

Cisco UCS 6324 Configuration Limits for Cisco UCS Manager, Release 3.0

First Published: 2014-07-24

Last Modified: 2015-06-26

Configuration Limits

The following tables list the Cisco verified limits for Cisco UCS 6324 FI-IOMs running Cisco UCS Manager release 3.0.

Ethernet Environment Configuration Limits

Feature	Cisco UCS 6324
Active VLANs per Cisco UCS domain	982
VLAN/VSAN ID space per Cisco UCS domain	4012 unreserved space For Cisco UCS 6324 Fabric Interconnect, 4093 is additionally reserved.
STP logical Interfaces (also referred to as VLAN port count) per FI-IOM Note The only exception is for failover vNICs. These consume resources on a per Cisco UCS domain basis.	2048
VIFs (virtual interfaces) per FI-IOM that map through VM-FEX to a vNIC or VM itself Note The only exception is for failover vNICs. These consume resources on a per Cisco UCS domain basis.	648
IGMP groups per Cisco UCS domain	250
Uplink port channels per FI-IOM	4
Maximum number of uplinks per fabric FI-IOM	4
Member interfaces per port channel	4
Interfaces per FCoE port channel	4

Feature	Cisco UCS 6324
QOS system classes per Cisco UCS domain	6

VIC Environment Configuration Limits

Static Virtual NICs per Host

Cisco UCS 6324			
OS	vNICs	vHBAs	Max Combination of vNICs and vHBAs
Win 2008 SP2 and R2 SP1	20	16	12 Enics and 8 Fnics
Win 2012 and Win 2012 R2	20	16	12 Enics and 8 Fnics
Red Hat Enterprise Linux 5.9 - 6.5 64bit	32	16	24 Enics and 8 Fnics
ESX 5.0 U2—ESX 5.5	26	16	18 Enics and 8 Fnics
XenServer 6.1 – 6.2	32	16	24 Enics and 8 Fnics
OL 6.4 64bit with UEK 2.6.39-400 Update 5	18	6	18 Enics and 6 Fnics
OL 6.4 64bit with UEK 3.8.13-16	18	6	18 Enics and 6 Fnics
SUSE Linux Enterprise Server 11.2 64bit	32	16	24 Enics and 8 Fnics
SUSE Linux Enterprise Server 11.3 64bit	32	16	24 Enics and 8 Fnics
Ubuntu 12.04.2	32	N/A	32 Enics

Dynamic Virtual NIC

Cisco UCS 6324				
	Max vNICs for Emulated Mode		Max vNICs for Hypervisor Bypass Mode	
OS	Half Width Blade (1 VIC)	Full Width Blade (2 VIC)	Half Width Blade (1 VIC)	Full Width Blade (2 VIC)
ESXi 5.0 U2—5.5	114 vNICs and 2 vHBAs	114 vNICs and 2 vHBAs	114 vNICs and 2 vHBAs	114 vNICs and 2 vHBAs
Window 2012 (SR-IOV)	114 vNICs and 2 vHBAs	223 vNICs with 4 vHBAs	114 vNICs and 2 vHBAs	223 vNICs with 4 vHBAs

Fibre Channel Environment Configuration Limits

Feature	Cisco UCS 6324
VSANs	32
Zones	<ul style="list-style-type: none"> • Per VSAN—4000 • Across all VSANS—4000 <p>Note If you implement Cisco UCS Manager-based zoning, the maximum number of targets per service profile is 4.</p>
Native FC links	4
Virtual Fibre Channel interfaces per FI-IOM	30
Virtual Fibre Channel interfaces per blade	16
Note VIC Environment Configuration Limits, on page 2	
Flogis per fabric interconnect	255
Maximum number of SAN port channels	1
Maximum port channel members per port channel	4
Port channel mode in FC switching	On

VM-FEX Environment Configuration Limits

	Cisco UCS 6324	
	Hypervisor Manager	DVS /Logical Switches
ESX/ESXi	1 vCenter per Cisco UCS domain	2 DVS per vCenter
Hyper-V	1 SCVMM host per Cisco UCS domain	2 logical switches per SCVMM
Port profiles per Cisco UCS domain	38	
Dynamic ports per port profile	4096	
Dynamic ports per DVS	4096	

SCVMM Support Matrix



Note When you configure scale environment, make sure to configure retention timer value as 30 minutes.

Microsoft Software	Cisco UCS Software	Active Directory Services
SCVMM 2012 SP1	Cisco UCS Manager, release 3.0(1) Infrastructure Bundle and Adapter Firmware Cisco ENIC Drivers for Windows Server 2012	AD 2008 R2 and SP1 or 2012 AD Domain Controller must have the following: <ul style="list-style-type: none"> • DNS • DHCP • MSSQL 2008 and above Database for SCVMM Data store • SQL Command line utilities • Windows ADK 8.0
Windows Hyper-V 2012		

General Network Configuration Limits

Feature	Cisco UCS 6324
Unicast MAC addresses per fabric interconnect	20000 entries
Multicast MAC addresses per fabric interconnect	400
Maximum MTU	9216
1G ports	4—First 4 unified ports
IP storage appliances per fabric interconnect	2
SPAN active sessions per fabric interconnect	2

General Management Configuration Limits

Feature	Cisco UCS 6324
Chassis per Cisco UCS domain	1
Maximum combined number of blade and rack servers	15 (8 blade servers and 7 rack servers)
Local user accounts per Cisco UCS domain	48
Concurrent logins per user account	64 This value is the same for both local and remote user accounts. This total includes a maximum of 32 concurrent GUI logins and 32 concurrent CLI logins per user account.
Active KVM sessions per individual CIMC	4

Feature	Cisco UCS 6324
Concurrent CLI logins per Cisco UCS Manager	32
Concurrent GUI logins per Cisco UCS Manager	256
Number of LDAP groups per Cisco UCS Manager	28
Number of adapter end points per Cisco UCS Manager	30

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.

All printed copies and duplicate soft copies of this document are considered uncontrolled. See the current online version for the latest version.

Cisco has more than 200 offices worldwide. Addresses and phone numbers are listed on the Cisco website at www.cisco.com/go/offices.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: www.cisco.com/go/trademarks. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1721R)

© 2014–2015 Cisco Systems, Inc. All rights reserved.