



# Trustworthy Systems Commands

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This module describes the commands related to trustworthy systems on Cisco IOS XR7 software.

For detailed information about the key components that form the trustworthy security systems, see the *Implementing Trustworthy Systems* chapter in the *System Security Configuration Guide for Cisco NCS 5500 Series Routers*.

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# show platform security integrity log

To display the security integrity logs for the router, use the **show platform security integrity log** command in XR EXEC mode.

```
show platform security integrity log { boot location location-name | runtime file-location
| secure-boot status location location-name }
```

## Syntax Description

<b>boot</b>	Displays boot integrity logs
<b>runtime</b>	Displays integrity measurement architecture (IMA) logs
<b>secure-boot</b>	Displays information related to secure boot

## Command Default

None

## Command Modes

XR EXEC

## Command History

Release	Modification
Release 7.10.1	The command was modified to include the secure boot status.
Release 7.0.12	This command was introduced.

## Usage Guidelines

If the router does not support this secure boot verification functionality, then the status is displayed as *Not Supported*.

## Task ID

Task ID	Operations
system	read, write

## Examples

This example shows how to verify the secure boot status of the router:

```
Router#show platform security integrity log secure-boot status
Wed Aug 10 15:39:17.871 UTC

+-----+
| Node location: node0_RP0_CPU0 |
+-----+
Secure Boot Status: Enabled
Router#
```

# show platform security attest

To allow the operator to cryptographically verify the Platform Configuration Registers (PCRs) and attest with the device Attestation Identity Key (AIK), use the **show platform security attest** command in XR EXEC mode.

```
show platform security attest { pcr 0/1 { location all | | trustpoint ciscoaik nonce nonce value } | certificate { ciscoaik | | ciscosudi } }
```

Syntax Description		
<b>attest</b>		The attest keyword is used with either pcr or certificate keywords.
<b>pcr</b>		The pcr keyword takes the index number 0 or 1 as an argument. PCRs return the pcr-index and pcr-value of the specified node.
<b>certificate</b>		The certificate keyword takes ciscoaik or ciscosudi as an argument.
<b>ciscoaik</b>		The ciscoaik keyword returns the Cisco AIK Root, Cisco AIK CA, and Cisco AIK certificates. The AIK is a Certificate Enrollment Specification used to certify the trustworthiness of a router.
<b>ciscosudi</b>		The ciscosudi keyword returns the Cisco SUDI Root, Cisco SUDI CA, and Cisco SUDI certificates. The Secure Unique Device Identifier (SUDI) is a secure device identity in an X.509v3 certificate that maintains the product identifier and serial number.
<b>trustpoint</b>		Cisco AIK certificate to be used for the PCR quote.
Optional keywords for <b>ciscoaik</b> and <b>ciscosudi</b>		<ul style="list-style-type: none"> <li>• <b>json</b></li> <li>• <b>location all</b></li> <li>• <b>nonce</b> <i>nonce value</i></li> </ul>

**Command Default** None

**Command Modes** XR EXEC

Command History	Release	Modification
	Release 7.4.1	This command was introduced.

**Usage Guidelines** If the router does not support this secure attest verification functionality, then the status is displayed as *Not Supported*.

Task ID	Task ID	Operations
	system	read, write

**Examples**

This example shows the truncated output of the certificates used to attest the trustworthiness of a router:

```
RP/0/RP0/CPU0:NCS-540-C-LNT#show platform security attest certificate ciscoaik
Thu Apr 11 06:09:57.026 UTC
```

```
+-----+
  Node location: node0_RP0_CPU0
+-----+
Certificate name: Cisco AIK Root
-----BEGIN CERTIFICATE-----
MIIDITCCAgmgAwIBAgIJAzozWHjOFsHBMA0GCSqGSIb3DQEBCwUAMC0xDjAMBgNV
-----END CERTIFICATE-----

Certificate name: Cisco AIK CA
-----BEGIN CERTIFICATE-----
MIIEXzCCA0egAwIBAgIJCCKA1bCuHJDMA0GCSqGSIb3DQEBCwUAMC0xDjAMBgNV
-----END CERTIFICATE-----

Certificate name: Cisco AIK
-----BEGIN CERTIFICATE-----
MIIEFjCCAv6gAwIBAgIDGGJ9MA0GCSqGSIb3DQEBCwUAMCkxFzAVBgNVBAMTDkF0
-----END CERTIFICATE-----
```

This example shows the pcr-quote, pcr-quote-signature, pcr-index, and pcr-value of the specified nonce.

```
RP/0/RP0/CPU0:NCS-540-C-LNT#show platform security attest PCR 0 trustpoint ciscoaik nonce
4678
Thu Apr 11 12:58:41.963 UTC
Nonce: 4678
```

```
+-----+
  Node location: node0_RP0_CPU0
+-----+
Uptime: 1224771
pcr-quote: /1RDR4AYACckYXSBYFKZw5Nurif7DYQRMrBTg6q91heoKFZW0kp0FQACRngAAAAABX7FPQAAA97/
///AQAAACQAAAAALAAAAQALAwEAAAAGrE798LlOkKp1kryIv50kG0/V461IQutuSVgCUwjG8q4=
pcr-quote-signature:
X3xo0M5DLWeJI3WGOM1XRLkE5sKyp9oEo0+EX8x5s13qdhIe---<truncated>--KhmwAV8ETdxfgbccPYS6A==
pcr-index      pcr-value
  0             sL3H+Em2xzXrNUoDF+kC47IXxN4V/d/7hYUXApXNoY=
```