

**Dell OpenManage Connection Version 2.1 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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# Introduction

Dell OpenManage Connection for IBM Tivoli Netcool/OMNIbus provides event monitoring and console launch capabilities for:

- Dell PowerEdge and PowerVault systems from 9th generation (9G) to 12th generation (12G). All the existing generation systems support an agent-based, in-band mode using Dell OpenManage Server Administrator (OMSA). The 12G systems also support an agent-free, out-of-band mode, using Integrated Dell Remote Access Controller 7 (iDRAC7).
- Integrated Dell Remote Access Controller7 (iDRAC7), Integrated Dell Remote Access Controller 6 (iDRAC6), and Dell Remote Access Controller 5 (DRAC5) for Dell PowerEdge and PowerVault systems from 9G to 12G.
- Dell Chassis: Dell PowerEdge M1000e (Dell Chassis Management Controller), Dell PowerEdge VRTX (VRTX Chassis Management Controller), and Dell PowerEdge 1955 (Dell Remote Access Controller/Modular Chassis).
- Dell Storage Devices: Dell PowerVault MD Storage Arrays and Dell EqualLogic Storage Arrays.
- Dell one to one Console launches:
  - Dell OpenManage Server Administrator (OMSA) Console
  - Dell OpenManage Server Administrator (OMSA) Web Server Console
  - Dell Remote Access Controller (DRAC) Console
  - Integrated Dell Remote Access Controller (iDRAC) Console
  - Dell Chassis Management Controller (CMC) Console
  - Dell PowerEdge VRTX Chassis Management Controller (VRTX CMC) Console
  - Dell EqualLogic Group Manager Console
  - Dell PowerVault Modular Disk Storage Management (MDSM) console
- Dell OpenManage Essentials (OME) Console
- Dell 12G Server Trap Configuration Information Console

 **NOTE:** This guide is intended for system administrators who are familiar with IBM Tivoli Netcool/OMNIbus 7.3.1 and IBM Tivoli Netcool/OMNIbus 7.4.

 **NOTE:** Dell Out-of-Band (OOB) 12G servers and Integrated Dell Remote Access Controller 7 (iDRAC7) are used interchangeably in the document.

 **NOTE:** This document contains information on the prerequisites and supported software necessary for installing Dell OpenManage Connection Version 2.1 For IBM Tivoli Netcool/OMNIbus. Before installing this version of Dell OpenManage Connection Version 2.1 For IBM Tivoli Netcool/OMNIbus, download the latest document from [dell.com/support/manuals](http://dell.com/support/manuals). For more information on accessing documents, see [Accessing Documents From Dell Support Site](#).

## Accessing Documents From Dell Support Site

To access the documents from Dell Support site:

1. Go to [dell.com/support/manuals](https://dell.com/support/manuals).
2. In the **Tell us about your Dell system** section, under **No**, select **Choose from a list of all Dell products** and click **Continue**.
3. In the **Select your product type** section, click **Software and Security**.
4. In the **Choose your Dell Software** section, click the required link from the following:
  - **Client System Management**
  - **Enterprise System Management**
  - **Remote Enterprise System Management**
  - **Serviceability Tools**
5. To view the document, click the required product version.



**NOTE:** You can also directly access the documents using the following links:

- For Enterprise System Management documents — [dell.com/openmanagemanuals](https://dell.com/openmanagemanuals)
- For Remote Enterprise System Management documents — [dell.com/esmmanuals](https://dell.com/esmmanuals)
- For Serviceability Tools documents — [dell.com/serviceabilitytools](https://dell.com/serviceabilitytools)
- For Client System Management documents — [dell.com/OMConnectionsClient](https://dell.com/OMConnectionsClient)
- For OpenManage Connections Enterprise systems management documents — [dell.com/OMConnectionsEnterpriseSystemsManagement](https://dell.com/OMConnectionsEnterpriseSystemsManagement)
- For OpenManage Connections Client systems management documents — [dell.com/OMConnectionsClient](https://dell.com/OMConnectionsClient)

## Prerequisites

Complete the following prerequisites.

### Requirements for the Managing System

The following table lists the requirements for integrating the Dell OpenManage Connection on the systems where the Netcool/OMNIBus 7.3.1 or Netcool/OMNIBus 7.4 components are installed.

**Table 1. IBM 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 communication between the desktop and Dell devices is established.	To retrieve the required information from Dell devices.
Web GUI	Install and configure the OMNIBus web GUI and WAAPI. Make sure that the SNMP communication channel between the web GUI server and the managed Dell systems is established.	To support Dell tools available for Dell OpenManage Connection. To retrieve the required information from Dell devices.

### Requirements for the Managed System

The following table lists the requirements for the systems that are managed by Dell OpenManage Connection.

**Table 2. Managed System Requirements**

Dell Devices	Requirement
Dell Servers Running Windows	<ul style="list-style-type: none"> <li>• OMSA versions 6.5–7.3</li> <li>• SNMP Service</li> </ul>
Dell Servers Running Linux	<ul style="list-style-type: none"> <li>• OMSA versions 6.5–7.3</li> <li>• SNMP Service</li> </ul>
Dell Servers Running ESXi	<ul style="list-style-type: none"> <li>• ESXi version 4.0 U3 and later</li> </ul>

Dell Devices	Requirement
	<ul style="list-style-type: none"> <li>• OMSA versions 6.5–7.3</li> <li>• SNMP Service</li> </ul>
Dell OOB Servers (iDRAC7)	<ul style="list-style-type: none"> <li>• Firmware versions 1.31.30–1.40.40</li> </ul>
iDRAC6 Modular	<ul style="list-style-type: none"> <li>• Firmware versions 3.40–3.50</li> </ul>
iDRAC6 Monolithic	<ul style="list-style-type: none"> <li>• Firmware versions 1.90–1.95</li> </ul>
DRAC5	<ul style="list-style-type: none"> <li>• Firmware versions 1.5–1.65</li> </ul>
DRAC/MC	<ul style="list-style-type: none"> <li>• Firmware versions 1.5–1.6</li> </ul>
CMC	<ul style="list-style-type: none"> <li>• Firmware versions 4.3.1–4.45</li> </ul>
VRTX CMC	<ul style="list-style-type: none"> <li>• Firmware version 1.0</li> </ul>
Dell EqualLogic Storage Arrays	<ul style="list-style-type: none"> <li>• Firmware versions 5.2–6.0</li> </ul>
Dell PowerVault MD Storage Array Systems	<ul style="list-style-type: none"> <li>• Firmware versions 07.80.62.60, 07.84.44.60 and 07.84.47.60</li> </ul>

 **NOTE:** Dell EqualLogic Storage Arrays refers to Dell EqualLogic PS Series.

## Dell OpenManage Connection for Netcool/OMNIBus File and Folder Details

The Dell OpenManage Connection for Netcool/OMNIBus is packaged as a zip file. This is applicable to systems running Windows and Linux. You can download the **Dell\_OpenManage\_Connection\_for\_OMNIBus\_v2\_1.zip** file from [dell.com/support](http://dell.com/support). When you extract the zip file, the following folders and files are extracted:

- **desktop\_integration**
- **objectserver\_integration**
- **probe\_integration**
- **webgui\_integration**
- **Dell\_OMC\_2\_1\_For\_IBM\_OMNIBus\_IG.pdf** — contains the procedure to install Dell OpenManage Connection for IBM Netcool/OMNIBus.
- **Dell\_OMC\_2\_1\_For\_Omnibus\_ReadMe.txt** — contains the details of the new features, system requirements for installing Dell OpenManage Connection for IBM Netcool/OMNIBus, installation prerequisites, and so on.
- **license\_en.txt** — contains the license agreement for IBM Netcool/OMNIBus.

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 3. Netcool/OMNIBus Components**

Component	Integration Folders
<b>probe_integration</b>	Contains the rules and lookup table files for servers, OOB servers, DRAC/MC, iDRAC6, DRAC5, CMC, VRTX CMC, Dell EqualLogic storage arrays, and Dell PowerVault MD Storage Arrays.
<b>objectserver_integration</b>	Contains the exported Dell integration automation triggers, tools, menus, and conversion classes.
<b>desktop_integration</b>	<p>Contains utilities or tools that you require for:</p> <ul style="list-style-type: none"> <li>• Configuring the SNMP community name string.</li> <li>• Launching the Server Administrator console from the Netcool/OMNIBus desktop.</li> <li>• Launching the iDRAC7 console from the Netcool/OMNIBus desktop.</li> <li>• Launching the CMC console from the Netcool/OMNIBus desktop.</li> <li>• Launching the VRTX CMC console from the Netcool/OMNIBus desktop.</li> <li>• Launching the DRAC/MC, iDRAC6, and DRAC5 console from the Netcool/OMNIBus desktop.</li> <li>• Launching the Dell 12G Server Trap Configuration Information from the Netcool/OMNIBus desktop.</li> </ul> <p> <b>NOTE:</b> This integration is not applicable to EqualLogic and Common Dell Tools.</p>
<b>webgui_integration</b>	<p>Contains the Dell integration tools, menus, and applications that you require for:</p> <ul style="list-style-type: none"> <li>• Configuring the SNMP community name string.</li> <li>• Launching the Server Administrator console from the Netcool/OMNIBus web GUI.</li> <li>• Launching the Server Administrator web server console from the Netcool/OMNIBus web GUI.</li> <li>• Launching the EqualLogic Group Manager console from Netcool/OMNIBus web GUI.</li> <li>• Launching the iDRAC console from the Netcool/OMNIBus web GUI.</li> <li>• Launching the CMC console from the Netcool/OMNIBus web GUI.</li> <li>• Launching the VRTX CMC console from the Netcool/OMNIBus web GUI.</li> <li>• Launching the DRAC5, iDRAC6, and DRAC/MC console from the Netcool/OMNIBus web GUI.</li> <li>• Launching the OpenManage Essentials (OME) console from the Netcool/OMNIBus web GUI.</li> </ul>

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Component	Integration Folders
	<ul style="list-style-type: none"><li>• Launching the MDSM console from the Netcool/OMNIbus web GUI.</li><li>• Launching the Dell 12G Server Trap Configuration Information console from the Netcool/OMNIbus web GUI.</li><li>• Launching the Dell Connections License Manager (DCLM) console from the Netcool/OMNIbus web GUI.</li></ul>

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# 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\_v2\_1.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 File and Folder Details](#).

 **NOTE:** You can extract the contents of the zip files as per your monitoring requirement.

2. Log in as Netcool administrator on any system where you have installed any of the Netcool/OMNIBus components.

## Installing Probe Integration

The probe integration folder contains rules, lookup, and version files for the supported Dell devices.

To deploy the integration of Server, iDRAC7, iDRAC6, DRAC5, DRAC/MC, CMC, Dell PowerEdge VRTX CMC, Dell EqualLogic storage arrays, and MD Array traps:

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 **\$NC\_RULES\_HOME\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"
```
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-MIB-Dell-10892.include.snmpttrap.lookup** file include statement in the **dell.master.include.lookup** file.
- c. Uncomment the **dell-StorageManagement-MIB.include.snmpttrap.rules** file include statement in the **dell.master.include.rules** file.
- d. Uncomment the **dell-MIB-Dell-10892.include.snmpttrap.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.

### *OOB server 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.

### *CMC, VRTX CMC, and DRAC (iDRAC6, DRAC5, DRAC/MC) 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.

### *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.
5. Restart the OMNIbus MTTtrapd SNMP probe service (**NCOMTTRAPDProbe**) or process (**nco\_p\_mtttrapd**).

## Installing ObjectServer Integration

The `objectserver_integration` folder contains the files:

- **delldevice\_confpack\_v\_2\_1.jar** — jar file that contains the exported Dell integration automation triggers, tools, menus, and conversion classes for Servers, iDRAC7 server, CMC, VRTX CMC, DRAC5, iDRAC6, DRAC/MC, Dell EqualLogic Storage Arrays, Dell PowerVault MD Storage Arrays, Dell Connections Licence Manager (DCLM), and common tools such as Dell OpenManage Essentials (OME).
- **delldevice\_int\_objectserver.ver** — version file for integration.

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. On systems running Windows:

```
%OMNIHOME%\bin\ncfpack.bat -import -server <ObjectServer> -user  
<username> -password <password> -package <copiedfolder>  
\delldevice_confpack_v_2_1.jar
```

b. On systems running Linux:

```
$OMNIHOME/bin/ncfpack -import -server <ObjectServer> -user  
<username> -password <password> -package <copied folder>/  
delldevice_confpack_v_2_1.jar
```

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

 **NOTE:** If the nco\_confpack command displays the **Unsupported Operating System** error, see [ibm.com/support/docview.wss?crawler=1&uid=swg1IV28036](http://ibm.com/support/docview.wss?crawler=1&uid=swg1IV28036), for resolution.

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.

 **NOTE:** To reconfigure Dell tools for 64-bit IBM Tivoli Netcool/OMNIBus 7.4 on a system running 64-bit linux, see [Reconfiguring Dell tools for IBM Tivoli Netcool/OMNIBus 7.4 on a system running 64-Bit linux](#).

## Reconfiguring Dell tools for IBM Tivoli Netcool/OMNIBus 7.4 on a system running 64-Bit linux

Reconfigure these tools when installing this version of Dell OpenManage connection for IBM Tivoli Netcool/OMNIBus Version 7.4 on a system running 64-Bit linux:

- **LaunchDellOpenManageServerAdministratorConsole**
- **LaunchDellRemoteAccessControllerConsole**
- **LaunchDelliDRACConsole**
- **LaunchDellVRTXCMCCConsole**
- **LaunchDellChassisManagementControllerConsole**
- **Launch12GTrapConfigurationConsole**

To reconfigure, provide the required security credentials to access the OMNIBus ObjectServer and log in to the ObjectServer.

1. In the Configuration window, select **Menu** → **Tools**.

2. Double-click the **Tools** on the right pane to launch the **Tool** details window.

3. Click the executable tab and edit the following string:

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

to

```
$(NCHOME)/platform/linux2x86/jre64_1.6.0/jre/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 the console 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 command:  

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

You must provide the IP address and the port of the Server Administrator Web Server. For example: **https://11.95.145.156:1311/omalogin.html?managedws=false&mnip=@Node**. For more information, see the Server Administrator documentation.

## Configuring OpenManage Essentials 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 command:  

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

You must provide the IP address and the port of the OpenManage Essentials. For example: **https://11.95.145.156:2607/**. For more information, see the *OpenManage Essentials User's Guide* at [dell.com/support/manuals](http://dell.com/support/manuals).

## 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.

To configure the MDSM 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. 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/manuals](http://dell.com/support/manuals).

## 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 Connection License Manager Console (Windows)** on the right pane to launch the **Tool Details** window.

On systems running Linux, double-click **Launch Dell Connection License Manager Console** on the right pane to launch the **Tool Details** window.

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

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

You must provide the IP address and the port of the Connection License Manager. For example: **http://DCLM.domain.com:8544/DellLicenceManagement**. For more information, see the Dell Connection License Manager documentation.

## Installing Desktop Integration

The **desktop\_integration** folder for Dell devices contains the following files:

- **dell\_OMNIBus\_Connection\_SNMP\_Configurator\_v\_2\_1.jar** — configures the SNMP community name string.
- **dell\_OMNIBus\_Connection\_SNMP\_Helper\_v\_2\_1.jar** — launches the consoles of the supported Dell devices.
- **snmp4j-2.1.0.jar** — SNMP Helper uses this file to establish the SNMP communication with Dell devices.
- **dell\_config.properties** — contains the encrypted SNMP community string.
- **delldevice\_int\_desktop.ver** — version file for desktop integration.
- **dell\_OMNIBus\_Connection\_KB\_Tool\_v\_2\_1.jar** — contains Trap Destination configuration information.

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

1. Copy the **dell\_OMNIBus\_Connection\_SNMP\_Configurator\_v\_2\_1.jar**, **dell\_OMNIBus\_Connection\_SNMP\_Helper\_v\_2\_1.jar**, **snmp4j-2.1.0.jar**, **dell\_OMNIBus\_Connection\_KB\_Tool\_v\_2\_1.jar**, and **dell\_config.properties** files in the **%OMNIHOME%** directory on the system where you have installed the desktop client.

 **NOTE:** 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 using the Dell SNMP Configurator utility. For more information, see [Dell SNMP Configurator Utility](#).

4. Add an environmental variable called **OMNIBROWSER** and set it to the path of the default or desired browser.

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

## Installing Web GUI Integration

The **import** sub folder within the **webgui\_integration** folder contains the following files and sub folders:

- **config** — Contains the **cgi-bin** folder with the following files:
  - **omsalauncher\_linux.cgi**
  - **omsalauncher\_nt.cgi**
  - **idraclauncher\_linux.cgi**
  - **idraclauncher\_nt.cgi**
  - **cmclauncher\_linux.cgi**
  - **cmclauncher\_nt.cgi**
  - **vrxcmlauncher\_linux.cgi**
  - **vrxcmlauncher\_nt.cgi**
  - **draclauncher\_linux.cgi**
  - **draclauncher\_nt.cgi**
  - **kblauncher\_linux.cgi**
  - **kblauncher\_nt.cgi**
  - **eqlauncher\_nt.cgi**
  - **eqlauncher\_linux.cgi**
- **dell\_config.properties** — Contains the encrypted SNMP community string.
- **dell\_OMNIBus\_Connection\_SNMP\_Configurator\_v\_2\_1.jar** — Configures the SNMP community name string.
- **dell\_OMNIBus\_Connection\_SNMP\_Helper\_v\_2\_1.jar** — Launches the OpenManage Server Administrator (OMSA), Integrated Dell Remote Access Controller (iDRAC), Dell CMC, VRTX CMC, and DRAC (iDRAC6, DRAC5, and DRAC/MC) URLs.
- **delldevice\_int\_webgui.ver** — Version file for web GUI integration.
- **export.xml** — Exports menus and tools and for registering cgi scripts.
- **snmp4j-2.1.0.jar** — SNMP Helper uses this file to establish the SNMP Communication with Dell devices.

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

1. Copy the **dell\_OMNIBus\_Connection\_SNMP\_Configurator\_v\_2\_1.jar**, **dell\_OMNIBus\_Connection\_SNMP\_Helper\_v\_2\_1.jar**, **snmp4j-2.1.0.jar**, and **dell\_config.properties** files in the <Web GUI home directory> on the system where you have installed the web GUI component.
2. Configure the SNMP Community using the **Dell SNMP Configurator** utility. For more information, see [Dell SNMP Configurator Utility](#).
3. On the system where the web GUI component is installed, in the <Web GUI home directory>, 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:

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 for systems running Windows and \$NCHOME\..\tipv2 on systems running Linux, then run the following command:

On systems running Windows:

```
ln -sf $NCHOME/../../tipv2 <Actual TIPHOME location>
```

On systems running Linux:

```
mklink /J %NCHOME%\..\tipv2 <Actual TIPHOME location>
```

 **NOTE:** The Actual TIPHOME location is the custom path where the Web GUI is installed.

For example:

If the WebGUI component is installed on

```
/opt/IBM/myWebGUI/tipv2
```

then the run the command

```
"ln -sf $NCHOME/../../tipv2 /opt/IBM/myWebGUI/tipv2"
```

## Dell SNMP Configurator Utility

Using the Dell SNMP Configurator utility, you can set the SNMP community string for desktop and web GUI.

 **NOTE:** Once the community string is configured using the Dell SNMP Configurator utility, the same community string is used for OMSA, CMC, VRTX CMC, iDRAC7, and DRAC (iDRAC6, DRAC5, and DRAC/MC) console launches.

Related Links:

- [Using the SNMP Configurator Utility for Desktop](#)
- [Using the SNMP Configurator Utility for Web GUI](#)

### Using the SNMP Configurator Utility for Desktop

To use the SNMP Configurator Utility to set the SNMP community string:

1. Navigate to the %OMNIHOME% directory on the system where the Desktop component is installed.
2. Run the following command for Desktop:
  - a) On systems running Windows:

```
%NCHOME%\platform\<specificplatform>\jre_1.6.7\jre\bin\java -  
Ddell.config.path=desktop -classpath %NCHOME%\omnibus  
\dell_OMNIBus_Connection_SNMP_Configurator_v_2_1.jar;%NCHOME%\omnibus  
\snmp4j-2.1.0.jar com.dell.openmanage.connections.SnmpConfigurator
```

- b) On systems running Linux:

```
$NCHOME/platform/<specificplatform>/jre_1.6.7/jre/bin/java -  
Ddell.config.path=desktop -classpath $NCHOME/omnibus/  
dell_OMNIBus_Connection_SNMP_Configurator_v_2_1.jar:$NCHOME/omnibus/  
snmp4j-2.1.0.jar com.dell.openmanage.connections.SnmpConfigurator
```

### Using the SNMP Configurator Utility for Web GUI

To use the SNMP Configurator utility to set the SNMP community string:

1. Navigate to the web GUI Installation directory on the system where the web GUI component is installed.
2. Run the following command for web GUI:
  - a) On systems running Windows:

```
<Tivoli Integrated Portal home directory>\java\jre\bin\java -  
Ddell.config.path=webgui -classpath %NCHOME%\omnibus_webgui  
\dell_OMNIBus_Connection_SNMP_Configurator_v_2_1.jar;%NCHOME%  
\omnibus_webgui\snmp4j-2.1.0.jar  
com.dell.openmanage.connections.SnmpConfigurator
```

- b) On systems running Linux:

```
<Tivoli Integrated Portal home directory>/java/jre/bin/java -  
Ddell.config.path=webgui -classpath $NCHOME/omnibus_webgui/  
dell_OMNIBus_Connection_SNMP_Configurator_v_2_1.jar:$NCHOME/
```

```
omnibus_webgui/snmp4j-2.1.0.jar
com.dell.openmanage.connections.SnmpConfigurator
```

## 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 on a Dell device alert and make sure that the respective Dell devices 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:  
`https://<Server Administrator Web Server Host/IP>:<Server Administrator Web Server PORT>/omalogin.html?managedws=false&mnip=@Node`  
  
You must provide the IP address and the port of the Server Administrator Web Server. For example: **https://11.95.145.156:1311/omalogin.html?managedws=false&mnip=@Node**. For more information, see the Server Administrator documentation.

## Configuring Dell OpenManage Essentials 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:  
`https://<OpenManage Essentials Host/IP>:<OpenManage Essentials PORT>`  
  
You must provide the IP address and the port of the OME Web Server. For example: **https://11.95.145.156:2607/**. For more information, see the *OpenManage Essentials User's Guide* at [dell.com/support/manuals](http://dell.com/support/manuals).

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

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"`

## 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:  
`http://<DCLM IP/Host>:<DCLM Port>/DellLicenseManagement`  
You must provide the IP address and the port of the Dell Connection License Manager. For example: **http://DCLM.domain.com:8544/DellLicenceManagement**. For more information, see the Dell Connection License Manager documentation.

## Configuring Dell Server Administrator Console on the Web GUI Server on Systems Running Linux

To configure the Launch Dell Server Administrator console on systems running Linux:

1. Log in to the web GUI on systems running Linux.
2. Click **Administration** → **Event Management Tools** → **Tool Creation**.
3. Double-click **LaunchDellServerAdministratorConsole**.
4. Modify the name of the CGI Script in the URL section to **omsalauncher\_linux.cgi**.

## Configuring iDRAC Console on the Web GUI Server on Systems Running Linux

To configure the **Launch iDRAC** tool on systems running Linux:

1. Log in to the web GUI on systems running Linux.
2. Click **Administration** → **Event Management Tools** → **Tool Creation**.
3. Double-click **LaunchDelliDRACConsole**.
4. Modify the name of the CGI Script in the URL section to **idraclauncher\_linux.cgi**.

## Configuring Dell Chassis Management Controller Console on the Web GUI Server on Systems Running Linux

To configure the **Launch ChassisManagement Controller** 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 **LaunchDellChassisManagementControllerConsole**.
4. Modify the name of the CGI Script in the URL section to **cmlauncher\_linux.cgi**.

## Configuring Dell PowerEdge VRTX Chassis Management Controller Console on the Web GUI Server on Systems Running Linux

To configure the **Launch VRTXChassisManagement Controller** tool on systems running Linux :

1. Log in to the web GUI on systems running Linux.
2. Click **Administration** → **Event Management Tools** → **Tool Creation**.
3. Double-click **LaunchDellVRTXChassisManagementControllerConsole**.
4. Modify the name of the CGI Script in the URL section to **vrtxcmlauncher\_linux.cgi**.

## Configuring Dell PowerVault Modular Disk Storage Manager Console on the Web GUI Server on Systems Running Linux

To configure the **Launch Dell Modular Disk Storage Manager** console on systems running Linux:

1. Log in to the web GUI on systems running Linux.
2. Click **Administration** → **Event Management Tools** → **Tool Creation**.
3. Double-click **LaunchDellModularDiskStorageManagerConsole**.
4. Update the following command:  
`"/opt/dell/mdstoragesoftware/mdstoragemanager/client/SMclient"/`

## Configuring Dell Remote Access Controller Console on the Web GUI Server on Systems Running Linux

To configure the **Launch Dell Remote Access Controller Console** tool on systems running Linux:

1. Log on to the web GUI on systems running Linux.
2. Click **Administration** → **Event Management Tools** → **Tool Creation**.
3. Double-click **LaunchDellRemoteAccessControllerConsole**.
4. Modify the name of the CGI script in the URL section to **draclauncher\_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 Installation Guide* at [dell.com/support/manuals](http://dell.com/support/manuals).
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. Restart the OMNIBus MTRapd SNMP probe service (NCOMTTRAPDProbe) 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 Dell EqualLogic Group Manager Console**
  - **Launch iDRAC Console**
  - **Launch Dell Chassis Management Controller Console**
  - **Launch Dell VRTX Chassis Management Controller Console**
  - **Launch Dell OpenManage Essential Console**
  - **Launch Dell Connections License Manager Console**
  - **Launch Dell Modular Disk Storage Manager Console**
  - **Launch Dell 12G 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\_omsa\_clear**
  - **dell\_omsa\_deduplicate\_clear**
  - **dell\_equallogic\_clear**
  - **dell\_equallogic\_deduplicate\_clear**
  - **dell\_idrac\_clear**
  - **dell\_idrac\_deduplicate\_clear**
  - **dell\_dclm\_clear**
  - **dell\_dclm\_deduplicate\_clear**
  - **dell\_mdarray\_clear**
  - **dell\_mdarray\_deduplicate\_clear**
8. In the **Configuration** window, navigate to **Visual Conversions** and expand **Class**. Right-click the following and click **Delete**:
  - **Dell Server (2080)**
  - **Dell EqualLogic (2085)**
  - **Dell iDRAC (2088)**
  - **Dell CMC (2086)**
  - **Dell VRTX CMC (2084)**
  - **Dell DCLM (2081)**
  - **Dell DRAC (2087)**
  - **Dell MD Storage Array (2809)**
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:
    - \* **delldevice\_int\_desktop.ver**
    - \* **dell\_OMNIbus\_Connection\_SNMP\_Configurator\_v\_2\_1.jar**
    - \* **dell\_OMNIbus\_Connection\_SNMP\_Helper\_v\_2\_1.jar**
    - \* **snmp4j-2.1.0.jar**
    - \* **dell\_config.properties**
    - \* **dell\_OMNIbus\_Connection\_KB\_Tool\_v\_2\_1.jar**

# Uninstalling Web GUI Integration

To uninstall the web GUI integration:

1. Log on to the web GUI.
2. Remove the following files from the **webgui\_integration** folder.
  - **delldevice\_int\_webgui.ver**
  - **dell\_OMNIBus\_Connection\_SNMP\_Configurator\_v\_2\_1.jar**
  - **dell\_OMNIBus\_Connection\_SNMP\_Helper\_v\_2\_1.jar**
  - **snmp4j-2.1.0.jar**
  - **dell\_config.properties**
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 EqualLogic Group Manager Console**
  - **Launch iDRAC Console**
  - **Launch Dell Chassis Management Controller Console**
  - **Launch Dell VRTX Chassis Management Controller Console**
  - **Launch OpenManage Essentials Console**
  - **Launch Dell Modular Disk Storage Manager Console**
  - **Launch Dell Connection License Manager Console**
  - **Launch Dell 12G 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**.
  - **omsalauncher\_linux.cgi**
  - **omsalauncher\_nt.cgi**
  - **idraclauncher\_linux.cgi**
  - **idraclauncher\_nt.cgi**
  - **cmclauncher\_linux.cgi**
  - **cmclauncher\_nt.cgi**
  - **vrxcmlauncher\_linux.cgi**
  - **vrxcmlauncher\_nt.cgi**
  - **draclauncher\_linux.cgi**
  - **draclauncher\_nt.cgi**
  - **kblauncher\_linux.cgi**
  - **kblauncher\_nt.cgi**
  - **eqlauncher\_nt.cgi**
  - **eqlauncher\_linux.cgi**
9. Restart the web GUI.



## 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. Visit [dell.com/support](https://dell.com/support)
2. Select your support category.
3. Verify your country or region in the Choose a Country/Region drop-down menu at the top of page.
4. Select the appropriate service or support link based on your need.