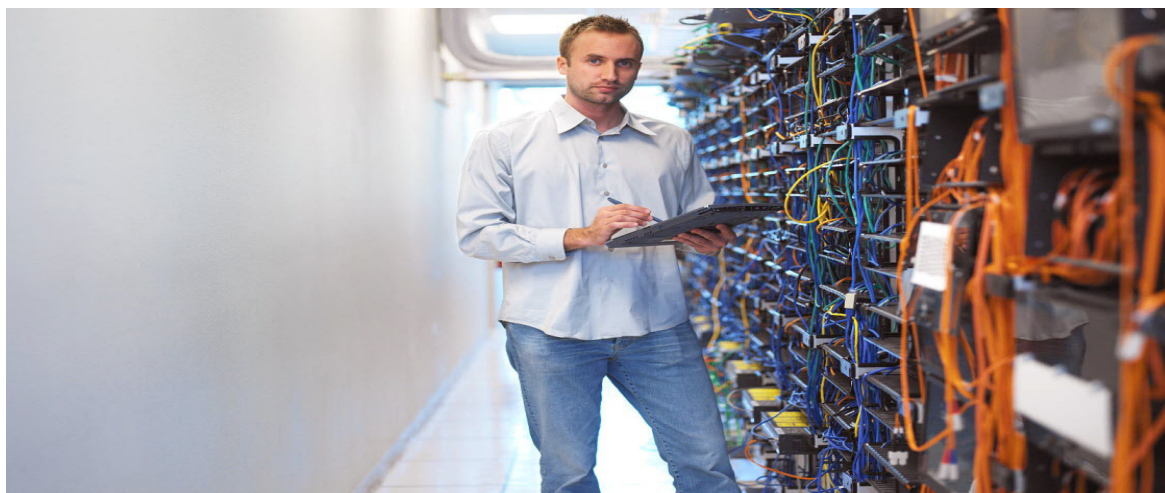# Managing Cisco Unified Computing System C-Series Rack Servers with Smart Call Home

Cisco® Smart Call Home is an award-winning, embedded support feature available on a broad range of Cisco products. This proactive support capability is provided at no additional cost when you have an active SMARTnet® Service, SP Base, Unified Computing Support Service, Mission Critical Support Service, Smart Care, Partner Support Service, or Smart Net Total Care contract for the designated products.

Recently Smart Call Home added support for the Unified Computing System C-Series (UCS-C) when integrated with the Unified Computing System Manager (UCSM).

This paper will discuss:

- UCS-C deployment options and the implications to Smart Call Home support

- Smart Call Home inventory coverage for the UCS-C

- Smart Call Home diagnostic messages for the UCS-C

Smart Call Home and UCS-C Deployment Models

The UCS-C customer has two options for deploying UCS-C servers—stand-alone and integrated. As a traditional stand-alone server, each UCS-C is managed via the embedded Cisco Integrated Management Controller (CIMC). Both HTTP and CLI management are supported. Intelligent Platform Management Interface (IPMI) is supported for integration with third party datacenter management and orchestration tools. Physically, the UCS-C server's embedded Gigabit Ethernet and the Fast Ethernet CIMC interfaces are connected to a traditional Ethernet access layer switch or Cisco Nexus® 2000 Fabric Extender managed by a Nexus 5000 parent switch.

Customers of Cisco's Unified Computing System may choose to integrate UCS-C servers with the UCSM (Figure 1). In this configuration, the UCS-C becomes a compute resource managed by the UCSM. Physically, a supported Cisco Network Assistant (CNA) or the Cisco Virtual Interface Card (VIC) is connected to the Unified Computing System Fabric Interconnect, and management traffic is routed through the LAN on Motherboard (LOM) Ethernet ports connected to a Nexus 2000 Fabric Extender.

Figure 1.   Example of UCS-C integration with UCSM
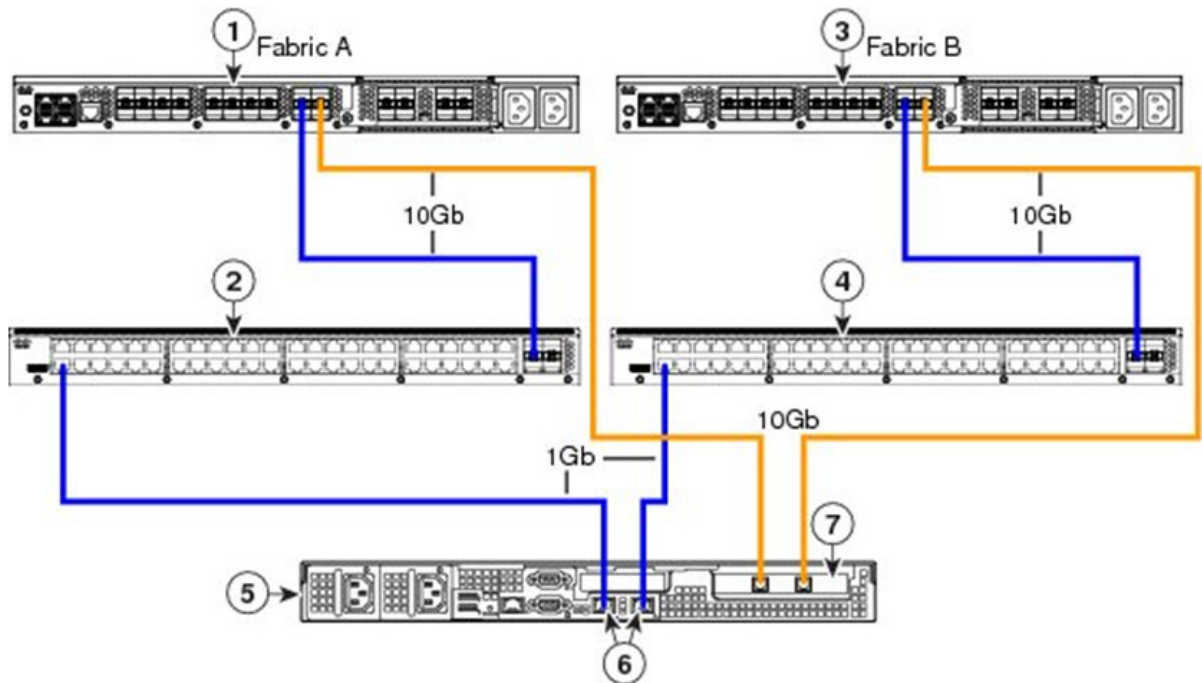
Instructions for integrating UCS-C with UCSM are available in the *Installation and Service Guides* for each rack server.

 Smart Call Home software is part of the UCSM running on the Fabric Interconnect. Therefore, Smart Call Home does support a rack server integrated with UCSM. Smart Call Home does not support a stand-alone UCS-C rack server. Instructions for configuring Smart Call Home in UCSM for an integrated rack server are available in the *Quick Start Guide for UCS-C Rack Server*.

Smart Call Home Inventory Reports

In the Cisco Unified Computing System, UCS-B and UCS-C servers provide compute resources that are combined with storage and networking resources to form service profiles representing traditional servers. Due to the physical differences between UCS-B and UCS-C servers, they are treated slightly differently in UCSM and in the Smart Call Home inventory reports.

The UCS-B blade, IO Module (Fabric Extender), and power supplies are components of the UCS Chassis. The UCS-C Server and Fabric Extender are separate units. In UCSM, these components are grouped under a parent object, Rack-Mounts (Figure 2).

Figure 2.   UCS-B and UCS-C in UCSM
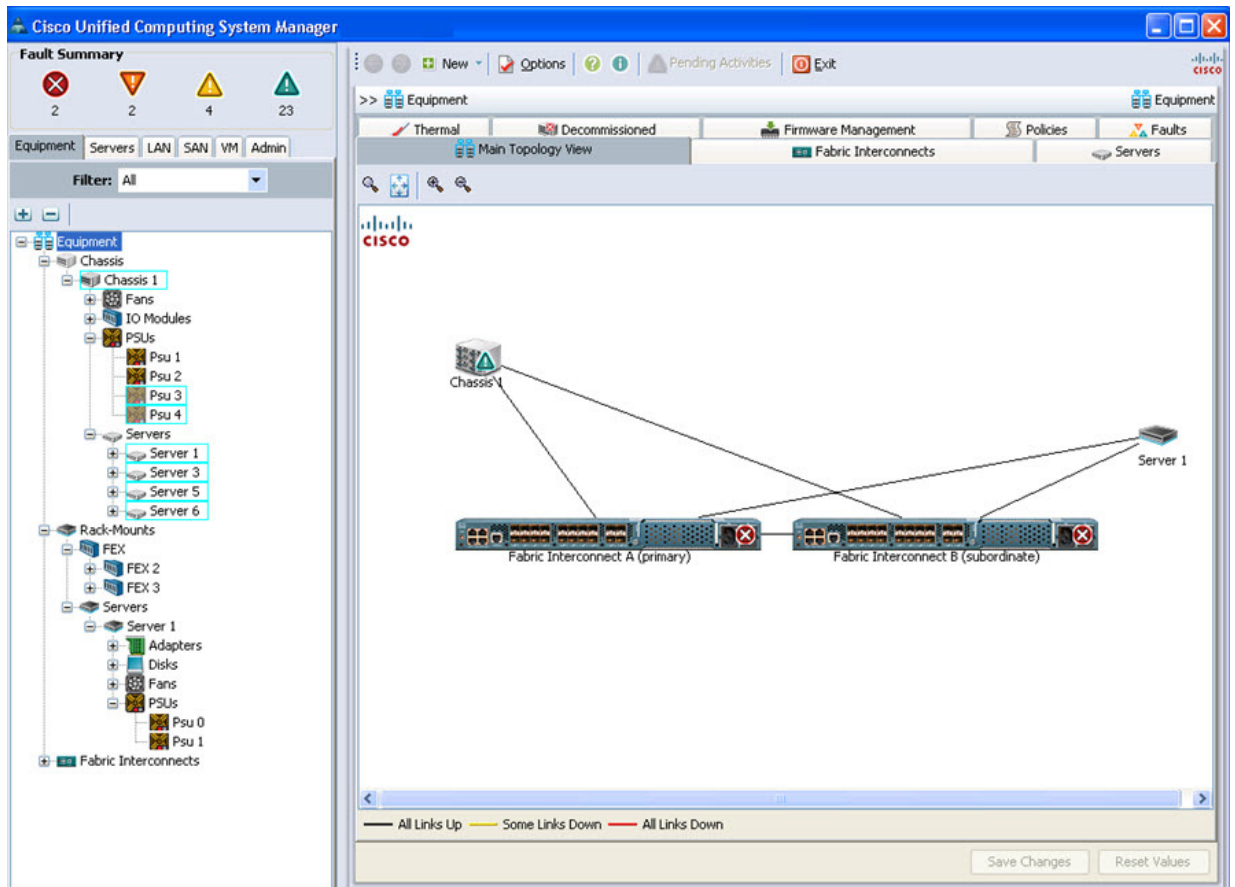
In the Smart Call Home inventory report, the server and fabric interconnect are displayed at the same level as the UCS-B chassis. Both the server and chassis have independent power supplies which are shown as children of those objects in both UCSM and Smart Call Home (Figure 3).

Figure 3. UCS-B and UCS-C in Smart Call Home device details

Products & Services
Smart Call Home

Overview	Registration Management	Reports

Device Report | Call Home History Report | Global Summary Report | Registration Summary Report | Service Request Logging Report | Partner Summary Report | Ad-hoc Report | Analysis Report

Device Details

< Back to Report Results

Device Details:	Serial Number	Host Name	Product ID	HW Version
	SSI143507KC	tspm-ucsm-1-A	N10-S6100	0
	SW Version	Part Number/Rev	Inventory Updated	Configuration Updated
	1.4(3I)	N10-S6100	31-Mar-2011 06:45:44 AM	Not Available
	Top Assembly Number	Time Based License	Failover Status	
	Not Available	Not Available	Not Available	

Device Details

Contact

Show Detail

Hardware Module

Show Detail

Power-Supply

Show Detail

Fan Unit

Show Detail

System

Show Detail

Device Details - Blade Chassis

Blade Chassis Id	Blade Chassis Description
1	Cisco Blade Server Chassis, 6U with Eight Blade Server Slots

Device Details - Rack server

Server Id	Description
1	2 socket, 2RU Rack-Mount Server, 48 DIMMs, 8 SFF Disks, Intel Xeon 5500 and 5600 series, 5 PCIe slots, 2PSUs

Device Details - Fabric Extender

Server Id	Description
2	Cisco Nexus 2000 Series 48-port 100/1000-T and 4-port 10GE SFP+ Fabric Extender

UCS-C power supplies are children of the switch and fabric extenders (Figure 4).

Figure 4.   UCS-C Power Supplies in Smart Call Home device details

Products & Services
Smart Call Home

Overview	Registration Management	Reports

Device Report | Call Home History Report | Global Summary Report | Registration Summary Report | Service Request Logging Report | Partner Summary Report | Ad-hoc Report | Analysis Report

Device Details:	Serial Number	Host Name	Product ID	HW Version
	SSI143507KC	tspm-ucsm-1-A	N10-S6100	0
	SW Version	**Part Number/Rev**	**Inventory Updated**	**Configuration Updated**
	1.4(3I)	N10-S6100	31-Mar-2011 06:45:44 AM	Not Available
	Top Assembly Number	**Time Based License**	**Failover Status**	
	Not Available	Not Available	Not Available	

Chassis

Show Detail

Power Supplies

Hide Detail

Power Supply Number	Product Id	Serial Number	Hardware Version	Part Number	Status
0 - 850W power supply unit for UCS C250 M2 Rack Server	R250-PSU2-850W	ART1438Z05B	0	341-0420-01	operable
1 - 850W power supply unit for UCS C250 M2 Rack Server	R250-PSU2-850W	ART1438Z04X	0	341-0420-01	operable

Export Call Home Report: **X** Excel | **PDF**

Fan Units

Show Detail

Adaptor

Show Detail

Disk Controller

Show Detail

Disk Drive

Show Detail

CPU

Show Detail

Memory

Show Detail

Smart Call Home Diagnostic Notifications and Reports

Diagnostic messages related to the UCS-C server are associated with the active fabric interconnect. The notification email related to the message indicates to which fabric interconnect the message is associated and provides a link to the message, analysis, and remediation in the Smart Call Home portal (Figure 5).

Figure 5. Smart Call Home email notification

Dear Smart Call Home User,

We have received a DIAGNOSTIC message from device "tspm-ucsm-1-A" for which you are a contact person.

Problem Details:

N10-S6100 with System name tspm-ucsm-1 reported Diagnostics test failure: compute-physical-assigned-inaccessible .This Service Request was Updated due to the test: compute-physical-assigned-inaccessible

For further detail and an analysis of these test failures, refer to:
https://tools.cisco.com/sch/reports/diagnosticResult.do?blockId=878901eb95b555eb:-3015a1a5:1323585cd0c:-6cb9&srId=618967621

Device Details:

Message Name: Server 1 (service profile: org-root/ls-tspm-c250m2-win2008) inaccessible

TimeStamp: 2011-09-04 19:16:14 GMT-00:00

Series: UCS 6100 Series Fabric Interconnect Host Name: tspm-ucsm-1-A Contract ID: 91413366 Serial Number: SSI143507KC Product ID: N10-S6100

Company: CISCO SYSTEMS, INC.

The message has been processed and Service Request 618967621 has been updated. To review the Service Request, please go to
http://tools.cisco.com/ServiceRequestTool/query/QueryCaseSearchAction.do?caseType=ciscoServiceRequest&method=doQueryByCase&SRNumber=618967621.

Please contact the Cisco TAC and reference the Service Request Number to close the Service Request if it has been resolved or opened in error.

Regards,

Cisco

For corporate legal information please click here:

http://www.cisco.com/web/about/doing_business/legal/cri/index.html

The message description indicates the distinguished name of the specific service profile or UCS-C server that triggered the message from UCSM.

Similarly, the test description in the Smart Call Home portal indicates the distinguished name of the device that triggered the message (Figure 6).

Figure 6.   Test Description in the Smart Call Home portal

A detailed list of the UCSM faults supported by Smart Call Home is available on Cisco.com.

Conclusion

Smart Call Home is now an option for UCSM customers who deploy integrated UCS-C servers. Stand-alone UCS-C servers are not currently supported by Smart Call Home.

The UCS-C server and Nexus Fabric Extender are displayed in the device report for the active fabric interconnect. Diagnostic messages related to the UCS-C and fabric extender are also associated with the active fabric interconnect.

Cisco.com Technical Support Resources for Users of Smart Call Home

The Cisco website offers a full range of online resources to help you use Smart Call Home. Please be sure to visit the award-winning support website and support community.

Visit the Smart Call Home Product Page for Smart Call Home Information

The Smart Call home product page on Cisco.com is your starting point for learning about and using Smart Call Home. You can see which Cisco products support Smart Call Home and find links to technical content that will help you design, configure, maintain, troubleshoot, and optimize your network with Smart Call Home.

Visit the Cisco Support Website for Smart Call Home Technical Resources

The Cisco Support website is your comprehensive base of technical knowledge and tools to help you design, operate, and troubleshoot your Smart Call Home products and technologies. The website offers robust features that enable you to:

Find technical content

Explore the library of 90,000+ documents (like the Smart Call Home User Guide) and use troubleshooting tools to diagnose and resolve technical issues quickly

Personalize your support

Customize the My Cisco web portal to be your central hub for viewing modular information on your products, notifications, service requests, and more

Download software

Find your software and the related product information from one location; save time by storing your software choices in the download cart

Use the Cisco Support Community for Technical Questions on Smart Call Home

Join the Cisco Support Community to learn more about Smart Call Home by interacting with networking peers and experts worldwide. The community offers a variety of resources that help you:

Connect with peers

Ask questions, get answers, and share insights in the discussion forums (such as the Network Infrastructure forum)

Learn from Cisco experts

Learn about specific networking topics via online Ask the Expert discussions, interactive webinars, and archived sessions; or explore expert blogs and videos (like Smart Call Home Configuration on UCS)

Share knowledge

Collaborate with peers to post wiki content, and share documents through social media outlets like Facebook and Twitter

For More Information

For more information about Cisco Smart Call Home, visit www.cisco.com/go/smartcall.

For more information about Cisco UCS, visit www.cisco.com/go/ucs.

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