Dell OpenManage

Version 6.5

Port Information Guide

Notes and Cautions

NOTE: A NOTE indicates important information that helps you make better use of your computer.

⚠ **CAUTION: A CAUTION indicates potential damage to hardware or loss of data if instructions are not followed.**

Contents

1

Introduction

Overview

The Dell OpenManage Port Information document helps system administrators and technicians to identify the ports used by the Dell OpenManage systems management software, standard operating system services, and other agent applications.

Other Documents You May Need

In addition to this guide, you can access the following guides available on the Dell Support website at **support.dell.com/manuals**. On the **Manuals** page, click **Software → Systems Management**. Click on the appropriate product link on the right-side to access the documents.

- The *Dell Systems Software Support Matrix* provides information about the various Dell systems, the operating systems supported by these systems, and the Dell OpenManage components that can be installed on these systems.

- The *Dell OpenManage Server Administrator Installation Guide* contains instructions to help you install Dell OpenManage Server Administrator.

- The *Dell OpenManage Management Station Software Installation Guide* contains instructions to help you install Dell OpenManage management station software that includes Baseboard Management Utility, DRAC Tools, and Active Directory Snap-In.

- The *Dell OpenManage Server Administrator SNMP Reference Guide* documents the Simple Network Management Protocol (SNMP) management information base (MIB). The SNMP MIB defines variables that extend the standard MIB to cover the capabilities of systems management agents.

- The *Dell OpenManage Server Administrator CIM Reference Guide* documents the Common Information Model (CIM) provider, an extension of the standard management object format (MOF) file. The CIM provider MOF documents supported classes of management objects.

- The *Dell OpenManage Server Administrator Messages Reference Guide* lists the messages that are displayed in your **Server Administrator** home page Alert log or on your operating system's event viewer. This guide explains the text, severity, and cause of each Instrumentation Service Alert message that Server Administrator issues.

- The *Dell OpenManage Server Administrator Command Line Interface User's Guide* documents the complete command line interface for Server Administrator, including an explanation of CLI commands to view system status, access logs, create reports, configure various component parameters, and set critical thresholds.

- The *Integrated Dell Remote Access Controller User's Guide* provides detailed information on configuring and using the iDRAC.

- The *Dell Chassis Management Controller User's Guide* provides detailed information on installing, configuring and using CMC.

- The *Dell Online Diagnostics User's Guide* provides complete information on installing and using Online Diagnostics on your system.

- The *Dell OpenManage Baseboard Management Controller Utilities User Guide* provides additional information about using Server Administrator to configure and manage your system's BMC.

- The *Dell OpenManage Server Administrator Storage Management User's Guide* is a comprehensive reference guide for configuring and managing local and remote storage attached to a system.

- The *Dell Remote Access Controller Racadm User's Guide* provides information about using the racadm command-line utility.

- The *Dell Remote Access Controller 5 User's Guide* provides complete information about installing and configuring a DRAC 5 controller and using DRAC 5 to remotely access an inoperable system.

- The *Dell Update Packages User's Guide* provides information about obtaining and using Dell Update Packages as part of your system update strategy.

- The *Dell OpenManage Server Update Utility User's Guide* provides information about obtaining and using the Server Update Utility (SUU) to update your Dell systems or to view the updates available for any systems listed in the Repository.

- The *Dell Management Console User's Guide* has information about installing, configuring, and using Dell Management Console. Dell Management Console is a Web-based systems management software that enables you to discover and inventory devices on your network. It also provides advanced functions, such as health and performance monitoring of networked devices and patch management capabilities for Dell systems.

- The *Dell Lifecycle Controller User Guide* provides information on setting up and using the Unified Server Configurator to perform systems and storage management tasks throughout your system's lifecycle. You can use the Unified Server Configurator to deploy an operating system, configure a Redundant Array of Independent Disks (RAID), and run diagnostics to validate the system and attached hardware. Remote Services capabilities enable automated system platform discovery by management consoles and enhance remote operating system deployment capabilities. These capabilities are exposed through the web services based hardware management interface provided by the Lifecycle Controller firmware.

- The *Glossary* for information on terms used in this document.

Obtaining Technical Assistance

If at any time your product does not perform as expected, help tools are available to assist you. For more information about these help tools, see "Getting Help" in your system's *Hardware Owner's Manual*.

Additionally, Dell Enterprise Training and Certification is available; see **dell.com/training** for more information. This service may not be offered in all locations.

2

Ports

Table 2-1 lists the ports used by the Dell OpenManage systems management software, standard operating system services, and other agent applications.

NOTE: Ports that are configured correctly are necessary to allow Dell OpenManage systems management software to connect to a remote device through firewalls.

NOTE: The version of the systems management software mentioned in Table 2-1 indicates the minimum version of the product required to use that port.

Table 2-1. Dell OpenManage UDP/TCP Ports Default Locations

Port #	Protocol	Port Type	Version	Maximum Encryption Level	Direction	Usage	Config-urable
Dell OpenManage Storage Management							
5554	TCP	TCP	4.x	None	In/Out	Personal agent to transfer data between LSI IDE solution server and client	No
Dell Management Console							
22	SSH	TCP	1.x	128-bit	None	SSH client Remote software updates to Server Administrator—for systems supporting Linux operating systems Performance monitoring in Linux systems	Yes
23	Telnet	TCP	1.x	None	In/Out	Telnet to Linux device	No

Table 2-1. Dell OpenManage UDP/TCP Ports Default Locations *(continued)*

Port #	Protocol	Port Type	Version	Maximum Encryption Level	Direction	Usage	Config-urable
25	SMTP	TCP	1.x	None	In/Out	Optional e-mail alert action from Dell Management Console	No
67,68, 69, 4011	PXE	UDP				PXE and DHCP	
68	UDP	UDP	1.x	None	In/Out	Wake-on-LAN	Yes
53, 80, 135, 137, 139, 150, 1433, 2500		TCP				Symantec Console — Console using a remote computer	
80	HTTP	TCP	1.x	None	In/Out	Application launch— PowerConnect Console	No
	ICMP					Ping	
135, 137, 139, 445		TCP/ UDP				Non-HTTP communications (for example, client package download using UNC)	
135	RPC/DCOM	TCP/ UDP	1.x	None	In/Out	WMI/CIM management queries	No
138		UDP				NS client installation	
161	SNMP	UDP	1.x	None	In/Out	SNMP query management	No
162	SNMP	UDP	1.x	None	In/Out	SNMP Event Reception and Trap Forwarding	No

Table 2-1. Dell OpenManage UDP/TCP Ports Default Locations *(continued)*

Port #	Protocol	Port Type	Version	Maximum Encryption Level	Direction	Usage	Config-urable
389	LDAP	TCP	1.x	128-bit	In/Out	Domain authentication for IT Assistant log on	No
401-402		TCP/ UDP			In/Out	Deployment Solution: is used to tickle the Aclient	
443	Proprietary/ Symantec Agent, WSMAN	TCP	1.x	None	In/Out	EMC storage discovery and inventory, Symantec Agent after installation	No
445		UDP				Non-HTTP communications (for example, client package download using UNC)	
623	RMCP	UDP	1.x	None	In/Out	IPMI, WS-MAN, and ASF management	No
664	RMCP	UDP			In/Out	Secure ASF management	Yes
1010	PXE	TCP				Deployment Solution: PXE configuration to talk with PXE configuration Service	
1011		TCP				Monitor Solution	
2070-2073, 1758, 1759	PXE	UDP				Deployment Solution: PXE for TFPT and MTFTP transfer of PXE image	

Table 2-1. Dell OpenManage UDP/TCP Ports Default Locations *(continued)*

Port #	Protocol	Port Type	Version	Maximum Encryption Level	Direction	Usage	Config-urable
3389	RDP	TCP	1.x	128-bit SSL	In/Out	Application launch—Remote desktop to Windows terminal services	Yes
3829, 4949, 4950, 4951		TCP				Used by Symantec Deployment Solutions and PCT Real Time to communicate between PCTWiz and RTDestAgent and to search for RTDestAgent	
4952		TCP				Deployment Solutions communication used for managing the connection drops	
6389	Proprietary	TCP	1.x	None	In/Out	Enables communication between a host system (through NaviCLI/NaviSecCLI or Navisphere Host Agent) and a Navisphere Array Agent on a storage system	No
8080						Deployment Solutions Web Console	

Table 2-1. Dell OpenManage UDP/TCP Ports Default Locations *(continued)*

Port #	Protocol	Port Type	Version	Maximum Encryption Level	Direction	Usage	Config-urable
16992					Out	AMT management unsecure	No
16993					Out	AMT management secure	No
16994					Out	AMT management redirection service unsecure	No
16995					Out	AMT management redirection service secure	No
50120-50124						Task Server	
52028, 52029		TCP				NS Client Multicast	
1024 - 65535	DCOM	TCP/UDP	Unknown	None	In/Out	WMI query management (random port)	OS - msdn. microsoft.com/ enus/library/ms 809327. aspx
Dell OpenManage Baseboard Management Controller - PowerEdge *x8xx* systems							
623	RMCP	UDP	PowerEdge *x8xx* systems only	None	In/Out	IPMI access through LAN	No

Table 2-1. Dell OpenManage UDP/TCP Ports Default Locations _(continued)_

Port #	Protocol	Port Type	Version	Maximum Encryption Level	Direction	Usage	Config-urable
Dell OpenManage Baseboard Management Utility							
623	Telnet	TCP	1.x	None	In/Out	Accepts incoming Telnet connections	Yes
623	RMCP	UDP	1.x	None	In/Out	Basic BMC commands: server status, power up/down, and so on.	No
623	RMCP	UDP	1.x	None	In/Out	Basic BMC commands and console redirection	No
Dell OpenManage Client Instrumentation							
20	HTTP and FTP	TCP	7.x	None	In/Out	Flash BIOS communication	No
21	HTTP and FTP	TCP	7.x	None	In/Out	Flash BIOS communication	No
80	HTTP and FTP	TCP	7.x	None	In/Out	Flash BIOS communication	No
135	DCOM	TCP/UDP	7.x, 8.x	None	In/Out	Monitoring and configuration through WMI	No
135	DCOM	TCP	7.x, 8.x	None	Out	Event transmission through WMI	No
161	SNMP	UDP	8.x	None	In/Out	SNMP query management	No
162	SNMP	UDP	8.x	None	Out	SNMP trap event	No
1024-65535 (Dynamically assigned)	DCOM	TCP/UDP	7.x, 8.x	None	In/Out	Monitoring and configuration through WMI	No

Table 2-1. Dell OpenManage UDP/TCP Ports Default Locations *(continued)*

Port #	Protocol	Port Type	Version	Maximum Encryption Level	Direction	Usage	Config-urable
Dell OpenManage IT Assistant							
22	SSH	TCP	7.x	128-bit	In/Out	IT Assistant contextual application launch—SSH client Remote software updates to Server Administrator—for systems supporting Linux operating systems Performance monitoring in Linux systems	Yes
23	Telnet	TCP	7.x	None	In/Out	IT Assistant contextual application launch—Telnet to Linux device	No
25	SMTP	TCP	7.x	None	In/Out	Optional e-mail alert action from IT Assistant	No
68	UDP	UDP	7.x	None	Out	Wake-on-LAN	Yes
80	HTTP	TCP	7.x	None	In/Out	IT Assistant contextual application launch— PowerConnect console	No

Table 2-1. Dell OpenManage UDP/TCP Ports Default Locations *(continued)*

Port #	Protocol	Port Type	Version	Maximum Encryption Level	Direction	Usage	Config-urable
135	RPC	TCP	7.x	None	In/Out	Event reception through CIM from Server Administrator—for systems supporting Windows operating systems	No
135	RPC	TCP/ UDP	7.x	None	In/Out	Remote software update transfer to Server Administrator—for systems supporting Windows operating systems Remote Command Line— for systems supporting Windows operating systems	No
161	SNMP	UDP	7.x	None	In/Out	SNMP query management	No
162	SNMP	UDP	7.x	None	In	Event reception through SNMP	No
162	SNMP	UDP	7.x	None	Out	SNMP trap forwarding action from IT Assistant	No
389	LDAP	TCP	7.x	128-bit	In/Out	Domain authentication for IT Assistant log on	No
443	Proprietary	TCP	8.0	None	In/Out	EMC Storage discovery and inventory	No

Table 2-1.   Dell OpenManage UDP/TCP Ports Default Locations (continued)

Port #	Protocol	Port Type	Version	Maximum Encryption Level	Direction	Usage	Config-urable
623	RMCP	UDP	8.0	None	In/Out	IPMI access through LAN	No
1433	Proprietary	TCP	7.x	None	In/Out	Optional remote SQL server access	Yes
2606	Proprietary	TCP	7.x	None	In/Out	Network monitoring service communication port	Yes
2607	HTTPS	TCP	7.x	128-bit SSL	In/Out	IT Assistant Web GUI	Yes
3389	RDP	TCP	7.x	128-bit SSL	In/Out	IT Assistant contextual application launch—Remote desktop to Windows terminal services	Yes
6389	Proprietary	TCP	8.0	None	In/out	Enables communication between a host system (through NaviCLI/NaviSec CLI or Navisphere Host Agent) and a Navisphere Array Agent on a Storage system	No
Dell Chassis Management Controller							
20	FTP	TCP		None	Out	FTP data client	No
21	FTP	TCP		None	Out	FTP command client	No
22	SSH	TCP		128-bit	In	SSH server	Yes

Table 2-1.   Dell OpenManage UDP/TCP Ports Default Locations _(continued)_

Port #	Protocol	Port Type	Version	Maximum Encryption Level	Direction	Usage	Config-urable
23	Telnet	TCP		None	In	Telnet server	Yes
25	SMTP	TCP		None	Out	SMTP client	No
53	DNS	TCP		None	Out	DNS client	No
67[a]	DHCP	UDP					
68[a]	DHCP-assigned IP address	UDP		None	Out	DHCP client	No
69	TFTP	UDP		None	Out	TFTP client	No
80	HTTP	TCP		None	In	HTTP server	Yes
161	SNMP Agent	UDP		None	In	SNMP Agent (server)	No
162	SNMP Trap	UDP		None	Out	SNMP trap client	No
443	HTTPS	TCP		128-bit	In	HTTPS server	Yes
514	Remote syslog	TCP		None	Out	Syslog client	Yes
636	LDAPS, Active Directory	TCP		SSL	Out	LDAPS, Active Directory client	Yes
3269	LDAPS for global catalog (GC)	TCP		None	Out	Active Directory client	No

a. When a DHCP client connects to a DHCP server, the source port is 68 and the destination port is 67. When the DHCP server responds to the DHCP client, the source port is 67 and destination port is 68. The CMC only acts as a DHCP client.

Table 2-1. Dell OpenManage UDP/TCP Ports Default Locations *(continued)*

Port #	Protocol	Port Type	Version	Maximum Encryption Level	Direction	Usage	Config-urable
Dell OpenManage Server Administrator							
22	SSH	TCP	2.0	128-bit	In/Out	Remote Server Administrator Command Line (for IT Assistant.) Remote Software Update feature (for Linux operating systems.)	Yes
25	SMTP	TCP	2.0	None	In/Out	Optional e-mail alert messages from Server Administrator	No
135	RPC	TCP/ UDP	2.0	None	In/Out	CIM management queries	No
135	RPC	TCP/ UDP	2.0	None	In/Out	Remote Server Administrator Command Line (for IT Assistant). Remote software update feature (for Windows operating systems.)	No
139	NetBIOS	TCP	2.0	None	In/Out	Remote Server Administrator Command Line (for IT Assistant.) Remote Software Update (for Windows operating systems.)	No
161	SNMP	UDP	1.x, 2.0	None	In/Out	SNMP query management	No

Table 2-1. Dell OpenManage UDP/TCP Ports Default Locations *(continued)*

Port #	Protocol	Port Type	Version	Maximum Encryption Level	Direction	Usage	Config- urable
162	SNMP	UDP	1.x, 2.0	None	Out	SNMP trap event	No
443	HTTPS	TCP	7.x	128-bit SSL	In/Out	Remote Management using Web Server to connect to OpenWSMAN/Wi nRM)	Yes
445	NetBIOS	TCP	2.0	None	In/Out	Remote software updates to Server Administrator (for Windows operating systems.)	No
1311	HTTPS	TCP	1.x	128-bit SSL	In/Out	Web GUI	Yes
1311	HTTPS	TCP	7.x	128-bit SSL	In/Out	Server Administrator Web GUI	Yes
11487	Proprietary	UDP	1.x	None	In	Remote Flash BIOS update initiation from IT Assistant	Yes
11489	Proprietary	TCP	1.x	None	In	Remote Flash BIOS update file transfer from IT Assistant	Yes
1024 - 65535	DCOM	TCP/ UDP	2.0	None	In/Out	CIM/WMI query management	Yes

Table 2-1. Dell OpenManage UDP/TCP Ports Default Locations *(continued)*

Port #	Protocol	Port Type	Version	Maximum Encryption Level	Direction	Usage	Config-urable
Dell Remote Access Controller (DRAC): DRAC III, DRAC III/XT, ERA, and ERA/O							
21	FTP	TCP	1.0	None	In/Out	Firmware update through FTP and certificate upload or download	No
23	Telnet	TCP	1.0	None	In/Out	Optional Telnet-based CLI management	No
25	SMTP	TCP	1.0	None	In/Out	Optional e-mail alert messages	No
68	DHCP	UDP	1.2	None	In/Out	DHCP assigned IP address	No
69	TFTP	UDP	1.0	None	In/Out	Firmware update through Trivial FTP. Remote floppy boot through TFTP	No
80	HTTP	TCP	1.0	None	In/Out	Web GUI redirected to HTTPS	No
162	SNMP	UDP	1.0	None	Out	SNMP trap event	No
443	HTTPS	TCP	1.0	128-bit SSL	In/Out	Web management GUI	No
443	HTTPS	TCP	3.2	128-bit SSL	In/Out	Remote racadm CLI utility	No
5869	Proprietary	TCP	1.0	None	In/Out	Remote racadm CLI utility	No
5900	VNC	TCP	1.0	56 bit DES	In/Out	Video redirection	Yes

Table 2-1. Dell OpenManage UDP/TCP Ports Default Locations *(continued)*

Port #	Protocol	Port Type	Version	Maximum Encryption Level	Direction	Usage	Config-urable
5900	VNC	TCP	3.2	128-bit RC	In/Out	Video redirection	Yes
5981	VNC	TCP	1.0	None	In/Out	Video redirection	Yes
random and > 32768	Proprietary	TCP	1.0	None	In/Out	Firmware update from the Web GUI	No
DRAC 4							
22	SSHv2	TCP	1.30	128-bit	In/Out	Optional Secure Shell (SSH) CLI management	Yes
23	Telnet	TCP	1.0	None	In/Out	Optional Telnet CLI management	Yes
25	SMTP	TCP	1.0	None	In/Out	Optional e-mail alert messages	No
53	DNS	UDP	1.20	None	In/Out	Dynamic Domain name server (DNS) registration of the host name assigned within DRAC	No
68	DHCP	UDP	1.0	None	In/Out	DHCP assigned IP address	No
69	TFTP	UDP	1.0	None	In/Out	Firmware update through Trivial FTP	No
80	HTTP	TCP	1.0	None	In/Out	Web GUI redirected to HTTPS	Yes
161	SNMP Agent	UDP	1.0	None	In/Out	SNMP query management	No
162	SNMP	UDP	1.0	None	Out	SNMP trap event	No

Table 2-1. Dell OpenManage UDP/TCP Ports Default Locations *(continued)*

Port #	Protocol	Port Type	Version	Maximum Encryption Level	Direction	Usage	Config- urable
443	HTTPS	TCP	1.0	128-bit SSL	In/Out	Web management GUI and remote RACADM CLI utility	Yes
636	LDAP	TCP	1.0	128-bit SSL	In/Out	Optional Active Directory Services (ADS) authentication	No
3269	LDAP for global catalog (GC)	TCP	1.0	128-bit SSL	In/Out	Optional ADS authentication	No
3668	Proprietary	TCP	1.0	None	In/Out	CD or diskette virtual media service	Yes
5869	Proprietary	TCP	1.0	None	In/Out	Remote RACADM spcmp server	No
5900	Proprietary	TCP	1.0	128bit RC4, Keyboard/ mouse traffic only	In/Out	Console redirection	Yes
DRAC/MC							
23	Telnet	TCP	1.0	None	In/Out	Optional Telnet CLI management	Yes
25	SMTP	TCP	1.0	None	In/Out	Optional e-mail alert messages	No
53	DNS	UDP	1.0	None	In/Out	Dynamic DNS registration of host name assigned within DRAC	No

Table 2-1. Dell OpenManage UDP/TCP Ports Default Locations *(continued)*

Port #	Protocol	Port Type	Version	Maximum Encryption Level	Direction	Usage	Config-urable
68	DHCP	UDP	1.0	None	In/Out	DHCP assigned IP address	No
69	TFTP	UDP	1.0	None	In/Out	Firmware update through Trivial FTP	No
80	HTTP	TCP	1.0	None	In/Out	Web GUI redirected to HTTPS	Yes
161	SNMP Agent	UDP	1.0	None	In/Out	SNMP query management	No
162	SNMP trap	UDP	1.0	None	Out	SNMP trap event	No
389	Active Directory authentication	TCP	1.0	None	In/Out	Optional ADS authentication	No
443	HTTPS	TCP	1.0	128-bit SSL	In/Out	Web management GUI and remote racadm CLI utility	No
636	Active Directory authentication	TCP	1.0	128-bit SSL	In/Out	Optional ADS authentication	No
3269	Active Directory authentication	TCP	1.0	128-bit SSL	In/Out	Optional ADS authentication	No
DRAC 5							
22	SSHv2	TCP	1.30	128-bit SSL	In/Out	Optional Secure Shell (SSH) CLI management	Yes
23	Telnet	TCP	1.0	None	In/Out	Optional Telnet CLI management	Yes

Table 2-1.   Dell OpenManage UDP/TCP Ports Default Locations *(continued)*

Port #	Protocol	Port Type	Version	Maximum Encryption Level	Direction	Usage	Config-urable
25	SMTP	TCP	1.0	None	In/Out	Optional e-mail alert messages	No
53	DNS	UDP	1.0	None	In/Out	Dynamic DNS registration of host name assigned within DRAC	No
68	DHCP	UDP	1.0	None	In/Out	DHCP assigned IP address	No
69	TFTP	UDP	1.0	None	In/Out	Firmware update through Trivial FTP	No
80	HTTP	TCP	1.0	None	In/Out	Web GUI redirected to HTTPS	Yes
161	SNMP	UDP	1.0	None	In/Out	SNMP query management	No
162	SNMP	UDP	1.0	None	Out	SNMP trap event	No
443	HTTPS	TCP	1.0	128-bit SSL	In/Out	Web management GUI and remote racadm CLI utility	No
623	RMCP/RMCP+	UDP	1.0	128-bit SSL	In/Out	IPMI over LAN	No
636	LDAPS	TCP	1.0	128-bit SSL	In/Out	Optional ADS authentication	No
3269	LDAPS for global catalog (GC)	TCP	1.0	128-bit SSL	In/Out	Optional ADS authentication	No
3668	Proprietary	TCP	1.0	None	In/Out	Virtual Media Service	Yes
3669	Proprietary	TCP	1.0	128-bit SSL	In/Out	Virtual Media Secure Service	Yes

Table 2-1. Dell OpenManage UDP/TCP Ports Default Locations *(continued)*

Port #	Protocol	Port Type	Version	Maximum Encryption Level	Direction	Usage	Config-urable
5900		TCP	1.0	128-bit SSL	Out	Console Redirection:keyboard/mouse	Yes
5901		TCP	1.0	128-bit SSL	In	Console Redirection: Video	Yes
iDRAC 6 1.54 for Rack and Tower Servers							
22	SSH						Yes
23	Telnet						Yes
25	SMTP						No
53	DNS						No
68	DHCP-assigned IP address						No
69	TFTP						No
80	HTTP						Yes
161	SNMP Agent						No
162	SNMP Trap						No
443	HTTPS						Yes
623	RMCP/RMCP+						No
636	LDAPS						No
5900	Virtual Console/Virtual Media						Yes
3269	LDAPS for global catalog (GC)						No

Table 2-1. **Dell OpenManage UDP/TCP Ports Default Locations** *(continued)*

Port #	Protocol	Port Type	Version	Maximum Encryption Level	Direction	Usage	Config-urable
iDRAC for Blade Servers							
22	Secure Shell (SSH)	TCP	1.30	128-bit SSL	In/Out	Secure CLI management	Yes
23	Telnet	TCP	1.0	None	In/Out	Optional Telnet-based CLI management	Yes
25	SMTP	TCP	1.0	None	In/OUt	Optional e-mail alert messages	No
53	DNS	UDP	1.0	None	In/Out	Dynamic DNS registration of host name assigned within DRAC	No
68	DHCP-assigned IP address	UDP	1.0	None	In/Out	DHCP assigned IP address	No
69	TFTP	UDP	1.0	None	In/Out	Firmware update through Trivial FTP	No
80	HTTP	TCP	1.0	None	In/Out	Redirected to HTTPS	Yes
162	SNMP traps	UDP	1.0	None	Out	SNMP trap event	No
443	HTTPS	TCP	1.0	128-bit SSL	In/Out	Web management GUI	Yes
623	RMCP/RMCP+	UDP	1.0	128-bit SSL	In/Out	IPMI over LAN	No
636	LDAPS	TCP	1.0	128-bit SSL	In/Out	Optional ADS authentication	No
3269	LDAPS for global catalog (GC)	TCP	1.0	128-bit SSL	In/Out	Optional ADS authentication	No

Table 2-1.   Dell OpenManage UDP/TCP Ports Default Locations *(continued)*

Port #	Protocol	Port Type	Version	Maximum Encryption Level	Direction	Usage	Config- urable
3668, 3669	Virtual Media Service	TCP	1.0	None-SSL	In/Out	For the Virtual Media transfer	Yes
3670, 3671	Virtual Media Secure Service	TCP	1.0	SSL	In/Out	For Virutal Media redirection and transfer	Yes
5900	Console Redirection keyboard/mo use	TCP	1.0	Non-SSL	In/Out	For mouse and keyboard redirection	Yes
5901	Console Redirection video	TCP	1.0	None-SSL	In/Out	For video redirection	Yes
iDRAC 6 Enterprise for Blade Servers							
22	SSH	TCP	1.30	128-bit SSL	In/Out	Secure CLI management	Yes
23	Telnet	TCP	1.0	None	In/Out	Optional Telnet-based CLI management	Yes
25	SMTP	TCP	1.0	None	In/Out	Optional e-mail alert messages	No
53	DNS	UDP	1.0	None	In/Out	Dynamic DNS registration of host name assigned within DRAC	No
68	DHCP-assigned IP address	UDP	1.0	None	In/Out	DHCP assigned IP address	No
69	TFTP	UDP	1.0	None	In/Out	Firmware update through Trivial FTP	No

Table 2-1.   Dell OpenManage UDP/TCP Ports Default Locations *(continued)*

Port #	Protocol	Port Type	Version	Maximum Encryption Level	Direction	Usage	Config-urable
80	HTTP	TCP	1.0	None	In/Out	Redirected to HTTPS	Yes
162	SNMP trap	UDP	1.0	None	Out	SNMP trap event	No
443	HTTPS	TCP	1.0	128-bit SSL	In/Out	Web management CLI	Yes
623	RMCP/RMCP+	UDP	1.0	128-bit SSL	In/Out	IPMI over LAN	No
636	LDAPS	TCP	1.0	128-bit SSL	In/Out	Optional ADS authentication	No
3269	LDAPS for global catalog (GC)	TCP	1.0	128-bit SSL	In/Out	Optional ADS authentication	No
3668, 3669	Virtual Media Service	TCP	1.0	Non-SSL	In/Out	For Virtual Media transfer	No
3670, 3671	Virtual Media Secure Service	TCP	1.0	SSL	In/Out	For Virtual Media redirection and transfer	No
5900	Console Redirection keyboard/mouse	TCP	1.0	Non-SSL	In/Out	For mouse and keyboard redirection	Yes
5901	Console Redirection video	TCP	1.0	Non-SSL	In/Out	For video redirection	Yes

Table 2-1. Dell OpenManage UDP/TCP Ports Default Locations *(continued)*

Port #	Protocol	Port Type	Version	Maximum Encryption Level	Direction	Usage	Config-urable
5988	Used for WS-MAN	TCP	1.0	None	In/Out	No interface will be able to communicate directly. It is enabled and listen only for the loopback interface. This is used for WS-MAN communication.	No
Digital KVM							
2068	Proprietary	TCP	1.0	128-bit SSL	In/Out	Video redirection — keyboard/mouse	No
3668	Proprietary	TCP	1.0	None	In/Out	Virtual Media	No
8192	Proprietary	TCP	1.0	None	In/Out	Video redirection to client viewer	No

🖉 **NOTE:** CIM ports are dynamic. See the Microsoft knowledge base at **support.microsoft.com** for information on CIM port usage.

🖉 **NOTE:** If you are using a firewall, you must open all ports listed in Table 2-1 to ensure that IT Assistant and other Dell OpenManage applications function correctly.