Communications Failure with Cisco Smart License Server

Contents

- Communications failure with Cisco Smart License server
 - <u>ICSeverity</u>
 - Impact
 - Description
 - SyslogMessage
 - MessageSample
 - ProductFamily
 - Regex
 - Recommendation
 - Commands

Communications Failure with Cisco Smart License Server

ICSeverity

5 - Notice

Impact

Device can retry connecting later

Description

This error appears if you have Smart Licensing configured on the device. Smart Licensing is a cloud-based unified license management system for managing licenses across Cisco products. Depending on your network type and setup, you could be using different methods of communication with the CSSM (Cisco Smart Software Manager) portal. This error can be seen if the device is unable to get a response for configured URL via on-prem or CSLU method or if the destination is Unreachable. SMART_LIC-3-COMM_FAILED: Communications failure with the Cisco Smart License Utility (CSLU): HTTP Server Error 404: Not Found Refer to steps under Remediation

SyslogMessage

SMART_LIC-3-COMM_FAILED

MessageSample

ProductFamily

- Cisco Catalyst 9200 Series Switches
- Cisco Catalyst 9300 Series Switches
- Cisco Catalyst 9400 Series Switches
- Cisco Catalyst 9500 Series Switches
- Cisco Catalyst 9500H Series Switches
- Cisco Catalyst 9600 Series Switches
- Cisco 4000 Series Integrated Services Routers
- Cisco Catalyst 8200 Series Edge Platforms
- Cisco ASR 1000 Series Aggregation Services Routers
- Cisco Catalyst 9800 Series Wireless Controllers

Regex

N/A

Recommendation

This error indicates one of the web pages the device was expecting to receive for licensing was empty, and the server returned a 404 error. Please review the output of show license all. This gives you additional information about any license failure and if the licenses are Unregistered. There are a couple common reasons why this error can be seen:

First: Check the URL that you are using for the on-prem smart licensing service. If it contains any spaces, many Cisco IOS® XE devices can not properly capture the spaces in the config, and as a result the URL can be cut off and thus invalid. Replacing a space with the characters "%20" (without the quotes) allows the device to use a single string of characters to reach out to the server and must allow it to get to the proper page.

Second: It has been observed in some deployments that certain software combinations can result in the on-prem service not having a webpage available which the device in question is expecting, thus generating the error. For example, starting in Cisco IOS XE 17.3.2 and later, smart licensing uses the SLP mechanism. On-prem smart license servers require a minimum of of 8-202102 to recognize this mechanism. Running on-prem software prior to this release with newer Cisco IOS XE software can generate this error. For the second scenario, it is often recommended that the on-prem service be upgraded to the latest recommended release in order to address all known issues at that time. If neither of these workarounds are able to resolve the issue, please contact Cisco TAC as additional troubleshooting can be required.

Commands

#show version
#show logging
#show license all
#show license summary
#show call-home profile all
#show tech-support license