iDRAC7 Version 1.30.30 With Lifecycle Controller 2 Version 1.1 Quick Start Guide



# Notes, Cautions, and Warnings

🖉 NOTE:

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.

M WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

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# Overview

This Quick Start Guide provides the basic steps to set up and use the Integrated Dell Remote Access Controller 7 (iDRAC7) version 1.30.30 with Lifecycle Controller 2 version 1.1. For links to detailed information on all available features, see <u>Additional Information</u>.

The following terms are used in this document:

- Managed System The PowerEdge server containing the iDRAC7.
- Management Station A workstation used to manage the iDRAC7 remotely through a Web browser.

# **Configuring Initial iDRAC7 Network Settings**

You must configure the initial network settings based on your network infrastructure to enable communication with the iDRAC7 from your management station.

- 1. Turn on or reboot the managed system.
- 2. During Power-On Self-Test (POST), press <F2> when F2 = System Setup is displayed in the upper right corner of the screen as shown in the following figure.



Figure 1. Selecting F2 to Enter System Setup

3. On the System Setup Main Menu page, click iDRAC Settings, and then click Network. The iDRAC Settings.Network page is displayed.

| DRAC Settings • Network                          |   |      |
|--|---|------|
| Enable NIC                                       | Clicabled      Enabled                                  |      |
| NIC Selection                                    | Dedicated (DRAC? Enterryise only)                       |      |
| Fallover Network                                 | Dedicated (DRAC7 Enterprise only)                       |      |
| MAC Address                                      | LOM1  |      |
| Auto Negotiation                                 | LOM2  |      |
| Auto Dedicated NIC                               | LOM3<br>LOM4  |      |
| Network Speed                                    | 0 10 Mbps 0 100 Mbps @ 1000 Mbps                        |      |
| Active NIC Interface                             | Dedicated (IDRAC7 Enterprise only)                      |      |
| Duplex Mode                                      | → Half Duplex   |      |
| COMMON SETTINGS                                  |   |      |
| Register DRAC on DNS                             | Bisabled     C Enabled                                  |      |
|  |   |      |
| Displays the current mode out of the LOM3, LOM4. | e five possible modes: Dedicated (DRAC NC), LOM1, LOM2, |      |
| PowerEdge R720                                   | Arrow keys and Enter to select                          | Back |
| Service Teat ICS0001                             | Esc to exit name Tab to change focus                    | Dath |

#### Figure 2. Network Settings

- 4. Specify the following settings:
  - Network Settings:
    - \* Enable NIC — Set this to Enabled.
    - \* NIC Selection (rack and tower servers only) - Select the Dedicated (iDRAC7 Enterprise only) option if it is available. Otherwise, select one of the listed LOMs to be used for the iDRAC traffic (the selected LOM is shared with the operating system). Make sure a network cable is connected to the appropriate port.



**NOTE:** The **Dedicated (iDRAC7 Enterprise only)** option is available only on rack or tower systems with iDRAC7 Enterprise license.

| iDRAC Settings   |   |      |
|--|---|------|
| iDRAC Settings • Network   |   |      |
| COMMON SETTINGS  |   |      |
| Register DRAC on DNS   | O Disabled      Enabled   |      |
| DNS DRAC Name  | idrac-CDVB7R1   |      |
| Auto Config Domain Name  | Oisabled     O Enabled  |      |
| Static DNS Domain Name   | test.lab  |      |
| IPV4 SETTINGS  |   |      |
| Enable IPv4  | O Disabled @ Enabled  |      |
| Enable DHCP  | O Disabled      Enabled   |      |
| Static IP Address  | 192.168.0.120   |      |
| Static Gateway   | 192.168.0.1   |      |
| Static Subnet Mask   | 255.255.0   |      |
| Use DHCP to obtain DNS server addresses  | O Enabled   |      |
| Static Preferred DNS Server  | 172.23.199.29   |      |
|  |   |      |
| Enter the static DNS domain name to be us<br>Config Domain Name option is selected, this | ed if it was not acquired from DHCP, When the Auto<br>option is disabled. |      |
| DouwerEnders D720  | Arrow Louis and Enter to calast   |      |
| Service Teat ICS0004   | Final to and page. Tak to share factor                                    | Back |

Figure 3. Common Settings and IPv4 Settings

- Common Settings (Optional):
  - \* **Register DRAC on DNS** Select **Enabled** for the iDRAC7 to automatically register itself with the DNS server, if the DNS server is configured to allow dynamic updates.

**NOTE:** If this field is grayed-out, then to edit the field, either the **Enabled DHCP** option under **IPv4 Settings** or the **Enable Auto-configuration** option under **IPv6 Settings** must be enabled.

- \* **DNS DRAC Name** The default name is idrac-<Dell Service Tag #>. Use the default name or specify a unique name for the iDRAC.
- \* **Auto Config Domain Name** Set this to **Enabled** if you are using a DCHP server that is configured to provide the domain name.
- \* Static DNS Domain Name Specify the domain name, for example test.lab, if Auto Config Domain Name is set to Disabled.
- IPv4 Settings:

**NOTE:** You can also use the **IPv6 Settings** section instead of IPv4. See the *iDRAC7 User's Guide* available at **dell.com/support/manuals** for the IPv6 configuration.

- \* Enable IPv4 Set this to Enabled.
- Enable DHCP Select Enabled if you are using a DHCP server to assign the IP address, gateway, and subnet mask. Else, select Disabled and enter the values for IP Address, Gateway, and Subnet Mask.
- \* Use DHCP to obtain DNS server addresses Set this to Enabled if you are using a DHCP server that is configured to provide DNS server addresses. Else, select Disabled and enter the IP addresses for the Static Preferred DNS Server and optionally the Static Alternate DNS Server.
- 5. Click **Back**, **Finish**, and then click **Yes** when prompted to save changes.

The network settings are configured.

6. Exit and allow the server to reboot.



NOTE: If you have enabled DHCP and are not connecting to iDRAC7 using the Fully Qualified Domain Name (FQDN) of the iDRAC, you can obtain the iDRAC's DHCP address from:

- The front LCD panel on systems that have them.
- Go back to F2 = System Setup, click iDRAC Settings and then click System Summary. Under the \_ Current IPv4 Settings section, view the Current IP Address value.

|   |  | Help   About   Exit |
|---|--|---------------------|
| iDRAC Settings                                |  |                     |
| iDRAC Settings • System Summary               |  |                     |
| DHCP Enabled                                  | Yes  |                     |
| Current Subnet Mask                           |  |                     |
| Current Gateway                               | 172.23.68.254<br>Yes                       |                     |
| Current Preferred DNS Server                  |  |                     |
| Current Pv6 Settings                          |  | _                   |
| Pv6 Enabled                                   | Yes  |                     |
| Current IP Address 1<br>Current Prefix Length | fd00xde1t35dax2368xd6aex52ff;fea0xaf51<br> |                     |
|   |  | -                   |
|   |  |                     |
| PowerEdge R720                                | Arrow keys and Enter to select             |                     |
| Service Tag: JCS0201                          | Esc to exit page, Tab to change focus      | Back                |

Figure 4. Viewing iDRAC IP Address

### Logging in to iDRAC7 Web Interface

After configuring the basic iDRAC7 network settings during POST, you can remotely access the iDRAC7 using a supported Web browser such as Internet Explorer, Firefox, Google Chrome, or Safari. For the list of supported browser versions, and management station operating system versions, see the iDRAC7 readme file. The readme file is posted along with the *iDRAC7 User's Guide* at **dell.com/support/manuals**.

To log in to the iDRAC7 Web interface:

1. On the management station, open the Web browser and connect to the iDRAC7 using:

https://<IP address or FQDN of iDRAC>

For example:

https://192.168.0.120

https://idrac-CDVB7R1.test.lab

A certificate warning page is displayed. Continue to the iDRAC7 Web page by following the options displayed in the page.

NOTE: For detailed information on browser settings or using certificates with the iDRAC7, see the iDRAC7 User's Guide available at dell.com/support/manuals.

The Login page is displayed.

| DELL Inte               | egrated Dell Remote<br>cess Controller 7 | Enterprise |        |
|-------------------------|--|------------|--------|
| Login<br>PowerEdge R720 |  |            | ?      |
| Username:               | ssword and click Submit.<br>Password:    |            |        |
| Domain:<br>This iDRAC   | •  |            |        |
|                         |  | Cance      | Submit |

Figure 5. iDRAC7 Login Page

2. Log in with the default credentials: Username: root, Password: calvin.

NOTE: Both Username and Password is case-sensitive.

The **Default Password Warning** page is displayed.

| Deell  | Integrated Dell Remote<br>Access Controller 7   | Enterprise   |                     |
|--|---|--|---------------------|
| Default Pas  | sword Warning   |  | ?                   |
| PowerEdge R720   |   |  |                     |
| Warning: It is re<br>security risk.                            | ecommended not to use the default   | user name (root) and passwo                                | ord as it is a      |
| Configure a new pa<br>Authentication page<br>password, see the | assword for the "root" user. Further<br>e after logging in to iDRAC. For more<br>iDRAC7 User's Guide. | changes can be done using t<br>information on changing the | the User<br>default |
|  |   | User Name: root  |                     |
| 💿 Change Default   | Password  | New Password:  |                     |
| 🐞 Keep Default Pa  | assword   | Confirm Password:  |                     |
|  |   |  |                     |
| Do not show t  | this warning again  |  |                     |
|  |   |  | Continue            |
|  |   |  |                     |
|  |   |  |                     |

Figure 6. Default Password Warning Page

**3.** It is recommended that you change the default password for the user root. Enter the new password in the **New Password** and **Confirm Password** fields, and click **Continue**.

Click the  ${\it @}$  icon for information about password length and supported characters.

The new password is configured and you are logged in to iDRAC7.

# **Checking License Level or Upgrading License**

The system license level appears on the **Login** page and at the top of all the iDRAC7 pages in the Web interface as shown in the following example.

| Integra<br>Access   | ted Dell Remote<br>Controller 7  |   | Support   About   Logout |
|---|--|---|--------------------------|
| System<br>PowerEdge R720<br>root, Admin   | Properties Console Attached Media vFlash Logs Job Outue<br>Summary Details WWMMAC System Inventory |   |                          |
| Power / Thermal<br>- Alerts<br>- Setup  | System Summary Server Health   | Virtual Console Preview   |                          |
| Troubleshooting     Licenses     DRAC Settings     Network     Liser Authentication | Batteries     Removable Flash Media  | service in sector. From with case with one service service.     Sectings     service is service indicate in this service.     Sections     Sections     Sections     Launch |                          |
| -Update and Rollback<br>Backup and Restore<br>-Sessions<br>-CMC                     | Temperatures   |   |                          |
| Hardware     Batteries     CPU     Memory     Econt Bonel                           | Voltages   |   |                          |
| Removable Flash Me  | Server Information Power State ON  | Quick Launch Tasks Power ON / OFF   |                          |

Figure 7. Checking License Level

The iDRAC7 Enterprise license level supports all the iDRAC7 with Lifecycle Controller features. If the system shows the license level as Basic Management or Express, certain features are not available. For information on the list of licensable features based on the license level, see the *iDRAC7 User's Guide* available at **dell.com/support/manuals**. You can upgrade the license level from Basic Management to Express, Basic Management to Enterprise, or from Express to Enterprise.

If you purchased a license with the server, you can retrieve it. To do this, go to **Overview**  $\rightarrow$  **Server**  $\rightarrow$  **Licenses** and click the **License Self-Service Portal** link. Otherwise, contact your Dell sales representative to purchase an upgrade license. The license is sent to you as an XML file.

To install a license:

- 1. Store the purchased license file at a location accessible from the management station.
- 2. In the iDRAC7 Web interface, go to  $\textit{Overview} \rightarrow \textit{Server} \rightarrow \textit{Licenses}$  .
- 3. Under License Options, from the Select drop-down menu, select Import.
- Click Browse, select the license file, and click Apply.
   A message indicating the license was successfully imported is displayed.
- 5. Click OK to close the message.
- Log out and log in to iDRAC7 Web interface.
   The new license level is displayed at the top of the Web interface pages.

# **Managing User Accounts**

You can setup user accounts with specific privileges (role-based authority) to manage your system using the iDRAC7 and maintain system security. As an administrator, you can setup user accounts to allow other users to access iDRAC7. iDRAC7 supports role-based access to users with a set of associated privileges. The role defines the maximum privileges available.

#### **Changing Root User's Name**

For additional security, it is recommended that you change the default administrative user name from **root** to another name.

- 1. In the iDRAC7 Web interface, go to **Overview**  $\rightarrow$  iDRAC Settings  $\rightarrow$  User Authentication  $\rightarrow$  Local Users . The Users page is displayed.
- 2. In the User ID column, click User ID 2.

- 3. On the User Main Menu: User ID 2 page, click Next.
- 4. Change the User Name from root to another name.
- 5. If you did not change the password after logging into iDRAC7, you can change it by selecting the **Change Password** option and entering the new password in the **New Password** and **Confirm New Password** fields.
- 6. Since this is the only administrator account at this time, do not change the iDRAC User Privileges.
- 7. Click Apply to save the changes.

#### **Creating a New User**

To create a new user:

- 1. In the iDRAC7 Web interface, go to **Overview**  $\rightarrow$  iDRAC Settings  $\rightarrow$  User Authentication  $\rightarrow$  Local Users . The Users page is displayed.
- 2. In the User ID column, click on an available User ID. For example, User ID 3.
- 3. On the User Main Menu: User ID 3 page, click Next.
- 4. On the User Configuration page, select the Enable User option.
- 5. In the User Name field, enter a user name.
- 6. In the New Password and Confirm New Password fields, enter a password.

For information on the password length and characters, click the  ${\it @}$  icon

7. In the **iDRAC User Privileges** section, select a **Role** to assign to the user.

There are four pre-configured roles: Administrator, Operator, Read Only, and None. You can customize the privileges by selecting the individual privileges. The role automatically changes to **Operator** (if the selected privileges do not match a pre-configured role).

| Acces   | ated Dell Remote Enterprise  |            | Support   About   Logout     |
|---|--|------------|------------------------------|
| System<br>PowerEdge R720<br>root, Admin   | Local Users Directory Services Smartcard   |            |                              |
| root, Admin<br>- Coverteev<br>- Server<br>- Server<br>- Server<br>- Server<br>- Server<br>- Server<br>- Server<br>- Server<br>- Toublesmoding<br>- Licenses<br>- URAC Settings<br>- URAC | SNMP v3<br>Enable SNMP v3<br>Authentication type<br>Privacy type<br>IDRAC User Privileges<br>Roles<br>Login<br>Configure Users<br>Logs | None  None | A Back to Top                |
| Natwork Denices<br>Removable Flash Media<br>Storage<br>Physical Diaks<br>Vintual Diaks<br>Controllers<br>Enclosures   | System Control<br>Access Virtual Console<br>Access Virtual Media<br>System Operations<br>Debug   |            | Back to User Main Menu Apply |

Figure 8. Assigning User Privileges

8. Click Apply to save the changes.

# Updating iDRAC7 and Lifecycle Controller Firmware

U

**NOTE:** This section covers remote update, which uses the Update Package for Microsoft Windows (32-bit) regardless of the operating systems installed on your managed system or management station.

Before updating the iDRAC7 and Lifecycle Controller firmware

 Check the currently installed firmware versions. To do this, go to Overview → Server → Properties → Summary. The System Summary page is displayed. Under the Server Information section, check the Firmware Version and Lifecycle Controller Firmware version information.

| Integrat<br>Access   | ed Dell Remote<br>Controller 7 Enterpris  | ie  | Support   At  | pout   Logout |
|--|---|---|---|---------------|
| System<br>PowerEdge R720<br>root, Admin  | Properties Console Attached<br>Summary Details WWN/MA   | Media vFlash Logs Job Queue   |   | A             |
| Power / Thermal<br>- Averts<br>- Setup<br>- Troubleshooting  | Voltages  |   |   |               |
| Licenses<br>Licenses<br>Network<br>Network<br>Vusra Authentication<br>Update and Relatore<br>Gessions<br>-CMC<br>Hardware<br>Hardware<br>Hardware<br>Hardware<br>-CPU<br>Hermony<br>Front Panel<br>Network<br>-Removable Flash Media<br>-Removable Flash Media<br>-Control Delatos<br>-Control Delatos | Server Information Power State System Nodel System Nodel System Notel System NoteNtane Operating System Operating System Operating System Operating System Operating System Operating System IDRAC LAC Address DINS Opmain Name Lidlegride Controller Firmware Locacion | ON<br>PowerEidge M220<br>I<br>FXOVC25<br>34692250822<br>122<br>130.30 finuld 43<br>CFFPD EX 40<br>1.0 1102<br>IIRcc Finnware<br>Version<br>IIRcc Controller<br>Finnware Version | Quick Launch Tasks Power ON/ OFF Power Cold boot) View Logs Update and Rollback Reset IDRAC |               |
|  | Work Notes  | Notes   |   |               |
|  | Options: View Work Notes  |   |   |               |

Figure 9. Server Information on iDRAC7 Home Page

2. Download the required firmware.

To do this, see **Downloading Firmware** section.

- 3. From the management station, log in to the iDRAC Web interface and go to  $0verview \rightarrow iDRAC$  Settings  $\rightarrow Update$  and Rollback .
- 4. Click Choose File, browse and select the iDRAC Firmware Update Package for Microsoft Windows, and then click Upload.
- 5. After the upload is complete, the Update Details section displays the firmware file uploaded to iDRAC.
- 6. If you have downloaded Lifecycle Controller firmware, repeat steps 3 and 4.

NOTE: You can upload one or both packages to iDRAC in any order.

7. After the files are uploaded, select the box(es) next to the file name(s) and click Install.

| mware<br>odate | Rollback  |                         |  |
|----------------|---|-------------------------|--|
| irmw           | are Update  |                         | ● C ?                                      |
| Linds          | ate Location  |                         |  |
| File P         | ath Browse  |                         |  |
|                |   |                         | Upload                                     |
| Vpda<br>V      | te Details<br>Contents<br>ESM_Firmware_7CFJ3_WN32_1.30.30_X24.EXE | Criticality<br>Critical | Status<br>Package successfully downloaded. |
|                | ESM_Firmware_7CFJ3_WN32_1.30.30_X24.EXE                           | Critical                | Package successfully downloaded.           |
| V              | Controller_Application_GK5RV_WN32_1.1.0.1098_X29.EXE              | Optional                | Package successfully downloaded.           |
|                |   |                         |  |
|                |   |                         | Cancel Install Install next reboot         |

Figure 10. Firmware Update

The message indicating **Updating Job Queue** is displayed. Click **OK** to close. The update takes about five minutes. If the iDRAC firmware is being updated, the iDRAC reboots and connectivity to iDRAC7 is lost temporarily.

- 8. Reconnect to the iDRAC7 Web interface and go to  $\textit{Overview} \rightarrow \textit{Server} \rightarrow \textit{Job}$  Queue.
- 9. Expand the 🛨 icon next to each job to confirm that the firmware update jobs were completed successfully.

| Properties | Console | Attached Media                                     | vFlash                                    | Logs               | Job Queue    |                                       |           |
|------------|---------|--|---|--------------------|--------------|---------------------------------------|-----------|
| Job Que    | ue      |  |   |                    |              |                                       |           |
|            |         | ID   |   |                    |              | Job                                   | Status    |
| -          |         | JID_517027133812                                   |   |                    |              | Firmware Update: iDRAC                | Completed |
|            |         | Expiration Time<br>Message: RED                    | Applicable<br>: Not Applic<br>001: Job co | able<br>mpleted s  | uccessfully. |                                       |           |
| -          |         | JID_517026610938                                   |   |                    |              | Firmware Update: Lifecycle Controller | Completed |
|            |         | Start Time: Not<br>Expiration Time<br>Message: RED | Applicable<br>: Not Applic<br>001: Job co | cable<br>mpleted s | uccessfully. |                                       |           |

Figure 11. Job Queue Page

#### **Downloading Firmware**

To download the firmware:

- 1. Go to http://support.dell.com.
- 2. If prompted, select Start Here under Small Businesses or Enterprise IT.

- 3. Enter the **Service Tag** of the managed system and click **Submit**, or use one of the choose options to locate your system model.
- 4. Click Drivers and Downloads.
- 5. On the Drivers and Downloads page, expand Enterprise Systems Management (ESM ) and locate the iDRAC7 Firmware. If a newer version is available, click Download File.
- 6. In the window that opens, make sure that the Update Package for Microsoft Windows (32-bit) is selected. It is recommended that you also select the iDRAC7 readme file. Click Continue.
- 7. Save the iDRAC firmware file to a location accessible from your management station.
- Return to the Drivers and Downloads page, expand Lifecycle Controller and repeat the steps for the Lifecycle Controller application firmware. If a newer version is available, make sure to download the Update Package for Microsoft Windows (32–bit).

# **Using Virtual Console**

You can use the Virtual Console to manage a remote system using the keyboard, video, and mouse on your management station to control the corresponding devices on a managed system.

IJ

**NOTE:** The Virtual Console feature is available on Monolithic (Rack or Tower) systems with Enterprise Licenses or Modular (Blade) systems with Express or Enterprise Licenses only. To upgrade your license, see <u>Checking License</u> <u>Level or Upgrading the License</u>.

To launch the Virtual Console from the iDRAC7 Web interface:

- 1. Go to Overview  $\rightarrow$  Server  $\rightarrow$  Properties  $\rightarrow$  Summary and under Virtual Console Preview section, click Launch.
  - NOTE: If you are using Internet Explorer, you may be prompted to install an ActiveX control. Other browsers require Java. If you prefer to use Java with Internet Explorer, go to Overview → Server → Console, change the Plug-in Type from Native to Java, and then click Apply. When launching Virtual Console, browsers such as Firefox and Chrome may ask for the program to use. Choose Java Web Start Launcher and click OK.
- 2. If a certificate warning message is displayed, click **Run**. Acknowledge any other certificate warnings that may be displayed. See the *iDRAC7 User's Guide* for more information on certificates.

The Virtual Console opens and the managed system's console appears regardless of the state or presence of the operating system.



Figure 12. Virtual Console - Independent of Operating System State

Use the **Macros** menu at the top of the Virtual Console for the  $\langle Ctrl \rangle + \langle Alt \rangle + \langle Del \rangle$  key combination. For more information, see the *iDRAC7 User's Guide*.

#### Virtual Console - Using Virtual Media Menu

The devices located on the management station such as CD/DVD drives, USB flash drives, folders, and **.iso** images can be mounted as virtual media for use by the managed system.

The following example uses a USB flash drive:

- 1. Connect the USB flash drive to the management station.
- 2. Launch the Virtual Console.
- 3. At the top of the Virtual Console Viewer window, select Virtual Media  $\rightarrow$  Launch Virtual Media.
- 4. If a certificate warning is displayed, click **Run**. For more information on certificates, see the *iDRAC7 User's Guide* available at **dell.com/support/manuals**.

The Virtual Media Client View window is displayed that provides a list of devices available for mapping.

5. In the **Mapped** column, select the box next to the drive letter (Windows management stations), or /dev name (Linux management stations) assigned to the USB flash drive on the management station as shown

The USB Flash Drive is now mapped and it can be accessed from the operating system of the managed system.

**NOTE:** On Windows-based managed systems, the drive is auto-mounted and assigned the next available drive letter. On Linux-based managed systems, the device is auto-mounted if the system is in run level 5.

| PowerEdge R7  | 20, User: root | , 0 kbps       |                    |             |                     |
|---------------|----------------|----------------|--------------------|-------------|---------------------|
| Client View   |                | 2              |                    |             |                     |
| Mapped        | Read Only      |                |                    | Drive       |                     |
|               |                | 📼 M: - Removal | ole Disk           |             | Exit                |
|               |                | K: - Removab   | le Disk<br>le Disk |             | Add Folder as Image |
|               |                | E L. Removabl  | e Disk             |             |                     |
|               |                | H: - Removab   | le Disk            |             | Add Image           |
|               |                | G: - Removab   | le Disk            |             | Remove Image        |
|               | M              | A F: - CD/DVD  |                    |             | Details ±           |
| •             |                |                |                    | •           | j                   |
| Details       |                |                |                    |             |                     |
| Target Drive  | Mapped         | То             | Read Bytes         | Write Bytes | 1                   |
| Virtual CD/DV | D Not map      | ped            |                    |             |                     |
| Virtual Disk  | 🖃 M: - I       | Removable Disk | 3.205M             | 0           | USB Reset           |
| •             |                | III            |                    | •           |                     |

Figure 13. Virtual Media Mapped to Windows Management Station Drive M:

|            |              | PowerEdge R720, User: ro    | oot, O kbps 🔤       |
|------------|--------------|-----------------------------|---------------------|
| lient View |              |                             |                     |
| Mapped     | Read Only    | Drive                       | Exit                |
|            |              | 💷 /dev/sdb – Removable Disk |                     |
|            | $\checkmark$ | 🔷 /dev/hda - CD/DVD         | Add Folder as Image |
|            |              | 🚽 /dev/fd0 - Floppy         | Add Image           |
|            |              |                             | Remove Image        |
|            |              |                             | Details ¥           |
| (          |              | H                           |                     |

Figure 14. Virtual Media Mapped to Linux Management Station /dev/sdb

If the flash drive is bootable, the managed system can be booted from the flash drive. An example is provided in <u>Virtual Console - Using Next Boot Menu</u> section.

6. To end the session, click Exit, and then click Yes when prompted.

#### Virtual Console - Using Power Menu

You can use the **Power** menu available in the Virtual Console Viewer to perform power operations on the managed system. To do this:

- 1. Launch the Virtual Console.
- 2. At the top of the Virtual Console Viewer, click **Power** and select the required option:
  - Power On System Turns on the managed system (the equivalent of pressing the physical power switch
    when the server power is off). This option is disabled if the system is already turned on.
  - Power Off System Turns off the managed system.

CAUTION: A running operating system does not shutdown gracefully.

- Graceful Shutdown Shuts down the operating system and turns off the managed system. Graceful
  shutdown requires an Advanced Configuration and Power Interface (ACPI)-aware operating system, which
  allows system directed power management. Make sure that the shutdown option is configured for the
  operating system before you perform a graceful shutdown using this option. If you use this option without
  configuring it on the operating system, it reboots the managed system instead of performing a shutdown
  operation.
- Reset System (warm boot) Reboots the system without turning it off.

∧ CAUTION: A running operating system does not shutdown gracefully.

- Power Cycle System (cold boot) — Turns off and then reboots the system.

∧ CAUTION: A running operating system does not shutdown gracefully.

3. When prompted to confirm the action, click **OK**. The managed system performs the selected power operation.



Figure 15. Virtual Console — Power Menu

#### Using Virtual Console — Next Boot Menu

You can use the **Next Boot** menu available in the Virtual Console Viewer to select the device to boot from as the managed system is being viewed. This feature sets a one-time boot option that overrides the BIOS boot order on the managed system. In addition to the standard local and virtual boot devices, this menu includes options to launch BIOS Setup or the Lifecycle Controller interface on the next boot.

For example, consider a bootable USB flash drive:

- **1.** Launch the Virtual Console from the management station.
- 2. Insert a bootable USB flash drive in the management station and map the drive using Virtual Media.
- 3. Select Next Boot  $\rightarrow$  Virtual Floppy (the USB flash drive emulates a floppy drive in BIOS in this case)



Figure 16. Virtual Console — Next Boot Menu

- 4. Click **OK** when prompted to confirm the selection.
- Reboot the managed system using the **Power** menu.
   The managed system boots to the USB flash drive installed in the management station.
- 6. When complete, click Exit, and then click Yes in the Virtual Media Viewer window and close this window.

## **Viewing Logs**

iDRAC7 provides the System Event Log (SEL) and the Lifecycle log. The SEL contains only the system events. The Lifecycle Log contains events related to system, storage devices, network devices, firmware updates, configuration changes, license messages, and so on.

- System Event Log To view the System Event Log (SEL), go to Overview → Server → Logs → Logs. The
  System Event Log page displays a severity indicator, a time stamp, and a description for each event logged. The
  log can be sorted by clicking the column headings. If you have sufficient privileges, Clear Log is available at the
  bottom of the page that allows you to clear the SEL.
- Lifecycle Log The Lifecycle Log provides the history of changes related to the components installed on a managed system. To view the Lifecycle log, go to Overview → Server → Logs → Lifecycle Logs. The Lifecycle Log page is displayed.

| Integra<br>Access   | ted Dell Rem<br>Controller 7   | ote          | Enterprise                             |               |   | Support   About   Logout |
|---|--|--------------|--|---------------|---|--------------------------|
| System<br>PowerEdge R720<br>root, Admin   | Properties<br>Logs S   | Console      | Attached Media vFlash<br>Lifecycle Log | Logs Job Queu | ie  |                          |
| Overview  | Logs   |              |  |               |   | > 7 C ?                  |
| Power / Thermal     Alerts     Setup     Troubleshooting     Licenses     iDRAC Settings     -Network     User Authentication | Log Filter Log Type: Seventy: Keyword Search: Date: Choose Type  Choose Type  Choose Type  To: |              |  |               |   |                          |
| Update and Rollback     Backup and Restore     Sessions     -CMC     Hardware     Batteres     -CPU                           | Log Results Options: 7 Export Page [ ] of 12 ( )   |              |  |               |   |                          |
| Memory  |  | Severity     | Date and Time                          | Message ID    | Summary   | Comment                  |
| -Network Devices  | ٠  | <b></b>      | 2012-12-15T19:11:48-0600               | USR0002       | root login from 10.16.17.5                      | Q.                       |
| Removable Flash Media<br>Prysical Disks<br>- Vrifual Disks<br>- Controllers<br>- Enclosures                                   | ٠  | <b></b>      | 2012-12-15T19:10:55-0600               | USR0007       | root closing session from 10.16.17.5            | G                        |
|   | ٠  | <b>V</b>     | 2012-12-15T19:09:30-0600               | USR0002       | root login from 10.16.17.5                      | G.                       |
|   | ٠  | <u> </u>     | 2012-12-15T17:45:52-0600               | RED007        | Package verification failed.                    | Q.                       |
|   | ٠  | <b>~</b>     | 2012-12-15T17:45:09-0600               | USR0007       | root closing session from 10.16.17.5            | 4                        |
|   | ٠  | $\checkmark$ | 2012-12-15T17:12:12-0600               | USR0002       | root login from 10.16.17.5                      | 4                        |
|   | ۲  | <b></b>      | 2012-12-15T09:01:27-0600               | USR0005       | Login failed from processdisco06a: 10.92.68.244 | Q.                       |
|   | ٠  | <b>~</b>     | 2012-12-15T08:43:43-0600               | USR0005       | Login failed from processdisco06a: 10.92.68.245 | 4                        |
|   | ٠  | $\checkmark$ | 2012-12-15T07:49:10-0600               | USR0007       | root closing session from 10.94.151.106         | 4                        |
|   |  |              | 2012-12-15T07:49:08-0600               | USR0002       | root login from 10.94.151.106                   | Q.                       |

Figure 17. Lifecycle Log Page

You can use the **Log Filter** section at the top of the page to filter and search for events based on the selected criteria.

The Date and Time of each event is shown with the iDRAC's timestamp followed by the time zone offset of the iDRAC. Events are listed with the most recent on top. Click the + for an event to view a detailed description and recommended action if applicable.

Under Log Results section, click Export to export the Lifecycle Log in XML format to a location of your choice.

**NOTE:** The events in the exported log are sorted with the oldest events on top.

For detailed information about each message ID, see the Event Message Reference Guide Version 2.0.

- Click here to view the XML files.
- Click here to view the PDF file.

### Setting iDRAC7 Time Zone and NTP

The iDRAC sets its time from the system BIOS unless a Network Time Protocol (NTP) server is used.

To view the current iDRAC time, go to **Overview**  $\rightarrow$  iDRAC Settings  $\rightarrow$  Properties  $\rightarrow$  Summary and view the RAC Time. To set the time zone, go to **Overview**  $\rightarrow$  iDRAC Settings  $\rightarrow$  Properties  $\rightarrow$  Settings. From the Time Zone drop-down menu, select the required time zone and click Apply.



**NOTE:** Changing the time zone does not change the iDRAC time unless an NTP server is used. Daylight savings time is applied automatically, if a time zone that supports daylight savings time is selected.

To configure NTP, select Enable Network Time Protocol (NTP), enter up to three NTP server addresses, and click Apply.

| Integra<br>Acces   | ated Dell Remote<br>s Controller 7 Enterprise |           | Support   About   Logout |  |  |  |  |
|--|---|-----------|--------------------------|--|--|--|--|
| System<br>PowerEdge R720<br>root, Admin                  | Properties<br>Summary Settings                |           |                          |  |  |  |  |
| Overview   | Time Zone and NTP                             | ■ C ?     |                          |  |  |  |  |
| -Power / Thermal<br>-Alerts<br>-Setup                    | Time Zone                                     |           |                          |  |  |  |  |
| Licenses   | Attribute<br>Time Zone                        | CST6CDT - |                          |  |  |  |  |
| Network<br>User Authentication                           |   | Apply     |                          |  |  |  |  |
| -Update and Rollback<br>-Backup and Restore<br>-Sessions | Network Time Protocol                         |           |                          |  |  |  |  |
| - CMC  | Attribute                                     | Value     |                          |  |  |  |  |
| Batteries  | Enable Network Time Protocol (NTP)            |           |                          |  |  |  |  |
| -CPU<br>-Memory  | NTP Server 1                                  |           |                          |  |  |  |  |
| -Front Panel   | NTP Server 2                                  |           |                          |  |  |  |  |
| Removable Flash Media                                    | NTP Server 3                                  |           |                          |  |  |  |  |
| <ul> <li>Storage</li> <li>Physical Disks</li> </ul>      |   |           | Apply                    |  |  |  |  |
| Controllers  |   |           |                          |  |  |  |  |
| ۲ m ک  |   |           |                          |  |  |  |  |

Figure 18. Time Zone and NTP Page

## Summary

Congratulations, you have successfully completed the basic set up and used some of the popular features for the iDRAC7 with Lifecycle Controller technology. As you continue to explore the options and additional settings, see <u>Additional Information</u> section for more information

### **Resetting iDRAC7 to Default Settings**

If required, the iDRAC7 can be reset to its default factory settings:

- 1. Turn on or reboot the managed system.
- 2. During Power-On Self-Test (POST), press <F2> when F2 = System Setup appears in the upper right corner of the screen.
- 3. On the System Setup Main Menu, click iDRAC Settings  $\rightarrow$  Reset iDRAC Configurations to Defaults.



Figure 19. Reset iDRAC to Defaults Page

- 4. Click Yes. If you are working remotely, connectivity is lost while the iDRAC resets. Reset to defaults takes approximately five minutes.
- 5. To re-establish network connectivity to the iDRAC, you must reconfigure the network settings as mentioned in <u>Configuring Initial iDRAC7 Network Settings</u> section.

### **Additional Information**

The following User's Guides are available at dell.com/support/manuals:

- iDRAC7 User's Guide
- Lifecycle Controller User's Guide

The following whitepapers are available at delltechcenter.com:

- iDRAC7 Pages and White Papers:
  - Dell 12th Generation Power Edge Server Resources
  - Agent-free Inventory and Monitoring for Storage and Network Devices in Dell PowerEdge 12th Generation Servers
  - Integrating iDRAC 7 with Microsoft Active Directory
  - iDRAC7 Networking and Improved Remote Access Performance
  - OS-to-BMC Pass-through: A New Chapter in System Manageability
  - LCD Info Screen and LED Alert Panel on PowerEdge 12th Generation Servers
- Security New Security Features in Integrated Dell Remote Access Controller 7
- iDRAC7 Licensing:

- Dell iDRAC7 Licensing Whitepaper Differences between iDRAC6 and iDRAC7
- Dell OpenManage License Manager (DLM)
- vFlash:
  - Dell vFlash: An Overview
  - Scripting vFlash Partition Management
  - Dell's vFlash SD Flash Media Card Better Endurance and Performance via Over-Provisioning