Monitor /var Space In Cellular Gateway CG522-E

Contents

Introduction

Prerequisites

Requirements

Components Used

Background Information

Monitor

Troubleshoot

Conclusion

Introduction

This document describes maintaining log rotation for monitoring Cisco CG522-e space issues if running on version Cisco IOS® 17.9.5 or lower.

Prerequisites

Requirements

Cisco recommends that you have basic knowledge of these topics:

- 5G Cellular Network Basics
- Cisco Cellular Gateway 522-E
- Cisco IOS XE and Cisco IOS CG

Components Used

The information in this document is based on these software and hardware versions:

Cisco Cellular Gateway 522-E with Cisco IOS

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Background Information

Cisco CG522-E running on versions below Cisco IOS 17.9.5 can have space issues that hamper device performance. Later releases after 17.12.3 ES have a file rotation feature, thus eliminating manual file deletion in later releases to clear the space.

Monitor

Sample Log Example:

CRITICAL: File system [/var] is critically low in space. Available space [0]. Please delete some files, otherwise the device sometimes does not function correctly.

Troubleshoot

These are the steps to recover the box until upgraded to later releases like 17.9.5a ClickES or 17.12.3 ES if encountering space issues:

Step 1 : Login to CG, proactively monitor /var/log space usage and remove the offending log files like confd.log if you see any errors like:

CRITICAL: File system [/var] is critically low in space. Available space [0]. Please delete some files, otherwise the device sometimes does not function correctly.

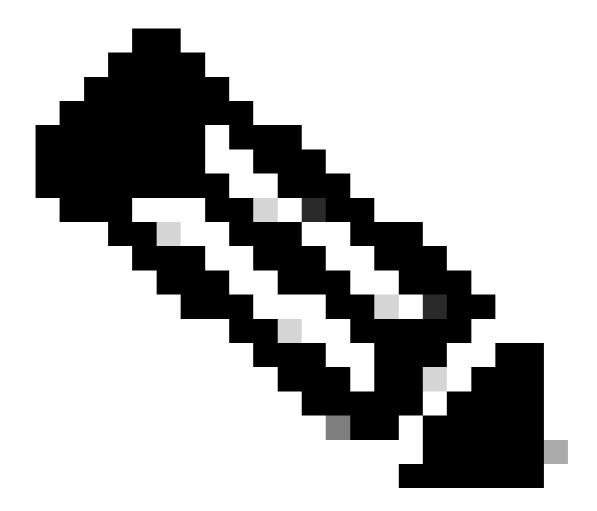
Step 2: Request shell access

R1# request system shell

Activity within this shell can jeopardize the System.

"Are you sure you want to continue? [y/n]y

Challenge: XXXXX



Note: Need to copy and share the challenge with TAC in order to provide a response.

Step 3: Entering the shell prompt and verifying the file size

R1:/# cd /var/log/confd R1:/var/log/confd#

R1:/var/log/confd# du -sh *

300.4M audit.log

328.0K confd.log

4.0K confderr.log.1

4.0K confderr.log.idx

4.0K confderr.log.siz

340.0K devel.log

<..... Truncated>

R1:/var/log/confd# cd ..
R1:/var/log# cd
R1:/admin# pwd
/admin
R1:/admin# cd /
R1:/# du -sh *
4.0K ACTIVE_BOOT_PART
4.0K AP_PLATFORM_DESCR

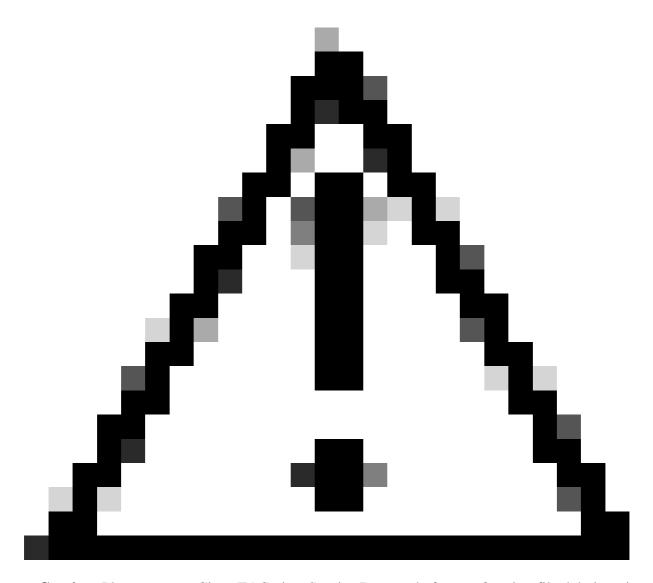
4.0K AP_PLATFORM_NAME

R1:/# cd /var/log

R1:/var/log# du -hs ./* | sort -n

- 0 ./boot.log
- 0 ./lastlog
- 0 ./ntpd.log
- 0 ./warnings
- 0./wtmp
- 1.2M ./xcheck.log
- 1.5M ./cwan.log.backup

<..... Truncated>



Caution: Please contact Cisco TAC via a Service Request before performing file deletion via Devshell access.

Step 4: Remove the problematic files

Usually audit.log can grow >1G or netconf.log can grow ~500M. As CG has a total space of 1.7G, removing these files would stop the device from being non-responsive

R1:/var/log/confd# rm netconf.log

R1:/var/log/confd# rm audit.log

Step 5 : Exit from shell:

R1:/# exit

Ending Debug session....

R1#

Conclusion

Release.12.3 ES or 17.9.5a ClickES has file rotation and thus manual file removal would not be required. If

running versions lower than Cisco IOS 17.9.5, monitor the logs and perform recovery through manual file deletion.