

HP Virtual Connect Manager 3.51 Release Notes

Abstract

This document provides Virtual Connect release information for version 3.51. This document supersedes the information in the documentation set released with version 2.3x, 3.0x, 3.1x, and 3.30. This document is intended for the person who installs, administers, and troubleshoots servers and storage systems. HP assumes you are qualified in the servicing of computer equipment and trained in recognizing hazards in products with hazardous energy levels.



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Update recommendation

Update Recommendation: Recommended

Supersede information

Supersedes: 3.30

Product models

Virtual Connect 3.51 is supported on the following interconnect modules:

- HP VC FlexFabric 10Gb/24-Port Module
 - HP VC Flex-10 10Gb Enet Module
 - HP VC 1/10 Gb-F Enet Module
 - HP VC 4Gb FC Module
 - HP VC 8Gb 20-Port FC Module
 - HP VC 8Gb 24-Port FC Module
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Operating Systems

The HP Virtual Connect version 3.51 firmware package operates in an embedded environment within each Virtual Connect module; therefore, it is not dependent on any operating system.

For more information, see the HP Operating Systems and Virtualization Software Support for ProLiant Servers web page on the HP website (<http://h18004.www1.hp.com/products/servers/software/index.html>).

Languages

Languages supported for this release: English, Japanese

Enhancements

Version 3.51 of Virtual Connect contains the following enhancements:

- Enhanced support for network loop protection
- Support for Internet Explorer 9.x
- Support for Mozilla Firefox 6.x and 7.x
- Support for the following products:
 - HP ProLiant BL460c Gen8 Server Blade
 - HP QMH2572 8Gb FC HBA for c-Class BladeSystem
 - HP FlexFabric 10Gb 2-port 554M Adapter
 - HP FlexFabric 10Gb 2-port 554FLB Adapter
 - HP Flex-10 10Gb 2-port 530FLB Adapter
 - HP Flex-10 10Gb 2-port 530M Adapter
 - HP Flex-10 10Gb 2-port 552M Adapter

Fixes

The following issues have been resolved in the VC 3.51 release:

- Resolved an issue for VC 8Gb 20-port FC module firmware where it would not always perform Link Reset when there were no FC buffer credits available. This fix improves link stability between the VC-FC module and the HBA.
- Resolved an issue that caused network connectivity loss for Integrity multi-blade servers, such as the HP Integrity BL870c i2 server, with a profile assigned. The issue could be triggered by a sequence of interaction between VCM and the OA, through which a profile "pending" state was left unattended.
- Resolved an issue where CLI server profiles associated with a non-default network access group reverted to the "Default" network access group after profiles were assigned to physical servers.
- Resolved an issue where the defined VC domain IP address became inaccessible after the primary VC module host name was changed.
- Resolved an issue where upgrading from VC v3.xx to v3.30 in configurations using multi-blade servers caused the domain to become inactive. This issue is also documented in Customer Advisory c03057267 on the HP website (<http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?objectID=c03057267>).
- Resolved an issue for multi-blade servers where FlexFabric ports were being over-allocated for FCoE entries and were unavailable for Ethernet connections.
- Previously the VCM CLI splash screen, which asks for acceptance to the terms on the screen, did not precede the login credentials. The VCM CLI now displays the customer configurable splash screen first, asking for acceptance to the terms before asking for login credentials.

- Resolved an issue where the MAC Address table did not get purged when a Flex-10 NIC was shut down, causing a loss of connectivity.
- Resolved an issue where changing the host name in either the GUI or CLI had no effect on the host name used in system log.
- Resolved an issue where both the GUI Domain Status screen and the CLI `show status` command did not include servers with a failed status.
- Resolved an issue where the GUI would stop its loading operation if the cursor was pointing to the DIP switch warning icon.
- Resolved an issue where VCM would restart when multiple iterations of the VCM CLI `show statistics` command was issued.
- Resolved an issue where Insight Control for VMware Center was unable to retrieve date from VC v3.30.
- Resolved an issue where a fabric previously set to Manual Login Re-Distribution might appear as set to Automatic Re-Distribution when you attempted to edit the fabric on the Edit SAN Fabric screen.
- Resolved an issue where the incorrect status of "linked-standby" was displayed for uplink ports with RJ-45 connectors.
- The CLI now supports three boot target WWN formats.
- The Network Setup Wizard now enables you to add a network access group before creating new networks.
- Resolved an issue with VCM internal states being out of sync, which resulted in loss of network connectivity.
- Resolved an issue where the FC profile connection entries were not being mapped to FC mezzanine cards installed on the third and fourth server blades in an HP Integrity BL890c i2 Server Blade installed in a c3000 enclosure.
- Resolved an issue that caused VCM and VCEM to be out of sync, which was caused by VCM and OA losing their communication during a VCEM profile assignment.
- Resolved an issue where unassigning the profile from an auxiliary bay in an HP Integrity BL8x0c i2 Server Blade cleared the connections on the auxiliary blade.
- Resolved an issue where copying a shared uplink set that had no associated networks failed in both the GUI and CLI.
- Resolved an issue that occurred when editing a shared uplink set. Previously, clicking on the links under the "Connected To" column in the External Uplink Ports table displayed a progress bar indicating that the data was loading, but the data load never completed.

Issues and workarounds

New issues

Issue

When VC or VCEM change the boot order using FC HBA boot parameters to configure Port 2 as primary and Port 1 as secondary, the boot order might be incorrect.

Issue

VCM might enable server ports with no network connections. For example, if a simple server profile has only one Ethernet connection, which maps to LOM1, then only LOM1 should be enabled. However both LOM1 and LOM2 are enabled.

Issue

While performing OA fail over events, the GUI prompt for “restoring OA credentials” is delayed longer than expected. The GUI displays the message “Web browser unable to communicate with VCM, please close the browser and re-connect”. The GUI might also display additional errors.

Workaround

Start a new VCM GUI session and OA credentials can be restored successfully.

Issue

The GUI fabric status is green for uplinks linked to the Ethernet switch, even through the port type is FC and FC SFPs are installed.

Issue

After confirming a DELETE DOMAIN operation, an error message "Unexpected failure while fetching system state" might be displayed.

Workaround

Acknowledge the message and continue.

Issue

After fail over from the primary module to a backup module, the following SNMP traps are not received:

Traps	Value/Severity
vcDomainManagedStatus	Minor
vcModuleManagedStatus	Critical
vcEnclosureManagedStatusChange	Minor
vcProfileManagedStatusChange	Unknown
vcEnetNetworkManagedStatus	Unknown

Issue

Virtual Connect Manager might reset when it contains more assigned and unassigned profiles than can be in use by physical servers in the domain.

Issue

The VCM CLI `show uplinkport` command does not display the serial numbers for pluggable modules.

Issue

For double-dense server blades, the side B server mezz port mapping is incorrect.

Issue

The timestamp for SNMP traps from VC FC interconnect modules is not in sync with the timestamp kept by Virtual Connect Manager.

Issue

Both the GUI and CLI allow restoring from a configuration file when a domain exists and server blades are powered on, which can result in duplicate MACs or WWNs on the network or SAN.

Workaround

When restoring a configuration on an existing domain, be sure server blades are powered off.

Issue

The GUI allows importing a new domain from an existing configuration file without warning you to power off all server blades.

Workaround

Power off all server blades before using a configuration file to import a new domain.

General issues

Issue

Upgrading VC FlexFabric firmware from 3.15, 3.17, or 3.18 to a newer version might result in a temporary Fibre Channel over Ethernet (FCoE) outage.

This behavior is limited to systems using HP ProLiant or Integrity server blades with a FlexFabric Mezzanine adapter and a corresponding FCoE connection to an HP VC FlexFabric 10Gb/24-port module. This behavior does not appear for FCoE connections using an embedded FlexFabric adapter (LOM).

For more detailed information, see Customer Advisory c02950493 on the HP website (<http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?objectID=c02950493>).

Issue

The HP VC 8 Gb 24-Port FC Module does not respond to the HP Insight Control cpqHoGUID MIB request and is reported as an error.

Workaround

Remove the FC module from the query.

Issue

HP Systems Insight Manager might incorrectly identify the HP VC 8 Gb 24-Port FC module as a SAN switch due to the incorrect value returned in the SysObjectOid.

Issue

In expanded VLAN mode, the number of allowed connections to a Flex-10 server port is 162. If a profile has more than 162 connections defined on a physical Flex-10 port, the port is disabled when the profile is applied and the port status is displayed as disabled.

Issue

The CLI `copy uplinkset` command does not allow copying of Private Networks within the shared uplink set.

Issue

When a HP VC 8Gb 24-Port FC module is connected to a Brocade 8510 (16Gb) switch, the link between the FC module and the 8510 can only negotiate to 4Gb instead of 8Gb.

Workaround

Lock the 8510 port speed to 8Gb for the port that the FC is connecting to.

Issue

If a user attempts to remove or add a mezzanine card to a server blade, then VCM might not detect the addition or removal of the mezzanine card when the server is re-inserted into the enclosure. However, the OA shows the correct configuration.

Workaround

Reset the VC Manager before powering up the server blade that has the mezzanine card changes. For new server installations, VCM correctly detects the server configuration and no reset is required. The VCM reset does not affect the operation of any other servers.

Issue

During an OA failover the VC GUI might be unable to communicate with VCM for some amount of time. However, VCM is still operational and working to recover from the OA failover. During this time, the browser might display an alert dialog to inform the user about this loss of communication. Additional alert dialogs might then be displayed for WebService calls that have failed.

Workaround

Acknowledge all alert dialogs, close the browser, and then begin a new GUI session.

Issue

On the Shared Uplink Sets screen, the list of networks on the Associated Networks tab might not be displayed in the correctly sorted order.

Workaround

Select **External Connections** to edit a shared uplink set. Click on the column headers to sort list of associated networks by name or VLAN ID. You can also see the correctly sorted list of networks by selecting **Ethernet Networks** in the left navigation tree, and then use **Filter** to narrow the list.

Issue

HP VC 8 Gb 24-Port FC Module does not return a proper value for the cpqHoGUID element of the CPHSHOST MIB during HP System Insight Control discovery, which causes discovery to complete with errors.

Issue

Under certain circumstances, you might encounter a pop-up message after deleting the VC domain through the GUI. Even though a pop-up message is encountered, the domain deletion is successful.

Issue

iSCSI Boot from SAN is supported only on the NC551i Dual Port FlexFabric 10Gb Adapter and NC553i/m 10Gb 2-port FlexFabric Converged Network Adapter. The boot LUN IDs must be in the range of 0 to 8.

Issue

If an enclosure import is attempted with a server blade in a failed state, VCM might incorrectly report an error when one does not exist. If the import completes, close the browser and log in again to verify that the import was successful. Use the OA to verify the working state of all server blades.

Issue

Under certain circumstances, the checkpoint status icon in the GUI persists for a long time and is not cleared. The CLI also shows a "Checkpoint Status: Invalid" status in the "show domain" output. This condition has been observed periodically after a VCSU firmware upgrade of the VC module firmware. To resolve this issue, reset VCM on the primary module, or reset the primary module using the OA.

Issue

The SNMP Managed Status Change trap (vcProfileManagedStatusChange) for all unassigned profiles is not sent by VC when the profile status transitions to Normal state.

Issue

In a multi-enclosure environment, if local and remote enclosures are shut down and powered back up, VC might incorrectly report that some empty I/O module bays in a remote enclosure are "NO-COMM". This error occurs if VC-FC modules are installed in the local enclosure and the corresponding bays in the remote enclosure are empty. The empty module bays should have been reported as "MISSING".

Issue

When VC is used and Integrity BL870c i2 or BL890c i2 server blades are present, after an OA is reset the OA occasionally displays factory-assigned WWNs and MAC addresses for the auxiliary blades in a multi-blade server, even though VC-assigned values exist. This problem does not affect the operation of the server. The server blades have and operate with the correct VC-assigned WWNs and MAC addresses.

Workaround

1. Power off the server blade, if necessary.
2. Unassign the VC profile.
3. Reassign the VC profile.
4. Power on the server blade.

Issue

In Virtual Connect release 3.0x or later, the Server Admin user is not able to modify the IGMP Snooping settings. This known issue is related to the authorizations of the Server Admin user in the security token being passed between VC software components. This issue will be fixed in a later release of Virtual Connect. To work around this issue, the Server Admin user must log in as an Administrator to change IGMP Snooping settings.

Issue

Multiple or unsupported versions of Adobe Flash Player cause the Firefox web browser to crash.

On some combinations of the Firefox web browser, Adobe Flash Player, and the operating system, the Adobe Flash Player causes the Firefox web browser to crash unexpectedly—especially if multiple versions or an older/unsupported version of the Flash Player (for example, Flash v8.0) is installed with Firefox, even if the older/unsupported version of the Flash plug-in is disabled. HP recommends that Virtual Connect 3.0x or later users install only one supported version of the Adobe Flash Player plug-in with the Firefox web browser.

Depending on the installed versions of the Firefox web browser, Adobe Flash Player, and the operating system (for example, Firefox v3.5.9 and Adobe Flash Player v9.0/v10.0 installed on GNU Linux v2.6.9), certain fix patches from Adobe for the Adobe Flash Player might be needed. For the latest information on fix patches for the Flash Player plug-in, see the Adobe website

(<http://www.adobe.com/support/security/index.html#flashplayer>).

Also, users might experience problems with the Firefox web browser hanging or crashing and then showing the "failed to create MSXML object" error. This is a known issue with XSLT transformations for the Firefox web browser. For more information about downloading and installing a patch for your specific version of the Firefox web browser, see the following:

- Foundation Security Advisory 2009-12
(<http://www.mozilla.org/security/announce/2009/mfsa2009-12.html>)

- Security Advisories for Firefox 3.0
(<http://www.mozilla.org/security/known-vulnerabilities/firefox30.html>)

Issue

Editing the SAN fabric should not allow changes to the fabric's I/O bay. The "Add Port" menu may show incorrect menu entries instead of showing the port details only for the current or previously added bay entries. If they are selected, the SAN fabric is not updated with the current modifications.

Issue

When multiple Internet Explorer 7 browser sessions are open to the Virtual Connect Manager application, the VC GUI might hang.

Workaround

Add the following registry value:

```
[HKLM\HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Internet Settings] "MaxConnectionsPerServer"=dword:6
```

By default, this registry value does not exist and Internet Explorer 7 defaults to the value of 2. Increasing the value to 6 resolves the hanging issue. Internet Explorer 8 defaults to a value of 6, so this issue does not occur. The Firefox web browser may also default to a higher value.

Issue

In a double-dense domain configuration, interconnect bays 7 and 8 should not be used to create an FC fabric. The fabric should instead be created on bays 5 and 6. If a fabric is created on bays 7 or 8 using the VCM CLI, an incorrect error message might appear, indicating "ERROR: Module not found" instead of "ERROR: A fabric is not allowed to be created with the specified bay for a double-sense configuration".

Issue

When a server blade server port has multiple FlexNICs defined and one of the ports is defined as FCoE, deleting the FCoE FlexNIC does not redistribute the bandwidth to other active FlexNICs, even though the GUI indicates that this redistribution occurred.

Issue

VC allows mapping of non-supported iSCSI connections for NC522m Mezz ports 1-a and 2-a.

Issue

If a profile that is currently assigned to a server is modified so that Network connections or FCoE connections are added or removed, VC might change the protocol (Ethernet or FCoE) for a particular Flex-10 interface without properly reinitializing it. This can result in unexpected behavior.

Workaround

Unassign the profile, and then reassign the profile.

Prerequisites



IMPORTANT: If you have FCoE connections configured through a mezzanine card, see the "Issues and workarounds (on page 6)" section for a workaround required to avoid a temporary FCoE outage during firmware update.

- There is a known issue with Virtual Connect data not appearing correctly in Insight Control for VMware vCenter Server version 6.2. HP recommends that customers using Insight Control for VMware vCenter Server upgrade to version 6.3 when using Virtual Connect firmware version 3.30 or higher.
- The Virtual Connect GUI requires a minimum of 512 MB of available memory to operate efficiently.
- Immediately review OA Customer Advisory c02639172 on the HP website (<http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?lang=en&cc=us&objectID=c02639172>) to see if any recent changes made to the enclosure configuration are at risk of not being persistently preserved. If you made changes using a non-Administrator user account, before the next OA firmware upgrade or reset, execute the workaround documented in Customer Advisory c02639172 to ensure that the enclosure configuration changes are being persistently preserved. The issue described in Customer Advisory c02639172 was resolved with OA 3.21 and later.
- QLogic QMH2562 8Gb FC HBA and HP Emulex LPe 1205 8Gb FC HBA are supported with Integrity server blades and ProLiant BL G6 server blades or later only.
- To operate with HP VC 8Gb 20-Port FC modules, all HP Emulex LPe 1205 8Gb FC HBAs that are revision A (identified by label EDC A-4904) must perform a CFL region 19 flash update. For download and installation instructions, see the LPe1205 product page on the HP website (<http://www.hp.com>).
- Although the GUI enables the selection of SNMP v2 traps, the VC 4Gb FC Module and the VC 8Gb 20-Port FC Module default to v1 traps.
- Configuring more than one FC trap destination with the same IP trap destination address results in only one entry, with the community string being the latter of the duplicated trap entries. The other community strings in the duplicate traps are not used to send traps.
- Changes in the server RBSU can override Virtual Connect server profile settings for PXE (enabled or disabled). If you make a change in RBSU, that change is not reflected in Virtual Connect Manager. If you set PXE through RBSU, HP recommends using the "Use-BIOS" setting.
- For proper server functionality in a Virtual Connect environment, enable the RBSU option by selecting **System Options > Embedded NIC Boot Options > Network Boot**. If you disable the RBSU option with RBSU, HP ProLiant G7 servers may not accept Virtual Connect configuration information correctly, which causes the server to malfunction.
- New GUI components

The VCM GUI introduces a new visual component in 3.0x. Data grids add simplicity and pleasant tone by accessing available operations through a right-click context menu. To add, delete, or edit a row (such as a connection or a profile), select the row and then right-click the row to access the context menu.

Some properties displayed in a data grid are editable. An editable indicator provides feedback on which items can be edited inside a data grid. The editable indicator underlines a property when you move the cursor over the property. If the property is underlined, left-click the property to edit.
- After an enclosure import, the Virtual Connect CLI shows the Stacking Links Connections Status as "Failed" until all modules have been initialized. Depending on the actual configuration, this may take up to 30 seconds.
- Before installing any HP Integrity BL8x0c i2 servers, be sure to do the following:
 - Verify that no profiles are assigned to any of the bays where the HP Integrity BL8x0c i2 servers will be installed.
 - Perform the updates to the recommended OA and VC firmware revisions.

If any HP Integrity BL8x0c i2 servers have already been installed, then they can be left powered on during the entire update to the recommended OA and VC firmware revisions.

- Brocade 804 8Gb FC HBA for HP BladeSystem c-Class is supported only with HP ProLiant G6 servers or later.
- Each FlexNIC and FlexHBA is recognized by the server as a PCIe physical function device. Adjustable speeds range from 100Mb to 10Gb in 100-Mb increments when connected to an NC553i/m 10Gb 2-port FlexFabric Converged Network Adapter or any Flex-10 NIC. Adjustable speeds range from 1Gb to 10Gb in 100-Mb increments when connected to an NC551i/m Dual Port FlexFabric 10Gb Converged Network Adapter.
- Virtual Connect Manager version 3.51 requires Adobe Flash Player 10.x or higher before you can log in. HP recommends updating to Adobe Flash Player 10.2 or higher. When using IE9, HP recommends using Adobe Flash Player 10.3.181.16 or higher.

The recommended Adobe Flash Player web browser plug-in can be downloaded and installed from the Adobe website (<http://get.adobe.com/flashplayer/>), or downloaded as a standalone executable from the Adobe website (<http://www.adobe.com/downloads>).

For the latest Adobe Flash Player Security Bulletin Updates, see the Adobe website (<http://www.adobe.com/support/security/index.html#flashplayer>).

- If you are planning to use VC 3.51 firmware in a VCEM environment, HP recommends upgrading to VCEM v6.3u1. VCEM 6.3u1 allows VC 3.51 firmware to work in VC 3.30 firmware "compatibility mode" as long no profiles have more than four FC or FCoE connections per I/O bay. A future version of VCEM will support the new features in VC 3.51.
- The HP NC551m Dual Port FlexFabric 10Gb Converged Network Adapter is only supported with the HP Integrity BL8x0c i2 Integrity Server Blades and the ProLiant G6 server blades or later.
- VC FlexFabric 10Gb/24-port Modules are only supported in BladeSystem c7000 enclosures with Virtual Connect firmware v3.15 and higher.
- When VC 8Gb 20-port FC Module and VC FlexFabric 10Gb/24-port Module Fibre Channel uplink ports are configured to operate at 8Gb speed and connect to HP B-series (Brocade) Fibre Channel SAN switches, the minimum supported version of the Brocade Fabric OS (FOS) is v6.4.x. In addition, the Fill Word on those switch ports must be configured with option Mode 3 to prevent connectivity issues at 8Gb speed.

On HP B-series (Brocade) FC switches, use the portCfgFillWord (`portCfgFillWord <Port#> <Mode>`) command to configure this setting.

Mode	Link Init/Fill Word
Mode 0	IDLE/IDLE
Mode 1	ARBF/ARBF
Mode 2	IDLE/ARBF
Mode 3	If ARBF/ARBF fails, use IDLE/ARBF

Modes 2 and 3 are compliant with FC-FS-3 specifications (standards specify the IDLE/ARBF behavior of Mode 2, which is used by Mode 3 if ARBF/ARBF fails after 3 attempts). For most environments, Brocade recommends using Mode 3, as it provides more flexibility and compatibility with a wide range of devices. In the event that the default setting or Mode 3 does not work with a particular device, contact your switch vendor for further assistance.

Installation instructions

Two options are available for VC firmware update:

- HP BladeSystem c-Class Virtual Connect Support Utility

For this release of HP Virtual Connect, the minimum firmware requirement for VCSU is version 1.6.0. HP recommends that you always use the latest version available. For more information about VCSU, see the HP BladeSystem c-Class Virtual Connect Support Utility release notes on the HP website (<http://www.hp.com/go/ bladesystem/ documentation>). To download the firmware, view the BladeSystem for ProLiant Release Set Compatibility Table on the HP website (<http://www.hp.com/go/ bladesystemupdates>) and select the appropriate download.

- HP Service Pack for ProLiant

SPP is the replacement product for Insight Foundation (PSPs, Smart Update Firmware DVD, and other systems software). To download the update, see the HP Service Pack for ProLiant website (<http://www.hp.com/go/ spp>).



IMPORTANT: When upgrading the HP VC 4Gb FC firmware from version VC-FC 1.2x to version VC-FC 1.4x, the VC-FC module can drop connectivity temporarily during the activation process. A redundant customer configuration experiences a failover with no loss of application connectivity to the fabric.



IMPORTANT: When updating the above firmware, update each domain with the entire firmware package, which includes the individual VC-Enet and VC-FC firmware. Updating only the VC-Enet firmware or only the VC-FC firmware is not supported.

Firmware upgrade requirements



IMPORTANT: For VC 3.51 upgrades when Virtual Connect Enterprise Manager (VCEM) is in use, observe the following guidelines:

- VCEM 6.3u1 allows VC 3.51 to work in VC 3.30 firmware "compatibility mode" as long as no profiles have more than four FC or FCoE connections per I/O bay.
- A future version of VCEM will support the new features in VC 3.51.

Each HP Virtual Connect firmware package contains a separate HP VC-FC firmware version. The following tables show the version of VC-FC firmware included with each VC firmware package.



IMPORTANT: When upgrading the HP VC 4Gb FC firmware from version VC-FC 1.2x to version VC-FC 1.4x, the VC-FC module can drop connectivity temporarily during the activation process. A redundant customer configuration experiences a failover with no loss of application connectivity to the fabric.

Virtual Connect firmware	VC 4Gb FC firmware within Virtual Connect	VC 8Gb 20-Port FC firmware within Virtual Connect	VC 8Gb 24-Port FC firmware within Virtual Connect
v1.31	1.20	—	—
v1.32, v1.34	1.21	—	—
v2.01, v2.02	1.30	—	—
v2.10, v2.12	1.32	1.32	1.00

Virtual Connect firmware	VC 4Gb FC firmware within Virtual Connect	VC 8Gb 20-Port FC firmware within Virtual Connect	VC 8Gb 24-Port FC firmware within Virtual Connect
v2.30–v2.33	1.40	1.40	1.01
v2.34	1.41	1.41	1.01
v3.0x	1.40	1.40	1.02
v3.10, v3.15	1.41	1.41	1.03
v3.17, v3.18	1.41	1.41	1.04
v3.30	1.42	1.42	1.04
v3.51	1.43	1.43	1.04

The following table shows firmware upgrade/downgrade support for the HP VC 4Gb FC Modules or HP VC 8Gb 20-Port FC Modules.

Upgrade to or downgrade from	1.31	1.32, 1.34	2.01, 2.02	2.10, 2.12	v2.3x	3.0x	3.10, 3.15, 3.17, 3.18	3.30, 3.51
VC 1.31	—	Normal	Fabric outage*	Fabric outage*	Fabric outage*	Fabric outage*	Fabric outage*	Fabric outage*
VC 1.32/1.34	Normal	—	Fabric outage*	Fabric outage*	Fabric outage*	Fabric outage*	Fabric outage*	Fabric outage*
VC 2.01/2.02	Fabric outage*	Fabric outage*	—	Normal	Normal	Normal	Normal	Normal
VC 2.10/2.12	Fabric outage*	Fabric outage*	Normal	—	Normal	Normal	Normal	Normal
VC 2.3x	Fabric outage*	Fabric outage*	Normal	Normal	—	Normal	Normal	Normal
VC 3.0x	Fabric outage*	Fabric outage*	Normal	Normal	Normal	—	Normal	Normal
VC 3.10/3.15/3.17/3.18	Fabric outage*	Fabric outage*	Normal	Normal	Normal	Normal	—	Normal
VC 3.30/ 3.51	Fabric outage*	Fabric outage*	Normal	Normal	Normal	Normal	Normal	—

* Always reset the module after the upgrade or downgrade.

On HP Virtual Connect 4Gb Fibre Channel Modules (with enhanced NPIV), downgrading the firmware to any version older than VC 2.10 is not supported.

Firmware version for HP BladeSystem for ProLiant

The firmware versions and software versions listed in this section have been tested as a solution set using HP Service Pack for ProLiant 2012.01.00 as a baseline, and are fully supported by HP. For Virtual Connect version 3.51, HP recommends the use of SPP version 2012.01.00 with updates for specific components of the solution. For best results, follow the pre-deployment planning steps in the *HP Virtual Connect for c-Class BladeSystem Setup and Installation Guide* and the *HP BladeSystem ProLiant Firmware Management Best Practices Implementer Guide* on the HP website

(http://h18004.www1.hp.com/products/servers/service_packs/documentation/index.html) to deploy the baseline set with component updates.

HP Service Pack for ProLiant is the replacement product for Insight Foundation (PSPs, Smart Update Firmware DVD, and other systems software). To download the update, see the HP Service Pack for ProLiant website (<http://www.hp.com/go/spp>).



CAUTION: HP recommends using the specific firmware and software versions listed together to ensure complete solution component compatibility and full functionality. These versions have been tested as a set. Using other version levels might result in operational issues.

Baseline Firmware Release Set

The contents of SPP 2012.01.00 is documented in the *HP Service Pack for ProLiant 2012.01.00 Release Notes* and *HP Service Pack for ProLiant 2012.01.00 Server Support Guide* on the HP website (http://h18004.www1.hp.com/products/servers/service_packs/documentation/index.html).

Additional information

For more BladeSystem information and tools, available in the *HP Virtual Connect Flex-10 NICs Solution Recipe White Paper* and the *HP Virtual Connect FlexFabric Solution Recipe White Paper*, go to the Additional information section of the HP website (<http://h18004.www1.hp.com/products/blades/ bladesystemupdate.html>).

Versions 3.15 and higher of HP Virtual Connect Manager check the server ROM image version and display an incompatible state only for server blades that have a VC Server Profile assigned and are using incompatible server ROM versions.

Virtual Connect does not have the capability to perform version checking of the mezzanine card firmware. Validate this information through server POST for mezzanine support utilities.

Server blades and mezzanine cards that do not meet the required firmware versions do not accept Virtual Connect-assigned parameters such as MACs and WWNs properly, and therefore maintain factory defaults. However, these server blades do have the Ethernet network and Fibre Channel fabric connectivity specified in their Virtual Connect server profiles. This connectivity enables you to use network-based firmware update tools for server blade and mezzanine firmware updates.

Firmware version for HP BladeSystem for Integrity



CAUTION: HP recommends using the specific firmware and software versions listed together to ensure complete solution component compatibility and full functionality. These versions have been tested as a set. Using other version levels might result in operational issues.

Baseline Firmware Release Set

HP Integrity i2 Server Blade	Version
HP Smart Updated Firmware – HP Integrity BL860c/870c/890c i2 System Firmware Bundle for Linux/Windows (http://h18004.www1.hp.com/products/blades/integrity-release-sets.html)	26.11
HP Integrity Server Blade	Version
HP Integrity BL860c (http://h20000.www2.hp.com/bizsupport/TechSupport/SoftwareIndex.jsp?lang=en&cc=us&prodNameId=3351095&prodTypeId=3709945&prodSeriesId=3331044&swLang=13&taskId=135&swEnvOID=4001)	04.26
HP Integrity BL870c (http://h20000.www2.hp.com/bizsupport/TechSupport/DriverDownload.jsp?lang=en&cc=us&prodNameId=3676869&taskId=135&prodTypeId=3709945&prodSeriesId=3676868&lang=en&cc=us)	04.26

Additional information

For Virtual Connect Fibre Channel and FlexFabric modules, the supported firmware and OS drivers are listed in the HP Single Point of Connectivity Knowledge (SPOCK) website (<http://www.hp.com/storage/spock>). The link to Virtual Connect is under the category "Other Hardware" in the list of selections on the left.

Versions 3.15 and higher of HP Virtual Connect Manager check the server ROM image version and display an incompatible state only for server blades that have a VC Server Profile assigned and are using incompatible server ROM versions.

Virtual Connect does not have the capability to perform version checking of the mezzanine card firmware. Validate this information through server post for mezzanine support utilities.

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Related information

Virtual Connect Enterprise Manager support

VCEM v6.3u1 allows VC 3.51 to work in VC 3.30 firmware "compatibility mode" as long as no profiles have more than four FC or FCoE connections per I/O bay. VCEM 6.1x, 6.2x, and 6.3 also allow VC 3.51 to work in compatibility mode. See the respective VCEM user guides for more information on VC features that need to be disabled to allow usage in these VCEM versions.

For VCEM availability and full product details, see the HP website (<http://www.hp.com/go/vcem>) or contact your HP representative.

Documentation feedback

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