

Firmware Updates for Clusters Using the OpenManage[™] Integration for VMware vCenter

This Dell technical white paper describes how to use the OpenManage[™] Integration for VMware vCenter to perform firmware updates for clusters onto Dell PowerEdge 11th generation or later host systems.

Kaushal Gala Sangita Pandit Michael Hepfer Azam Irfan

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Revisions

Date	Description
July 2013	Initial release
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Executive summary

The OpenManage Integration for VMware vCenter is a virtual appliance that streamlines tools and tasks associated with the management and deployment of Dell servers in your virtual environment. It reduces complexity by natively integrating the key management capabilities into the VMware vSphere Client console. It minimizes risk with hardware alarms, streamlined firmware updates and deep visibility into inventory, health, and warranty details.

The OpenManage Integration enables users to schedule firmware updates for clusters from within VMware vCenter. In addition, users can schedule the firmware update to run at a future time. This feature helps users to perform the firmware updates at the scheduled maintenance window without having to be present personally to attend the firmware updates.



1 Introduction

The OpenManage Integration provides a wizard that guides a user through the steps to perform firmware updates on cluster hosts using either a vSphere desktop client or a vSphere Web client. Both mechanisms are explained in this whitepaper. The firmware update functionality is only available on Dell PowerEdge[™] 11th and 12th Generation Servers that fulfills server prerequisites.

1.1 Firmware Update Assurances

Sequential execution. To make sure all the hosts are not brought down to perform firmware updates, the firmware update is performed sequentially, one host at a time.

Single failure stoppage. If an update job fails on a server being updated, the existing jobs for that server continues; however the firmware update task stops and does not update any remaining servers.

One firmware update job for each vCenter. To avoid the possibility of multiple update jobs interacting with a server or cluster, only one firmware update job for each vCenter is allowed. If a firmware update is scheduled or running for a vCenter, a second firmware update job cannot be scheduled or invoked on that vCenter.

Entering Maintenance Mode. If an update requires a reboot, the host is placed into maintenance mode prior to the update being applied. Before a host can enter maintenance mode, VMware requires that you power off or migrate guest virtual machines to another host. You can configure the DRS features for a cluster to migrate the guest virtual machines to another host automatically. If a host is not able to enter maintenance mode the firmware update task timeouts and fails.

Exiting Maintenance Mode. Once the updates for a host have completed, the host will be taken out of maintenance mode, if a host was in maintenance mode prior to the updates.

NOTE: If a host was in maintenance mode prior to the firmware update task, it is removed from the maintenance mode after the firmware update jobs are completed on the host.

1.2 Server prerequisites for candidates of firmware updates for clusters

For the Dell PowerEdge 11th and 12th generation server to update the firmware of datacenters and clusters, the server must fulfill the following requirements:

- Servers must have a valid iDRAC Express or Enterprise License.
- Server must be part of a Connection Profile.

- Server must be compliant in terms of minimum required firmware, CSIOR status, Hypervisor, and OMSA status (in case for Dell PowerEdge 11th generation servers).
 - At least the base level of firmware updates for Lifecycle Controller, iDRAC, and BIOS. See the product documentation for more details.
 - o Conduct System Inventory on Reboot (CSIOR) must be enabled.
 - For Dell PowerEdge 11th generation servers, a supported version of the OMSA agent must be installed. See the product documentation for more details.
- An inventory job run for the servers.

1.3 Firmware Repository prerequisites

A firmware repository accessible to the OpenManage Integration appliance is required. The repository can be the default repository location of ftp.dell.com, or a repository created using the Dell Repository Manager. Find information about creating a repository using the Dell Repository Manager in the whitepaper "Using Dell Repository Manager with OpenManage Essentials & DellTM OpenManage Integration for VMware vCenter"



Firmware Update Wizard for clusters

Using a vSphere Desktop Client or vSphere Web Client, a user can step through the firmware update process and schedule firmware update jobs on clusters as follows:

- 1. In Hosts and Clusters tree view, select a cluster.
- 2. Launch the firmware wizard.

For vSphere Desktop Client, select OpenManage Integration tab and click Update Firmware.

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Figure 1 Host and Clusters – Desktop Client

For vSphere Web Client, do any of the following:

- a. Select **Dell Cluster Information** tab. Select **Firmware** page and click **Run Firmware Wizard.**
- b. Right click on a cluster, Select All OpenManage Integration Actions, and select **Firmware Update.**
- c. Click on **Actions** drop-down menu, Select All OpenManage Integration Actions, and select **Firmware Update**.

2

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Figure 2 Host and Clusters – Web Client

If there is a firmware update job in progress or scheduled, a popup is shown stating the name of the firmware job.

Firmware updates can be performed on different vCenters simultaneously, however only one *in progress* or *scheduled* firmware job for each vCenter is allowed. Dismiss the dialog. Wait, and try this again later. View the status of all jobs on the Firmware Update Jobs tab in Job Queue (See section **Job Status for Firmware Update Jobs** for more details).

- 3. The wizard opens with a **Welcome** screen with the information about the update. Read this screen before proceeding with the wizard.
- 4. On the vSphere Desktop Client, Click **Next** to see Firmware Inventory page to review the components that are currently installed on the servers. The list presented is using data from the last scheduled hardware inventory, not from a real-time data. This information is from the time the last inventory was run on the system. Use this time to determine the hardware inventory data is fresh, and that firmware wouldn't have changed since the last scheduled inventory. The inventory data will not reflect the new firmware changes until an inventory has completed for the server.

Note: This page is not shown on the vSphere Web Client.

Welcome	Firmware Inventory:	Cluster-two				
Firmware Inventory Select Update Bundles	This page shows the he Last Inventory Run: Oct		ent inventory information (GMT-5) 👔	in this cluster.		
Select Systems to Update						Search
Firmware Update Information	Host Name/IP	Service Tag	Model	Component	Current	Date Applied
Schedule Update	10.255.4.102	6LFMHN1	PowerEdge R710	Power Supply	03.02.67	Jun 11, 2013 at 5:53:25 (GMT-5)
	10.255.4.102	6LFMHN1	PowerEdge R710	Dell OS Driv	6.5.3	Jan 22, 2013 at 11:05:18 (GMT-6)
	10.255.4.102	6LFMHN1	PowerEdge R710	32 Bit Diagn	5158A3	Sep 19, 2013 at 6:37:20 (GMT-5)
	10.255.4.102	6LFMHN1	PowerEdge R710	Dell Lifecycl	1.6.0.73	Sep 20, 2013 at 8:39:51 (GMT-5)
	10.255.4.102	6LFMHN1	PowerEdge R710	BIOS	6.3.0	Sep 20, 2013 at 11:01:58 (GMT-5)
	10.255.4.102	6LFMHN1	PowerEdge R710	iDRAC6	1.95	Sep 20, 2013 at 11:15:09 (GMT-5)
	10.255.4.102	6LFMHN1	PowerEdge R710	Broadcom N	7.6.15	Sep 20, 2013 at 11:19:41 (GMT-5)
	10.255.4.102	6LFMHN1	PowerEdge R710	PERC H700 I	12.10.6	Sep 20, 2013 at 11:19:41 (GMT-5)
	10.255.4.102	6LFMHN1	PowerEdge R710	Broadcom N	7.6.15	Sep 20, 2013 at 11:19:41 (GMT-5)
	10.255.4.62	2JQBQV1	PowerEdge R420	Power Supp	07.15.7E	Jun 23, 2012 at 8:08:32 (GMT-5)
	10.255.4.62	2JQBQV1	PowerEdge R420	Power Supp	07.15.7E	Jun 23, 2012 at 8:08:32 (GMT-5)
	10.255.4.62	2JQBQV1	PowerEdge R420	Integrated D	1.37.35	Jun 19, 2013 at 6:03:59 (GMT-5)
	10.255.4.62	2JQBQV1	PowerEdge R420	Broadcom G	7.2.14	Jun 23, 2012 at 10:06:22 (GMT-5)
	10.255.4.62	2JQBQV1	PowerEdge R420	Broadcom G	7.2.14	Jun 23, 2012 at 10:06:25 (GMT-5)

Figure 3 Firmware Inventory – Desktop Client

Note: The Cluster column is populated with the cluster name the host is under. If the host is not associated with any cluster, then the column is populated with "*Not Applicable*".

5. Click **Next** to see the repository information and update bundles.

Use the check boxes to select the update bundles on this page.

If a catalog does not contain a bundle for a given model, it is not listed. If multiple bundles are available for a model in the catalog, use the drop-down to select a bundle containing the update packages.



Formulars Update Wisard		🕞 Firmware Update	
Simone Permanen kontituty Leiset Bahar Bandien Sainel (sainen in Update Permanen Update ethereatore Baharlage Opdate	Select Update Bendles The ages shows the update bundles for each enviror funity retrained that the Stronger repeating boots on the statement begreating to contain up to the statement of the theory regulating and an the statement repeating variant and the statement of the Stronger repeating variant and the statement of the Stronger repeating variant and the statement of the statement of the Stronger repeating variant and the statement of the statement of the Stronger repeating variant and the statement of the stat	1 Welcome 2 Select Update Source 3 Select Components 4 Schedule Firmwaire Update 5 Summary	Select Update Source This page shows the update bundles for each server family referred from the location. Repository Location Current repository tocation. Dell Online(fb dell conviculatopratalogranting mit gp) The repository research checked for update bundles on 10/82/013 4 13 59 FM Select Bundles We have identified the following category of systems. Select the update bundle in the performance of the select a bundle for server family, you will not be able to perform them. Image: PowerEidge R/10 [11 hosts] System Bundle (Windows) PER/110 v474 Image: PowerEidge R420 [11 hosts] System Bundle (Windows) PER/140 v474
	vSphere Desktop Client	vSphere W	eb Client

Note: The bundle information is from the time specified on this screen. If the repository information was changed after that time, the change is not reflected. To reflect the change, exit the wizard. Next, update the repository location using any of the following:

a. vSphere Desktop Client:

- i. Click Dell Management Center under Home > Management
- ii. Navigate to Settings > Firmware Repository. Click Edit.
- b. vSphere Web Client:
 - i. Click OpenManage Integration under Home > Adminstration
 - ii. Navigate to Manage > Settings. Click Edit icon next to Firmware Update Repository.

Note: The bundles are loaded from a cached catalog file downloaded from the repository location listed. See **Troubleshooting** for details on errors.

When changing the Firmware Repository, allow several minutes for the appliance repository catalog file to synchronize so that the new catalog file is used. When the catalog file is being downloaded, on navigating the Update Bundles step of the wizard, an error poup "The repository is being updated by another process" is shown.

6. Click **Next** to see page showing components that can be updated. Use check boxes to select the components to upgrade or downgrade. To downgrade certain components, select the checkbox to allow downgrade (checkbox below the datagrid).

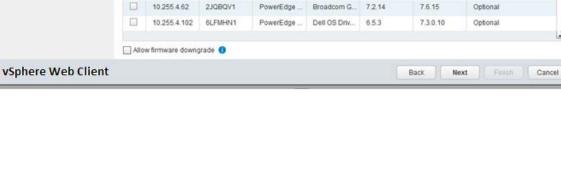
Note: When selecting all components, if some components remain unselected, there are no upgrades available for those components. Such components may be selected for a downgrade.

CAUTION: There are some known issues with specific pre-existing firmware versions that may cause a firmware update job to fail. Please read the release notes prior to selecting updates to identify and avoid any of these known issues. Also see the **Known Firmware Compatibility Issues** section.

CAUTION: Bundles may contain multiple updates of different versions for a component. It is recommened to select a single update version for a component. Applying multiple updates to a given component as part of the same update job may result in unexpected behavior on the target system.

Welcome Select the Systems/Components to Update Firmware inventory Select the Systems/Components to Update Select Update Bundles The page shows all the heats and components. Adways update firmware together as part of a repository bundle. BDS, DRAC, and Lifecycle Controler. Primware Update Information Schedule Information Schedule Update Model Component Current Available Critically * Primware Update Interprise U 4217A4 4225A2 Optional *	Firmware Inventory Ti Select Update Bundles C Select Systems to Update 7 Firmware Update Information Schedule Update	This page upgrades. Controller. 2 Export 2 Expor	e shows all the host idowngrades, selec- to CSV Host Name 10.255.4.62 10.255.4.62 10.255.4.62 10.255.4.62	is and compone ct the systems/	Service Tag 2JQBQV1 2JQBQV1 2JQBQV1 6LFMHN1 2JQBQV1	Model Model PowerEdge R420 PowerEdge R420 PowerEdge R420 PowerEdge R710	Component Enterprise U., Broadcom G., Lifecycle Co., Dell OS Driv.,	Current 4217A4 7.2.14 1.1.1.18 6.5.3	Available 4225A2 7.6.15 1.1.5.165 7.3.0.10	Criticality Optional Optional Optional	ile ×
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Figure 5 Update Components



7.6.15

Optional

7. **For vSphere Desktop client**, click **Next** to see "Firmware Update Information" to review the components selected for upgrade/downgrade.

Note: For vSphere Web Client, the selected components are shown in the Summary page.

mware Update Wizard											
Welcome	Firmware Update Information										
Firmware Inventory	This page shows the components sele	cted for upgrades/down	grades.								
Select Update Bundles	Firmware Update Assurance:										
Select Systems to Update	Select Systems to Update * The wizard updates one host at a time. * The wizard always puts the host in maintenance mode before applying the firmware updates. The host may reboot as part of the update process.										
Firmware Update Information	 The wizard always puts the host in The wizard updates a second host If the firmware update fails for one those updates are completed. How It typically takes 30-60 minutes to up Components selected for upgrad 	after confirming the prev of the components on a p ever, this host will remain pdate firmware componen	ious host is out of maint particular host, the upda in maintenance mode, a	enance mode, up a te task continues f	and running. or the remaini	ing components					
	Host Name/IP	Service Tag	Model	Component	Current	Available	Criticality				
	10.255.4.62	2JQBQV1	PowerEdge R420	Enterprise U	4217A4	4225A2	Optional				
	10.255.4.62	2JQBQV1	PowerEdge R420	Broadcom G	7.2.14	7.6.15	Optional				
	10.255.4.62	2JQBQV1	PowerEdge R420	Lifecycle Co	1.1.1.18	1.1.5.165	Optional				
	10.255.4.102	6LFMHN1	PowerEdge R710	Dell OS Driv	6.5.3	7.3.0.10	Optional				
	<u></u>					Back	Next Cance				

Figure 6 Firmware Update Information – Desktop Client

Click Next to see a page that provides the options for creating a firmware update job.
 In the Firmware Update Job Name text box, type the firmware update job name. This is a mandatory field. Do not enter a name that is already in use. If the name has been purged, it can be used again.

In the Firmware Update Description, type the description.

Under Job Schedule, do one of the following mandatory option:

- To run the update job now, click Update Now.
- To run the update job later, click Schedule Update, and then do the following:
 - o In the Calendar box, select the month and day.
 - In the Time text box, type the time in HH:MM, and then click Finish.
 Note: The time is the local timezone where your client is physically located.

Note: For **vSphere Desktop Client**, this is the last screen in the wizard. Review the options before clicking Finish.



Interest lades share	7	Torreaded Spille	
Innya Anuar turtuy Inn Ian Subs Inn Subs Inn Subs Inn Subs Innya Inny Inny	Schedule Termeane (gebas) The spin refuture, spin for soluble to unable a to three gebas pin. off three Nervery today into three Ververy today into three Ververy today into three O answ three O answ three Image: spin of three	 4 Stearch Stear Service 5 Service Langement 6 Service Langement 8 Service Tearring under Stearch S	Spingure Promital Update Theoryang cases. The first and the promit results of the transmit profession and the profession
	vSphere Desktop Client	-	tos two car vSphere Web Client

Figure 7 Schedule Update

9. For vSphere Web Client, click Next to see summary of user selected components as well as information about the job details such as job name, description and schedule option. Review this information before clicking "Finish".

1 Welcome 2 Select Update Source	Summary This page shows the complete details about the updates.									
 3 Select Components 4 Schedule Firmware Update 5 Summary 	Firmware Update Details: Job Name: my_job Update Status: Scheduled On 10/31/2013 10 56 00 PM (GMT-5)									
	Hostname	Service Teg	Model Name	Component	Current	Available	Criticality			
	10.255.4.102	6LFMHN1	PowerEdge	Dell OS Drive	6.5.3	7.3.0.10	Optional			
	10.255.4.62	2JQBQV1	PowerEdge	Enterprise U	4217A4	4225A2	Optional			
	10.255.4.62	2JQBQV1	PowerEdge	Dell OS Drive	7.0.1.13	7.3.0.12	Optional			
	10.255.4.62	2JQBQV1	PowerEdge	Integrated De	1.37.35	1.40.40	Urgent			
	10 255 4 62	2JQBQV1	PowerEdge	Lifecycle Con	1.1.1.18	1.1.5.165	Optional			
	10.255.4.62	2JOBOV1	PowerEdge	Broadcom Gi	7.2.14	7.6.15	Optional			
								D		
	* The wizard will * The wizard will * If the firmware of	update 1 host pr only bring down always put the h update fails on 3	er cluster at a time a second host from i ost in maintaninace consecutive hosts, t host, it will not apply	mode before apply he entire task will f	ing the firmwar all.	e updates.	and running.			

Figure 8 Summary Page – Web Client Only

10. Clicking **Finish** creates and schedules the firmware update job. A popup appears to confirm creation of the job. The Firmware Update task normally takes 30 to 60 minutes for each host to update the firmware.

3 Job Status for Firmware Update Jobs

3.1 Viewing Job Status and Details for Firmware Update Jobs

The Firmware Update Job section of Job Queue shows a list of firmware Update jobs and their status.

1. For vSphere Desktop Client, click the Job Queue tab in the Dell Management Center. Click on the "Firmware Update Jobs" tab. More details for the firmware update job are seen by clicking the *Details* link for the job in the Status column. This link opens a details window.

	CENTER						
OVERVIEW	JOB QUEUE						
DEPLOYMENT -	Deployme	at John Ja	ventory Hi	ston	Warranty History	Firmware Upda	to John
JOB QUEUE	Deployme	nt Jobs In	ventory H	istory	warranty History	Firmware Opda	te Jobs
CONNECTION PROFILES							
COMPLIANCE -	Tasks: > Retrest	> Purge Job Queue					
L00	FIRMWARE UPDAT	E JOB DETAILS					
SETTNOS -	Status	Scheduled Time		Name	Description	Collection Size	Progress Summary
	Scheduled g0 Detail	Oct 30, 2013 at 23	16:00 (GMT-5)	job1	Children and Child	2	Firmware Scheduled task job1 is
		Details					
	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	FIRMWARE		DETAIL	e		
					_		
		For more deta	is about this j	ob, go to t	he Log page and search for th	e host. 🖉 View Lo	9
		Host Name	Statu	JS	Start Time	End Time	
		10.255.4.10	2 Sch	eduled	Oct 30, 2013 at 23:16:0		
		10.255.4.62	Sch	eduled	Oct 30, 2013 at 23:16:0		

Figure 9 Firmware Update Jobs – Desktop Client

The details page shows a link to the log page where the status of the updates can be tracked.

- 2. For vSphere Web Client, click "OpenManage Integration" under Home > Administration. Select Monitor tab and Job Queue sub-tab to see different job types. Select "Firmware Updates" to see the firmware update job status information for all vCenters.
- 3. Select a given job in the upper list. Details about the hosts for this job is shown in the lower list.

OpenManage™ Integration f	for VMware vCenter						
Getting Started Monitor	Manage Licensing Hel	lp and Support					
Log Job Queue							
•	🛱 🕐 🛷						
Inventory History	Status	Scheduled Time	Name	Description	vCenter	Collection Size	Progress Summary
Warranty History	Scheduled	10/30/2013 11:16:00 PM (job1		VC04Win2K8.spect	redev.loc 2	Firmware Scheduled task jo
Firmware Updates							
	For more details about	ut this job, go to the Log Page and searc	h for the host.				
	Host Name	Statu	3	Start Ti	me	End Time	
	10.255.4.102	Sche	Scheduled 1		10/30/2013 11:16:00 PM (GMT-5)		
10.255.4.62		Scheduled		10/30	10/30/2013 11:16:00 PM (GMT-5)		

Figure 10 Firmware Update Jobs - Web Client

3.2 Actions on Firmware Update Jobs

3.2.1 Modify Jobs

A scheduled job can be modified to run on a different date by clicking **Modify** button.

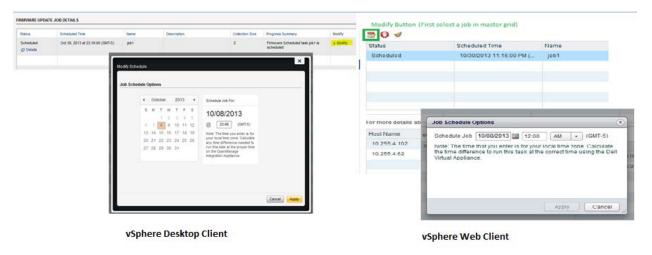


Figure 11 Modify Job

3.2.2 Abort Jobs

A scheduled or a running job can be aborted by clicking **Abort** button. If a firmware update is in-progress on a given host, the update on only that host is allowed to finish.

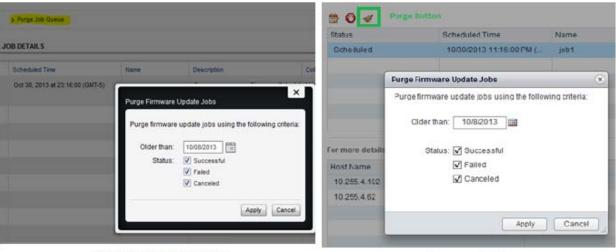
					Abort Batt				
					Status	Scheduled Time	Name	Description	vCer
					Scheduled	10/30/2013 11.15.00 PM	f (VC
Cescripton	Colection Size	Progress Summary	Medity	Abort					
	2	Firmware Scheduled task poll is scheduled	> Nooty	5 Abort	1		-		
Abort			For more details about this job, go to the Log Page and s		s Abort Job 🛞				
Abon			Host Name S						
The firmware update job cannot be recovered once it has been aborted.					10.255.4.102		The firmware job cannot be recovered once it is		0.0
					10.255.4.62		aborted.		1.0
		Co Not Abort Job Abort Job							
				1				Abort Job Do Not Abort J	ob
	vSphere I	Desktop Client				vSphe	ere Web Client		

Figure 12 Abort Job

3.2.3 Purge Jobs

A completed job (success, failed) can be purged from the history by clicking the **Purge** button.

Figure 13 Purge Job



vSphere Desktop Client

vSphere Web Client

Déd

4 Troubleshooting

4.1 Firmware Repository Problems

Problem Scenario 1: In the vSphere Web Client, even though the repository catalog has bundles for the models for the servers in a cluster, the firmware wizard shows no bundles with message "There are no bundles retrieved from the firmware repository location".

🚱 Firmware Update		•
 1 Welcome 2 Select Update Source 3 Select Components 4 Schedule Firmware Update 5 Summary 	Select Update Source This page shows the update bundles for each server family retrieved from the firmware repository location. ▲ There are no bundles retrieved from the firmware repository location. Repository Location Current repository location: Current repository location: Dell Online(ftp. dell.com/catalog/catalog.xml.gz)	

Figure 14 No bundles problem

Resolution:

If the servers in the cluster are 11G servers and are not complaint (e.g. OMSA not configured), then the bundles are not shown unless the servers are fixed using the compliance wizard. To fix such servers, open the vSphere Desktop Client, click Dell Management Center, and click vSphere Hosts under Compliance, and run the compliance wizard on this page.

Problem Scenario 2: While running the Firmware Update wizard for clusters, an error message "The firmware repository file does not exist or is invalid." is displayed. This may be due to a daily background process that was unable to download and cache the catalog file from the repository, where the catalog file was not reachable at the time the background process runs. Another reason may be the proxy settings cannot reach out to Dell Online and the repository is set to Dell Online.

Resolution: After resolving any catalog connectivity issues that may exist, a user can re-initiate the background process by changing the firmware repository location and then setting it back to the original location. Allow about 10 minutes for the background process to complete.

4.2 Known Firmware Compatiblity Issues

Issue 1: Using the OpenManage Integration to upgrade a Broadcom NetXtreme II 10Gigabit Ethernet adapter (BCM57712) from firmware version of 6.2.x or less, or downgrade to a firmware version of 6.2.x or less is not supported.

Resolution/Workaround: There is a known issue with the Broadcom NetXtreme II 10Gigabit Ethernet adapter (BCM57712) where updating the adapter from firmware version of 6.2.x or less, or downgrade to a firmware version of 6.2.x or less fails when the update is applied using the Lifecycle Controller. When attempting to perform this update using the OpenManage Integration, the update may incorrectly show that it completed successfully; however, the firmware update will have failed and remain at the previous level. One way to successfully update the adapter software for the Broadcom NetXtreme II 10Gigabit Ethernet adapter (BCM57712) is for customers to update the adapter firmware from an operating system.

Note: When using the firmware update, avoid selecting to update the Broadcom NetXtreme II 10Gigabit Ethernet adapter (BCM57712) with a version of 6.2.x or less.

Issue 2: Using OpenManage Integration to update an Intel Network card with the firmware version of 13.5.2 is not supported.

Resolution/Workaround: There is a known issue with Dell PowerEdge 12th generation servers and some Intel Network cards with a firmware version of 13.5.2. Updating some models of Intel network cards at this version of firmware will fail when the firmware update is applied using the Lifecycle Controller. Customers with this version of firmware must update the network driver software using an operating system. If the Intel Network card has a version of firmware other than 13.5.2, you can update using OpenManage Integration. For more information, see

http://en.community.dell.com/techcenter/b/techcenter/archive/2013/03/20/intel-network-controllercard-with-v13-5-2-firmware-cannot-be-upgraded-using-lifecycle-controller-to-v13-5-6.aspx

Note: When using the firmware update, avoid selecting Intel network adapters that are at version 13.5.2, as this will fail and stop the update task from updating remaining servers.

4.3 Tracing/Troubleshooting Firmware Update Jobs

Each completed sub-step in a firmware update job (for example, staging of files for update) is recorded in the logs. To view the firmware update job details in the log for tracing status of a job or troubleshooting a failed firmware update job, do the following:

- 1. Navigate to the log page.
 - For **vSphere Desktop Client**, click "LOG" on the Management Center.
 - For **vSphere Web Client**, click "Log" under Monitor tab of OpenManage Integration.
- 2. Select "Info" Filter.
- 3. In the text input box, type in [Firmware Update].



4. The log entries with date and time, and description will be filtered to show firmware update job related log information.

> Retresh	7 Export		Records per screen: 1000 • Page 1/1
liter: linfo	+ Last Year +		[Firmware L >
Category	Date and Time	Description	
🜒 info	Oct 14, 2013 at 20:01:12 (GMT-5)	[Firmware Update] File: Network_Firmware_59426_VN02_7.6.16.DXE - Status: Completed - Message: DRAC - Job finished successfully	
🜒 Info	Oct 14, 2013 at 19:51:11 (GMT-5)	(Firmware Update) Successfully staged 2 file(s) for update.	
🛈 Info	Oct 14, 2013 at 19:40.57 (OMT-5)	[Firmware Update] File: ESM_Firmware_C1000_WN02_3.50_A00 EXE - Status: Completed - Message: DRAC - Job finished successfully	
🕕 info	Oct 14, 2013 at 19:11:41 (GMT-5)	[Firmware Update] File: Lifecycle-Controller_Application_GFFFC_VHI32_16.0.73_A00.EXE - Status: Completed - Message: DRAC - Job completed successfully.	
🜒 info	Oct 14, 2013 at 19:09:43 (GMT-5)	(Firmware Update) Successfully staged 2 file(s) for update.	
0 info	Oct 14, 2013 at 19:06:49 (GMT-5)	[Firmware Update] File: Network_Firmware_568/26_VNI32_7.8.16.EXE - Status: Completed - Nessage: CRAC - The specified jeb has completed successfully.	
🕕 hfo	Oct 14, 2013 at 18.59.01 (OMT-5)	Firmware Update) File: ESM_Firmware_YTY7W_WH32_1 50 50_A00 EXE - Status: Completed - Message: DRAC - Job completed auccessfully.	
😗 info	Oct 14, 2013 at 18:52:17 (GMT-5)	(Firmware Update) Successfully staged 3 file(s) for update.	
🗊 Info	Oct 14, 2013 at 18:34:09 (GMT-5)	Firmware Update) File: ESM_Firmware_KG43R_WN32_1 82_A00 EXE - Status: Completed - Message: DRAC - Job finished successfully	
🜒 Info .	Oct 14, 2013 at 17.46.47 (GMT-5)	(Firmware Update) Successfully staged 1 file(s) for update.	
🕡 into	Oct 14, 2013 at 18 18:18 (GMT-5)	Firmware Updatej File: SAS.RAD_Firmware_C1VVX_WN32_21.2.6.0007_A04 EXE - Status: Completed - Message: DRAC - The specified pb has completed successfully	
🕡 info	Oct 14, 2013 at 16:18:17 (GMT-5)	[Fernivare Update] File: BIOS_1V3H9_VNI32_1 & 7.EXE - Status: Completed - Message: IORAC - The specified job has completed successfully.	
🚺 info	Oct 14, 2013 M 16 08 48 (GMT-5)	Firmware Update) Fier: ESM_Firmware_47G7D_V8X2_1.45.45_A00 EXE - Status: Completed - Message: IDRAC - Job completed successfully.	
🕡 info	Oct 14, 2013 at 15:59:12 (GMT-5)	Firmware Update) File: Lifecycle-Controller_Application_BOKID_WN3Z_1.1.5.185_A00 EXE - Status: Completed - Message: DRAC - Job completed successfully.	
🕕 Info	Oct 14, 2013 at 15:57:15 (GMT-5)	(Firmware Update) Successfully staged 4 file(s) for update	
1 info	Oct 14, 2013 at 15:49:31 (GMT-5)	(Firmware Update) Successfully staged 2 file(is) for update.	

Figure 15 Example of Log page with Firmware Update Job Details



5 Conclusion

The OpenManage Integration contains many features to reduce complexity and help you manage and deploy Dell servers for use with VMware. Using the Firmware Update Wizard, one can easily update firmware on clusters. Experience how the OpenManage Integration can speed deployment in a data center by downloading an evaluation version. Browse to:

http://dell.com/vcenterplugin

