Initiate Diagnostic Tool Embedded Within UCS Manager

Contents Introduction Prerequisites Requirements Components Used Procedure / Configure

Introduction

This document describes how to initiate the Diagnostic Tool embedded in UCS Manager to perform memory diagnostics on servers.

Prerequisites

Requirements

Components Used

Diag Test is available in the UCS Manager 3.1

It is only available for the servers that are integrated into it (B-Series and C-Series).

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.

Procedure / Configure

Navigate to the Servers section.



1 Main Topology

Select Policies.

CS Manager	
А	Servers / Publies
Seven	Ethemet Adapter Policies Fore Channel Adapter Policies Server Poli Policies Server Poli Policy Qualitations Host Firmware Packages (PMARed/th Access Profiles Local Disk Contry Policies Management Firmware Policies Sorub Policies
Service Profiles	+ - + Equat @Post
Service Poste Templates	Sana
Polices	\$ 107
* root (0)	
 Adapter Policies 	
 BIOS Defaults 	
 BIOS Policies 	
 Boot Policies 	
 Diagnostics Policies 	
 Graphics Card Policies 	
 Host Femware Packages 	
 IPMoRedfish Access Profiles 	
 KVM Management Policies 	
5	Al Al Al Al Al Al Al Al

2 Policies

Within Policies, select and open Diagnostics Policies.



3 Diagnostics Policies

At the bottom, click **Add** to create a new diagnostic policy.





In the new window, provide a name for the diagnostic policy. The **Description** field is optional.

* served
* Sub-Organizations
Service Profile Templates
* max 🔘
 Service Template EXX-SEVE TEMP
 Service Template IRONT-EXXL
* Sub-Organizations
* Palaini
* max 😳
* Adapter Policies
* BOOS Declaritie
* BOOK Pullcies
* Beet Policies
* Diagnostics Publics
Graphics Card Policies
* Host Firmware Packages
* IPME Rollink Across Problem
* KVM Management Policies
* Local Disk Config Policies
* Mainmance Policies
* Management Ferrevant Packages
* Memory Policy
A Resident Marcon Palar

5 Create Diagnostics Policies

Configure the details of the memory test, then click Add at the bottom of the window.

		Create	? ×					
0	Create Diagnostics Policies							
0	Memory Test	Order	CPU Filter	Loop Count	Memory C	Memory S	Pattern	
				No data	available			
				(+) Add	Delete			
		1	< P	rev	ext >	Finish	Cancel	

In the pop-up window, populate the fields according to your needs:

- **Order**: Defines the order of test execution.
- CPU Filter: Choose to configure for all CPUs or a specific CPU.
- Loop Count: Set the number of test iterations (minimum 1, maximum 1000).
- Memory Chunk Size: Set the memory chunk to 'big chunk' or '5mb-chunk.'
- Memory Size: Specify the tested memory size.
- Pattern: Choose from butterfly, killer, PRBS, PRBS-addr, or PRBS-killer tests.

		Create Diagnostics Policies	?) >
0	Create Diagnostics	Create Memory Test $? \times$		٥
0	Memory Test	Order : 1	Memory S Pattern	
Ŭ		CPU Filter : O P0 P1 Cpus All Cpus	All Prbs	
		Loop Count : 5		
		Memory Chunk Size : Big Chunk Smb Chunk		
		Memory Size (GiB) : all		
		Pattern : Prbs v		
		OK Cancel		
			inish Cancel	

7 Create Memory Test

When all fields are entered, click **OK** and then **Finish**.

Create Diagnostics Policies	T/ Advance	ed Filter 🕆 Exp	ort 🖷 Print			\$
	Order	CPU Filter	Loop Count	Memory C	Memory S	Pattern
Memory Test	1	All Cpus	5	Big Chunk	All	Prbs
			<u></u>			
			(+) Add	Delete		
		_	_			
		_	(† Add	Delete		

After creating the Diagnostic Policy, assign it to a blade server, an integrated rack server, or all servers.

To assign the policy to a specific server, navigate to the desired server by accessing **Equipment** and then **Chassis**.



9 Status

At the top of the screen, open the **Diagnostics** tab.

Go to **Diagnostic Policies**, and select the policy you created from the drop-down menu.

**	UCS Manager		8 9 0 0 0 7 0 1 0	
л.		Equipment / Channin / Channin 1 / Servers / Server 3		
•	* Ealphant * Charan	General Treestry Millia Machines Installed Firmaire CBIC Seasons SD, Logi VIP Refs. Diagnostic Basis	madh Dognomics Faults Events F3W Statistics Temperatures Power	
÷.	= Owen 1 😳	Oragreente Portones		
	 fans KO Moshaws 	Bark Topologia		
•	+ P\$0.	R3W Status Descr. Despendits_Pol		
	• Server 3	Filer Progress default Text Ownal Progress 1	10% 0	
	+ Server 8 😳	Ener Description Dispractic Result		
4.	* Paleric Interconnects	S-Abarcelifer + Davit + Peri		
	 Fabric Interconnect & (primary) Fabric Interconnect & (subordinate) 	0 feat type	Status Description	Result Progress Percentage
	* Policies			
	Port Auto-Discovery Policy			

10 Diagnostic

To initiate the Diagnostic Test, click **Start** button. A pop-up alert informs you that this diagnostic causes a server reboot.



Caution: This activity is highly intrusive and must be performed during a maintenance window as it reboots all servers.

If ready, press **Yes** to continue, or **No** to cancel.



11 Reboot Alert

Under the Start and Stop buttons, a progress bar shows the current task description and overall progress.

To stop the diagnostic at any time, click Stop.

**	UCS Manager	😟 😎 🍮 🕸 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ж.	н .	Equipment / Onexis L / Dennis L / Server 3
•	Equipment Cransis	General Inventory Virtual Machines Installed Primears GMC Sessions SD, Logo VM Paths Health Disposition Faults Events FSM Districts Temperatures Power Despendent Brains
	Chesss 1 Fars KrMsburs	Begront Publis : Dogenetic, Por +
۰	 PSus Servers 	Volence Data In Program F3M Security of Dag Serup Weed's Local F3M Program
	Sever 3	Tex Oursel Progress: 096 Environment OP6 Disconsisting fraudt Disconsisting fraudt
л _о	Rack Mounts Rabric Interconnects Advic Interconnect A (primary)	5_λδασισθήμαν φ. βαριτ. φ. Ρου. Ο δια Τουμαι δρομα
	Fabric Interconnect & (subordinate) Policies Policies Policies	No dea natativa

12 Progress bar

When the diagnostic is complete, the **Diagnostic Result** is displayed.

In this test, no memory issues were found. If the result returns **Fail**, generate the logs for the server and contact TAC for assistance.

Equipment / Chassis / Chassis 1 / Server 3															
General	inventory	Virtual Machines	Installed Firmware	CMC Sessions	SEL Logs VE P	who Heat	h Diagnostics	Faults	Events	FSM	Statistics	Temperatures	Power		
Diagnosti	c Status														
Diagnosti	c Policies :	Nagnostic_Pol ·													
Start	Stop														
Operation	State : 4	Completed													
FSM Stat	us Descr : A	Nop													
FSM Prog	P#15 : [100%							
Test Over	al Progress :							100%							
Error Des	cription :														
Diagnosti	Result														
Ty Advance	oed Filter + E	boot é Prist													
10			Test 1	Type			Status				D	escription			Nesult
1			Mem	ory Test Pmem2			Completed				N	io memory errors d	etected	P	lass .

13 Overall Progress

To run diagnostics on all servers, access **Equipment** and click **Diagnostics** on the far right.



Caution: This activity is highly intrusive and must be performed during a maintenance window as it reboots all servers.



14 Main Topology

This opens a new screen where you can select to run diagnostics on Blade Servers or Rack Servers.

This process allows for simultaneous execution of multiple diagnostic tests on servers with different configurations.

	Philosophia									
	Main Topology Vew Fabric Interconnects Servers Thermal	Decommissioned Firmware Management Policies Faults	Disgnostics							
	Red Server RAG Servers									
7	Actions									
	Start									
	Diagnoretic Result									
	5, Advanced Filter + Export - & Print									
	Name	Chaosh ID	P0	Operation State	Overall Progress Percentage					
	Server 3	1	UC58-8200-M5	Completed	100					
	Server 8	1	UC58-8200-M6	ide						

15 Blade Servers

By clicking **Start**, a pop-up alert appears informing you that the servers are going to be rebooted.



Caution: This activity is highly intrusive and must be performed during a maintenance window as it reboots all servers.

Choose Yes to proceed with the diagnostic test or No to cancel.

Maintenance A	All Servers $ imes$
Are you sure you wa	will cause reboot on all servers. ant to reboot?
	Yes No

16 Maintenance alert

After confirming the diagnostic test, the progress for multiple servers is reflected in the **Operation State** column and the **Overall Progress Percentage** column, indicating the current test percentage.

Equipment				
Man Topolog Wee - Rock Insecureors - Servers - Themat	Decommissioned Remeans Management Policies Faults E	teprotice		
Back Servers Rock Servers				
Actions				
Set.				
the				
Dispositic Result				
15-Advanced Filter # Equipt Print				
Name	Onemin @	P0	Operation State	Overall Progress Percentage
Server 1	1	UC68-0000-MS	it-Popea	40
Sarver 2	1	UCI8-8200-MS	a Popea	100

17 Server Progress

Disgrantis Result								
5 Advance/Team + Equat Print								
Name	Cheesia (D	P0	Operation State	Overall Progress Percentage				
Server 1	1	UC58-8200-M5	Completed	100				
Server 2	1	UC58-8200-M5	Completed	100				

18 Operation state

Double-click on any server to investigate further. This action opens the diagnostic result for that specific server.

Ipdigment / Chansis / Chansis 1 / Bervers / Berver 1													
General Inventory	Virtual Machines	Installed Firmware	CMC Sessions S	EL Loga W Patha	Health Diagnostics	Faults Date	na FSM	Statistics	Temperatures	Power			
Depends Rates													
Diagnostic Policies :	Disgnostic_Pol ·												
Stat Stop													
Operation State	Completed												
FSM Status Descr	Nop												
FSM Progress						100%							
Test Overall Progress						100%							
Error Description													
Diagnostic Result													
5-Advanced Filter - 8	Export & Print												
0		Tent Typ	pe -		Status			Ow	scription		Result		Progress Percentage
1		Memory	y Test Preem2		Completed			No	memory errors de	worked	Pasa		100

19 Completed

If the Result column reports Fail instead of Pass , please open a case with TAC.

Collect the server logs or, if you have Intersight available, collect the serial number of the server.

Include this information in the case to help our engineers start investigating the issue immediately.