




# Dell OpenManage Connection Version 3.0 for IBM Tivoli Netcool/OMNIBus Installation Guide



# Notes, cautions, and warnings

-  **NOTE:** A NOTE indicates important information that helps you make better use of your computer.
-  **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.
-  **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.

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# Contents

<b>1 Introduction.....</b>	<b>5</b>
<b>2 Prerequisites.....</b>	<b>7</b>
Supported operating systems and requirements for the managing system.....	7
Supported Operating Systems for managed systems.....	9
Supported Dell devices and firmware.....	11
<b>3 Installing Dell OpenManage Connection for Netcool/OMNIbus.....</b>	<b>14</b>
Dell OpenManage Connection for Netcool/OMNIbus package details.....	14
Integration details for Netcool/OMNIbus components.....	15
Installing Probe Integration.....	15
Installing ObjectServer Integration.....	17
Reconfiguring Dell tools for monitoring events from Dell servers or workstations running VMware ESXi version 5.5 or later .....	18
Configuring Dell Server Administrator Web Server console on the ObjectServer.....	19
Configuring OpenManage Essentials (OME) console on the ObjectServer.....	19
Configuring Dell PowerVault Modular Disk Storage Manager console on the ObjectServer...	20
Configuring Dell OpenManage Network Manager (OMNM) console on the ObjectServer.....	20
Configuring Dell AirWave Management Platform console on the ObjectServer.....	21
Configuring Dell Connections License Manager console on the ObjectServer.....	21
The Dell ConfigUtility.....	21
Installing Desktop Integration.....	22
Using the Dell ConfigUtility for Desktop.....	22
Configuring Dell Warranty Report tool on the Desktop Server.....	24
Installing Web GUI Integration.....	24
Using the Dell ConfigUtility for Web GUI.....	26
Updating the Dell Tools menu on the Web GUI Server.....	27
Configuring Dell Server Administrator Web Server console on the Web GUI.....	28
Configuring Dell OpenManage Essentials (OME) console on the Web GUI.....	28
Configuring Dell PowerVault Modular Disk Storage Manager console on the Web GUI.....	28
Configuring Dell OpenManage Network Manager (OMNM) console on the Web GUI.....	29
Configuring Dell AirWave Management Platform console on the Web GUI.....	29
Configuring Dell Connections License Manager console on the Web GUI.....	29
Configuring Dell Warranty Report tool on the web GUI.....	30
Configuring Dell consoles on the Web GUI server on systems running Linux.....	30
<b>4 Upgrading Dell OpenManage Connection for Netcool/OMNIbus.....</b>	<b>32</b>

<b>5 Uninstalling Dell OpenManage Connection for Netcool/OMNibus.....</b>	<b>33</b>
Uninstalling Probe Integration.....	33
Uninstalling ObjectServer Integration.....	33
Uninstalling Desktop Integration.....	35
Uninstalling Web GUI Integration.....	35
<b>6 Accessing documents from Dell support site.....</b>	<b>37</b>
<b>7 Contacting Dell.....</b>	<b>38</b>

# Introduction

This guide provides information about the software requirement, system requirements and the steps to install, configure, and uninstall Dell OpenManage Connection Version 3.0 for IBM Tivoli Netcool/OMNIBus.

Dell OpenManage Connection for IBM Tivoli Netcool/OMNIBus enables the customers to monitor Dell Original Equipment Manufacturing (OEM) Servers, Dell Datacenter Scalable Solutions (DSS), PowerEdge Servers, Dell Remote Access Controllers (DRACs), workstations, chassis, storage, and network devices in an environment managed by IBM Tivoli Netcool/OMNIBus. The Dell OpenManage Connection also supports console launch of the Dell devices and other Dell tools from the received alerts to perform further troubleshooting and configuration or management activities.

The following Dell devices are supported by the Dell OpenManage Connection:

- Dell OEM servers
- Dell Datacenter Scalable Solutions (DSS)
- Dell 10th generation of PowerEdge servers to Dell 13th Generation of PowerEdge servers
- Dell Precision Rack workstations
- Dell Remote Access Controllers:
  - Integrated Dell Remote Access Controller 8 (iDRAC8)
  - Integrated Dell Remote Access Controller 7 (iDRAC7)
  - Integrated Dell Remote Access Controller 6 (iDRAC6)
  - Dell Remote Access Controller 5 (DRAC5)
- Dell Chassis:
  - Dell PowerEdge FX2
  - Dell PowerEdge VRTX
  - Dell PowerEdge M1000e
- Dell Storage Arrays:
  - Dell Compellent Storage Arrays
  - Dell 10th Generation of PowerVault NX storage arrays to Dell 12th Generation of PowerVault NX Storage Arrays
  - Dell EqualLogic PS-Series Storage Arrays
  - Dell PowerVault MD Storage Arrays
- Dell Network Switches:
  - S-Series Switches
  - M-Series Switches
  - Z-Series Switches

- C-Series Switches
- N-Series Switches
- W-Series Switches

This guide is intended for system administrators who are familiar with IBM Tivoli Netcool/OMNIBus 7.3.1, 7.4, or 8.1

Before installing this version of Dell OpenManage Connection for IBM Tivoli Netcool/OMNIBus, download the latest Installation Guide from **[dell.com/omconnectionsEnterpriseSystemsManagement](http://dell.com/omconnectionsEnterpriseSystemsManagement)**.

For more information about accessing documents, see [Accessing Documents From The Dell Support Site - Software](#).

## Prerequisites

Complete the following prerequisites.

### Supported operating systems and requirements for the managing system

The following tables lists the operating systems and requirements for integrating the Dell OpenManage Connection on the systems where the Netcool/OMNIBus version 7.3.1, 7.4, or 8.1 components are installed:

**Table 1. Supported operating systems for Dell OpenManage Connection for IBM Tivoli Netcool/OMNIBus 8.1**

VMware vSphere ESXi	Windows Server	SUSE Linux Enterprise Server (SLES)	Red Hat Enterprise Linux Server (RHEL)
ESXi 5.5	Windows Server 2012 R2 64-bit (Standard, Datacenter)	SLES 12 64-bit	RHEL 7.0-1 64-bit (Server)
ESXi 5.0	Windows Server 2012 64-bit (Standard, Datacenter)	SLES 11.0-4 64-bit	RHEL 6.0-7 64-bit (Client, Server, Workstation)
ESXi 4.1			RHEL 5.7-11 64-bit (Advanced, Desktop)
ESXi 4.0			RHEL 5.7-10 64-bit ( Server)
ESXi 3.5			
ESX 3.5			

**Table 2. Supported operating systems for Dell OpenManage Connection for IBM Tivoli Netcool/OMNIBus 7.4**

VMware vSphere ESXi	Windows Server	Windows Client	SUSE Linux Enterprise Server (SLES)	Red Hat Enterprise Linux Server (RHEL)	SUSE Linux for Desktop (SLED)
ESXi 5.5	Windows Server 2008 R2 64-bit SP1 (Enterprise, Professional, Standard)	Windows 8.1 64-bit (Enterprise, Professional, Standard)	SLES 11.0-3 64-bit	RHEL 6.0-5 64-bit (Server, Workstation)	SLED 11.0-3 64-bit

<b>VMware vSphere ESXi</b>	<b>Windows Server</b>	<b>Windows Client</b>	<b>SUSE Linux Enterprise Server (SLES)</b>	<b>Red Hat Enterprise Linux Server (RHEL)</b>	<b>SUSE Linux for Desktop (SLED)</b>
	Datacenter, Standard)				
ESXi 5.0	Windows Server 2008 R2 32-bit SP2 (Enterprise, Standard)	Windows 8 64-bit (Enterprise, Professional, Standard)	SLES 10.0-4 64-bit	RHEL 6.0-10 64-bit (Advanced, Desktop, Server)	SLED 10.0-3 64-bit
ESXi 4.1	Windows Server 2008 64-bit SP2 (Enterprise, Standard)	Windows 7 64-bit SP1 (Enterprise, Professional)			
ESXi 4.0	Windows Server 2012 R2 64-bit (Datacenter, Essentials, Standard)	Windows 7 32-bit SP1 (Enterprise, Professional)			
ESXi 3.5	Windows Server 2012 64-bit (Datacenter, Essentials, Standard)				
ESX 3.5					

**Table 3. Supported operating systems for Dell OpenManage Connection for IBM Tivoli Netcool/OMNIBus 7.3.1**

<b>VMware vSphere ESXi</b>	<b>Windows Server</b>	<b>Windows Client</b>	<b>SUSE Linux Enterprise Server (SLES)</b>	<b>Red Hat Enterprise Linux Server (RHEL)</b>	<b>SUSE Linux for Desktop (SLED)</b>
ESXi 5.5	Windows Server 2008 R2 64-bit SP1 (Enterprise, Datacenter, Standard)	Windows Vista Enterprise 64-bit SP2	SLES 11.0-3 64-bit	RHEL 6.0-5 64-bit (Client, Server, Workstation)	SLED 11.0-3 64-bit
ESXi 5.0	Windows Server 2008 R2 32-bit SP2 (Enterprise, Standard)	Windows Vista Enterprise 32-bit SP2	SLES 11.0-3 32-bit	RHEL 6.0-5 32-bit (Server, Workstation)	SLED 10.0-4 64-bit
ESXi 4.1	Windows Server 2008 64-bit SP2 (Enterprise, Standard)	Windows Vista Ultimate 64-bit SP2	SLES 10.0-4 64-bit	RHEL 6.0-4 32-bit (Client)	SLED 10.0-4 32-bit

VMware vSphere ESXi	Windows Server	Windows Client	SUSE Linux Enterprise Server (SLES)	Red Hat Enterprise Linux Server (RHEL)	SUSE Linux for Desktop (SLED)
ESXi 4.0	Windows Server 2008 32-bit SP2 (Enterprise, Standard)	Windows Vista Ultimate 32-bit SP2	SLES 10.0-4 32-bit	RHEL 5.0-10 64-bit (Advanced, Desktop, Server)	
ESXi 3.5		Windows XP Professional 32-bit SP3		RHEL 5.0-10 32-bit (Advanced, Desktop, Server)	
ESX 3.5		Windows 7 64-bit SP1 (Professional, Enterprise) Windows 7 32-bit SP1 (Professional, Enterprise)			

**Table 4. IBM Tivoli Netcool/OMNIBus component requirements**

Component	Requirement	Purpose
Probes	Configure the MTTTrapd Simple Network Management Protocol (SNMP) probe and the Netcool/OMNIBus Knowledge Library (NcKL).	To receive and process the SNMP traps sent by Dell devices.
ObjectServer	Install and configure the confpack utility.	To import Dell integration automation triggers, tools, menus, and conversion classes.
Desktop	Make sure that the SNMP/WS-MAN communication between the desktop and Dell devices exists.	To retrieve the required information from Dell devices.
Web GUI	Install and configure the OMNIBus web GUI and WAAPI. Make sure that the SNMP/WS-MAN communication channel between the web GUI server and the managed Dell systems exists.	To support Dell tools available for Dell OpenManage Connection. To retrieve the required information from Dell devices.

## Supported Operating Systems for managed systems

The following table lists the operating systems supported on the supported Dell devices:


**Table 5. Supported operating systems for Dell Workstations**

<b>VMware vSphere ESXi</b>	<b>Windows Server</b>	<b>SUSE Linux Enterprise Server (SLES)</b>	<b>Red Hat Enterprise Linux Server (RHEL)</b>
ESXi 6.0 U1	Windows Server 2012 R2 (Datacenter, Foundation, Essentials, and Standard editions)	SLES 12 64-bit	RHEL 7.2 64-bit
ESXi 5.5 U3	Windows 8.1 Professional 64 bit	SLES 11 SP4 64-bit	RHEL 7.1 64-bit
ESXi 5.5 U2	Windows 7 Professional 32-bit and 64-bit		RHEL 7.0 64-bit
	Microsoft Windows Server 2008 SP1		RHEL 6.7 64-bit
	Microsoft Windows Server 2008 R2		

**Table 6. Supported operating systems for Dell Servers**

<b>VMware vSphere ESXi</b>	<b>Windows Server</b>	<b>SUSE Linux Enterprise Server (SLES)</b>	<b>Red Hat Enterprise Linux Server (RHEL)</b>
ESXi 6.0 U1	Windows Server 2012 R2 (Datacenter, Foundation, Essentials, and Standard editions)	SLES 12 64-bit	RHEL 7.2 64-bit
ESXi 6.0	Microsoft Windows Server 2012 Essentials	SLES 11 SP4 64-bit)	RHEL 7.1 64-bit
ESXi 5.5 U3	Windows Essential Business Server 2008 SP1		RHEL 7.0 64-bit
ESXi 5.5 U2	Windows Essential Business Server 2008 SP1		RHEL 6.7 64-bit
ESXi 5.5	Windows Server 2008 SP2 32-bit and 64-bit		RHEL 6.5 64-bit
ESXi 5.1 U3	Windows Server 2008 R2 64-bit		RHEL 6.2 64-bit
ESXi 5.1 U2	Windows Server 2008 R2 SP1 64-bit		RHEL 6.0 64-bit
ESXi 5.1 U1	Windows Server 2008 R1 and R2 (HPC Edition)		RHEL 5.9 64-bit and 32-bit
ESXi 5.1	Windows Storage Server 2008 SP2		RHEL 5.5 64-bit and 32-bit

VMware vSphere ESXi	Windows Server	SUSE Linux Enterprise Server (SLES)	Red Hat Enterprise Linux Server (RHEL)
ESXi 5.0 U3	Windows Small Business Server 2008 SP2		RHEL 5.3 64-bit and 32-bit
ESXi 5.0 U2	Windows Small Business Server 2008 R2		RHEL 5.0 64-bit and 32-bit
ESXi 5.0 U1	Microsoft Windows Small Business Server 2011		
	Microsoft Windows Server 2012		
	Windows Small Business Server 2003 R2 SP2		
	Windows Server 2003 R2 32-bit and 64-bit		
	Windows Storage Server 2003 R2		
	Windows Server 2003 (Compute Cluster Edition)		
	Windows Unified DataStorage Server 64-bit		

 **NOTE:** If you have installed the Dell OpenManage connection for ITNM on a system running Windows, then ensure that you have also installed `ActivePerl` in the system.

## Supported Dell devices and firmware

The following table lists the Dell devices and their supported firmware versions for Dell OpenManage Connection.

**Table 7. Dell devices and firmware**

Dell Devices	Supported OMSA Versions	Supported Firmware Versions
Dell OEM Servers	<ul style="list-style-type: none"> <li>• 8.3</li> <li>• 8.2</li> <li>• 8.1</li> </ul>	NA
Dell PowerEdge servers	<ul style="list-style-type: none"> <li>• 8.3</li> <li>• 8.2</li> <li>• 8.1</li> </ul>	NA
Dell Workstations	<ul style="list-style-type: none"> <li>• 8.3</li> <li>• 8.2</li> </ul>	NA

Dell Devices	Supported OMSA Versions	Supported Firmware Versions
	<ul style="list-style-type: none"> <li>8.1</li> </ul>	
Dell Datacenter Scalable Solutions (DSS 1500 and DSS 2500)	NA	<ul style="list-style-type: none"> <li>2.30.30.30</li> <li>2.16.16.12</li> </ul>
Dell Datacenter Scalable Solutions (DSS 1510)	NA	<ul style="list-style-type: none"> <li>2.30.30.30</li> <li>2.17.17.13</li> </ul>
iDRAC8	NA	<ul style="list-style-type: none"> <li>2.30.30.30</li> <li>2.20.20.20</li> </ul>
iDRAC7	NA	<ul style="list-style-type: none"> <li>2.30.30.30</li> <li>2.20.20.20</li> </ul>
iDRAC6 Modular	NA	<ul style="list-style-type: none"> <li>3.6</li> <li>3.5</li> </ul>
iDRAC6 Monolithic	NA	<ul style="list-style-type: none"> <li>1.97</li> <li>1.96</li> </ul>
DRAC5	NA	<ul style="list-style-type: none"> <li>1.6</li> <li>1.5</li> </ul>
FX2 CMC	NA	<ul style="list-style-type: none"> <li>1.4</li> <li>1.3</li> </ul>
VRTX CMC	NA	<ul style="list-style-type: none"> <li>2.2</li> <li>2.1</li> </ul>
CMC	NA	<ul style="list-style-type: none"> <li>5.2</li> <li>5.1</li> </ul>
Dell PowerVault NX Storage Arrays	<ul style="list-style-type: none"> <li>8.3</li> <li>8.2</li> <li>8.1</li> </ul>	NA
Dell Compellent Storage Arrays	NA	6.6.2
Dell EqualLogic PS-Series Storage Arrays	NA	<ul style="list-style-type: none"> <li>8.1</li> <li>8.0</li> </ul>
Dell PowerVault MD Storage Arrays	NA	<ul style="list-style-type: none"> <li>08.20.09.60</li> <li>08.10.05.60</li> </ul>
Dell Network Switches	NA	S-Series <ul style="list-style-type: none"> <li>S55 (8.3.5.5 and 8.3.5.3)</li> <li>S60 (8.3.3.9 and 8.3.3.8)</li> <li>S4810 (9.6 and 9.5)</li> <li>S4820T (9.5 and 9.4)</li> </ul>

Dell Devices	Supported OMSA Versions	Supported Firmware Versions
		<ul style="list-style-type: none"> <li>• S5000 (9.1 and 9.0)</li> <li>• S6000 (9.5 and 9.4)</li> </ul>
		M-Series
		<ul style="list-style-type: none"> <li>• MXL (9.6 and 9.5)</li> <li>• MIOA (9.5 and 9.4)</li> </ul>
		Z-Series
		<ul style="list-style-type: none"> <li>• Z9500 (9.2)</li> <li>• Z9000 (9.5 and 9.4)</li> </ul>
		C-Series
		<ul style="list-style-type: none"> <li>• C150 (8.4.6.0)</li> <li>• C300 (8.4.5.0)</li> </ul>
		N-Series
		<ul style="list-style-type: none"> <li>• 6.1.2 and 6.1</li> </ul>
		W-Series
		<ul style="list-style-type: none"> <li>• W-Series Mobility Controllers (6.4)</li> </ul>

 **NOTE:** Dell Workstations refers to Dell Precision R7910 Rack Workstations.

# Installing Dell OpenManage Connection for Netcool/OMNIBus

To install Dell OpenManage Connection for Netcool/OMNIBus, you must extract the component-specific files on the systems where you have installed the Netcool/OMNIBus components and deploy them. For more information on extracting component-specific files, see [Integration Details for Netcool/OMNIBus Components](#).


Before you begin deploying the files:

1. Download the **Dell\_OpenManage\_Connection\_for\_OMNIBus\_v3\_0.zip** file from [dell.com/support](http://dell.com/support) and extract the contents to a folder. For more information on contents of the zip file, see [Dell OpenManage Connection for Netcool/OMNIBus package Details](#).
2. Log in as Netcool administrator on any system where you have installed any of the Netcool/OMNIBus components.

## Dell OpenManage Connection for Netcool/OMNIBus package details

The Dell OpenManage Connection for Netcool/OMNIBus is packaged as a zip file. This is applicable to systems running Windows and Linux including VMware ESXi environments. When you extract the **Dell\_OpenManage\_Connection\_for\_OMNIBus\_v3\_0.zip** zip file, the following folders and files are extracted:

- **desktop\_integration**
- **objectserver\_integration**
- **probe\_integration**
- **webgui\_integration**
- **Dell\_OMC\_3\_0\_For\_IBM\_OMNIBus\_IG.pdf**
- **Dell\_OMC\_3\_0\_For\_Omnibus\_ReadMe.txt**
- **license\_en.txt**

 **NOTE:** Once the folders and files have been extracted, and the system requirements are met with, ensure that you see the **Dell\_OMC\_3\_0\_For\_Omnibus\_ReadMe.txt** and the **license\_en.txt** files before you proceed with the installation.

Deploy the contents of the folders on the corresponding Netcool/OMNIBus components to monitor the supported Dell devices.

## Integration details for Netcool/OMNIbus components

The following table lists the Netcool/OMNIbus components and the Integration folders for Dell OpenManage Connection. Deploy the integration files of Dell OpenManage Connection from the corresponding folder to the Netcool/OMNIbus components folder.

**Table 8. Netcool/OMNIbus Components**

Component	Integration Folders
<b>probe_integration</b>	Contains the rules and lookup table files for the supported Dell devices.
<b>objectserver_integration</b>	Contains the exported Dell integration automation triggers, tools, menus, and conversion classes.
<b>desktop_integration</b>	Contains utilities that you require for configuring and launching the consoles for the supported Dell devices.
<b>webgui_integration</b>	Contains the Dell integration tools, menus, and utilities that you require for configuring the Dell device consoles from the Netcool/OMNIbus web GUI.


## Installing Probe Integration

The probe integration folder contains the following folder and version file:

- **Dell**

To deploy the integration of the supported Dell devices:

1. Copy the **dell** folder under **probe\_integration** and place it under the **%NC\_RULES\_HOME%\include-snmpttrap** folder on the system where you have installed the Probe component.

 **NOTE:** On systems running Linux, use the **\$NC\_RULES\_HOME/include-snmpttrap** folder.


2. Navigate to the **\$NC\_RULES\_HOME** folder, open the **snmpttrap-rules.file** and perform the following steps:

- a. Append the following command in the include rules section:

```
include "$NC_RULES_HOME/include-snmpttrap/dell/dell.master.include.rules"
```

- b. Append the following command in the include lookup table section:

```
include "$NC_RULES_HOME/include-snmpttrap/dell/dell.master.include.lookup"
```

 **NOTE:** This step is applicable to systems running Linux only.

3. Ensure that the copied **dell** folder and the files under it have permissions for the probe rules in accordance with the IBM guidelines. For more information, see IBM Netcool/OMNIbus documentation.

4. Perform the followings steps:

*Server traps*

- a. Uncomment the **dell-StorageManagement-MIB.include.snmpttrap.lookup** file include statement in the **dell.master.include.lookup** file.

- b. Uncomment the `dell-StorageManagement-MIB.include.snmptrap.rules` file include statement in the **dell.master.include.rules** file.
- c. Uncomment the `dell-MIB-Dell-10892.include.snmptrap.lookup` file include statement in the **dell.master.include.lookup** file.
- d. Uncomment the `dell-MIB-Dell-10892.include.snmptrap.rules` file include statement in the **dell.master.include.rules** file.

*OOB Server (iDRAC8, iDRAC7) traps*

- a. Uncomment the `dell-IDRAC-MIB.include.snmptrap.lookup` file include statement in the **dell.master.include.lookup** file.
- b. Uncomment the `dell-IDRAC-MIB.include.snmptrap.rules` file include statement in the **dell.master.include.rules** file.

*FX2 CMC, VRTX CMC, CMC , iDRAC6, DRAC5 traps*

- a. Uncomment the `dell-RAC-MIB.include.snmptrap.lookup` file include statement in the **dell.master.include.lookup** file.
- b. Uncomment the `dell-RAC-MIB.include.snmptrap.rules` file include statement in the **dell.master.include.rules** file.

*Compellent Storage Array traps*

- a. Uncomment the `dell-STORAGE-SC-MIB.include.snmptrap.lookup` file include statement in the **dell.master.include.lookup** file.
- b. Uncomment the `dell-STORAGE-SC-MIB.include.snmptrap.rules` file include statement in the **dell.master.include.rules** file.

*EqualLogic traps*

- a. Uncomment the `equalLogic-EQLMEMBER-MIB.include.snmptrap.lookup` file include statement in the **dell.master.include.lookup** file.
- b. Uncomment the `equalLogic-EQLDISK-MIB.include.snmptrap.lookup` file include statement in the **dell.master.include.lookup** file.
- c. Uncomment the `equalLogic-SCSI-MIB.include.snmptrap.lookup` file include statement in the **dell.master.include.lookup** file.
- d. Uncomment the `equalLogic-EQLMEMBER-MIB.include.snmptrap.rules` file include statement in the **dell.master.include.rules** file.
- e. Uncomment the `equalLogic-EQLDISK-MIB.include.snmptrap.rules` file include statement in the **dell.master.include.rules** file.
- f. Uncomment the `equalLogic-SCSI-MIB.include.snmptrap.rules` file include statement in the **dell.master.include.rules** file.
- g. Uncomment the `equalLogic-ISCSI-MIB.include.snmptrap.rules` file include statement in the **dell.master.include.rules** file.

*PowerVault MD Storage Array traps*

- a. Uncomment the `dell-MDStorageArray-MIB.include.snmptrap.lookup` file include statement in the **dell.master.include.lookup** file.
- b. Uncomment the `dell-MDStorageArray-MIB.include.snmptrap.rules` file include statement in the **dell.master.include.rules** file.

*Dell Network Switch traps*

- S-Series, M-Series, Z-Series, and C-Series Switches
    1. Uncomment the `dell.switch.master.include.lookup` file include statement in the **dell.master.include.lookup** file.
    2. Uncomment the `dell.switch.master.include.rules` file include statement in the **dell.master.include.rules** file.
  - N-Series Switches
    1. Uncomment the `dell.Nserieswitch.master.include.lookup` file include statement in the **dell.master.include.lookup** file.
    2. Uncomment the `dell.Nserieswitch.master.include.rules` file include statement in the **dell.master.include.rules** file.
  - W-Series Switches
    1. Uncomment the `dell.Wserieswitch.master.include.lookup` file include statement in the **dell.master.include.lookup** file.
    2. Uncomment the `dell.Wserieswitch.master.include.rules` file include statement in the **dell.master.include.rules** file.
5. Copy the `delldevice_int_mttrapdprobe.ver` version file to the `%OMNIHOME%` directory on the system where you have installed the Probe component on systems running Windows. On systems running Linux, copy the `delldevice_int_mttrapdprobe.ver` version file to the `$OMNIHOME` directory.
  6. Restart the OMNIBus MTTTrapd SNMP probe service (**NCOMTTTRAPDProbe**) or process (`nco_p_mttrapd`).

## Installing ObjectServer Integration

The `objectserver_integration` folder contains the following files and folder:

- **OMNIBus81**
- **delldevice\_confpack\_64bit\_v\_3\_0.jar**
- **delldevice\_confpack\_v\_3\_0.jar**
- **delldevice\_int\_objectserver.ver**

To deploy the Dell integration components on the system that hosts the ObjectServer:

1. Run the following command with the required security credentials to access the OMNIBus ObjectServer:
  - a. For IBM Tivoli Netcool/OMNIBus 8.1:
    - On systems running 64-bit Linux:
 

```
$OMNIHOME/bin/nco_confpack -import -server <ObjectServer> -user <username> -password <password> -package <copied folder>/OMNIBus81/delldevice_confpack_64bit_v_3_0.jar
```
    - On systems running Windows:
 

```
%OMNIHOME%\bin\nco_confpack.bat -import -server <ObjectServer> -user <username> -password <password> -package <copiedfolder>\OMNIBus81\delldevice_confpack_v_3_0.jar
```


- On systems running 32-bit Linux:
 

```
$OMNIHOME/bin/nco_confpack -import -server <ObjectServer> -user
<username> -password <password> -package <copied folder>/OMNIBus81/
delldevice_confpack_v_3_0.jar
```
- b. For IBM Tivoli Netcool/OMNIBus 7.4:
  - On systems running 64-bit Linux:
 

```
$OMNIHOME/bin/nco_confpack -import -server <ObjectServer> -user
<username> -password <password> -package <copied folder>/
delldevice_confpack_64bit_v_3_0.jar
```
  - On systems running Windows:
 


```
%OMNIHOME%\bin\nco_confpack.bat -import -server <ObjectServer> -user
<username> -password <password> -package <copied folder>
\delldevice_confpack_v_3_0.jar
```
  - On systems running 32-bit Linux:
 

```
$OMNIHOME/bin/nco_confpack -import -server <ObjectServer> -user
<username> -password <password> -package <copied folder>/
delldevice_confpack_v_3_0.jar
```


 **NOTE:** By default, the ObjectServer is **NCOMS**.

2. In the **Event List** on the desktop, click **File** → **Resync** → **All**.

This action synchronizes the newly added menu items for the Dell tools and conversion classes that are updated from the jar files.

 **NOTE:** Resync can be performed only for ObjectServer integration.

3. In the **%OMNIHOME%** directory on the system where the ObjectServer is installed, copy the **delldevice\_int\_objectserver.ver** file.

 **NOTE:** On systems running Linux, use the **\$OMNIHOME** directory.

4. Restart the web GUI.

## Reconfiguring Dell tools for monitoring events from Dell servers or workstations running VMware ESXi version 5.5 or later

If you want to launch the RAC console from events generated from Dell servers or workstations running VMware ESXi 5.5 or later, then reconfigure the following tools:

- **LaunchDellOpenManageServerAdministratorConsole (Windows)**
- **LaunchDellOpenManageServerAdministratorConsole**
- **LaunchDellRemoteAccessControllerConsole (Windows)**
- **LaunchDellRemoteAccessControllerConsole**

To reconfigure, provide the path to the Oracle Java version 1.6.0\_18 or later binary when following the steps listed below:

1. In the **Configuration** window, select **Menu** → **Tools**.
2. Double-click **Tools** on the right pane to launch the **Tool** details window.
3. Click the executable tab and edit the string:  
For example:

For systems running Windows:

```
$ (NCHOME) \platform\win32\jre_1.6.7\jre\bin\java
```

to

```
<installed custom Java path>\jre1.6.0_18\bin\java
```

For systems running Linux:

```
$ (NCHOME) /platform/linux2x86/jre_1.6.7/jre/bin/java
```

to

```
<installed custom Java path>/jre1.6.0_18/bin/java
```

## Configuring Dell Server Administrator Web Server console on the ObjectServer

The Dell Server Administrator Web Server console uses the configured URL to launch in the default browser.

To configure the Web Server console URL on systems running Windows and Linux:

1. Provide the required security credentials to access the OMNIbus ObjectServer and log in to the ObjectServer.
2. In the **Configuration** window, select **Menu** → **Tools**.
3. On systems running Windows, double-click **Launch Dell Server Administrator Web Server Console (Windows)** on the right pane to launch the **Tool Details** window.  
On systems running Linux, double-click **Launch Dell Server Administrator Web Server Console** on the right pane to launch the **Tool Details** window.
4. Click the executable tab and edit the following URL by providing the IP address and the port number:

```
https://<Server Administrator Web Server Host/IP>:<Server Administrator Web Server PORT>/omalogin.html?managedws=false&mnip=@Node
```

For example:

```
https://11.95.145.156:1311/omalogin.html?managedws=false&mnip=@Node
```

For more information, see the Dell Server Administrator documentation at [dell.com/support/home](http://dell.com/support/home).

## Configuring OpenManage Essentials (OME) console on the ObjectServer

The OME console uses the configured URL to launch the console in the default browser.

To configure the OME console URL on systems running Windows:

1. Provide the required security credentials to access the OMNIbus ObjectServer and log in to the ObjectServer.
2. In the **Configuration** window, select **Menu** → **Tools**.
3. Double-click **Launch Dell OpenManage Essentials Console (Windows)** on the right pane to launch the **Tool Details** window.
4. Click the executable tab and edit the following URL by providing the IP address and the port number for OME:

```
https://<OpenManage Essentials Host/IP>:<OpenManage Essentials PORT>
```

For example:

```
https://11.95.145.156:2607/
```

For more information, see the *OpenManage Essentials User's Guide* at [dell.com/support/home](http://dell.com/support/home).

## Configuring Dell PowerVault Modular Disk Storage Manager console on the ObjectServer

The Dell PowerVault Modular Disk Storage Manager (MDSM) console uses the configured URL to launch the console in a separate window. Ensure that MSDM is installed on the system on which you want to launch this console.

To configure the installed path of the MDSM client on systems running Windows and Linux:

1. Provide the required security credentials to access the OMNIBus ObjectServer and log in to the ObjectServer.
2. In the **Configuration** window, select **Menu** → **Tools**.
3. On systems running Windows, double-click **Launch Dell Modular Disk Storage Manager (Windows)** on the right pane to launch the **Tool Details** window.

On systems running Linux, double-click **Launch Dell Modular Disk Storage Manager** on the right pane to launch the **Tool Details** window.

4. Click the executable tab and edit the following command:

- On systems running Windows:

```
C:\\Program Files (x86)\\Dell\\MD Storage Software\\MD Storage Manager\\  
\\client\\Modular Disk Storage Manager Client.exe
```

- On systems running Linux:

```
"/opt/dell/mdstoragesoftware/mdstoragemanager/client/SMclient"
```

For more information, see the *Modular Disk Storage Manager User's Guide* at [dell.com/support/home](http://dell.com/support/home).

## Configuring Dell OpenManage Network Manager (OMNM) console on the ObjectServer

The Dell OpenManage Network Manager (OMNM) console uses the configured URL to launch the console in a separate window.

To configure the OMNM console URL on systems running Windows and Linux:

1. Provide the required security credentials to access the OMNIBus ObjectServer and log in to the ObjectServer.
2. In the **Configuration** window, select **Menu** → **Tools**.
3. On systems running Windows, double-click **Launch OpenManage Network Manager (Windows)** on the right pane to launch the **Tool Details** window.

On systems running Linux, double-click **Launch OpenManage Network Manager** on the right pane to launch the **Tool Details** window.

4. Click the executable tab and edit the following URL:

```
http://OMNM_IP_Address_OR_Host:OMNM_Port
```

For more information, see the *OpenManage Network Manager User's Guide* at [dell.com/support/home](http://dell.com/support/home).

For example:

```
http://192.168.10.12:8080
```

## Configuring Dell AirWave Management Platform console on the ObjectServer

The Dell AirWave Management Platform console uses the configured URL to launch the console in a default browser.

To configure the Dell AirWave Management Platform console URL on systems running Windows and Linux:

1. Provide the required security credentials to access the OMNIbus ObjectServer and log in to the ObjectServer.
2. In the **Configuration** window, select **Menu** → **Tools**.
3. On systems running Windows, double-click **Launch AirWave Management Platform Console (Windows)** on the right pane to launch the **Tool Details** window.  
On systems running Linux, double-click **Launch AirWave Management Platform Console** on the right pane to launch the **Tool Details** window.
4. Click the executable tab and edit the following URL:  
`https://airwavemanagementplatform_IP_Address`

## Configuring Dell Connections License Manager console on the ObjectServer

The Dell Connections License Manager (DCLM) console on the Object Server uses the configured URL to launch the console in the default browser. To configure the DCLM Console URL on systems running Windows and Linux:

1. Provide the required security credentials to access the OMNIbus ObjectServer and log in to the ObjectServer.
2. In the **Configuration** window, select **Menu** → **Tools**.
3. On systems running Windows, double-click **Launch Dell Connections License Manager Console (Windows)** on the right pane to launch the **Tool Details** window.  
On systems running Linux, double-click **Launch Dell Connections License Manager Console** on the right pane to launch the **Tool Details** window.
4. Click the executable tab and edit the IP address and the port number of the Connections License Manager following in the command:

```
http://<DCLM IP/Host>:<DCLM Port>/DellLicenseManagement
```


For example:

```
http://DCLM.domain.com:8544/DellLicenceManagement
```

For more information, see the *Dell Connections License Manager User's Guide* at [dell.com/support/home](http://dell.com/support/home).

## The Dell ConfigUtility

Using the Dell ConfigUtility, you can set the SNMP community string, WS-MAN parameters, and the TIPJAVAHOME parameters for desktop and web GUI.

-  **NOTE:** Once the community string, WS-MAN, and the TIPJAVAHOME parameters are configured using the Dell ConfigUtility, the same community string is used to launch the consoles for the supported Dell devices.

Related Links:

- [Using the ConfigUtility for Desktop.](#)
- [Using the ConfigUtility for Web GUI.](#)

## Installing Desktop Integration

The `desktop_integration` folder for Dell devices contains the following files:

- `dell_config.properties`
- `dell_MD_Array_Common.jar`
- `dell_OMNIBus_Connection_KB_Tool_v_3_0.jar`
- `dell_OMC_ITNO_ConfigUtility_v_3_0.jar`
- `dell_OMC_ITNO_Helper_v_3_0.jar`
- `intel_wsman_v_1_0_1.jar`
- `delldevice_int_desktop.ver`
- `snmp4j-2.3.0.jar`
- `SYMsdk.jar`


To deploy the Dell integration components on the system that hosts the desktop client:

1. Copy all the files to the `%OMNIHOME%` directory on the system where you have installed the desktop client:

 **NOTE:**

- On systems running Windows, use the `%OMNIHOME%` directory.
- On systems running Linux, use the `$OMNIHOME` directory.

2. In the `%OMNIHOME%` folder on the system where you have installed the desktop client, copy the `delldevice_int_desktop.ver` file.
3. Configure the SNMP Community string, WS-MAN parameter and the `TIPJAVAHOME` parameters using the Dell ConfigUtility (`dell_OMC_ITNO_ConfigUtility_v_3_0.jar`). For more information, see [Dell ConfigUtility](#).
4. Add an environment variable named `OMNIBROWSER` and set it to the path of the default or desired browser.

 **NOTE:** This is applicable to systems running Windows and Linux.

## Using the Dell ConfigUtility for Desktop

To use the Dell ConfigUtility to set the SNMP community string, WS-MAN parameters, and the `TIPJAVAHOME` parameters for the Desktop:

1. Navigate to the `%OMNIHOME%` directory on the system where the Desktop component is installed.
2. Run the following command to configure the SNMP community string:
  - a. For IBM Tivoli Netcool/OMNIBus 8.1:

On systems running Windows:

```
%NCHOME%\platform\<specificplatform>\jre_1.7.0\jre\bin\java -  
Ddell.config.path=desktop -jar dell_OMC_ITNO_ConfigUtility_v_3_0.jar -  
communitystring=public
```

On systems running Linux:

```
$NCHOME/platform/<specificplatform>/jre_1.7.0/jre/bin/java -  
Ddell.config.path=desktop -jar dell_OMC_ITNO_ConfigUtility_v_3_0.jar -  
communitystring=public
```

- b. For IBM Tivoli Netcool/OMNIbus 7.4:

On systems running Windows:

```
%NCHOME%\platform\<specificplatform>\jre_1.6.7\jre\bin\java -  
Ddell.config.path=desktop -jar dell_OMC_ITNO_ConfigUtility_v_3_0.jar -  
communitystring=public
```

On systems running Linux:

```
$NCHOME/platform/<specificplatform>/jre_1.6.7/jre/bin/java -  
Ddell.config.path=desktop -jar dell_OMC_ITNO_ConfigUtility_v_3_0.jar -  
communitystring=public
```

3. Run the following command to configure the WS-MAN parameters such as the user name and the password:

- a. For IBM Tivoli Netcool/OMNIbus 8.1:

On systems running Windows:

```
%NCHOME%\platform\<specificplatform>\jre_1.7.0\jre\bin\java -  
Ddell.config.path=desktop -jar dell_OMC_ITNO_ConfigUtility_v_3_0.jar -  
wsmanusername=root -wsmanpassword
```

On systems running Linux:

```
$NCHOME/platform/<specificplatform>/jre_1.7.0/jre/bin/java -  
Ddell.config.path=desktop -jar dell_OMC_ITNO_ConfigUtility_v_3_0.jar -  
wsmanusername=root -wsmanpassword
```

- b. For IBM Tivoli Netcool/OMNIbus 7.4:

On systems running Windows:

```
%NCHOME%\platform\<specificplatform>\jre_1.6.7\jre\bin\java -  
Ddell.config.path=desktop -jar dell_OMC_ITNO_ConfigUtility_v_3_0.jar -  
wsmanusername=root -wsmanpassword
```

On systems running Linux:

```
%NCHOME%\platform\<specificplatform>\jre_1.6.7\jre\bin\java -  
Ddell.config.path=desktop -jar dell_OMC_ITNO_ConfigUtility_v_3_0.jar -  
wsmanusername=root -wsmanpassword
```

4. Run the following command to configure the TIPJAVAHOME parameters:

- a. For IBM Tivoli Netcool/OMNIbus 8.1:

On systems running Windows:

```
%NCHOME%\platform\<specificplatform>\jre_1.7.0\jre\bin\java -  
Ddell.config.path=desktop -jar dell_OMC_ITNO_ConfigUtility_v_3_0.jar -  
tipjavahome=<WebSphere java home path>
```

On systems running Linux:

```
$NCHOME/platform/<specificplatform>/jre_1.7.0/jre/bin/java -  
Ddell.config.path=desktop -jar dell_OMC_ITNO_ConfigUtility_v_3_0.jar -  
tipjavahome=<WebSphere java home path>
```

- b. For IBM Tivoli Netcool/OMNIbus 7.4:

On systems running Windows:

```
%NCHOME%\platform\<specificplatform>\jre_1.6.7\jre\bin\java -  
Ddell.config.path=desktop -jar dell_OMC_ITNO_ConfigUtility_v_3_0.jar -  
tipjavahome=<java home path>
```

On systems running Linux:

```
$NCHOME/platform/<specificplatform>/jre_1.6.7/jre/bin/java -  
Ddell.config.path=desktop -jar dell_OMC_ITNO_ConfigUtility_v_3_0.jar -  
tipjavahome=<java home path>
```

## Configuring Dell Warranty Report tool on the Desktop Server

The Dell Warranty Report tool can be launched from the events that are generated from the Dell device that you are monitoring and is used to retrieve the warranty information about that device.

The Warranty Report tool should be configured on the Desktop Server if you do not have direct internet access and are using proxy settings to access the internet. In this case, on systems running Linux, ensure to resolve the host name `api.dell.com` in the file `/etc/host`. On systems running Windows, ensure to resolve the host name `api.dell.com` in the file `C:\Windows\System32\drivers\etc\hosts`.

For example:

```
143.166.11.198 api.dell.com
```

## Installing Web GUI Integration


The `import` sub folder within the `webgui_integration` folder contains the following files:

- `cmlauncher_linux.cgi`
- `cmlauncher_nt.cgi`
- `compellent_linux.cgi`
- `compellent_nt.cgi`
- `dell_config.properties`
- `dell_MD_Array_Common.jar`
- `dell_OMC_ITNO_ConfigUtility_v_3_0.jar`
- `dell_OMC_ITNO_Helper_v_3_0.jar`
- `delldevice_int_webgui.ver`
- `draclauncher_linux.cgi`
- `draclauncher_nt.cgi`
- `eqllauncher_linux.cgi`
- `eqllauncher_nt.cgi`
- `export.xml`
- `idraclauncher_linux.cgi`
- `idraclauncher_nt.cgi`
- `intel_wsman_v_1_0_1.jar`
- `kblauncher_linux.cgi`
- `kblauncher_nt.cgi`
- `n_switchadminlauncher_linux.cgi`
- `n_switchadminlauncher_nt.cgi`
- `omsalauncher_linux.cgi`
- `omsalauncher_nt.cgi`
- `snmp4j-2.3.0.jar`
- `SYMsdk.jar`

- vrtxcmlauncher\_linux.cgi
- vrtxcmlauncher\_nt.cgi
- warranty\_linux.cgi
- warranty\_nt.cgi

To deploy the Dell integration components on the system that hosts the web GUI:

1. Copy the following jar files and the **dell\_config.properties** file from the **\$NCHOME/omnibus\_webgui** to the system where you have installed the Web GUI component.
  - dell\_config.properties
  - dell\_MD\_Array\_Common.jar
  - dell\_OMC\_ITNO\_ConfigUtility\_v\_3\_0.jar
  - dell\_OMC\_ITNO\_Helper\_v\_3\_0.jar
  - delldevice\_int\_webgui.ver
  - export.xml
  - intel\_wsman\_v\_1\_0\_1.jar
  - snmp4j-2.3.0.jar
  - SYMSdk.jar
2. Configure the SNMP Community string, WS-MAN parameters, and the **TIPJAVAHOME** using the **Dell ConfigUtility** file. For more information, see [Dell ConfigUtility](#).
3. On the system where the web GUI component is installed, in the **\$NCHOME/omnibus\_webgui**, copy the **delldevice\_int\_webgui.ver** file.
4. Navigate to the **import** folder in the location where you have extracted **webgui\_integration** folder and run the following command for each integration:

 **NOTE:** By default, the **ObjectServer** is **NCOMS**. If your **ObjectServer** is anything other than **NCOMS**, then navigate to the **import** folder, open the **export.xml** file and replace all occurrences of the **datasource**, which is **NCOMS**, with the actual **ObjectServer** name.

For example: Change

```
datasource="NCOMS"
```

to

```
datasource="<ObjectServer_Name>"
```

- a. For IBM Tivoli Netcool/OMNIBus 8.1:

On systems running Windows:

```
<WEB GUI home directory>\waapi\bin\runwaapi -host <hostname> -user <Web GUI username> -password <Web GUI password> -file export.xml
```

On systems running Linux:

```
<WEB GUI home directory>/waapi/bin/runwaapi -host <hostname> -user <Web GUI username> -password <Web GUI password> -file export.xml
```

- b. For IBM Tivoli Netcool/OMNIBus 7.4:

On systems running Windows:

```
<WEB GUI home directory>\waapi\bin\runwaapi -host <hostname> -user <Web GUI username> -password <Web GUI password> -file export.xml
```

On systems running Linux:

```
<WEB GUI home directory>/waapi/bin/runwaapi -host <hostname> -user <Web GUI username> -password <Web GUI password> -file export.xml
```

5. If the Web GUI component is installed in a non default location or a location other than **%NCHOME%\..\tipv2**, then configure the **TIPJAVAHOME** environmental path with this version of Java as follows:  
java -Ddell.config.path=webgui> -jar dell\_OMC\_ITNO\_ConfigUtility\_v\_3\_0.jar -tipjavahome= C:\Program Files (x86)\Java\jre6\bin.

For example:

If Java is installed in the location **C:\Program Files (x86)\Java\jre6\bin\java.exe**, then configure the **TIPJAVAHOME** path as **tipjavahome= C:\Program Files (x86)\Java\jre6\bin**.



**NOTE:** If you have only installed IBM Tivoli Netcool OMNIBus in your system, then Tivoli Integrated Portal (TIP) will not be available. In this case, you can use the WebSphere home directory location while configuring the **TIPJAVAHOME** environmental path.

For example:

If Java is installed in the location **C:\Program Files (x86)\IBM\WebSphere\AppServer\java\jre\bin\java.exe**, then configure the **TIPJAVAHOME** path as **tipjavahome= C:\Program Files (x86)\IBM\WebSphere\AppServer\java\jre\bin**.

## Using the Dell ConfigUtility for Web GUI

To use the Dell ConfigUtility to set the SNMP community string, WS-MAN parameters, and the **TIPJAVAHOME** parameters for the Web GUI:

1. Navigate to the web GUI Installation directory on the system where the web GUI component is installed.
2. Run the following command to configure the SNMP community string:

- a. For IBM Tivoli Netcool/OMNIBus 8.1:

On systems running Windows:

```
<WebSphere home directory>\java\jre\bin\java -Ddell.config.path=webgui -jar dell_OMC_ITNO_ConfigUtility_v_3_0.jar -communitystring=public
```

On systems running Linux:

```
<WebSphere home directory>/java/jre/bin/java -Ddell.config.path=webgui -jar dell_OMC_ITNO_ConfigUtility_v_3_0.jar -communitystring=public
```

- b. For IBM Tivoli Netcool/OMNIBus 7.4:

On systems running Windows:

```
<Tivoli Integrated Portal home directory>\java\jre\bin\java -Ddell.config.path=webgui -jar dell_OMC_ITNO_ConfigUtility_v_3_0.jar -communitystring=public
```

On systems running Linux:

```
<Tivoli Integrated Portal home directory>/java/jre/bin/java -Ddell.config.path=webgui -jar dell_OMC_ITNO_ConfigUtility_v_3_0.jar -communitystring=public
```

3. Run the following command to configure the WS-MAN parameters such as the user name and the password:
  - a. For IBM Tivoli Netcool/OMNIBus 8.1:

On systems running Windows:

```
<WebSphere home directory>\java\jre\bin\java -Ddell.config.path=webgui -  
jar dell_OMC_ITNO_ConfigUtility_v_3_0.jar -wsmanusername=root -  
wsmanpassword
```

On systems running Linux:

```
<WebSphere home directory>/java/jre/bin/java -Ddell.config.path=webgui -  
jar dell_OMC_ITNO_ConfigUtility_v_3_0.jar -wsmanusername=root -  
wsmanpassword
```

- b. For IBM Tivoli Netcool/OMNIbus 7.4:

On systems running Windows:

```
<Tivoli Integrated Portal home directory>\java\jre\bin\java -  
Ddell.config.path=webgui -jar dell_OMC_ITNO_ConfigUtility_v_3_0.jar -  
wsmanusername=root -wsmanpassword
```

On systems running Linux:

```
<Tivoli Integrated Portal home directory>/java/jre/bin/java -  
Ddell.config.path=webgui -jar dell_OMC_ITNO_ConfigUtility_v_3_0.jar -  
wsmanusername=root -wsmanpassword
```

4. Run the following command to configure the TIPJAVAHOME parameters:

- a. For IBM Tivoli Netcool/OMNIbus 8.1:

On systems running Windows:

```
<WebSphere home directory>\java\jre\bin\java -Ddell.config.path=webgui -  
jar dell_OMC_ITNO_ConfigUtility_v_3_0.jar -tipjavahome=<WebSphere java  
home path>
```

On systems running Linux:

```
<WebSphere home directory>/java/jre/bin/java -Ddell.config.path=webgui -  
jar dell_OMC_ITNO_ConfigUtility_v_3_0.jar -tipjavahome=<WebSphere java  
home path>
```

- b. For IBM Tivoli Netcool/OMNIbus 7.4:

On systems running Windows:

```
<Tivoli Integrated Portal home directory>\java\jre\bin\java -  
Ddell.config.path=webgui -jar dell_OMC_ITNO_ConfigUtility_v_3_0.jar -  
tipjavahome=<java home path>
```

On systems running Linux:

```
<Tivoli Integrated Portal home directory>/java/jre/bin/java -  
Ddell.config.path=webgui -jar dell_OMC_ITNO_ConfigUtility_v_3_0.jar -  
tipjavahome=<java home path>
```

## Updating the Dell Tools menu on the Web GUI Server

To update the **Dell Tools** menu on the **Alerts** menu of the Web GUI component:

1. Perform the following steps to edit the **Alert** menu:
  - a. Click **Administration** → **Event Management Tools**.
  - b. Navigate to **Menu Configuration**.
  - c. Select **Alerts** from the **Available menus** on the right pane.
  - d. Click **Modify**.
  - e. Select **menu** from the **Available items** drop-down list.
  - f. Add **Dell Tools** to the **Current items**.
  - g. Click **Save**.
2. Navigate to **Administration** → **Availability** → **Events** → **Active Event List (AEL)** and refresh the list to synchronize the newly added menu items.

3. Right-click a Dell device alert and make sure that the respective Dell console launch tools are available.

## Configuring Dell Server Administrator Web Server console on the Web GUI

To configure the **Launch Dell Server Administrator Web Server** console:

1. Log in to the web GUI.
2. Click **Administration** → **Event Management Tools** → **Tool Creation**.
3. Select **LaunchDellServerAdministratorWebServerConsole** on the right pane to launch the **Tool Configuration** window.
4. Edit the following URL by providing the IP address and the port number:  
`https://<Server Administrator Web Server Host/IP>:<Server Administrator Web Server PORT>/omalogin.html?managedws=false&mnip=@Node`

For example:

`https://11.95.145.156:1311/omalogin.html?managedws=false&mnip=@Node`

For more information, see the Dell Server Administrator documentation at [dell.com/support/home](https://dell.com/support/home).

## Configuring Dell OpenManage Essentials (OME) console on the Web GUI

To configure the **Launch Dell OpenManage Essentials** console:

1. Log in to the web GUI.
2. Click **Administration** → **Event Management Tools** → **Tool Creation**.
3. Select **LaunchDellOpenManageEssentialsConsole** on the right pane to launch the **Tool Configuration** window.
4. Edit the following URL by providing the IP address and the port number for OME:  
`https://<OpenManage Essentials Host/IP>:<OpenManage Essentials PORT>`

For example:

`https://11.95.145.156:2607/`

For more information, see the *OpenManage Essentials User's Guide* at [dell.com/support/home](https://dell.com/support/home).

## Configuring Dell PowerVault Modular Disk Storage Manager console on the Web GUI

Dell PowerVault Modular Disk Storage Manager (MDSM) console must be installed on the server from where you want to launch the console.

To configure the **Launch Dell Modular Disk Storage Manager** console:

1. Log in to the web GUI.
2. Click **Administration** → **Event Management Tools** → **Tool Creation**.
3. Select **LaunchDellModularDiskStorageManagerConsole** on the right pane to launch the **Tool Configuration** window.
4. Update the following command if required:

On systems running Windows:

```
"%PROGRAMFILES%\Dell\MD Storage Software\MD Storage Manager\client\Modular  
Disk Storage Manager Client.exe"
```

On systems running Linux:

```
"/opt/dell/mdstoragesoftware/mdstoragemanager/client/SMclient"
```

## Configuring Dell OpenManage Network Manager (OMNM) console on the Web GUI

To configure the **Dell OpenManage Network Manager** console:

1. Log in to the web GUI.
2. Click **Administration** → **Event Management Tools** → **Tool Creation**.
3. Select **LaunchDellOpenManageNetworkManagerConsole** on the right pane to launch the **Tool Configuration** window.
4. Edit the following URL by providing the IP address and the port number for OMNM:  
`http://OMNM_IP_Address_OR_Host:OMNM_Port`

For example:

```
http://192.168.10.12:8080
```

For more information, see the *OpenManage Essentials User's Guide* at [dell.com/support/home](http://dell.com/support/home).

## Configuring Dell AirWave Management Platform console on the Web GUI

To configure the **Dell AirWave Management Platform** console:

1. Log in to the web GUI.
2. Click **Administration** → **Event Management Tools** → **Tool Creation**.
3. Select **LaunchDellAirWaveManagementPlatformConsole** on the right pane to launch the **Tool Configuration** window.
4. Edit the following URL:  
`https://airwavemanagementplatform_IP_Address`

## Configuring Dell Connections License Manager console on the Web GUI

To configure the Launch **Dell Connections License Manager (DCLM)** console:

1. Log in to the web GUI.
2. Click **Administration** → **Event Management Tools** → **Tool Creation**.
3. Select **LaunchDellConnectionsLicenseManagerConsole** on the right pane to launch the **Tool Configuration** window.
4. Edit the following URL by providing the IP address and the port number of the Dell Connections License Manager:

```
http://<DCLM IP/Host>:<DCLM Port>/DellLicenseManagement
```

For example:

```
http://DCLM.domain.com:8544/DellLicenceManagement
```

For more information, see the *Dell Connections License Manager User's Guide* at [dell.com/support/manuals](http://dell.com/support/manuals).

## Configuring Dell Warranty Report tool on the web GUI

The Dell Warranty Report tool can be launched from the events that are generated from the Dell device that you are monitoring and is used to retrieve the warranty information about that device.

The Warranty Report tool should be configured on the web GUI server if you do not have direct internet access and are using proxy settings to access the internet. In this case, on systems running Linux, ensure to resolve the host name `api.dell.com` in the file `/etc/host`. On systems running Windows, ensure to resolve the host name `api.dell.com` in the file `C:\Windows\System32\drivers\etc\hosts`.

For example:

```
143.166.11.198 api.dell.com
```

## Configuring Dell consoles on the Web GUI server on systems running Linux

You must configure the Dell device specific console on the web GUI server on systems running Linux. To configure a Dell console launch tool on a system running Linux:

1. Log in to the web GUI on a system running Linux.
2. Click **Administration** → **Event Management Tools** → **Tool Creation**.
3. Double-click on the Dell console that you want to launch.
4. Modify the name of the CGI Script or the URL based on the Dell console you want to launch.  
For more information about the Dell consoles that you must configure and their respective CGI Script or the URL see the table below.

For example:

To Launch the iDRAC console:

Navigate to **Administration** → **Event Management Tools** → **Tool Creation**, click **LaunchDelliDRACConsole** and then modify the name of the CGI Script in the URL section to **idraclauncher\_linux.cgi** in the right pane.

**Table 9. Dell console launch tools and their respective CGI script/URL/Command**

Console launch tools	CGI Script/URL
Dell Server Administrator Console	omsalauncher_linux.cgi
Dell Server Administrator Web Server Console	https://<Server Administrator Web Server Host/IP>:<Server Administrator Web Server PORT>/omalogin.html?managedws=false&mnip=@Node
Dell iDRAC Console	idraclauncher_linux.cgi
Dell Remote Access Controller Console	draclauncher_linux.cgi
Dell Chassis Management Controller Console	cmclauncher_linux.cgi
Dell Compellent Storage Manager Console	compellent_linux.cgi
Dell EqualLogic Group Manager Console	eqllauncher_linux.cgi

<b>Console launch tools</b>	<b>CGI Script/URL</b>
Dell OpenManage Switch Administrator Console	n_switchadminlauncher_linux.cgi
Dell OpenManage Network Manager Console	http://OMNM_IP_Address_OR_Host:OMNM_Port
Dell AirWave Management Platform Console	https://airwavemanagementplatform_IP_Address
Dell OpenManage Essentials Console	https://OME_IP_Address_OR_Host:OME_Port
Dell Connections License Manager	http://DCLM_IP:DCLM_Port/DellLicenseManagement
Dell Warranty Report	warranty_linux.cgi
Dell Server Trap Configuration Information	kblauncher_linux.cgi

# Upgrading Dell OpenManage Connection for Netcool/OMNIBus

To upgrade the Dell OpenManage Connection for Netcool/OMNIBus:


1. Uninstall the existing connection. For more information, see the *Dell OpenManage Connection for Netcool/OMNIBus Installation Guide*, for the existing version, at [dell.com/omconnectionsEnterpriseSystemsManagement](http://dell.com/omconnectionsEnterpriseSystemsManagement).
2. Install the latest version using the installation procedure described in [Installing Dell OpenManage Connection for Netcool/OMNIBus](#).

# Uninstalling Dell OpenManage Connection for Netcool/OMNIbus

To uninstall Dell OpenManage Connection for Netcool/OMNIbus you must uninstall or remove the component-specific files.

## Uninstalling Probe Integration

To uninstall the Probe integration:

1. Navigate to the `%NC_RULES_HOME%/include-snmpttrap` folder on the system where you have installed the Probe component.
  -  **NOTE:** On systems running Linux, use the `$NC_RULES_HOME/include-snmpttrap` folder.
2. Navigate to `$NC_RULES_HOME\snmpttrap-rules`.file and remove the following commands:
  - `include "$NC_RULES_HOME/include-snmpttrap/dell/dell.master.include.rules"`
  - `include "$NC_RULES_HOME/include-snmpttrap/dell/dell.master.include.lookup"`
3. Delete the `dell` folder under `$NC_RULES_HOME/include-snmpttrap`.
4. Navigate to the `%OMNIHOME%` directory and delete the `delldevice_int_mttrapdprobe.ver` version file.
5. Restart the **OMNIbus MTTTrapd** SNMP probe service (**NCOMTTTRAPDProbe**) or process (`nco_p_mttrapd`).

## Uninstalling ObjectServer Integration

To uninstall the ObjectServer integration:

1. Provide the required security credentials to access the OMNIbus ObjectServer and log in to the ObjectServer.
2. In the **Configuration** window, select **Menu** → **Tools**.
3. Right-click the following tools and click **Delete**:
  - **Launch Dell Server Administrator Console**
  - **Launch Dell Server Administrator Web Server Console**
  - **Launch iDRAC Console**
  - **Dell Remote Access Controller Console**
  - **Launch Dell Chassis Management Controller Console**
  - **Dell Compellent Storage Manager Console**
  - **Launch Dell Modular Disk Storage Manager Console**
  - **Launch EqualLogic Group Manager Console**

- Dell OpenManage Switch Administrator Console
  - Dell OpenManage Network Manager Console
  - Dell AirWave Management Platform Console
  - Launch Dell Connections License Manager Console
  - Dell Warranty Report
  - Launch OpenManage Essentials Console
  - Dell Server Trap Configuration Information
4. In the **Configuration** window, select **Menu** → **Menus**.
  5. Under the **Alerts Menu**, select **Dell Tools**.
  6. Right-click **Dell Tools** and click **Delete**.
  7. In the **Configuration** window, navigate to **Automation Triggers** and delete the following triggers:
    - **dell\_idrac\_clear**
    - **dell\_idrac\_deduplicate\_clear**
    - **dell\_omsa\_clear**
    - **dell\_omsa\_deduplicate\_clear**
    - **dell\_cmc\_clear**
    - **dell\_cmc\_deduplicate\_clear**
    - **dell\_compellent\_clear**
    - **dell\_compellent\_deduplicate\_clear**
    - **dell\_equallogic\_clear**
    - **dell\_equallogic\_deduplicate\_clear**
    - **dell\_mdarray\_clear**
    - **dell\_mdarray\_deduplicate\_clear**
    - **dell\_enterprise\_switch\_clear**
    - **dell\_enterprise\_switch\_deduplicate\_clear**
    - **dell\_nseries\_clear**
    - **dell\_nseries\_deduplicate\_clear**
    - **dell\_dclm\_clear**
    - **dell\_dclm\_deduplicate\_clear**
  8. In the **Configuration** window, navigate to **Visual Conversions** and expand the **Class** menu. Right-click the following and click **Delete**:
    - **Dell Server (2080)**
    - **Dell iDRAC (2088)**
    - **Dell DRAC (2087)**
    - **Dell CMC (2086)**
    - **Dell Chassis (2094)**
    - **Dell VRTX CMC (2084)**
    - **Dell Compellent Storage Arrays (2090)**
    - **Dell MD Storage Array (2809)**
    - **Dell EqualLogic (2085)**
    - **Dell Enterprise Series Switch (2091)**
    - **Dell N-Series Switch (2092)**
    - **Dell W-Series Mobility Controller (2093)**

- **Dell DCLM (2081)**
9. In the %OMNIHOME% directory on the system where the ObjectServer is installed, remove the file `delldevice_int_objectserver.ver`.
  10. Open **Event List** and select **File** → **Resync** → **All**.
  11. Restart the Web GUI.

## Uninstalling Desktop Integration

To uninstall the desktop integration:

1. Navigate to the %OMNIHOME% directory on the system where you have installed the desktop integration components.
2. Perform the following steps:
  - Remove the file `delldevice_int_desktop.ver`
  - *All Desktop Integration* – Remove the following files:
    - `dell_config.properties`
    - `dell_MD_Array_Common.jar`
    - `dell_OMNIBus_Connection_KB_Tool_v_3_0.jar`
    - `dell_OMC_ITNO_Helper_v_3_0.jar`
    - `dell_OMC_ITNO_ConfigUtility_v_3_0.jar`
    - `intel_wsman_v_1_0_1.jar`
    - `snmp4j-2.3.0.jar`
    - `SYMsdk.jar`

## Uninstalling Web GUI Integration

To uninstall the web GUI integration:

1. Login to the web GUI.
2. Remove the following files from the `webgui_integration` folder.
  - `dell_config.properties`
  - `dell_MD_Array_Common.jar`
  - `dell_OMC_ITNO_ConfigUtility_v_3_0.jar`
  - `dell_OMC_ITNO_Helper_v_3_0.jar`
  - `delldevice_int_webgui.ver`
  - `export.xml`
  - `intel_wsman_v_1_0_1.jar`
  - `snmp4j-2.3.0.jar`
  - `SYMsdk.jar`
3. Navigate to **Administration** → **Event Management Tools** → **Tool Creation**.
4. Select the following tools and click **Delete**.
  - **Launch Dell Server Administrator Console**
  - **Launch Dell Server Administrator Web Server Console**
  - **Launch iDRAC Console**
  - **Dell Remote Access Controller Console**


- Launch Dell Chassis Management Controller Console
  - Dell Compellent Storage Manager Console
  - Launch Dell Modular Disk Storage Manager Console
  - Launch EqualLogic Group Manager Console
  - Dell OpenManage Switch Administrator Console
  - Dell OpenManage Network Manager Console
  - Dell AirWave Management Platform Console
  - Launch Dell Connections License Manager Console
  - Dell Warranty Report
  - Launch OpenManage Essentials Console
  - Dell Server Trap Configuration Information
5. Navigate to **Administration** → **Event Management Tools** → **Menu Configuration**.
  6. Under **Available menus**, select **DellTools** and click **Delete**.
  7. Navigate to **Administration** → **Event Management Tools** → **CGI Registry**.
  8. Select the following .cgi files, and then click **Unregister**.
    - idralauncher\_linux.cgi
    - idralauncher\_nt.cgi
    - dralauncher\_linux.cgi
    - dralauncher\_nt.cgi
    - cmlauncher\_linux.cgi
    - cmlauncher\_nt.cgi
    - compellent\_linux.cgi
    - compellent\_nt.cgi
    - eqllauncher\_linux.cgi
    - eqllauncher\_nt.cgi
    - n\_switchadminlauncher\_linux.cgi
    - n\_switchadminlauncher\_nt.cgi
    - omsalauncher\_linux.cgi
    - omsalauncher\_nt.cgi
    - warranty\_linux.cgi
    - warranty\_nt.cgi
    - kblauncher\_linux.cgi
    - kblauncher\_nt.cgi
  9. Restart the Web GUI component.

# Accessing documents from Dell support site

You can access the required documents in one of the following ways:

- Using the following links:
  - For all Enterprise Systems Management documents – [Dell.com/SoftwareSecurityManuals](https://www.dell.com/support/manuals)
  - For OpenManage documents – [Dell.com/OpenManageManuals](https://www.dell.com/support/manuals)
  - For Remote Enterprise Systems Management documents – [Dell.com/esmanuals](https://www.dell.com/support/manuals)
  - For OpenManage Connections Enterprise Systems Management documents – [Dell.com/OMConnectionsEnterpriseSystemsManagement](https://www.dell.com/support/manuals)
  - For Serviceability Tools documents – [Dell.com/ServiceabilityTools](https://www.dell.com/support/manuals)
  - For OpenManage Connections Client Systems Management documents – [Dell.com/DellClientCommandSuiteManuals](https://www.dell.com/support/manuals)
- From the Dell Support site:
  - a. Go to [Dell.com/Support/Home](https://www.dell.com/support/home).
  - b. Under **Select a product** section, click **Software & Security**.
  - c. In the **Software & Security** group box, click the required link from the following:
    - **Enterprise Systems Management**
    - **Remote Enterprise Systems Management**
    - **Serviceability Tools**
    - **Dell Client Command Suite**
    - **Connections Client Systems Management**
  - d. To view a document, click the required product version.
- Using search engines:
  - Type the name and version of the document in the search box.

# Contacting Dell

 **NOTE:** If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

1. Go to **Dell.com/support**.
2. Select your support category.
3. Verify your country or region in the **Choose a Country/Region** drop-down list at the bottom of the page.
4. Select the appropriate service or support link based on your need.