

# OpenManage Integration for VMware vCenter: Enabling a Dell Host for Server Management in a vCenter

This Dell Technical White Paper describes necessary steps to enable Dell Server ready for server management in vSphere client using OpenManage Integration for VMware vCenter from vSphere Desktop Client

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## 1 Introduction

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

The OpenManage Integration for VMware vCenter is designed to streamline the management processes in your data center environment by allowing you to use VMware vCenter to manage your entire infrastructure—both physical and virtual. From firmware updates to bare metal deployment, the OpenManage Integration for VMware vCenter will expand and enrich your data center management experience with Dell PowerEdge servers.

This whitepaper provides the information you need to prepare a Dell Server for server management in vCenter using the OpenManage Integration for VMware vCenter from vSphere Dekstop Client. We describe the steps you will take to set up a connection profile for Dell hosts in a vCenter, run inventory, and fix compliance issues on those hosts.

## 1.1 Audience and scope

This whitepaper is intended for sale engineers, field application engineers, test engineers, architects, or IT administrators who are involved in the decision-making process for the design, configuration, and operation of a dynamic datacenter. The scope of this document is to provide a detailed procedure that describes setting up a Dell Server for server management in vCenter. This document is intended to assist users in using the OpenManage Integration for VMware vCenter for managing vSphere hosts that are Dell Servers in a vCenter.

## 1.2 Prerequisites

Readers are expected to have a working knowledge of networking, VMware vSphere, virtual networking concepts, Windows<sup>™</sup> and Linux server environment. Software requirements are VMware ESX/ESXi 4.0 or later host installation and VMware vCenter.

Readers are expected to know how to install a VMware ESX/ESXi hypervisor on a server and how to add it to a vCenter as a vSphere host.

Readers are also expected to know how to install OpenManage Integration for VMware vCenter and register it to a vCenter. More information for installation and registering the plug-in to a vCenter can be found in OpenManage Integration for VMware vCenter User's Guide.

## 2 Steps to enable Dell servers for management

User need to perform the following steps in order to start managing Dell Host from the 'Dell Server Management' tab in vSphere Client:

- 1. Create a connection profile and associate Dell hosts to it
- 2. Run hardware inventory on Dell hosts so that necessary hardware information is collected
- 3. Fix any compliance issues that are reported by vSphere Host Compliance

## 2.1 Connection Profiles

A Connection Profile associates a set of Dell hosts with credentials needed to communicate with ESX/ESXi and the Dell Remote Access Controller (iDRAC).

### 2.1.1 Creating Connection Profiles

- 1. Open OpenManage Integration for VMware vCenter using vSphere Client.
- 2. If you are using the OpenManage Integration for VMware vCenter for the first time, the Welcome page of the configuration wizard displays. Click **Next** or **Save and Continue** to see the Connection Profiles page.

If you have used the OpenManage Integration for VMware vCenter at least once, you will not see the Configuration Wizard automatically. Click **Connection Profiles** in the left navigation area.

	T CENTER	Help Support <del>v</del> About		
OVERVIEW	Connection Profiles			
DEPLOYMENT -	AVAILABLE PROFILES			
JOB QUEUE	Create New → Refresh	> Delete   > View / Edit		
CONNECTION PROFILES	СХР	No Connection Profile selected.		
LOG				
SETTINGS -				

Figure 1 Connection Profiles

- 3. Click **Create New** to open the New Connection Profile screen.
- 4. Type a Profile Name and Description for the connection profile, and then click Next.
- 5. Place a checkmark in the boxes beside the hosts in the vCenter tree that you want to be part of the Connection Profile, and then click **Next**.

PROFILE NAME AND DESCRIPTION N	lew Connection Profile		? X
ASSOCIATED HOSTS	ASSOCIATED HOSTS		
CREDENTIALS 🗸	Host Name	Service Tag	Current Connection Profile
	I0.255.5.150		
TEST CONNECTION PROFILE	▼ □ BC247		
	10.255.5.173	4V63TS1	
	🔻 🔲 📠 UI Team DC		
	10.255.5.128	J359JN1	
	Vew Datacenter		
	10.255.5.47	4QWGHN1	схр
	10.255.4.156	3TPXSJ1	=
	10.255.4.201	52C4JN1	схр
	10.255.5.71	42C4JN1	схр
	10.255.5.67	22C4JN1	схр
	10.255.4.172	59ZRGT1	схр
	10.255.4.102	3JCW1V1	схр
	10.255.4.196	DMJR3T1	схр
	10.180.63.204	4P6MGS1	схр
	🔻 🔲 📁 Irfan 12G Wave-2 Don't Disturb :)		
	10.255.5.86	1459JN1	схр
			Cancel Back Next

Figure 2 Connection Profiles - Associated Hosts

- 6. Read the information on Credentials screen, and then click Next.
- 7. Enter the required iDRAC credentials, and then click Next. If you want to provide Active Directory credentials for the iDRAC, select the Use Active Directory check box before entering the Active directory credentials.

PROFILE NAME AND DESCRIPTION	New Connection Profile
ASSOCIATED HOSTS	IDRAC
ASSOCIATED HOSIS	IDRAC     Credentials        I Use Active Directory   Active Directory credentials may only be used for hosts that have iDRAC already registered to Active Directory.   User Name   I the user name is limited to 16 characters. Refer to the IDRAC documentation for information about user name restrictions for your version of IDRAC.   Note: The IDRAC account requires administrative privileges for updating firmware, applying hardware profiles, and deploying hypervisor.   Password   Verify Password   The password can contain up to 20 characters.   Certificate Check
	Cancel Back Next

Figure 3 Connection Profiles - iDRAC Credentials

8. Enter Host Credentials (OS Admin login details), then click Next. If you want to provide Active Directory credentials for the host, select the Use Active Directory check box before entering the Active directory credentials.



PROFILE NAME AND DESCRIPTION	New Connection Profile
ASSOCIATED HOSTS	ноѕт
CREDENTIALS IDRAC Host TEST CONNECTION PROFILE	Credentials         Image: Sective Directory         Active Directory credentials may only be used for hosts are already registered to Active Directory.         User Name         Password         Verify Password         Verify Password can contain up to 127 characters.         Certificate Check
	Cancel Back Next

Figure 4 Connection Profiles - Host Credentials

At any time, the user can cancel profile creation action using the **Cancel** button, or move back and forth between the wizard screens using the **Back** and **Next** buttons.

9. Click **Test Connection** Profile to test the new profile credentials. See **Test Connection Profiles** for further information. Click **Save** to finish creation of the connection profile.

PROFILE NAME AND DESCRIPTION	New Con	nection Profile			? >	×	
ASSOCIATED HOSTS	TEST CONNECTION PROFILE						
CREDENTIALS -	You can optionally test the communication with the hosts using the configured credentials by selecting one or more hosts associated with this Connection Profile and click "Test Selected". All configured credentials are tested against each selected host						
TEST CONNECTION PROFILE	and th	and the results of the tests are displayed when the test completes.					
		> Test Selected	> Abort Air lests				
		Associa	ted Hosts	Crede	ntials to Test		
	⊻	Host	Service Tag	iDRAC Credentials	Host Credentials		
	⊻	10.255.5.173	4V63TS1				
			0% Complet	ted			
Click this to							
					Cancel Back Save	J	

Figure 5 Complete Connection Profile Creation

## 2.1.2 Test Connection Profiles

You can test the credentials for connection profiles either at the end of the profile creation process or by using the **Test Connection** link on the Connection Profiles screen:

1. On the **Connection Profiles** screen, You will see the all the hosts attached to that connection profile. Click the connection profile you want to test.



	CENTER		oron Ab	Help	Support 🔻	About
OVERVIEW	Connection Profiles					
DEPLOYMENT -	AVAILABLE PROFILES	СХР				
JOB QUEUE	@ Create New > Refresh	> Delete > View / Edit				
CONNECTION PROFILES						
COMPLIANCE -	CXP •	Associated Hosts (9)	D Test Connection			
		• 10.255.5.47	• 10.255.4.102			
L0G		<ul> <li>10.255.4.201</li> </ul>	<ul> <li>10.255.4.196</li> </ul>			
Settings 🗸 🗸		• 10.255.5.71	• 10.180.63.204			
		<ul> <li>10.255.5.67</li> </ul>	<ul> <li>10.255.5.86</li> </ul>			
		• 10.255.4.172				
		Details				
		Date Created	Jul 16, 2012 at 5:18:51 (GMT-5)			
		Date Modified	Jul 16, 2012 at 5:18:51 (GMT-5)			
		Last Modified By	Administrator			
		Description:				
		No Description				

Figure 6 Select a Connection Profile

2. Click Test Connection above the attached hosts to open a popup screen.

	Assoc	ciated Hosts		Credentials to Test	
$\checkmark$	Host	Service Tag	iDRAC Credentials	Host Credentials	
~	10.255.5.47	4QWGHN1			
$\checkmark$	10.255.4.201	52C4JN1			
~	10.255.5.71	42C4JN1			
~	10.255.5.67	22C4JN1			
~	10.255.4.172	59ZRGT1			
~	10.255.4.102	3JCW1V1			
~	10.255.4.196	DMJR3T1			

Figure 7 Test Connection Profile

3. Place a checkmark in the box beside the hosts you want to select, and click Test Selected.



## 2.1.3 Test Connection Failures

The following cases explain situations that can cause Test Connection Failures.

### Pre-Dell 12th Generation PowerEdge Servers

Host Credentials will fail for one of the following cases:

- a. Credentials changed to incorrect credentials for a host in a connection profile which has lockdown mode disabled.
- b. After adding a host to connection profile which has lockdown mode disabled, lockdown mode is enabled on that host. Test will fail for at least next 30 minutes for this host. If the connection still fails after 30 minutes, then restart either host or the management agents on that host.
- c. No Agent (OMSA) is installed.
- d. Not able to reach host common reasons include:
  - i. Host is not online or rebooting.
  - ii. Host is not reachable from appliance; if hosts are added with the DNS names or FQDN in the vCenter server, then make sure that appliance can access those hosts via the DNS configuration present in the appliance.
  - iii. Any other networking and/or routing problems; check the network and DNS configuration in the appliance.

iDRAC Credentials will fail for one of the following cases:

- a. iDRAC is not present on the server.
- b. Any condition mentioned above for Pre-Dell 12th Generation PowerEdge Server Host Credentials failure is true.
- c. iDRAC credentials are incorrect.
- d. Not able to reach the iDRAC common issues included:
  - i. iDRAC is not online or rebooting/resetting.
  - ii. iDRAC is not reachable from appliance; check appliance's network configuration.

#### Dell 12th Generation PowerEdge Servers

Host Credentials will fail for one of the following cases:

- a. Credentials changed to incorrect credentials for a host in a connection profile which has lockdown mode disabled.
- b. After adding a host to connection profile which has lockdown mode disabled, lockdown mode is enabled on that host. Test will fail for at least next 30 minutes for this host.

iDRAC Credentials will fail for one of the following cases:

- a. Any condition mentioned above for Dell 12th Generation PowerEdge Server Host Credentials failure is true.
- b. Not able to reach the iDRAC, as mentioned above.

Here is an example screen of a "Test Connection" in action.

Test Connect	Test Connection Profile: cxp						
You can optic and click "Tes	You can optionally test the communication with the hosts using the configured credentials by selecting one or more hosts associated with this Connection Profile and click "Test Selected". All configured credentials are tested against each selected host and the results of the tests are displayed when the test completes.						
Tasks: > To	Tasks: > Test Selected > Abort All Tests						
	Associated Hosts		Creden	tials to Test			
	Host	Service Tag	iDRAC Credentials	Host Credentials			
	10.255.5.47	4QWGHN1	😵 Fail - Unable to contact iDR	😵 Fail - Unable to contact Host. Ch			
	10.255.4.201	52C4JN1	Pass	Pass =			
	10.255.5.71	42C4JN1	😵 Fail - Unable to contact iDR	🔞 Fail - Unable to contact Host. Ch			
	10.255.5.67	22C4JN1	Pass	Pass			
	10.255.4.172	59ZRGT1	Pass	Pass			
	10.255.4.102	3JCW1V1	🍅 Testing	🌣 Testing			
	10.255.4.196	DMJR3T1	In Queue	In Queue			
	Several Se	eted					
TEST PROC	5623.5 01 9 10515	testing host 10.2	55.4.102				

Figure 8 Example of test connection

## 2.2 Hardware inventory on Dell servers

A successfully completed inventory is required to gather the necessary hardware information for the Dell Server Management software to function. Also, periodic inventories ensure information is always up-to-date.

#### 2.2.1 Scheduling an inventory job

Hardware inventory can be scheduled in any of three ways:

- 1. Using the Configuration Wizard
  - a. Once you have created a connection profile in the Configuration Wizard as shown above, click through the screens using **Next** or **Save** and **Continue** until you land on Inventory Schedule page.
  - b. Using the checkboxes, select the days you want inventory to run. Set the time you want the inventory to run.

Configuration Wizard					? ×
Proxy Settings	Inventory Schedule	Warranty Schedule	Deployn Credent	nent Firmwar ials Reposito	re OpenMa ory Server A
Configure inventor inventory process r	y to run on Dell hosts perio equires minimal resources	odically to make	sure there is up-to	-date hardware and sof	tware data. The
INVENTORY SCHEDULE					
On Selected Days: ✓ MO □ T	Select the days via checkbo» J IWE TH I	FR SA	Set the ti	ime (GMT-5) Clear	
Note: The time you enter this task at the proper ti	is for your local time zone. Calculate ar me on the Dell Virtual Appliance.	ny time difference neede	ed to run	·	
Do not run inventory on	Dell hosts				
☑ Run inventory at the end	of the wizard [Recommended]				
				Close Wizard	Back Save and Continue

Figure 9 Schedule Inventory - Configuration Wizard

- c. Click **Save and Continue** to save the inventory schedule.
- 2. Using the Settigs screens
  - a. Click **Settings** in the left navigation area.
  - b. Click Inventory Schedule.







- c. Click on "Edit" on upper-right.
- d. Select the days to run the inventory and set the time. Click Save.

	CENTER Help Support - About
OVERVIEW	Inventory Schedule
DEPLOYMENT -	INVENTORY SCHEDULE
JOB QUEUE	Information     Periodic inventories must be run on all Dell servers to make sure there is up-to-date information. Configure the schedule below (Dell recommends running inventory once per week). Inventory requires minimal resources and will not impact host performance.
CONNECTION PROFILES	
	◎ On Selected Days: ▼ MO ▼ TU ▼ WE ▼ TH ▼ FR ▼ SA ▼ SU 3:00 (GMT-5) Clear
LOG	
SETTINGS	Note: The time you enter is for your local time zone. Calculate any time difference needed to run this task at the proper time on the Dell Virtual Appliance.
General	
Events and Alarms	Do not run inventory on Dell hosts
HTTP Proxy	
Inventory Schedule	Cancel Apply
Warranty Schedule	
Deployment Credentials	
Firmware Repository	
Security	

Figure 11 Schedule Inventory via Settings

#### 3. Using the Job Queue

- a. Click **Job Queue** in the left navigation area.
- b. Click Inventory History to see details on Inventory Jobs.

	CENTER					aa AA	Help	Support 🔻	About
OVERVIEW	JOB QUEUE								
	Deploym	ent Jobs	Inventory	History	Warranty His	story			
	Last Inventory				Next Inventory				
COMPLIANCE -	Jul 17, 201	2 at 3:00:	00 (GMT-5)		Jul 18, 2	2012 at 3:00:00 (GMT-5)			
LOG	·				,	· · · · ·			
SETTINGS -	Tasks: 🗗 Chan	ge Schedule	> Run Now	> Refresh					
	DETAILS OF LAST	INVENTORY JOB							
	Host	Status	Duration (MM:SS)	Start Date and Tir	ne	End Date and Time			
	10.255.5.86	Successful	44:13	Jul 17, 2012 at 3:	33:26 (GMT-5)	Jul 17, 2012 at 4:17:38 (GMT-5)			
	10.180.63.204	Failed	29:33	Jul 17, 2012 at 3:	33:26 (GMT-5)	Jul 17, 2012 at 4:02:59 (GMT-5)			
	10.255.4.196	Failed	44:59	Jul 17, 2012 at 3:	33:26 (GMT-5)	Jul 17, 2012 at 4:18:24 (GMT-5)			
	10.255.4.102	Failed	13:57	Jul 17, 2012 at 3:	33:26 (GMT-5)	Jul 17, 2012 at 4:47:23 (GMT-5)			
	10.255.4.172	Successful	09:07	Jul 17, 2012 at 3:	33:26 (GMT-5)	Jul 17, 2012 at 3:42:33 (GMT-5)			
	10.255.5.67	Successful	07:57	Jul 17, 2012 at 3:	33:26 (GMT-5)	Jul 17, 2012 at 3:41:22 (GMT-5)			
	10.255.5.71	Failed	07:24	Jul 17, 2012 at 3:	33:26 (GMT-5)	Jul 17, 2012 at 3:40:49 (GMT-5)			
	10.255.4.201	Successful	03:31	Jul 17, 2012 at 3:	33:26 (GMT-5)	Jul 17, 2012 at 3:36:56 (GMT-5)			
	10.255.5.47	Failed	05:22	Jul 17, 2012 at 3:	33:26 (GMT-5)	Jul 17, 2012 at 3:38:48 (GMT-5)			

Figure 12 Job Queue - Inventory History

- c. Click **Change Schedule** to open a popup for changing inventory schedule.
- d. Click Edit, select the days to run the inventory, and set the time.
- e. Click Apply.



	×
INVENTORY SCHEDULE	☑ Edit
1 Information Periodic inventories must be run on all Dell servers to make sure there is up-to-date information. Configure the schedule below (Dell recommends run on ce per week). Inventory requires minimal resources and will not impact host performance.	unning inventory
On Selected Days: MO    TU    WE    TH    FR    SA    SU    3:00 (GMT-5) Clear Note: The time you enter is for your local time zone. Calculate any time difference needed to run     this task at the proper time on the Dell Virtual Appliance.	
Do not run inventory on Dell hosts	
	Cancel Apply

Figure 13 Change Inventory Schedule

#### 2.2.2 Running an inventory job

An inventory job can either run on scheduled days/time as explained in the section *Scheduling an inventory job*, or on demand when user clicks **Run Now** as shown in Figure 13.

After the inventory job finishes, the result of inventory on each host is displayed in inventory job details table with Successful or *Failed* status. The status is only for the last inventory job. The host with *Successful* inventory status is ready to be managed in *Dell Server Management* tab corresponding to that host.

#### 2.2.3 Reasons for Inventory Failures

- 1. Any condition mentioned in the section *Test Connection Profiles* for Pre 12th Generation Host Credentials failure is true. See section *Compliance issues* to troubleshoot inventory issues.
- 2. Any condition mentioned in the section *Test Connection Profiles* for 12th Generation Host Credentials failure is true. See section *Compliance issues* to troubleshoot inventory issues.
- 3. An expired license or base license present for iDRAC on a 12th Generation host also fails inventory. To see more details, view "iDRAC License" page under "Compliance" in Dell Management Center.

To troubleshoot inventory failures, check host and iDRAC Network connections.

### 2.2.4 Incorrect Error Messages for Inventory Failures

Following incorrect errors can be seen during inventory for a connection failure with iDRAC:

- 1. Exception specifying that OMSA is not installed.
- 2. iDRAC License failure, for Pre 12th Generation Host.

## 2.3 Compliance issues

The Dell hosts must meet certain minimum criteria in order to be managed by the OpenManage Integration for VMware vCenter. If the Dell hosts do not meet the minimum criteria, they are treated as non-compliant vSphere hosts.

#### 2.3.1 Viewing non-compliant hosts

A compliance check runs as a part of an inventory job on hosts that are part of a connection profile. This check identifies hosts that do not meet necessary minimum criteria, and marks such hosts as non-compliant specifying exact reasons.

There are two ways to view non-compliant hosts:

1. Click **View Details** below **Non-compliant vSphere Hosts** on the **Overview** page as shown in Figure 15.

	IT CENTER	
OVERVIEW	OVERVIEW	
DEPLOYMENT -	HOSTS AND SERVER DEPLOYMENT	VSPHERE HOST AND BARE METAL SERVER COMPLIANCE
JOB QUEUE	다 Learn More	பு Learn More
CONNECTION PROFILES	Dell vCenter Hosts	Non-compliant vSphere Hosts
	Deployment Jobs in Queue	View Details L Fix vSphere Hosts for Compliance Non-compliant Bare Metal Servers 0
LOG	Dell Servers Available for Deployment 1 > Run Deployment Wizard	D Fix Bare Metal Servers for Compliance

Figure 14 View Non-compliant hosts from Overview page

2. Click **vSphere Hosts** or **View non-compliant vSphere Host** Details on the Compliance page as shown in Figure 18.





Figure 15 View non-compliant hosts from Compliance page

The hosts shown are non-compliant because of one or more of the reasons listed below:

- 1. Inventory Job has not run on the host
- 2. Inventory Job has not completed on the host
- 3. Connection Profile not configured
- 4. OMSA is not installed (applicable only to Pre 12th Generation Host)
- 5. OMSA update required (applicable only to Pre 12th Generation Host)
- 6. OMSA is not configured (applicable only to Pre 12th Generation Host)
- 7. CSIOR (Collect System Inventory on Reboot) is off
- 8. Reboot Required

are Metal Servers	Host	Connection Profile	CSIOR Status	OMSA Status
AC License	10.255.5.71	cxp	On	Not Configured
	10.255.4.201	cxp	0#	Not Configured
2G	10.255.5.47	cxp	On	Not installed
ettings .	10.255.5.67	cxp	On	Not Configured
	10.255.5.86	cxp	On	Not Configured
	10.255.5.59	cità :	On	Not Configured
	10.255.4.102	cxp	On - Reboot Required	Update Required
	10.255.5.173	Not Configured	Unknown	Unknown
	10 255 5 128	Not Configured	Unknown	Unknown
	10.180.63.204	Not Configured	Unknown	Unknown
	10.255.4.196	Not Configured	Unknown	Unknown



Due to security restrictions pertaining to Lockdown Mode, OpenManage Integration for VMware vCenter cannot communicate or run the full compliance check for hosts with Lockdown Mode set to Enabled state. Such hosts are not shown in the non-compliant and are marked with a message on top of the non-compliant hosts list.

### 2.3.2 Fixing non-compliant hosts

OpenManage Integration for VMware vCenter can take necessary steps to resolve the compliance issue by installing software, updating software, configuring SNMP on host, turning on CSIOR on iDRAC etc. After completing all the required steps to make a host compliant, an automatic inventory job is triggered to re-collect the latest information on that host.

To fix compliance issues on non-compliant hosts, use the Host Compliance Wizard:

1. Click **Fix non-compliant vSphere Hosts** on the **vSphere Hosts** page (alternatively, you can click **Fix vSphere Hosts for Compliance** on the **Overview** screen). The compliance wizard **Select Hosts** screen displays.

Fix Non-compl	Fix Non-compliant vSphere Hosts						
Select	Select Hosts     Turn On CSIOR     Fix OMSA     Reboot Hosts     Summary						
Select vSpl The followin OMSA.	Select vSphere Hosts to Fix Compliance: The following vSphere hosts are not compliant. Select the vSphere hosts to make compliant. This includes turning on CSIOR and installing / updating / configuring OMSA.						
	Host	Connection Profile	CSIOR Status	OMSA Status			
	10.255.5.71	схр	On	Not Configured			
	10.255.4.201	схр	Off	Not Configured			
	10.255.5.47	схр	On	Not Installed			
	10.255.5.67	схр	On	Not Configured			
	10.255.5.86	схр	On	Not Configured			
	10.255.5.59	схр	On	Not Configured			
	10.255.4.102	схр	On - Reboot Required	Update Required			
	10.255.5.173	Not Configured	Unknown	Unknown			
	10.255.5.128	Not Configured	Unknown	Unknown			
	10.180.63.204	Not Configured	Unknown	Unknown			
	Cancel Back Next						

Figure 17 Host Compliance Wizard - Select Hosts

2. Select the hosts you want to fix on the Select Hosts page using the checkboxes on the left column. Click **Next**.

If you select hosts that are not part of a connection profile, i.e. those with Connection Profile shown as "Not Configured", you will be prompted with a warning message.

Warning	×
	There are selected hosts that are not assigned to a Connection Profile. To allow the OpenManage Integration for VMware vCenter to run a compliance check, you must add these hosts to a Connection Profile. If you choose to continue, these hosts will be excluded from the wizard.
	Continue Compliance Wizard Fix Connection Profiles
	Continue Compliance Wizard Fix Connection Profiles

Figure 18 Host Compliance Wizard - Fix Connection Profile Warning

Click Fix Connection Profiles to proceed to the Connection Profiles screen.

Clicking **Continue Compliance Wizard** will allow you to continue with the wizard, but will not include hosts that were not part of any connection profile.

3. Next you will be shown hosts (from the hosts you selected) that are non-compliant due to CSIOR state on "**Turn On CSIOR**" page. Select hosts to fix CSIOR state and click "**Next**". See section *Fixing CSIOR issues* for details.

Fix No	on-compli	ant vSphere Hosts					×
	Select	Hosts Turn	On CSIOR	Fix OMSA	Reboot	Hosts	Summary
Tur The	rn on CSI e following	OR: I vSphere hosts have CSIOR turne	d off or require a reboo	t. Select the checkbox to	turn on CSIOR for the se	lected vSphere hosts	
	✓	Host	CSIOR	Status	CSIOR Action		
		10.255.4.201	Off		Turn On CSIOR		
	✓	10.255.4.102	On - R	eboot Required	Reboot		
						Cancel	Back Next

Figure 19 Host Compliance Wizard - CSIOR



4. Next you will be shown hosts (from the hosts you selected in Step 2) that are non-compliant due to OMSA state on the **Fix OMSA** page. Select hosts to fix OMSA state and click Next. See *Fixing OMSA issues* for details.

Fix N	Fix Non-compliant vSphere Hosts						
	Select	: Hosts Turn On CSIOR	Fix Of	MSA	Reboot Hosts	Summary	
F	ixing OMS he followin	A: g vSphere hosts do not have OMSA installed or ar	e outdated or uncon	figured. Select the check	box to fix OMSA for the	selected vSphere hosts.	
		Host	OMSA Version	Hypervisor	OMSA Status	OMSA Action	
		10.255.5.71	7.0.0	VMware ESXi 4.1	Not Configured	Configure OMSA	
		10.255.4.201	6.5.0	VMware ESX 4.1	Not Configured	Configure OMSA	
		10.255.5.47		VMware ESX 4.1	Not Installed	Install OMSA	
		10.255.5.67	7.1.0	VMware ESXi 5.0	Not Configured	Configure OMSA	
		10.255.5.86	7.0.0	VMware ESXi 4.1	Not Configured	Configure OMSA	
		10.255.5.59	7.0.0	VMware ESXi 5.1	Not Configured	Configure OMSA	
		10.255.4.102	6.4.0	VMware ESXi 4.1	Update Required	Update OMSA	
	Cancel Back Next						

Figure 20 Host Compliance Wizard – OMSA

5. If you have selected hosts that may need reboot either while fixing OMSA or CSIOR, the Reboot Hosts screen displays with details on those hosts that need to be rebooted. You can check the checkbox on the bottom to opt-in for maintenance mode and reboot action. If you wish to manually reboot such hosts, simply uncheck the checkbox. Click **Next**.

ost	Reason for Reboot
0.255.4.102	Reboot Required due to OMSA Status and CSIOR Status
Automatically and basels in maintenan	
Automatically pot nosts in maintenan	ice mode and record whenever required

Figure 21 Host Compliance Wizard - Reboot Hosts



6. The **Summary** screen summarizes the actions that will be performed to correct compliance. Click **Finish** to initiate the fix process. You can go back and change your selections using the **Back** button.

Non-compliant vSphere Hosts			
Select Hosts Turn C	On CSIOR Fix C	DMSA R	eboot Hosts Summary
This shows the actions that will be reboot to make the vSphere host co Summary of Actions:	taken on the non-compliant vSp ompliant.	here hosts to make them compl	ant. Turning on CSIOR requires a manual
Host	CSIOR Action	OMSA Action	Reboot Action
10.255.5.71	None	Configure OMSA	Not Required
10.255.4.201	Turn On CSIOR	Configure OMSA	Not Required
10.255.5.47	None	Install OMSA	Not Required
10.255.5.67	None	Configure OMSA	Not Required
10.255.5.86	None	Configure OMSA	Not Required
10.255.5.59	None	Configure OMSA	Not Required
10.255.4.102	Reboot	Update OMSA	Automatic
			Cancel Back Finish

Figure 22 Host Compliance Wizard – Summary

#### 2.3.3 Fixing OMSA issues

When a host is selected for fixing an OMSA issue, a new OMSA package is installed or updated as needed. To fix OMSA configuration, a file on the host operating system is configured to send SNMP traps.

OpenManage Integration for VMware vCenter uses vCenter for OMSA related issue on ESXi 4.x hosts but uses SSH on classic ESX 4.x and ESXi 5.0/5.0 Upate1.

### 2.3.4 Common failures while fixing OMSA

- 1. Host is down
- 2. SSH is disabled for ESX 4.x and ESXi (5.0, 5.0 U1)
- 3. PasswordAuthentication=no in the SSH Configuration file on ESXi (5.0, 5.0 U1)
- 4. Network latency for OMSA configuration.



## 2.3.5 Fixing CSIOR issues

CSIOR is an iDRAC feature which needs to be ON to collect hardware information. When a host is selected for fixing CSIOR issues, this feature is turned ON. Sometimes, CSIOR may already be ON and simply needs the host to reboot. This is indicated in CSIOR status as "On - Reboot Required". To fix this, simply select the checkbox to reboot hosts in the Reboot Host screen of the host compliance wizard.

## 2.3.6 Common failures while fixing CSIOR

- 1. iDRAC not responding. Resetting iDRAC can resolve this problem.
- 2. Bad iDRAC credentials set in the connection Profile.
- 3. Old iDRAC firmware that does not support CSIOR Configuration.

NOTE: Even after having run inventory, if the CSIOR status is "Unknown", it is due to the same reasons as explained above in "Common Failures while fixing CSIOR".



## 3 Conclusion

Now that you have successfully set up your Dell Servers and they are ready to be managed from your vSphere Client, you can start using the Dell Server Management tab to access desired management features. More information on this may be found in OpenManage Integration for VMware vCenter User's Guide.

