8f7
        Count: Last reported:    0
               Next report:      0
   [ 2] Name:  Product: ASR99 8x100GE-CM Right to Use
        Entitlement Tag:
```

```
regid.2016-02.com.cisco.A99-8X100GE-CM,1.0_dc4a177b-2992-42d3-b004-885f9b969839
        Count: Last reported:    0
```

show license platform summary

To display smart license summary, use the **show license platform summary** command in the XR EXEC mode.

show license platform summary

Syntax Description

This command has no keywords or arguments.

Command Default

None

Command Modes

XR EXEC mode

Command History

Release	Modification
Release 7.11.1	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

Examples

The following example shows output for the **show license platform summary** command on Cisco IOS XR:

```
Router# show license platform summary
Wed May  8 06:29:12.376 UTC
Collection: LAST: Wed May 08 2024 06:27:38 UTC
            NEXT: Wed May 08 2024 07:27:38 UTC
Reporting:  LAST: Wed May 08 2024 06:27:38 UTC
            NEXT: Thu May 09 2024 06:27:38 UTC
SIA Status: In Compliance
                                                                      Count
Feature/Area     Entitlement                                        Last Next
============ ================================================== ==== ====
```

show license platform trace

To display trace logs for platform-specific licensing operations, use the **show license platform trace** command in XR EXEC mode.

show license platform trace { **all** | **detail** | **error** | **info** }

Syntax Description

all	Displays all trace logs.
detail	Displays detail trace logs.
error	Displays error messages in the trace logs.
info	Displays detailed informational messages in the trace logs.

Command Default

None

Command Modes

XR EXEC mode

Command History

Release	Modification
Release 7.11.1	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

Examples

The following example shows output for the **show license platform trace** command with the **all** keyword:

```
Router# show license platform trace all
Wed May  8 06:30:24.936 UTC
3 unique entries (3072 possible, 0 filtered)
May  8 06:17:00.322 plat_sl/sl-err 0/RSP0/CPU0 2# t7377 PLUGIN(vortex):  ok , proc name -
plat_sl_client / location - 0/RSP0/CPU0
May  8 06:27:38.867 plat_sl/sl-inf 0/RSP0/CPU0 30# t7377 SIALOG: BAU model is active
May  8 06:29:33.869 plat_sl/sl-det 0/RSP0/CPU0 186# t7344 plat_sl_edm_get_detail_info:
detail info len: 26934
218 wrapping entries (55488 possible, 448 allocated, 0 filtered, 218 total)
May  8 06:16:59.840 plat_sl/sl-inf 0/RSP0/CPU0 t6906 Process start (count 1)
May  8 06:16:59.840 plat_sl/sl-err 0/RSP0/CPU0 t6906 Process start (count 1)
May  8 06:16:59.849 plat_sl/sl-det 0/RSP0/CPU0 t6906 Process start (count 1)
May  8 06:16:59.851 plat_sl/sl-det 0/RSP0/CPU0 t6906 EVM creation completed
May  8 06:16:59.851 plat_sl/sl-det 0/RSP0/CPU0 t6906 Checkpoint initialized for the first
time
May  8 06:16:59.851 plat_sl/sl-det 0/RSP0/CPU0 t6906 Checkpoint init completed
```

```
May  8 06:16:59.852 plat_sl/sl-det 0/RSP0/CPU0 t6906 EDM init completed
May  8 06:16:59.852 plat_sl/sl-det 0/RSP0/CPU0 t6906 Plugin Configuration init completed
May  8 06:16:59.852 plat_sl/sl-det 0/RSP0/CPU0 t6906 IM init completed
May  8 06:16:59.881 plat_sl/sl-det 0/RSP0/CPU0 t7344 plat_sl_edm_thread: evm 0x7f6638000b70
May  8 06:16:59.914 plat_sl/sl-det 0/RSP0/CPU0 t7345 sysdb bind to /cfg/gl/flexconsumption/
 completed
May  8 06:16:59.914 plat_sl/sl-det 0/RSP0/CPU0 t7344 sysdb bind to
/admin/oper/smartlic-edm/gl/ completed
May  8 06:16:59.951 plat_sl/sl-det 0/RSP0/CPU0 t7345 sysdb bind to /cfg/gl/licensing/
completed
May  8 06:16:59.989 plat_sl/sl-det 0/RSP0/CPU0 t7344 sysdb edm register completed
May  8 06:17:00.008 plat_sl/sl-det 0/RSP0/CPU0 t6906 Install init completed
May  8 06:17:00.025 plat_sl/sl-inf 0/RSP0/CPU0 t6906 Opening connection to IM
May  8 06:17:00.031 plat_sl/sl-det 0/RSP0/CPU0 t7377 WORKER thread starting
May  8 06:17:00.033 plat_sl/sl-det 0/RSP0/CPU0 t7345 sysdb edm register completed for flex
 consumption
```

show license status

To display the registration details, status of license, and authorization details of license , use the **show license status** command in the XR EXEC mode.

show license status

Syntax Description

This command has no keywords or arguments.

Command Default

None

Command Modes

XR EXEC mode

Command History

Release	Modification
Release 5.3.3	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

Examples

The following example shows output from the **show license status** command:

```
Router# show license status
Fri Sep 27 12:10:47.338 UTC

Utility:
  Status: DISABLED

Smart Licensing Using Policy:
  Status: ENABLED

Account Information:
  Smart Account: <none>
  Virtual Account: <none>

Data Privacy:
  Sending Hostname: yes
    Callhome hostname privacy: DISABLED
    Smart Licensing hostname privacy: DISABLED
  Version privacy: DISABLED

Transport:
  Type: cslu
  Cslu address: <empty>
  Proxy:
    Not Configured
  VRF:
    Not Supported
```

```
Policy:
  Policy in use: Merged from multiple sources.
  Reporting ACK required: yes (CISCO default)
  Unenforced/Non-Export Perpetual Attributes:
    First report requirement (days): 365 (CISCO default)
    Reporting frequency (days): 0 (CISCO default)
    Report on change (days): 90 (CISCO default)
  Unenforced/Non-Export Subscription Attributes:
    First report requirement (days): 90 (CISCO default)
    Reporting frequency (days): 90 (CISCO default)
    Report on change (days): 90 (CISCO default)
  Enforced (Perpetual/Subscription) License Attributes:
    First report requirement (days): 0 (CISCO default)
    Reporting frequency (days): 0 (CISCO default)
    Report on change (days): 0 (CISCO default)
  Export (Perpetual/Subscription) License Attributes:
    First report requirement (days): 0 (CISCO default)
    Reporting frequency (days): 0 (CISCO default)
    Report on change (days): 0 (CISCO default)

Miscellaneous:
  Custom Id: <empty>

Usage Reporting:
  Last ACK received: <none>
  Next ACK deadline: Sep 12 2025 15:46:25 UTC
  Reporting push interval: 30  days
  Next ACK push check: <none>
  Next report push: Sep 12 2024 15:48:25 UTC
  Last report push: <none>
  Last report file write: <none>

Trust Code Installed: <none>
Secondary Signing Cert: 0

Device Telemetry Report Summary:
================================
Data Channel: AVAILABLE
Reports on disk: 0
```

show license summary

To display the license summary, use the **show license summary** command in XR EXEC mode.

show license summary

Syntax Description

This command has no keywords or arguments.

Command Default

None

Command Modes

XR EXEC mode

Command History

Release	Modification
Release 6.1.1	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

Examples

The following example shows output from the **show license summary** command:

```
Router# show license summary

Smart Licensing is ENABLED

Registration:
  Status: REGISTERED
  Smart Account: Smart-Account-Name
  Virtual Account: ASR9K-SL-eXR
  Last Renewal Attempt: None
  Next Renewal Attempt: Mon Apr 09 2018 12:52:44 UTC

License Authorization:
  Status: AUTHORIZED on Wed Oct 11 2017 12:55:24 UTC
  Last Communication Attempt: SUCCEEDED
  Next Communication Attempt: Thu Oct 12 2017 00:55:24 UTC

License Usage:
  License                              Entitlement tag                Count       Status
  -----------------------------------------------------------------------------------------

  ASR 9000 Consumption Model LC         (A9K-8X100GE-CM)                1        AUTHORIZED

  ASR 9K 48x10-1G Consumption Model
  Line Card License                    (A9K-48X10-1-CM-LIC)            1        AUTHORIZED

  ASR9000 IP Basic 10G                 (S-A9K-IP-10G)                  48       AUTHORIZED
```

show license usage

To display the license usage count, use the **show license usage** command in XR EXEC mode.

show license usage

Syntax Description

This command has no keywords or arguments.

Command Default

None

Command Modes

XR EXEC mode

Command History

Release	Modification
Release 6.1.1	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

Examples

The following example shows output from the **show license usage** command:

```
Router# show license usage
Wed Sep 25 02:52:02.267 UTC

ESS_100G_RTU_1 (ESS-100G-RTU-1):
  Description: Core and Aggregation Essentials SW Right-to-Use v1.0 per 100G
  Count: 1
  Version: 1.0
  Status: NOT AUTHORIZED
  Export status: NOT RESTRICTED
  Feature Name: ESS_100G_RTU_1
  Feature Description: Core and Aggregation Essentials SW Right-to-Use v1.0 per 100G
  Enforcement type: NOT ENFORCED
  License type: Perpetual
  Reservation:
    Reservation status: NOT INSTALLED

ESS_100G_SIA_3 (ESS-100G-SIA-3):
  Description: Core and Aggr Essentials SIA per 100G
  Count: 1
  Version: 1.0
  Status: NOT AUTHORIZED
  Export status: NOT RESTRICTED
  Feature Name: ESS_100G_SIA_3
  Feature Description: Core and Aggr Essentials SIA per 100G
  Enforcement type: NOT ENFORCED
  License type: Subscription
  Reservation:
    Reservation status: NOT INSTALLED
```