Clear Transient DIMM UECC Errors on Cisco UCS

Contents

Introduction

This document describes how to clear transient Uncorrectable Error Correction Code (UECC) memory errors on Cisco Unified Computing Systems (UCS).

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

This document is valid for all M5, M6 and M7 generation servers.

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

In the case of servers that do not display prior instances of Error Correction Code(ECC) or Uncorrectable Error Correction Code (UECC) errors, certain memory modules can exhibit UECC memory errors upon BIOS POST during a reboot under normal operations. The affected Dual In-Line Memory Modules (DIMM)

are shown as block listed, but no new errors are reported upon subsequently clearing the Block Listing data or, during a Failure Analysis after a Return Materials Authorization (RMA). This indicates the potential transient nature of UCS Memory Errors. DIMMs can continue to be used after clearing the Block Listing Error data.

Transient or non-persistent errors can occur without warning. Correctable Errors do not always necessarily occur withinin a DIMM prior to the occurance of a DIMM Training Error or a Multibit Error. The scope of what occurs during memory training greatly differs from what occurs when memory is used at runtime. Therefore, the stability of the memory modules does not necessarily correlate between server POST and Runtime.

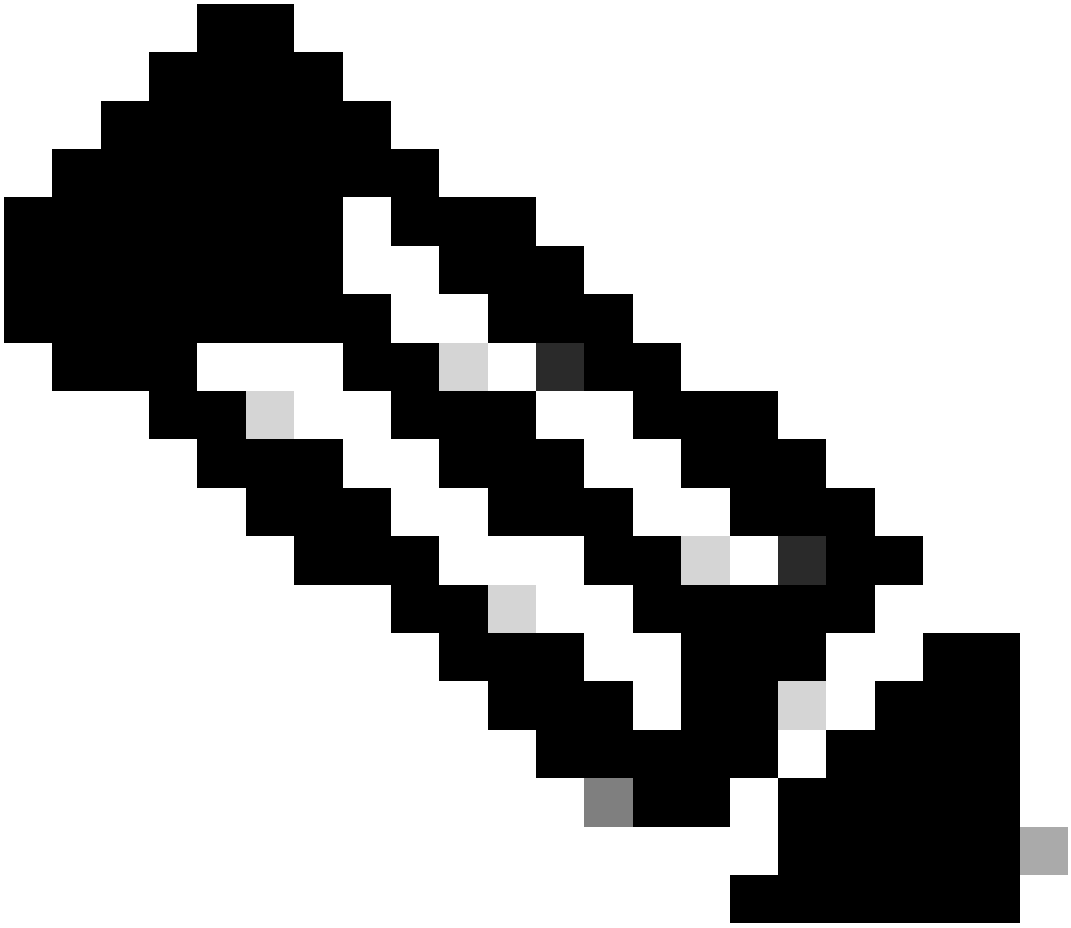
Known Defects

The behavior previously described is outlined by the listed Bugs:

1. Cisco bug ID CSCwa75339
2. Cisco bug ID CSCwk28210
3. Cisco bug ID CSCwo62396

Steps to Clear POST UECC Errors

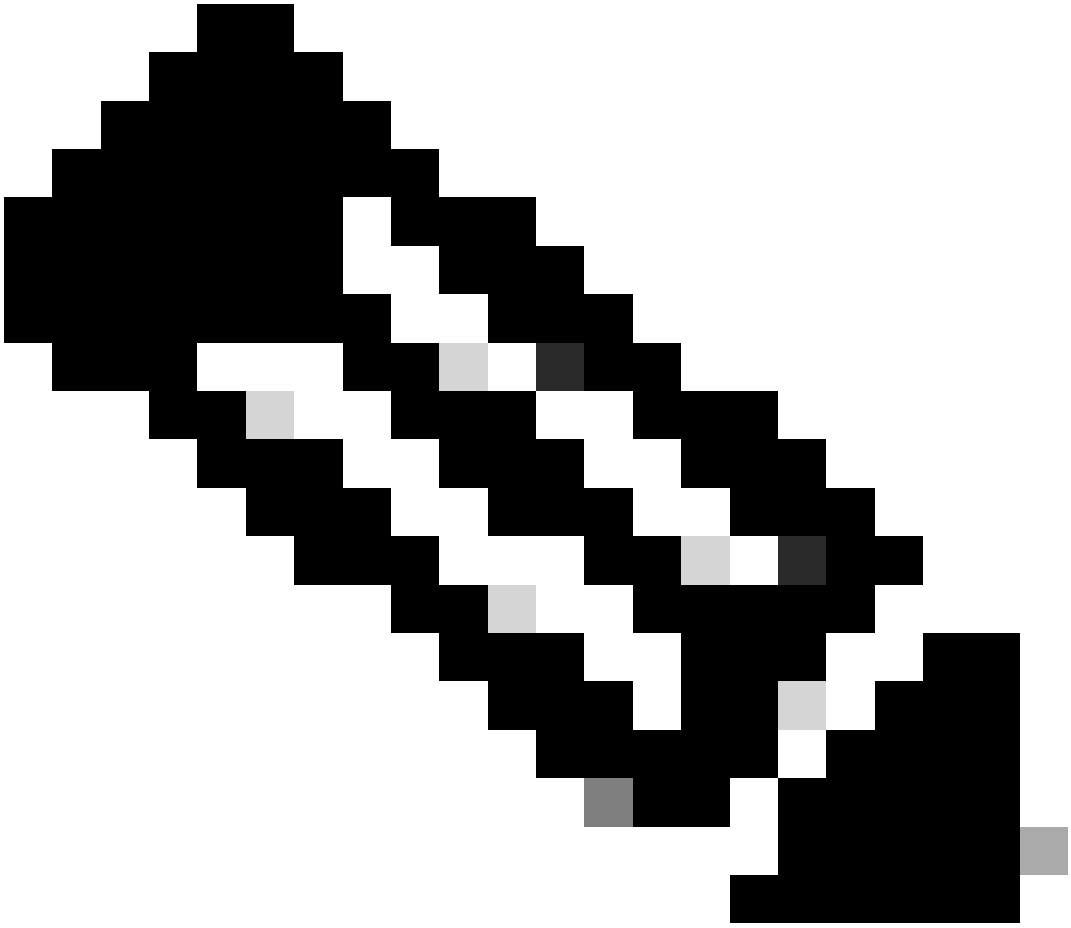
Blade Server



Note: Please select the correct Chassis ID and Server ID required for your specific environment. The image displayed is for demonstration purposes.

Power off the server.

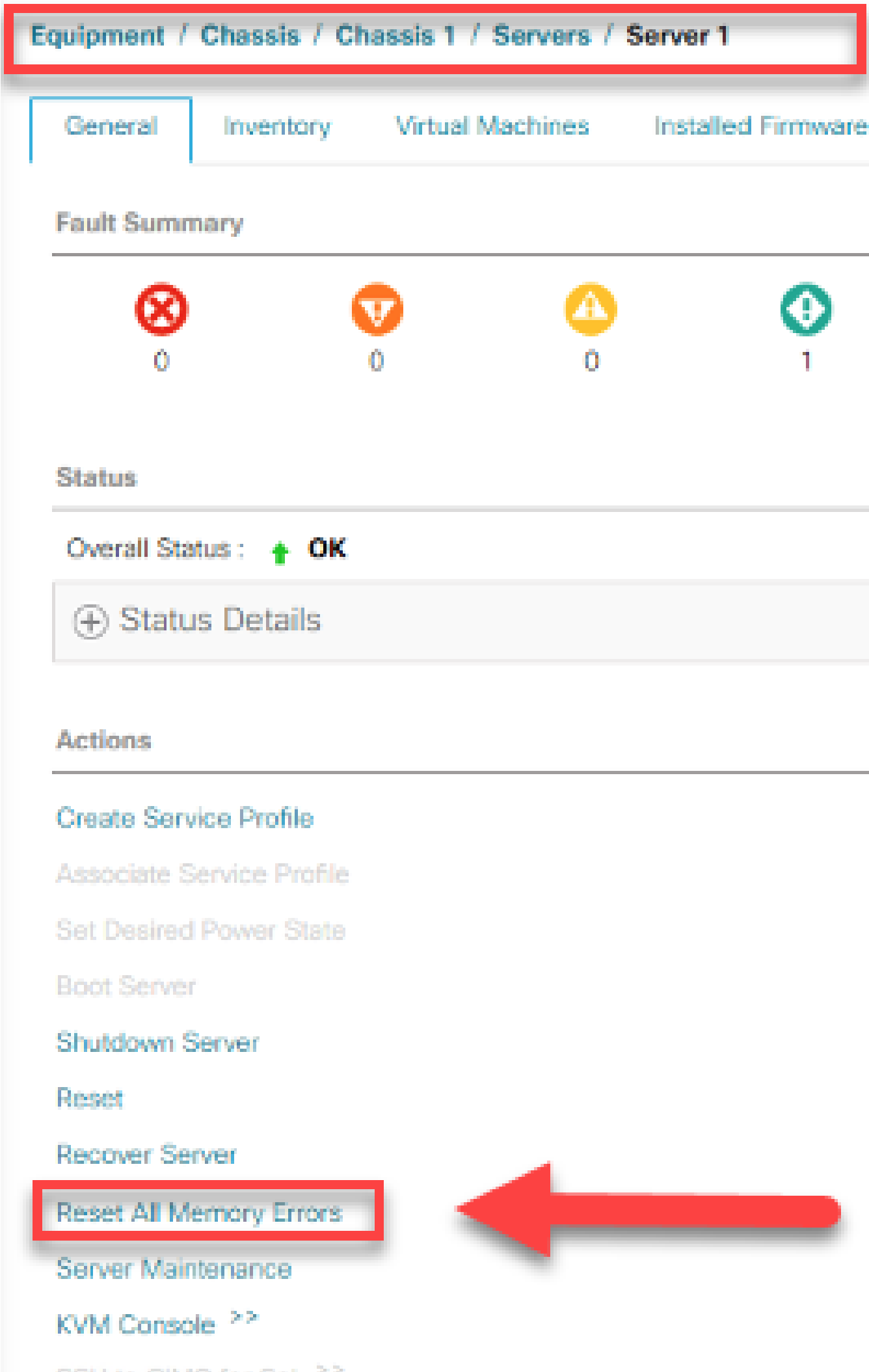
The server requires to be physically powered off otherwise the UECC errors can persist upon reboot.



Note: DIMM SPD data is not updated as CIMC polls the DIMM SPD data only upon server power on. If there is a truly problematic DIMM, the error returns upon reboot and Cisco Support can provide an RMA for the DIMM.

GUI Method for UCS Manager

Navigate to **Equipment > Chassis > Chassis ID > Servers > Server ID > Actions > System > Reset All Memory Errors.**

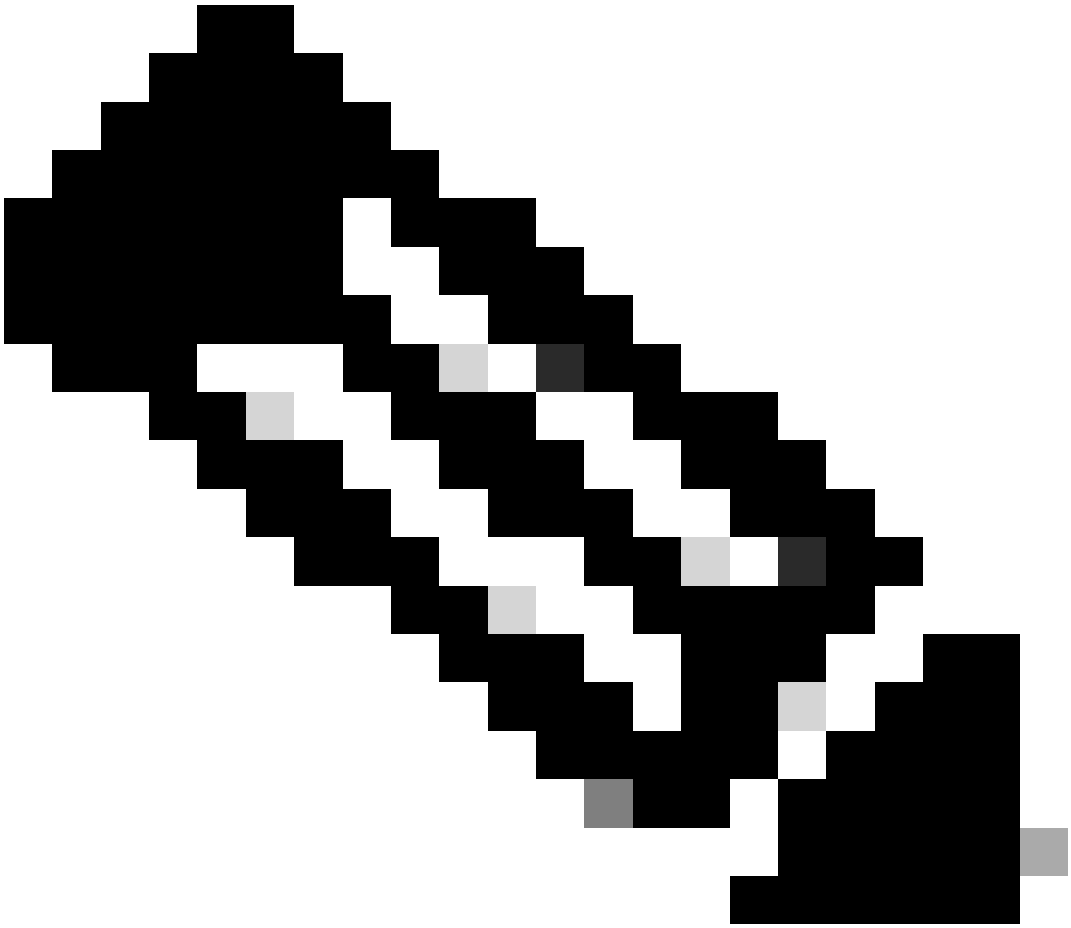

Equipment / Chassis / Chassis 1 / Servers / Server 1
General
Inventory
Virtual Machines
Installed Firmware
Fault Summary
0
0
0
1
Status
Overall Status : OK
Status Details
Actions
Create Service Profile
Associate Service Profile
Set Desired Power State
Boot Server
Shutdown Server
Reset
Recover Server
Reset All Memory Errors
Server Maintenance
KVM Console

: DIMM SPD data is not updated as CIMC polls the DIMM SPD data only upon server power on. If there is a truly problematic DIMM, the error returns upon reboot and Cisco Support can provide an RMA for the DIMM.

GUI Method

If the Server is not managed with Intersight Managed Mode (IMM), then the Command Line Interface (CLI) method is required. Otherwise, the previous steps are applicable.

CLI Method



Note: The image displayed is for demonstration purposes.

Launch an SSH Session to the Server CIMC IP Address. Ensure that the server in question is powered off prior to proceeding with the steps as outlined.

```
# scope chassis
 /chassis # reset-ecc
 /chassis # commit
 /chassis #
```

Once complete, verify that no new errors increment within the system.