

DOCUMENT NUMBER: MTN-0043-23-NA
APC: 226
ISSUE DATE: May-2023
EXPIRATION DATE: 31-May-2024
Bulletin Type: Informational Only

Motorola Solutions Technical Notification (MTN)

TITLE: Intersystem link bouncing during active calls might cause ISGW application to reset

TECHNOLOGY: ASTRO 25

SYMPTOMS:

ISGW (ASTRO InterSystem Gateway) resets and switches over to redundant ISGW (if present). UEM (Unified Event Manager) shows Critical event: CRITICAL MALFUNCTION, SOFTWARE ERROR. This may happen after numerous (thousands over time cumulative) foreign system link failures during active calls.

MODELS / SYSTEM RELEASES / KITS / DATECODES AFFECTED:

ASTRO 2019.2, ISGW-Astro-20.19.02.03-04 or prior
ASTRO 2020.1 / 2020.HS /2021.1, ISGW-Astro-20.20.01.01-21 or prior
ASTRO 2022.1 / 2022.HS, ISGW-Astro-20.22.01.03-52 or prior

SEVERITY RECOMMENDATION:

Medium / Operational - Schedule to implement

ROOT CAUSE:

Software defect

DEFINITIVE TEST:

Execute shell command `grep "Max number of dialogs reached" /sz/log/dvmsgs .`

If the command returns the output shown below, the ISGW is at high risk of resetting. It is strongly recommended to upgrade the ISGW immediately.

01/25/2023 21:37:06.223 32(IF) DialogPool.cpp(1208) task:24 pid: 3252 tid:4141615936 Index 38441, Code 1, Method 11: DialogPool::GetDialog(): Max number of dialogs reached, MAX_NUM_DIALOGS = 30000

If the command does not return any message, the ISGW upgrade should be scheduled soon since cumulative link failures trigger the reset.

WORKAROUNDS:

None

CORRECTIVE ACTIONS:

Upgrade ISGW to the version listed below. This is a robustness fix for cumulative link failure over time to avoid ISGW reset.

DOCUMENT NUMBER: MTN-0043-23-NA
APC: 226
ISSUE DATE: May-2023
EXPIRATION DATE: 31-May-2024
Bulletin Type: Informational Only

RESOLUTIONS AND REPAIR PROCEDURES:

Upgrade to the appropriate version as listed in the "PARTS REQUIRED (HARDWARE/SOFTWARE):" section below, based on the model - see *Upgrading Linux-Based Virtual Machines* procedure in *Private Network Management Servers Feature Guide*.

To obtain software:

- 1) Initiate a software request case through Motorola Solutions, Inc. Centralized Managed Support Operations (CMSO) at 800-MSI-HELP (800-674-4357) or 302-444-9800
- 2) Await confirmation email from Motorola Solutions Software Factory (MSSF) with instructions
- 3) Complete the Motorola Solutions Software Factory Software Order Form:
 - a) Reference **MTN-0043-23-NA** in the 'Reason for Software/Hardware Change' section of the software order form.
 - b) List the part number (**KC #** as listed under "PARTS REQUIRED (HARDWARE/SOFTWARE):" below) in the 'Part # or Version #' section of the software order form.
- 4) Email completed Software Order Form to MSSF for processing

TIME TO IMPLEMENT/SYSTEM IMPACT:

Estimated time to implement - per machine - up to 30 mins

High - Loss of functionalities/audio/downtime - For systems without ISGW redundancy, the available ISSI/CSSI connection will be down. In addition, all home group and unit registrations will be lost. For systems with ISGW redundancy, intersystem calls aren't available for the switchover time.

PARTS REQUIRED (HARDWARE/SOFTWARE):

ASTRO 2019.x, ISGW-Astro-20.19.02.03-16, KC226V000000190600 or later

ASTRO 2020.x/2021.x, ISGW-Astro-20.20.01.01-35, KC226V000000200500 or later

ASTRO 2022.x, ISGW-Astro-20.22.01.04-55, KC226V000000220200 or later

ADDITIONAL INFORMATION:

None

REFERENCE THE FOLLOWING DOCUMENTS/PROCESSES FOR INSTALLATION PROCEDURES:

[Private Network Management Servers Feature Guide](#) (ID:MN005979A01 for ASTRO 2019.x, ID:MN007171A01 for ASTRO 2020.x, ID:MN007580A01 for ASTRO 2021.x, ID:MN009787A01 for ASTRO 2022.x)

[Unified Network Configurator User Guide](#) (ID:MN005991A01 for ASTRO 2019.x, ID:MN007175A01 for ASTRO 2020.x, ID:MN007584A01 for ASTRO 2021.x, ID:MN009792A01 for ASTRO 2022.x)

WHEN TO APPLY RESOLUTION:

After failure _X_

During maintenance _X_

DOCUMENT NUMBER: MTN-0043-23-NA
APC: 226
ISSUE DATE: May-2023
EXPIRATION DATE: 31-May-2024
Bulletin Type: Informational Only

LABOR ALLOWANCE:

This is an informational bulletin. No labor warranty is implied, intended or authorized for U.S. Domestic Partners/Customers. Other regions should follow their own standard procedures.

If, after attempting to perform the solution steps, you are having issues with the resolution in the MTN then please contact your MSI Technical support center.

In NALA https://www.motorolasolutions.com/en_us/support.html

In EMEA https://www.motorolasolutions.com/en_xu/support.html

In Asia https://www.motorolasolutions.com/en_xp/support.html

SW ORDER FORM IS AVAILABLE UNDER THE LINK:

http://www.motorolasolutions.com/content/dam/msi/docs/robots/motorola-technical-notification/SW_order_form.pdf