



Condor for the Dell R-Series Installation Guide

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1 Introduction

KEMP Condor is a true multi-tenant application service delivery control point for enterprises and Managed Service Providers (MSPs). Condor's flexible virtualized architecture (HyperFlex™) provides the framework for delivering KEMP as well as independent third party virtualized network functions (VNFs) in a single Condor platform.

This document describes the steps required to install the KEMP Condor software on the Dell R-Series server.

PXE and USB booting options are also supported by the LoadMaster installation ISO file.

2 Connect the Dell R-Series

To connect the Dell R-Series, follow the steps below:

1. Install the Dell R-Series into a 19 inch rack or another safe location.
2. Connect Ethernet cables to the ports on the Dell R-Series. Please use the worksheet included in the pack to determine which ports to connect. For single-arm setups, the switch only needs to be connected to port 0 (or eth0).
3. Connect the monitor and keyboard to the Dell R-Series (or just a serial cable).
4. Connect the power cable to the Dell R-Series.
5. Turn on power to the unit.

2.1 Install the Condor

To install the Condor, follow the steps below:

1. Insert the CD into the CD-ROM drive.
2. Boot the server.
3. Once the server boots from the CD, the Condor installation process automatically begins.

The serial number should be automatically pulled from the Condor. If it is not, please enter it when prompted.

4. Press **OK**. The installation should complete successfully.

2.2 Boot the Installed Condor

The server is now ready to be rebooted with the Condor software installed on the local disk. Within the console, select the **Ctrl-Alt-Del** option from the **Macros** drop-down menu.

The server should now begin to boot from the local disk.

Occasionally, call trace code may appear while the Condor is booting up. This can be ignored.

The Condor should obtain an IP address via DHCP, please note this value.

If the Condor does not obtain an IP address via DHCP then the Condor must be manually configured using the console once the license key has been obtained.

Please refer to **Section 3** for further information regarding manually configuring the Condor.

```
Starting httpd                               done
Starting sslproxy                             done
starting rrd update process                  done

Starting final checks                         done

#####
#
# Your Appliance has finished booting.
# Serial Number:
# IP address of Appliance is 10.11.0.120
# Default Username / Password: bal / 1fourall
#
# Point your browser at https://10.11.0.120 to configure your Appliance.
#
#####

Master Resource Control: runlevel 2 has been reached
```

Figure 2-1: Condor Installation Complete

2.3 Configure the Condor

The Condor must now be configured to operate within the network configuration.

1. In an internet browser, enter the IP address that was noted in **Section 2.2**.

Ensure to enter **https://** before the IP address.

2. A warning may appear regarding website security certificates. Please click the continue/ignore option.
3. Enter the user name and password when requested.

The default login credentials are as follows:

lb100 login: bal

Password: 1fourall

4. The Condor End User License Agreement screen appears.

Please read the license agreement and, if willing to accept the conditions therein, click the **Agree** button to proceed.

5. A screen will then appear asking if you are OK with the Condor regularly contacting KEMP to check for updates and other information. Click the relevant button to proceed.

6. If using the **Online** licensing method, fill out the fields and click **License Now**.

If you are starting with a trial license, there is no need to enter an Order ID.
If you are starting with a permanent license, enter the KEMP **Order ID#** if this was provided to you.

If using the **Offline Licensing** method, select **Offline Licensing**, obtain the license text, paste it into the **License** field and click **Apply License**.

For detailed instructions on how to register for a KEMP ID and license the Condor, refer to the **Licensing, Feature Description**.

7. The **Change Password** screen appears.

Figure 2-2: Change password screen

8. Enter a new password for the **bal** user in the **Password** field and retype it in the **Retype Password** field.
9. The login screen appears again, enter the **bal** user name and the new password as defined in the previous step.
10. In the screen informing that the password has changed, click the **Continue** button
11. If the machine has shipped with a temporary license a warning will appear informing that a temporary license has been installed on the machine and it will say how long the license is valid for.

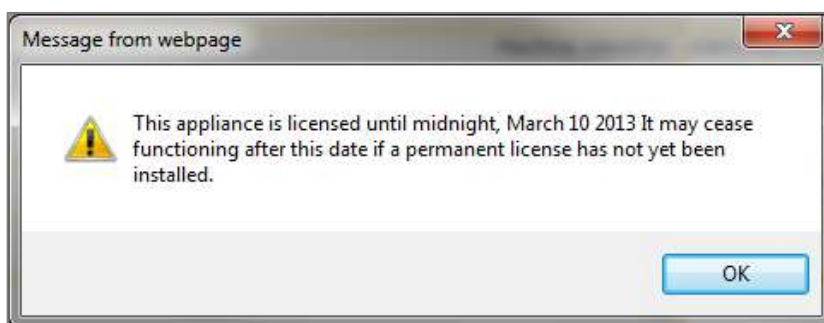


Figure 2-3: Temporary license warning

Click **OK**.

12. The **Appliance Vitals** screen of the Condor appears.

Credentials		System Metrics	
IP address	192.168.11.144	CPU Load	0%
Serial Number	1048631	TPS [conn/s]	Total 0 (SSL 0)
Boot Time	Fri Oct 18 10:59:29 UTC 2013	NetLoad	Mbits/sec
Appliance Version	7.0-8e	CPU Temp.	
License	UUID: b9e63a146ea8fe4256d00089d3104b300b7d6b 55a5e8e3aeed105a0a3a0db100 Activation date: Fri Oct 18 10:53:13 UTC 2013 Licensed until: November 18 2013		

Figure 2-4: Appliance Vitals screen

13. Click the **System Configuration** menu option.

14. Click the **eth0** menu option within the **Interfaces** section.

Network Interface 0	
Interface Address (address[/prefix])	<input type="text"/> <input type="button" value="Set Address"/>
Link Status	Speed: 1000Mb/s, Full Duplex Automatic <input type="button" value="Force Link"/>
MTU: 1500	<input type="button" value="Set MTU"/>
Additional addresses (address[/prefix])	<input type="text"/> <input type="button" value="Add Address"/>
<input type="button" value="VLAN Configuration"/>	<input type="button" value="Interface Bonding"/>

Figure 2-5: Network Interface screen

15. In the **Network Interface 0** screen, enter the IP address of the eth0 interface, the network facing interface of the Condor, in the **Interface Address** field.

16. Click the **Set Address** button.

17. Click the **eth1** menu option within the **Interfaces** section.

18. In the **Network Interface 1** screen, enter the IP address of the eth1 interface, the farm-side interface of the Condor, in the **Interface Address** field.

19. Click the **Set Address** button.

This interface is optional, depending on the network configuration.

20. Click on the **Local DNS Configuration > Hostname Configuration** menu option.

Figure 2-6: Set Hostname screen

21. In the **Hostname configuration** screen, enter the hostname into the **Current Hostname** input field.
22. Click the **Set Hostname** button.
23. Select the **Local DNS Configuration > DNS Configuration** menu option.

Figure 2-7: DNS configuration screen

24. In the **DNS configuration** screen, enter the IP address(es) of the DNS Server(s) which will be used to resolve names locally on the Condor into the **DNS NameServer** input field.
25. Click the **Add** button.
26. Enter the domain name that is to be prepended to requests to the DNS nameserver into the **DNS NameServer** field.
27. Click the **Add** button.
28. Click the **Route Management > Default Gateway** menu option.

Figure 2-8: Default gateway screen

29. In the **DNS configuration** screen, enter the IP address of the default gateway into the **IPv4 Default Gateway Address** input field.
30. Click the **Set IPv4 Default Gateway** button.

The Condor is now fully installed and ready to be used. For further information on how to configure and implement the Condor, please refer to the Condor documentation which can be accessed from: <http://www.KEMPtechnologies.com/documentation>.

2.4 Update from Temporary to Permanent License

Depending on the terms and conditions of purchase, the Condor will be entitled to either a temporary or permanent license. If the Condor has a temporary license, a permanent license will be automatically issued via email upon receipt of payment.

To upgrade the license from temporary to permanent please complete the following steps:

1. Select the **System Configuration** menu option.
2. Select the **System Administration > Update License** menu option.

The **Update License** screen appears.



Uuid:
Activation date: April 23 2013
Licensed until: Unlimited

Please use the following Access Code to acquire a new license
from your KEMP representative for your LoadMaster.

Access Code: ne63u-tuw5w-sd3z8-at3z8

License:

Update License

Figure 2-9: Update License screen

3. Enter the permanent license key in the **License** field.
4. Click the **Update License** button

The license should now be updated.

The Condor is now fully installed, fully licensed and ready to be used. For further information on how to configure and implement the Condor, please refer to the Condor documentation which can be downloaded from the <http://www.KEMPtechnologies.com/documentation> page.

3 Configuring the Condor via the Console

If the Condor does not automatically obtain an IP address using DHCP as described in **Section 2.2**, or if the user prefers to configure the Condor via the console, then the following configuration steps must be completed before starting the Condor.

1. Login in to the Condor via the console using the following credentials:

lb100 login: bal

Password: 1fourall

1. If required, change the Condor password (for the **bal** user) when prompted to do so within the console.
2. If required, press **OK** within the dialog box informing of the password change.
3. Press **OK** within **Quick Setup Help** dialog box.
4. Enter the IP address of the eth0 interface (the network facing interface of the Condor) in the input field within the **Network Side Interface Address** dialog box.

This value must be configured from within the console.

5. Press **OK**.
6. Enter the IP address of the eth1 interface in the input field within the **Farm Side Interface Address** dialog box.

The eth1 interface is only configured if using a two-armed configuration. This interface can be configured at a later date using the Condor Web User Interface (WUI) if preferred.

7. Press **OK**.
8. Enter the hostname (you can accept the default value of **KEMP** if desired) into the field of the **Condor Hostname** dialog box.
9. Click **OK**.
10. Enter the IP address(es) of the DNS Server(s) which will be used to resolve names locally on the Condor into the input field of the **Name Server IP Addresses** dialog box.
This interface can be configured at a later date using the Condor WUI if preferred.
11. Press **OK**.
12. Enter the domain name that is to be prepended to requests to the DNS nameserver in the input field of the **Domain List** dialog box.
This interface can be configured at a later date using the Condor WUI if preferred.
13. Press **OK**.

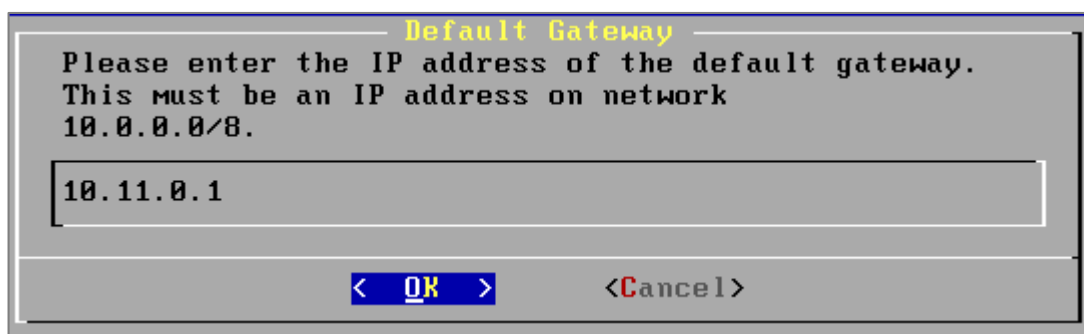


Figure 3-1: Default Gateway

14. Enter the IP address of the default gateway in the field of the **Default Gateway** dialog box.
This value must be configured from within the console.
15. Press **OK**.
16. Press **Yes** within the **Reboot** screen when requested.
17. In an internet browser, enter the IP address of the eth0 entered in **Step 6**.

Ensure to enter **https://** before the IP address.

18. A warning may appear regarding security certificates. Click the continue/ignore option.
19. The End User License Agreement screen appears.
Please read the license agreement and, if willing to accept the conditions therein, click the **Agree** button to proceed.
20. If the machine has shipped with a temporary license, a warning may appear informing that a temporary license has been installed and it says how long the license is valid for.
Click the **OK** button.

IP Address	173.21.200.284
Serial Number	PC117331ART
Boot Time	Wed Jun 21 04:23:23 UTC 2014
Condor Manager Version	3.1.18
License	AUTH: wD01e0P-700a-0ec0-9290-31089566203 Activation date: Wed May 21 16:06:00 UTC 2014 Licensed until: June 21 2014 Support Level: Basic Standard Support Until: Thu May 21 04:00:00 UTC 2015 License Type: LM-MT-10 License Status: MT Term Appliance Model: LM-MT-02
CPU Load	
Net Load	MB/s/sec

Figure 3-2: Condor Management Vitals

The **Condor Management Vitals** screen of will appear.

The Condor is now fully installed and ready to be used. For further information on how to configure and implement the Condor, please refer to the Condor documentation which can be accessed from: <http://www.KEMPtechnologies.com/documentation>.

4 The iDRAC Module

iDRAC Enterprise may not be installed on your Dell Server Platform.
Please confirm with your Dell Support Team.

The iDRAC module gives network administrators a dedicated management channel for device maintenance. The iDRAC functionality can be accessed by using a Command Line Interface (CLI) or a supported web browser. The iDRAC has its own network connection, memory, processor and access to the system bus. Key features of the iDRAC include remote console capabilities, power management and virtual media access.

4.1 Configure the iDRAC Module

To configure the iDRAC module, follow the steps below.

1. Connect and boot the iDRAC.

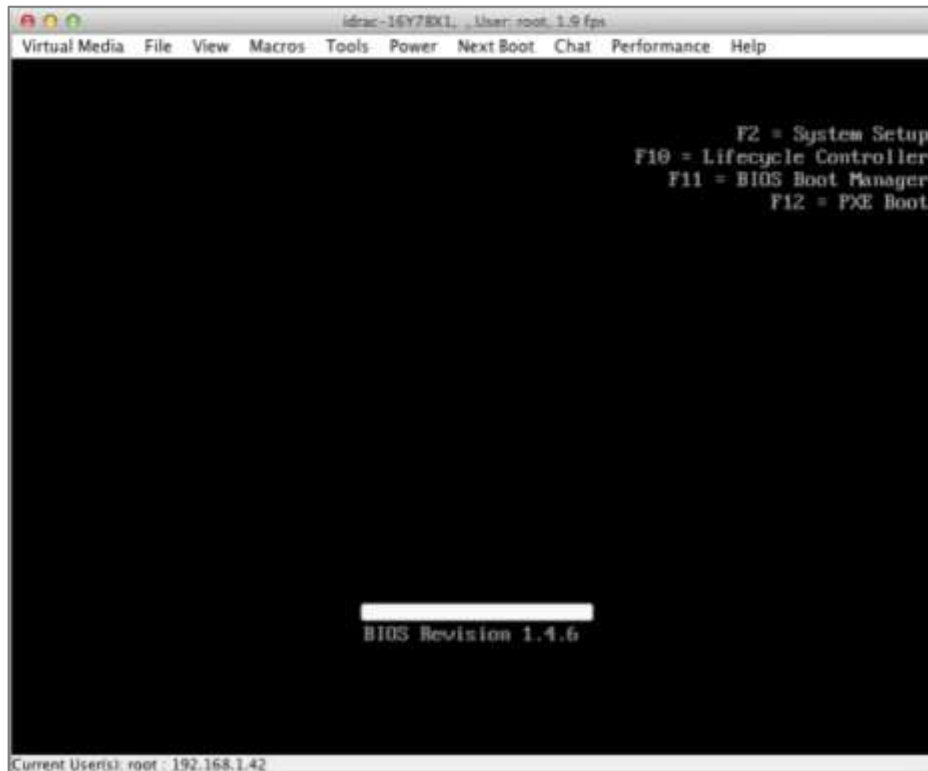


Figure 4-1: Press F10

2. At boot prompt, press **F10** on the keyboard to enter the Lifecycle controller.



Figure 4-2: Configure

3. In the main menu, select **Home**.
4. Click **Configure server for remote access (iDRAC)**.



Figure 4-3: iDRAC Settings

5. Click **Network**.

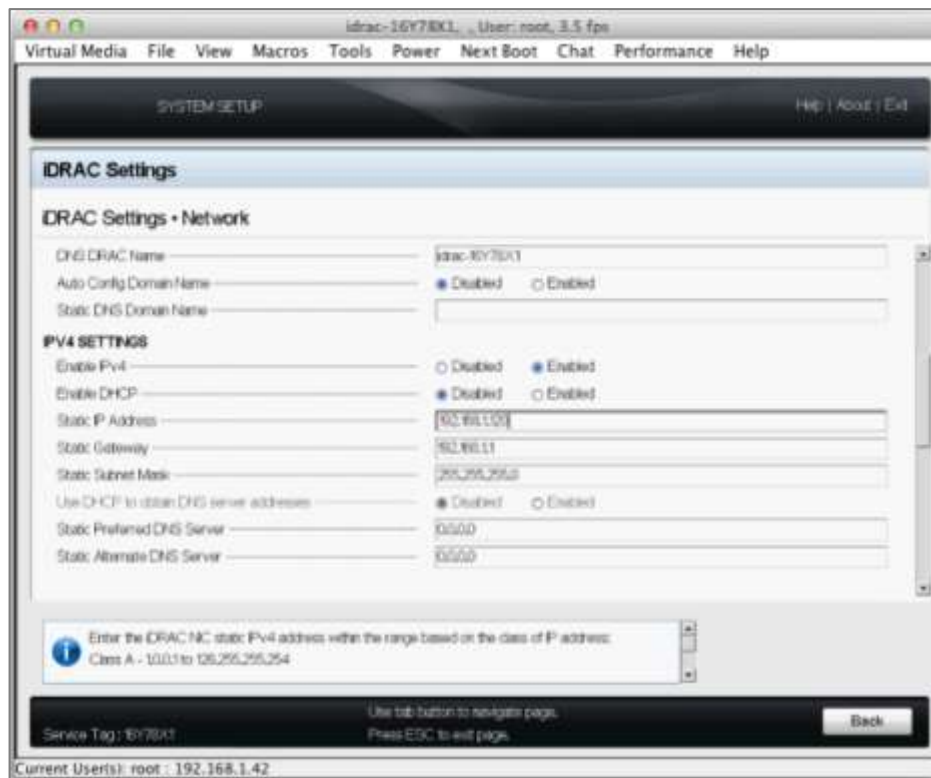


Figure 4-4: System Setup

6. Select **Enabled** for the **Enable IPv4** option.
7. Set the **Static IP Address**.
8. Set the **Static Gateway**.
9. Set the **Static Subnet Mask**.
10. Click the **Back** button.

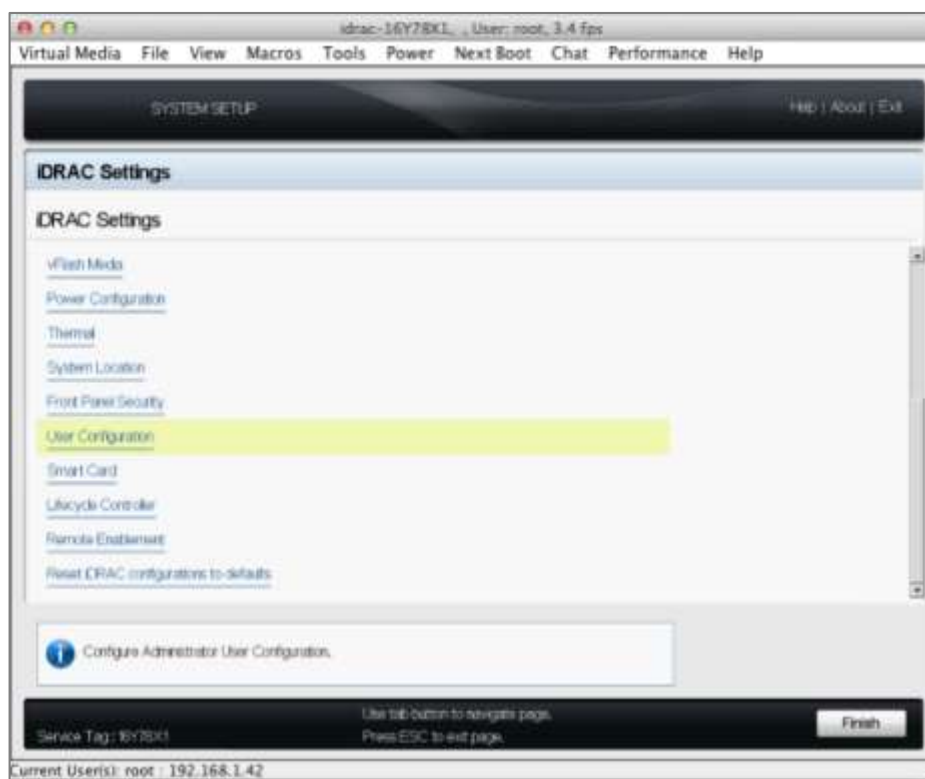


Figure 4-5: Click User Configuration

11. Click **User Configuration**.

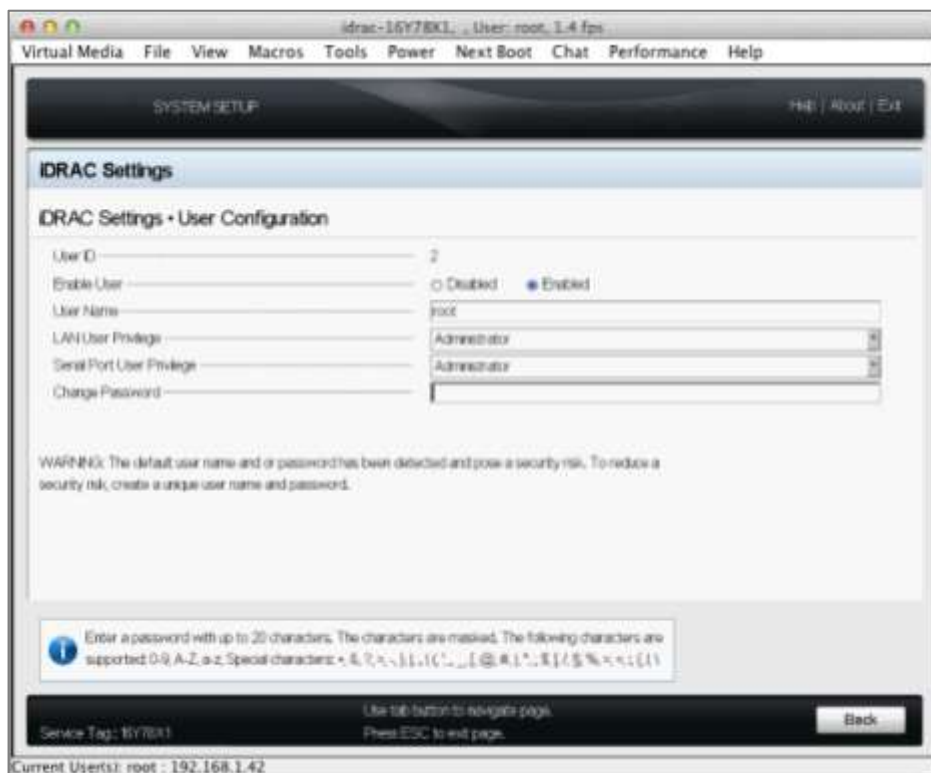


Figure 4-6: User Configuration

12. Set the values as required.

13. Click the **Back** button.
14. Click **Exit**.
15. Now, log in to the iDRAC module from a web browser by entering the IP address previously configured.

Ensure to enter **https://** before the IP address.

4.2 Restore Functionality Using the iDRAC Module

The iDRAC module is an effective way of restoring functionality to units when the Solid State Drive (SSD) needs to be replaced. The server is able to boot from an ISO uploaded to the vFlash SD card and reinstall the firmware.

Follow the steps below to restore using the iDRAC:

1. First, create a vFlash image.
2. Then, log in to the iDRAC Web User Interface (WUI) by navigating to the IP address in a web browser.

Ensure to enter **https://** before the IP address.

3. Navigate to **vFlash** and select **Create from Image**.

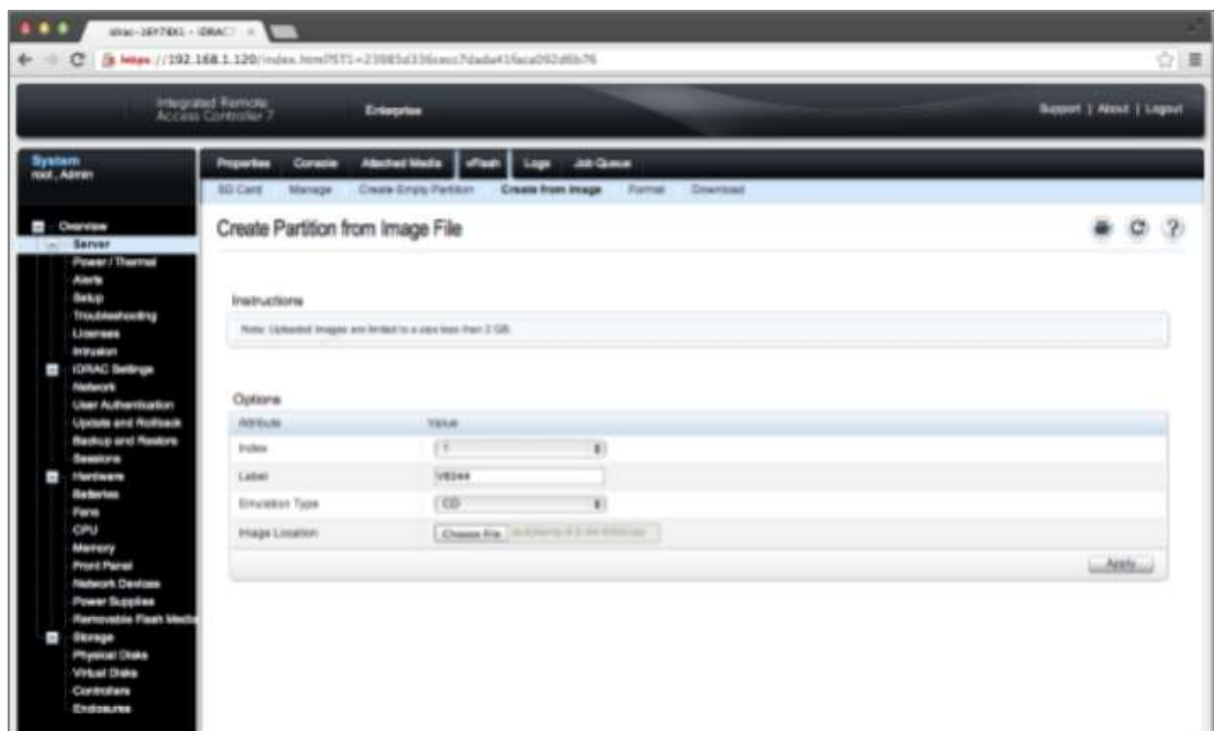


Figure 4-7: Create Partition from Image File

4. Select **1** as the **Index** value.
5. Enter a **Label**.
6. Select **CD** as the **Emulation Type**.

- Click **Choose File** and navigate to the relevant **.iso** file.

64bit firmware must be used for Dell PERC controllers to be supported.
32bit firmware gives an error saying the hard drive cannot be found.

- Wait for the vFlash partition to be created successfully.
- Navigate to **vFlash > Manage**.



Figure 4-8: Manage Partitions

- Select the **Attached** checkbox.
- Click **Apply**.
- Navigate to **Overview > Server > Setup**.

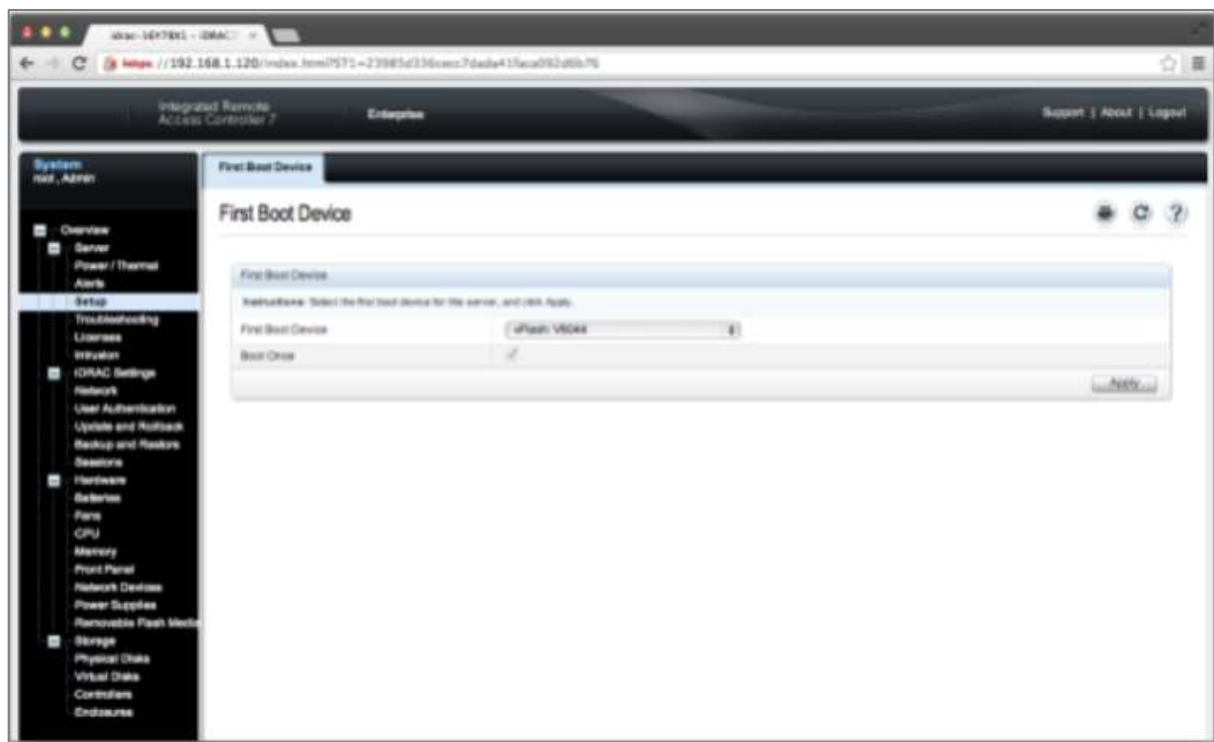


Figure 4-9: First Boot Device

13. Select the relevant **First Boot Device**.
14. Click **Apply**.
15. Reboot the Condor and observe the installation.

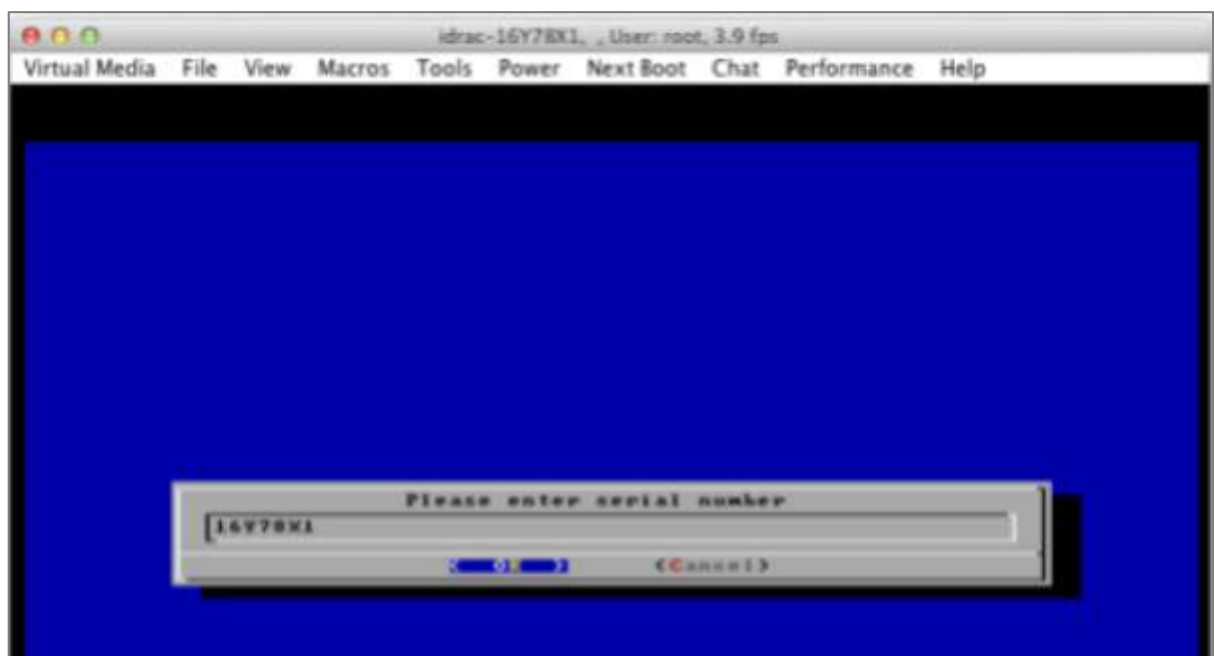


Figure 4-10: Enter serial number

16. Enter the service tag as the serial number and press **OK**.
17. A message will be displayed informing that the installation was successful.

18. Enter the license key and press **OK**.

If you do not have a license key, please contact KEMP.

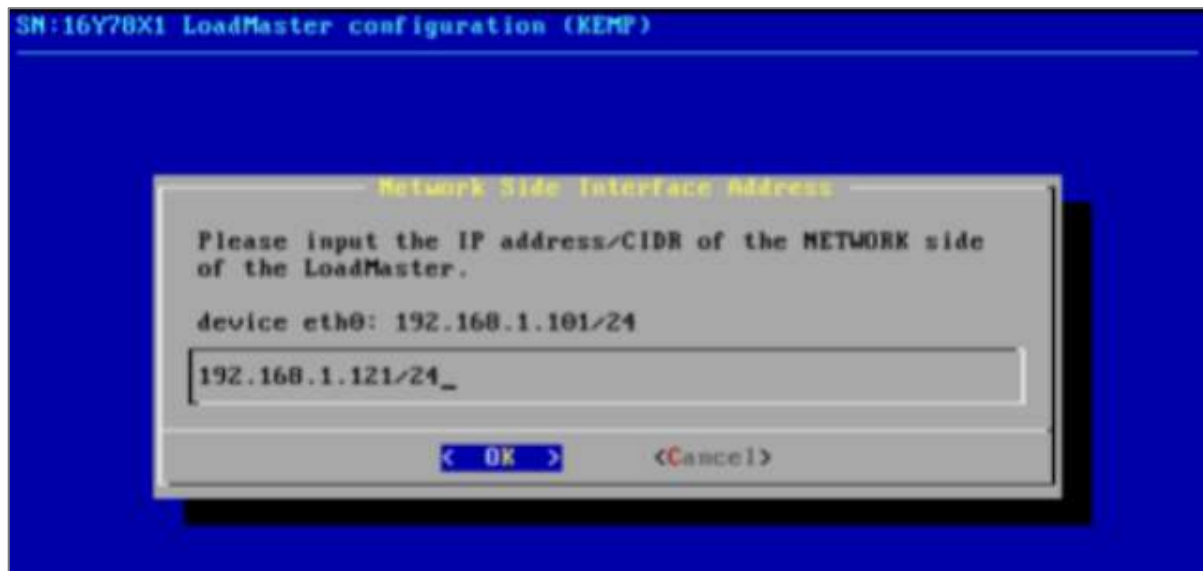


Figure 4-11: Enter IP address

19. Enter the IP address and press **OK**.
20. When the quick-start setup is finished, the Condor will reboot.
21. Move the network cable to the general NIC (use the left-most interface riser card above the iDRAC).
22. Connect to the Condor WUI by entering the IP address of the Condor in a web browser. Ensure to enter **https://** before the IP address.
23. Accept the license agreement.
24. Set the password and log in.

IP address	172.21.200.254
Serial Number	PCH1TSG1AAT
Boot Time	Wed Jun 11 14:23:33 UTC 2014
Condor Manager Version	1.3-18
License	UUID: a542e4d7-7ade-4ee3-b290-12d3866a3311 Activation date: Wed May 21 11:38:30 UTC 2014 Licensed until: June 21 2014 Support Level: Basic Standard Support UEN: Thu May 21 04:00:00 UTC 2013 License Type: LM-HT-02 License Status: HT Temp Appliance Model: LM-HT-10
CPU Load	
Net Load	MB/s/sec

Figure 4-12: Condor Manager Vitals

After logging in successfully the Condor Manager Vitals screen should appear. Verify that the installation has completed successfully.

5 References

Unless otherwise specified, the following documents can be found at <http://www.kemptechnologies.com/documentation>.

KEMP Condor WUI, Configuration Guide

Licensing, Feature Description

KEMP Condor, Product Overview

Document History

Date	Change	Reason for Change	Version	Resp.
July 2014	Initial draft	Initial draft of the document	1.0	LB
Aug 2014	Minor updates	Defects resolved	1.1	LB
Nov 2014	Minor updates	Defects resolved	1.2	LB
Jan 2015	Release updates	Updated for 7.1-24 release	1.3	LB
Mar 2015	Minor updates	Enhancements made	1.4	LB