UCS C-Series Server: Bare metal, Storage Appliance, Host-OS Hardware and Software Interoperability Matrix

First Published: September 23, 2015

Last Modified: September 29, 2015

CONTENTS

UCS C-Series Server: Baremetal, Storage Appliance and Host-OS Hardware and Software Interoperability Matrix

Overview

This document provides interoperability matrices for Cisco Unified Computing System components and Configurations that have been tested and validated by Cisco, Cisco partners, or both. Use this document as a reference for supported hardware and software.

Audience

This document is designed for use by Cisco sales, support engineers, professional service partners and system administrators responsible for the design and deployment of the Unified Computing System in the data center environment.

This document applies to UCS C3160 as standalone server CIMC 2.0(6d) and integrated with Cisco unified computing system 2.2(5a) as Storage Appliance.

Acronyms

Acronym	Description
CIMC	Cisco Integrated Management Controller
FC	Fiber Channel
FCoE	Fiber Channel Over Ethernet
FEX	Fabric Extender
HDD	Hard Disk Drive
iSCSI	Internet Small Computer System Interface
LVM	Logical Volume Manager

Acronym	Description
OS	Operating System
RAID	Redundant Array of Independent Disk
RHEL	Red Hat Enterprise Linux
SAN	Storage Area Network
SSD	Solid State Drive
UCS	Unified Computing System
UCSM	Unified Computing System Manager
VIC	Virtual Interface Card

Component Matrix

- Component Matrix, page 3

Component Matrix

Component	Version
Server	
Fabric Interconnect 6296	5.2(3)N2(2.25a)
CIMC (B-Series)	2.2(5a)
CIMC (C3160 Server)	2.0(6d)
CIMC C220 M4/C240 M4/C460 M4 UCSM Integrated	2.2(5a)
UCS Manager	2.2(5a)
UCS C3160 Driver Bundle	ucs-cxxx-drivers.2.0.2
UCS Blade Servers Driver Bundle	ucs-bxxx-drivers.2.2.5a
Adapter	
Cisco UCS VIC 1227	4.0(5b)
Cisco UCS VIC 1225	4.0(5b)
Cisco UCS VIC 1380	4.0(5b)
Switch	
Cisco Nexus 5548UP	7.2(0)N1(1)
Cisco Nexus 5596T	7.2(0)N1(1)
Cisco Nexus C2232PP	N/A
Cisco MDS 9513	6.2(9c)

Component	Version
Storage	
NetApp FAS 3240	8.0.2
Hitachi HUS 150	0980/D-H
Hitachi VSP	70-06-20-00/00
EMC VNX 5300	05.32.000.5.218

Japanese Operating System Interoperability Matrix

Baremetal: Japanese Operating System Interoperability Matrix

Operating System	Vendor
Windows Server 2012 x64	Microsoft
Windows Server 2012 R2 x64	Microsoft

Operating System	Vendor
RHEL 6.4 x64 bit	Redhat
RHEL 6.6 x64 bit	Redhat
RHEL 7.0 x64 bit	Redhat
RHEL 7.1 x64 bit	Redhat

Hypervisor	Vendor
vSphere 5.1 U3	VMware
vSphere 5.5	VMware
vSphere 5.5 U1	VMware
vSphere 6.0	VMware

Note   Cisco customized ESXi images were used.

Adapter Interoperability Matrix (UCS C3160 as Standalone Server)
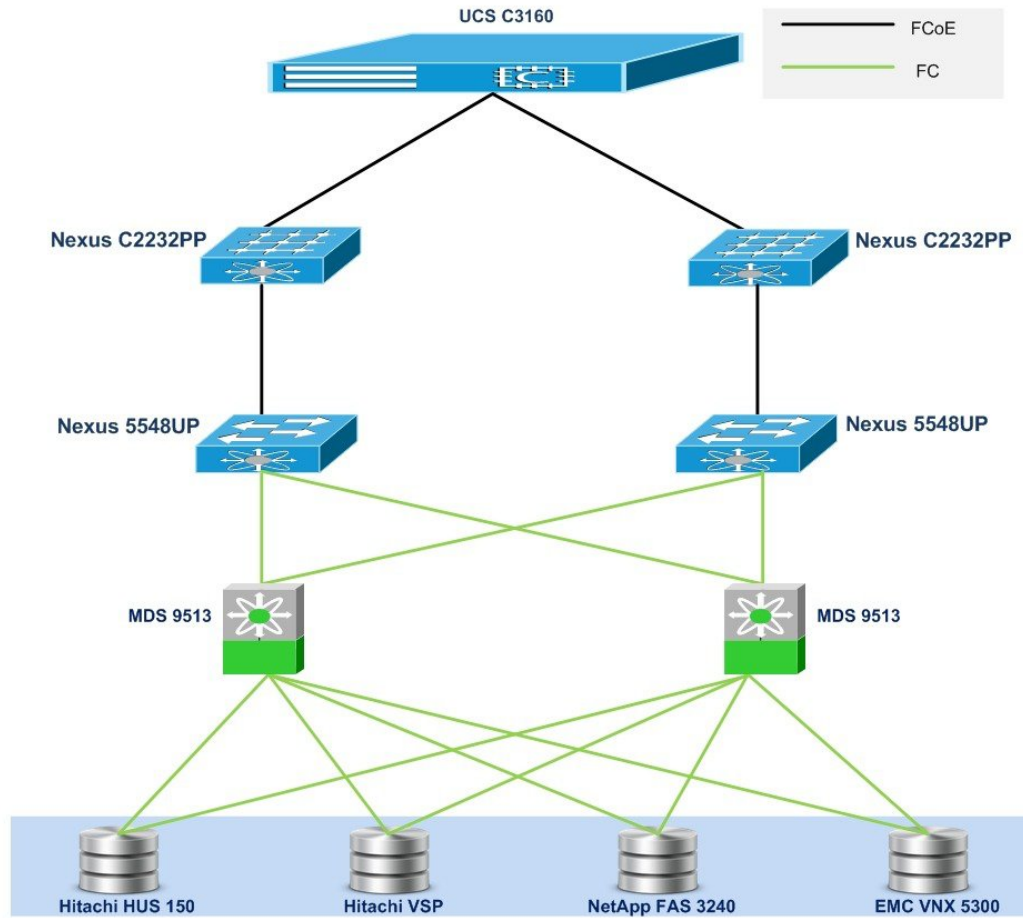
Test Topology

Fig 1 : FC Storage Boot with Fabric Extender
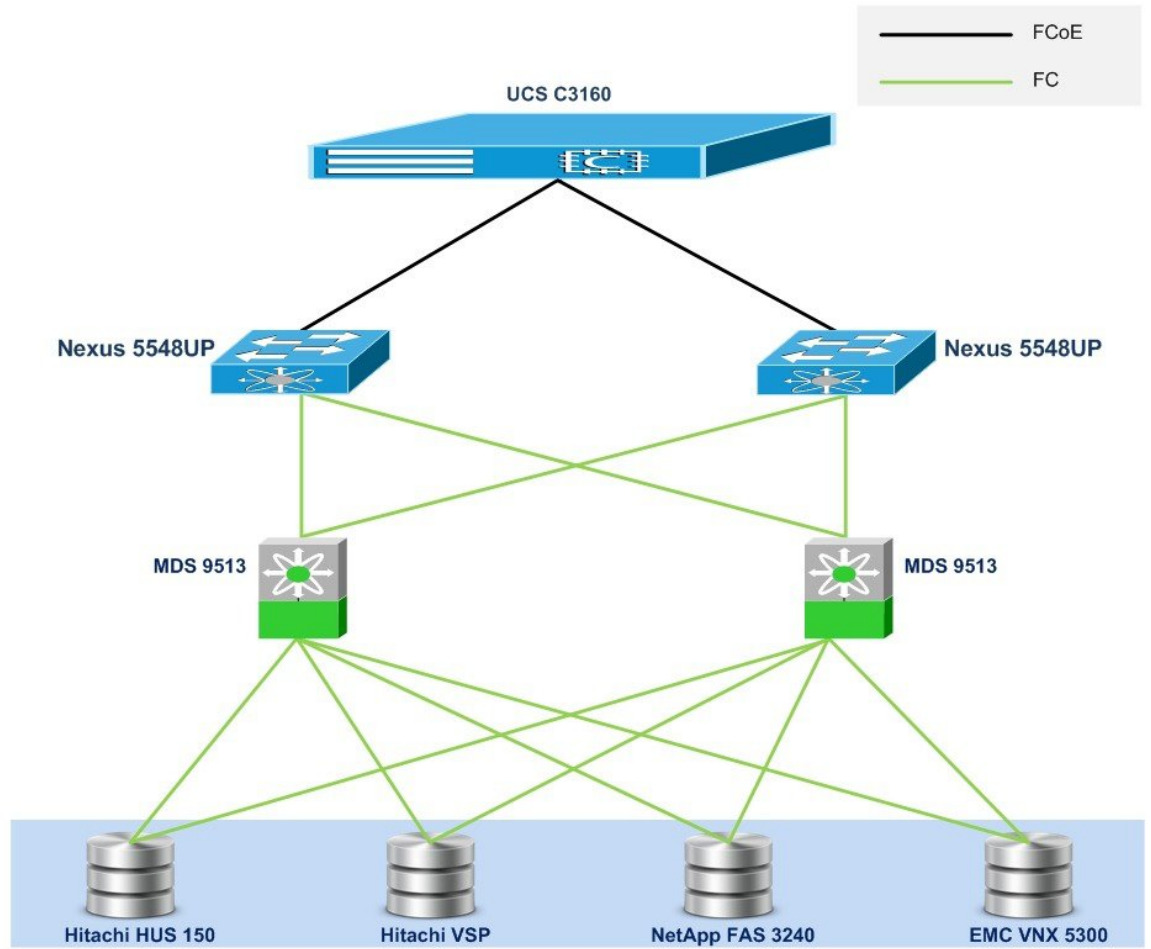
Fig 2 : FC Storage Boot with Nexus 5548UP
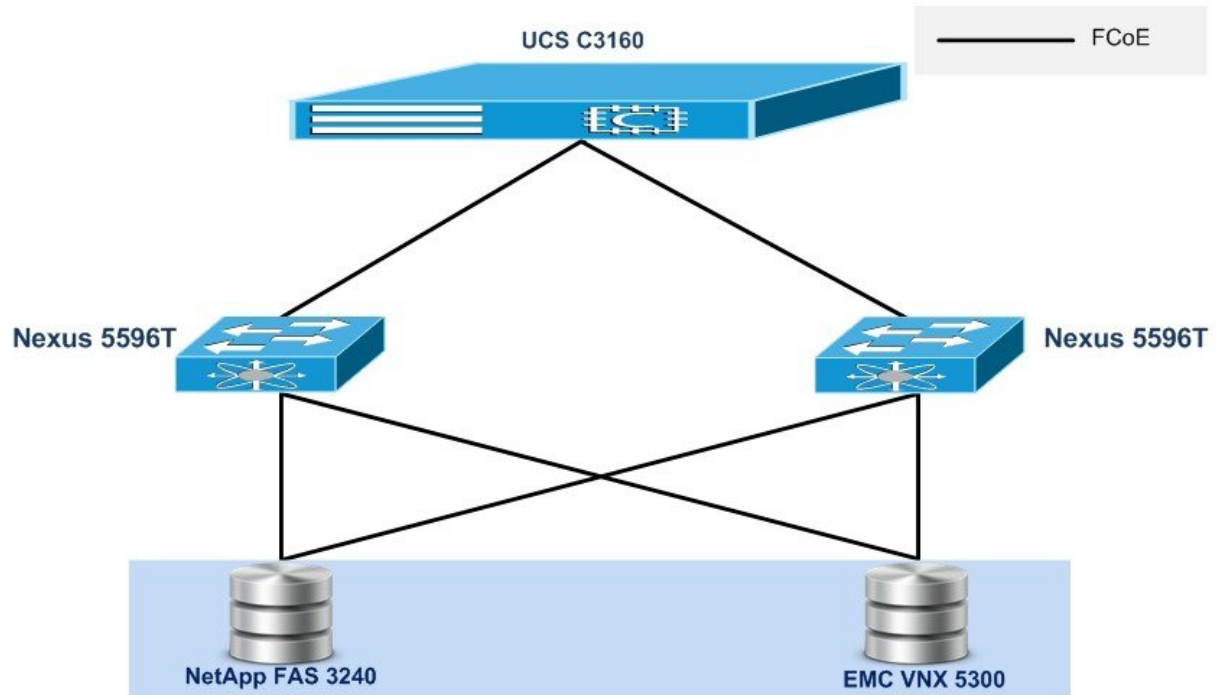
Fig 3 : FCoE Storage Boot with Nexus 5596T

Baremetal: Adapter Interoperability Matrix of C3160

Baremetal: Adapter Interoperability Matrix of C3160 in Local boot (HDD)

UCS Rack Server	Adapter model	Operating System	Storage Used	Adapter Driver	Adapter Firmware
C3160	RAID controller for UCS C3X60 Storage Servers	Windows Server 2012 x64	Local HDD (RAID-0,1,5)	6.706.6.0	24.7.0-0047
C3160	RAID controller for UCS C3X60 Storage Servers	Windows Server 2012 R2 x64	Local HDD (RAID-0,1,5)	6.706.6.0	24.7.0-0047

UCS Rack Server	Adapter model	Operating System	Storage Used	Adapter Driver	Adapter Firmware
C3160	RAID controller for UCS C3X60 Storage Servers	RHEL 6.4 x64	Local HDD (RAID-0,1,5)	06.806.08.00	24.7.0-0047
C3160	RAID controller for UCS C3X60 Storage Servers	RHEL 6.6 x64	Local HDD (RAID-0,1,5)	06.806.08.00	24.7.0-0047
C3160	RAID controller for UCS C3X60 Storage Servers	RHEL 7.0 x64	Local HDD (RAID-0,1,5)	06.806.08.00	24.7.0-0047
C3160	RAID controller for UCS C3X60 Storage Servers	RHEL 7.1 x64	Local HDD (RAID-0,1,5)	06.805.06.01-rc1	24.7.0-0047
C3160	RAID controller for UCS C3X60 Storage Servers	vSphere 5.1 U3	Local HDD (RAID-0,1,5)	6.606.06.00.1vmw	24.7.0-0047
C3160	RAID controller for UCS C3X60 Storage Servers	vSphere 5.5	Local HDD (RAID-0,1,5)	6.606.06.00.1vmw	24.7.0-0047
C3160	RAID controller for UCS C3X60 Storage Servers	vSphere 5.5 U1	Local HDD (RAID-0,1,5)	6.606.06.00.1vmw	24.7.0-0047
C3160	RAID controller for UCS C3X60 Storage Servers	vSphere 6.0	Local HDD (RAID-0,1,5)	6.605.08.00-6vmw.600.0.0.2494585	24.7.0-0047

Baremetal: Adapter Interoperability Matrix of C3160 in Local boot (SSD)

UCS Rack Server	Adapter model	Operating System	Storage Used	Adapter Driver	Adapter Firmware
C3160	Windows Server 2012 Software RAID	Windows Server 2012 x64	Local SSD (RAID 0,1)	NA	NA

UCS C-Series Server: Bare metal, Storage Appliance, Host-OS Hardware and Software Interoperability Matrix

UCS Rack Server	Adapter model	Operating System	Storage Used	Adapter Driver	Adapter Firmware
C3160	Windows Server 2012 R2 Software RAID	Windows Server 2012 R2 x64	Local SSD (RAID 0,1)	NA	NA
C3160	RHEL Software RAID (LVM)	RHEL 6.4 x64	Local SSD (RAID 0,1)	NA	NA
C3160	RHEL Software RAID (LVM)	RHEL 6.6 x64	Local SSD (RAID 0,1)	NA	NA
C3160	RHEL Software RAID (LVM)	RHEL 7.0 x64	Local SSD (RAID 0,1)	NA	NA
C3160	RHEL Software RAID (LVM)	RHEL 7.1 x64	Local SSD (RAID 0,1)	NA	NA
C3160	NA	vSphere 5.1 U3	Local SSD	NA	NA
C3160	NA	vSphere 5.5	Local SSD	NA	NA
C3160	NA	vSphere 5.5 U1	Local SSD	NA	NA
C3160	NA	vSphere 6.0	Local SSD	NA	NA

Baremetal: Adapter Interoperability Matrix of C3160 in SAN Boot

UCS Rack Server	Adapter model	Operating System	Storage Used	Adapter Driver	Adapter Firmware
C3160	VIC 1227	Windows Server 2012 x64	NetApp FAS 3240/ Hitachi HUS 150 and VSP/ EMC VNX 5300	2.4.0.9	4.0(5b)
C3160	VIC 1227	Windows Server 2012 R2 x64	NetApp FAS 3240/ Hitachi HUS 150 and VSP/ EMC VNX 5300	2.4.0.9	4.0(5b)
C3160	VIC 1227	RHEL 6.4 x64	NetApp FAS 3240/ Hitachi HUS 150 and VSP/ EMC VNX 5300	1.6.0.17	4.0(5b)
C3160	VIC 1227	RHEL 6.6 x64	NetApp FAS 3240/ Hitachi HUS 150 and VSP/ EMC VNX 5300	1.6.0.17	4.0(5b)
C3160	VIC 1227	RHEL 7.1 x64	NetApp FAS 3240/ Hitachi HUS 150 and VSP/ EMC VNX 5300	1.6.0.18	4.0(5b)
C3160	VIC 1227	vSphere 5.1 U3	NetApp FAS 3240/ Hitachi HUS 150 and VSP/ EMC VNX 5300	1.6.0.17a	4.0(5b)

UCS Rack Server	Adapter model	Operating System	Storage Used	Adapter Driver	Adapter Firmware
C3160	VIC 1227	vSphere 5.5	NetApp FAS 3240/ Hitachi HUS 150 and VSP/ EMC VNX 5300	1.6.0.17a	4.0(5b)
C3160	VIC 1227	vSphere 5.5 U1	NetApp FAS 3240/ Hitachi HUS 150 and VSP/ EMC VNX 5300	1.6.0.17a	4.0(5b)
C3160	VIC 1227	vSphere 6.0	NetApp FAS 3240/ Hitachi HUS 150 and VSP/ EMC VNX 5300	1.6.0.17a	4.0(5b)

Note   RHEL 7.0 SAN Boot is not supported.

Adapter Interoperability Matrix (UCS C3160 as UCSM Integrated Storage Appliance)
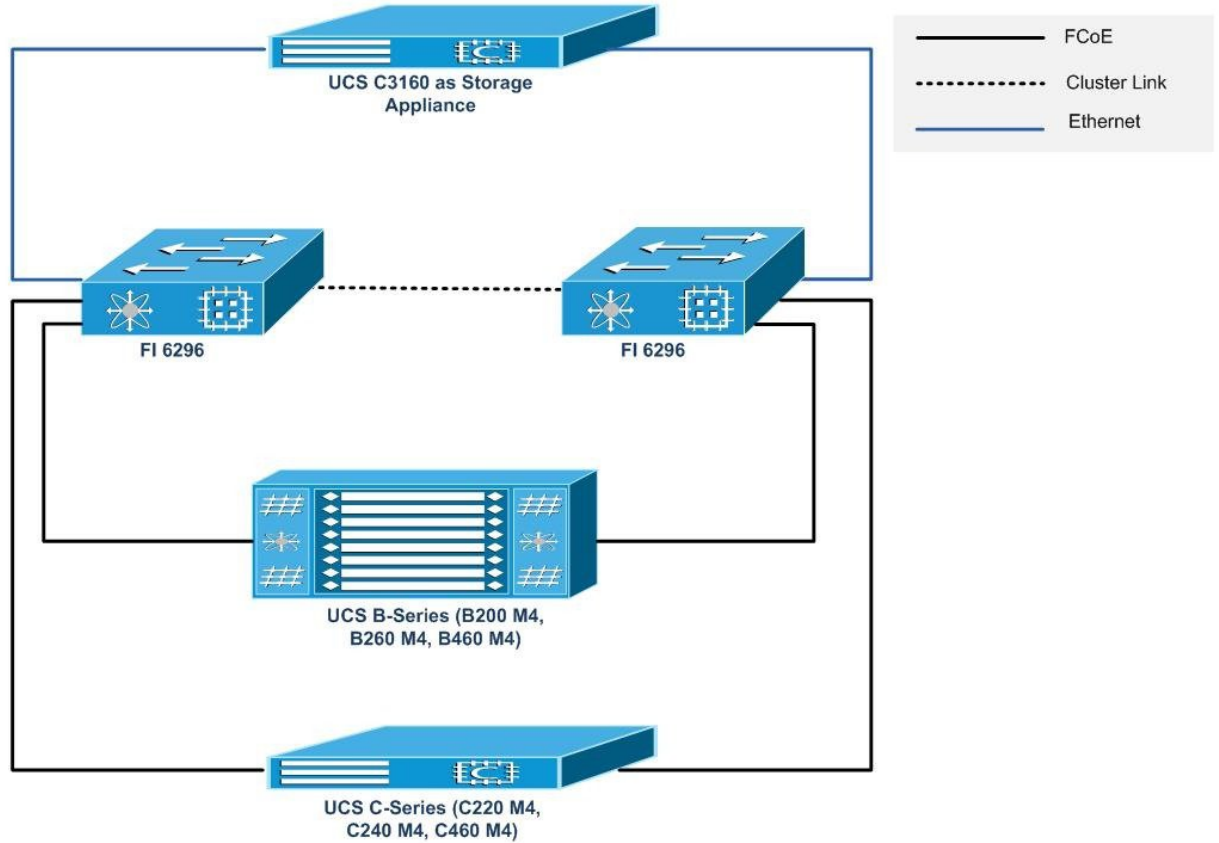
Test Topology

Fig 4 : C3160 as UCSM Integrated Storage appliance

Adapter Interoperability Matrix (B Series Servers and C3160 as UCSM Integrated Storage Appliance)

UCS Blade Server	Adapter model	Operating System	ISCSI Target/ Target OS	Adapter Driver	Adapter Firmware
B200 M4/ B260 M4/ B460 M4	VIC 1380	Windows Server 2012 x64	C3160/ Windows(2012&2012R2)	3.4.0.12	4.0(5b)
B200 M4/ B260 M4/ B460 M4	VIC 1380	Windows Server 2012 R2 x64	C3160/ Windows(2012&2012R2)	3.4.0.12	4.0(5b)
B200 M4/ B260 M4/ B460 M4	VIC 1380	RHEL 6.6 x64	C3160/ Windows(2012&2012R2)	2.1.1.93	4.0(5b)

UCS Blade Server	Adapter model	Operating System	ISCSI Target/ Target OS	Adapter Driver	Adapter Firmware
B200 M4/ B260 M4/ B460 M4	VIC 1380	RHEL 7.0 x64	C3160/ Windows(2012&2012R2)	2.1.1.93	4.0(5b)
B200 M4/ B260 M4/ B460 M4	VIC 1380	RHEL 7.1 x64	C3160/ Windows(2012&2012R2)	2.1.1.93	4.0(5b)
B200 M4/ B260 M4/ B460 M4	VIC 1380	vSphere 5.1 U3	C3160/ Windows(2012&2012R2)	2.1.2.71	4.0(5b)
B260 M4/ B460 M4	VIC 1380	vSphere 5.5	C3160/ Windows(2012&2012R2)	2.1.2.71	4.0(5b)
B260 M4/ B460 M4	VIC 1380	vSphere 5.5 U1	C3160/ Windows(2012&2012R2)	2.1.2.71	4.0(5b)
B200 M4/ B260 M4/ B460 M4	VIC 1380	vSphere 6.0	C3160/ Windows(2012&2012R2)	2.1.2.71	4.0(5b)

Note   RHEL 6.4 is not supported by B200 M4/ B260 M4/ B460 M4 Servers.

ESXi 5.5, ESXI 5.5 U1 are not supported by B200 M4 Server.

Adapter Interoperability Matrix (C Series Servers are UCSM Integrated and C3160 as UCSM Intergrated Storage Appliance)

UCS Rack Server	Adapter model	Operating System	ISCSI Target/Target OS	Adapter Driver	Adapter Firmware
C220 M4/ C240 M4/ C460 M4	VIC 1227/1225	Windows Server 2012 x64	C3160/ Windows(2012&2012R2)	3.4.0.12	4.0(5b)
C220 M4/ C240 M4/ C460 M4	VIC 1227/1225	Windows Server 2012 R2 x64	C3160/ Windows(2012&2012R2)	3.4.0.12	4.0(5b)
C460 M4	VIC 1225	RHEL 6.4 x64	C3160/ Windows(2012&2012R2)	2.1.1.93	4.0(5b)
C220 M4/ C240 M4/ C460 M4	VIC 1227/1225	RHEL 6.6 x64	C3160/ Windows(2012&2012R2)	2.1.1.93	4.0(5b)
C220 M4/ C240 M4/ C460 M4	VIC 1227/1225	RHEL 7.0 x64	C3160/ Windows(2012&2012R2)	2.1.1.93	4.0(5b)
C220 M4/ C240 M4/ C460 M4	VIC 1227/1225	RHEL 7.1 x64	C3160/ Windows(2012&2012R2)	2.1.1.93	4.0(5b)

Adapter Interoperability Matrix (C Series Servers are UCSM Integrated and C3160 as UCSM Intergrated Storage Appliance)

UCS Rack Server	Adapter model	Operating System	ISCSI Target/Target OS	Adapter Driver	Adapter Firmware
C220 M4/ C240 M4/ C460 M4	VIC 1227/1225	vSphere 5.1 U3	C3160/ Windows(2012&2012R2)	2.1.2.71	4.0(5b)
C460 M4	VIC 1225	vSphere 5.5	C3160/ Windows(2012&2012R2)	2.1.2.71	4.0(5b)
C460 M4	VIC 1225	vSphere 5.5 U1	C3160/ Windows(2012&2012R2)	2.1.2.71	4.0(5b)
C220 M4/ C240 M4/ C460 M4	VIC 1227/1225	vSphere 6.0	C3160/ Windows(2012&2012R2)	2.1.2.71	4.0(5b)

Note   RHEL 6.4 is not supported by C220 M4 and C240 M4 Servers.

ESXi 5.5, ESXi 5.5 U1 are not supported by C220 M4 and C240 M4 Servers.

Issues

- Issues, page 19
- Related Documentation, page 19

Issues

S.No	BUG ID	Description
1	CSCuv85205	Power supplies failed to display the input watts
2	CSCuv86736	Esxi 6.0 Failed to install in C3160 server with Hitachi HUS150 storage
3	CSCuw12393	ESXI-5.5 U1 installation failed in B460 M4 server with iSCSI target
4	CSCuw12409	ESXi 5.5 install fail in C460M4 server with iSCSI target from UCS C3160
5	CSCuw14570	B460-M4 Blade server showing wrong RAID Adaptor During ESXi installation
6	CSCuv99487	RHEL 6.6 Failed to boot Blade Servers- B200 M4, B260 M4, B460 M4
7	CSCuw33240	iSCSI login failed during RHEL 7.0/7.1 boot on UCS Blade servers

Related Documentation

UCS B-Series Server Road Map

http://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/overview/guide/UCS_roadmap.html

UCS C-Series Server Road Map

http://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/overview/guide/UCS_rack_roadmap.html

Software Download for B-series and C-Series servers

https://software.cisco.com/download/type.html?mdfid=283853163&flowid=25821

Software Download for standalone UCS C3160 Server

https://software.cisco.com/download/type.html?mdfid=286281425&flowid=71786

Cisco Unified Computing System-Technical References

http://www.cisco.com/c/en/us/support/servers-unified-computing/unified-computing-system/products-technical-reference-list.html

Hardware and Software Interoperability for UCSM Managed Servers in Release 2.2(5)

http://www.cisco.com/c/dam/en/us/td/docs/unified_computing/ucs/interoperability/matrix/b_hcl_B_rel2-25.pdf

Hardware and Software Interoperability for Standalone C-Series Servers in Release 2.0(6)

http://www.cisco.com/c/dam/en/us/td/docs/unified_computing/ucs/interoperability/matrix/m_hcl_C_rel2-06.pdf