Release Notes for Cisco UCS Virtual Interface Card Drivers, Release 2.0

Introduction

This release note discusses the new features, known limitations, and open caveats for Cisco UCS Virtual Interface Card Drivers, Release 2.0. It does not cover new features, known limitations, and open caveats for third-party drivers.

Note   We sometimes update the documentation after original publication. Therefore, you should also review the documentation on Cisco.com for any updates.

Use this document in conjunction with the document listed in the Related Documentation section.

Table 1 shows the online change history for this document.

Table 1   Online Revision History

Part Number	Revision Date	Description
OL-25372-01	September 19, 2011	Created release notes.
	March 2, 2012	Added NIC Teaming driver for Windows.
	July 19, 2012	Updated to indicate eNIC for Linux support for the Multiple Receive Queues feature.
	November 16, 2012	Updated the Open Caveats section.
	July 3, 2013	Added information for Release 2.0(4) and Release 2.0(5).

System Requirements

For a complete list of supported hardware and software, see the *Hardware and Software Interoperability Matrix* for this release located at:
http://www.cisco.com/en/US/products/ps10477/prod_technical_reference_list.html

New Software Features in Release 2.0

February 2013

The Release 2.0(5) update adds the following support:

- FIP VLAN Discovery for C Series standalone operation.
- FC Event Tracing which allows improved troubleshooting at the fNIC driver level. This feature is not supported on Windows.

September 2012

The Release 2.0(4) update does not include new software features.

July 19, 2012

The Release 2.0(3) update adds the following support:

- Linux

  eNIC support for the Multiple Receive Queues feature on Red Hat Enterprise Linux 6.x and SUSE Linux Enterprise Server 11.x operating systems.

  To enable this support, complete the following steps while configuring a service profile in UCSM:

  1. Create and apply an adapter policy with the following parameters:

     Transmit Queues = 1

     Receive Queues = n (up to 8)

     Completion Queues = # Transmit Queues + # Receive Queues

     Interrupts = # Completion Queues + 2

     Receive Side Scaling (RSS) = Enabled

     Interrupt Mode = Msi X

     Do not modify the default setting for other parameters.

  2. Install eNIC driver 2.1.1.35 or later.

  3. Reboot the host.

March 2, 2012

The Release 2.0(1b) update adds the following support:

- Windows

  NIC Teaming driver support for the M81KR/P81E VIC (aka Palo) adaptor.

  - The driver is available now for UCS B-series. The driver is available beginning with the 2.0(1b) UCS Windows Utilities ISO bundle (link).

> **Note** The driver is included in the Utilities ISO bundle, not the Driver ISO bundle.

Installation instructions are included in the *Cisco UCS Virtual Interface Card Drivers for Windows Installation Guide* at this URL:
http://www.cisco.com/en/US/docs/unified_computing/ucs/sw/vic_drivers/install/Windows/2.0/b_Cisco_VIC_Drivers_for_Windows_Installation_Guide.html

September 19, 2011

The initial Release 2.0 adds the following support:

- ESX
  - eNIC support for UCS Manager VM-FEX for VMware
- Linux
  - eNIC support for UCS Manager VM-FEX for KVM
- Windows
  - eNIC support for MSFT Software iSCSI initiator
  - eNIC and fNIC support for UCS 2180
  - fNIC support for FIP VLAN discovery protocol (P81E only)
  - First release of Cisco UCS Virtual Interface Card (VIC) iSCSI Crashdump driver.
  - First release of Cisco UCS Virtual Interface Card (VIC) iSCSI Crashdump driver installer utility

Operating System Support

For complete information about the operating systems that Release 2.0 supports, see the Hardware and Software Interoperability for UCSM Managed Servers document for each Release 2.0 release located here:
http://www.cisco.com/en/US/partner/products/ps10477/prod_technical_reference_list.html

Resolved Caveats

Table 2 lists the caveats that have been resolved since Release 2.0(4).

Table 2   Resolved Caveats

Bug ID	Description
CSCtj40408	Provide VLAN discovery code for the P81E (Linux) card.
CSCtl66495	A P81E (SLES11) cannot do a FLOGI when a Cisco Nexus 5000 Series switch is in NPV mode.
CSCtr23840	Multipathing on SLES could not identify the FIP notification from the Cisco Nexus 5000 Series switch in NPV mode.
CSCtr73717	A Cisco VIC stays down on a Cisco Nexus 5000 Series switch in NPV mode after a flap of the external port.

Table 2   ***Resolved Caveats (continued)***

Bug ID	Description
CSCtr94986	A P81E card with Linux or ESX does not log in after the **portchannel shut/no shut** commands on an NPV switch.
CSCtt94116	A P81E card with Linux does not log in after a reboot of a Cisco Nexus 5596 switch.
CSCty31268	Static **vEth shut/no shut** commands cause the Red Hat Enterprise Linux fNIC device to go offline.
CSCtz63473	I/O during a firmware reset should be prevented.
CSCua18648	sg_reset hangs on LUN reset on Red Hat Enterprise Linux version 6.x.
CSCua23512	The fNIC driver may hit BUG_ON on device reset.
CSCua23924	Event tracing capability for the Linux fNIC driver is needed.
CSCua46052	The fNIC driver allows I/Os with more SGEs than the maximum SGEs supported by Palo.
CSCuc35655	Extra debugging tools and more fNIC flags are needed.
CSCud08543	Cannot install XS6.0.2 using Release 2.1(1) driver ISO 2.1.1.3 for SAN boot.

Open Caveats

There are no open caveats in Release 2.0.

Customers using Red Hat Enterprise Linux version 5.8 or an earlier version should be aware that an libfc bug exists in distributions. The details of this bug are available in the Red Hat Bugzilla 884740.

Known Limitations and Behaviors

The following known limitations are not otherwise documented:

- During an iSCSI boot, one initiator posts the iSCSI LUN to the BIOS boot menu, even if there are two iSCSI vNICs configured. For adapters configured with two iSCSI vNICs, only the iSCSI vNIC designated as Primary in the boot order posts the discovered iSCSI LUN to the BIOS boot menu and write the iBFT entry to host memory.

- Rx CRC errors might occur on interfaces that are experiencing a heavy amount of incoming traffic. Disabling the following BIOS settings reduces the number of errors:
  - C6
  - Speedstep
  - executeDisable
  - Turbo Boost

Related Cisco UCS Documentation

Documentation Roadmaps

For a complete list of all B-Series documentation, see the Cisco UCS B-Series Servers Documentation Roadmap available at the following URL: http://www.cisco.com/go/unifiedcomputing/b-series-doc.

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Other Documentation Resources

An ISO file containing all B and C-Series documents is available at the following URL: http://software.cisco.com/download/type.html?mdfid=283853163&flowid=25821. From this page, click **Unified Computing System (UCS) Documentation Roadmap Bundle**.

The ISO file is updated after every major documentation release.

Follow Cisco UCS Docs on Twitter to receive document update notifications.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation:

http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html

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