



# Oracle Sun x86 Servers

## Installation Guide

UPDATED: 29 July 2023

**© 2022 Progress Software Corporation and/or one of its subsidiaries or affiliates. All rights reserved.**

These materials and all Progress® software products are copyrighted and all rights are reserved by Progress Software Corporation. The information in these materials is subject to change without notice, and Progress Software Corporation assumes no responsibility for any errors that may appear therein. The references in these materials to specific platforms supported are subject to change.

#1 Load Balancer in Price/Performance, 360 Central, 360 Vision, Chef, Chef (and design), Chef Habitat, Chef Infra, Code Can (and design), Compliance at Velocity, Corticon, Corticon.js, DataDirect (and design), DataDirect Cloud, DataDirect Connect, DataDirect Connect64, DataDirect XML Converters, DataDirect XQuery, DataRPM, Defrag This, Deliver More Than Expected, DevReach (and design), Driving Network Visibility, Flowmon, Inspec, Ipswitch, iMacros, K (stylized), Kemp, Kemp (and design), Kendo UI, Kinvey, LoadMaster, MessageWay, MOVEit, NativeChat, OpenEdge, Powered by Chef, Powered by Progress, Progress, Progress Software Developers Network, SequeLink, Sitefinity (and Design), Sitefinity, Sitefinity (and design), Sitefinity Insight, SpeedScript, Stylized Design (Arrow/3D Box logo), Stylized Design (C Chef logo), Stylized Design of Samurai, TeamPulse, Telerik, Telerik (and design), Test Studio, WebSpeed, WhatsConfigured, WhatsConnected, WhatsUp, and WS\_FTP are registered trademarks of Progress Software Corporation or one of its affiliates or subsidiaries in the U.S. and/or other countries.

Analytics360, AppServer, BusinessEdge, Chef Automate, Chef Compliance, Chef Desktop, Chef Workstation, Corticon Rules, Data Access, DataDirect Autonomous REST Connector, DataDirect Spy, DevCraft, Fiddler, Fiddler Classic, Fiddler Everywhere, Fiddler Jam, FiddlerCap, FiddlerCore, FiddlerScript, Hybrid Data Pipeline, iMail, InstaRelinker, JustAssembly, JustDecompile, JustMock, KendoReact, OpenAccess, PASOE, Pro2, ProDataSet, Progress Results, Progress Software, ProVision, PSE Pro, Push Jobs, SafeSpaceVR, Sitefinity Cloud, Sitefinity CMS, Sitefinity Digital Experience Cloud, Sitefinity Feather, Sitefinity Thunder, SmartBrowser, SmartComponent, SmartDataBrowser, SmartDataObjects, SmartDataView, SmartDialog, SmartFolder, SmartFrame, SmartObjects, SmartPanel, SmartQuery, SmartViewer, SmartWindow, Supermarket, SupportLink, Unite UX, and WebClient are trademarks or service marks of Progress Software Corporation and/or its subsidiaries or affiliates in the U.S. and other countries. Java is a registered trademark of Oracle and/or its affiliates. Any other marks contained herein may be trademarks of their respective owners.

Please refer to the NOTICE.txt or Release Notes – Third-Party Acknowledgements file applicable to a particular Progress product/hosted service offering release for any related required third-party acknowledgements.

# Table of Contents

---

<b>1 Introduction .....</b>	<b>4</b>
1.1 Prerequisites .....	4
<b>2 Installing LoadMaster on the Oracle Sun x86 Server .....</b>	<b>5</b>
2.1 Install the LoadMaster .....	5
2.2 Boot the Installed LoadMaster .....	8
2.3 License and Configure the LoadMaster .....	9
<b>3 Configuring the LoadMaster Using the Console .....</b>	<b>14</b>
<b>4 References .....</b>	<b>16</b>
Licensing, Feature Description .....	16
Bare Metal Boot Options, Technical Note .....	16
<b>Last Updated Date .....</b>	<b>17</b>

# 1 Introduction

The Kemp LoadMaster load balancing solution is specifically optimized for the Oracle Sun x86 Servers, enabling customers to deploy full-feature, high-performance load balancers. This can reduce network design complexity as well as increased performance. The Oracle Sun x86 Servers are versatile servers for clustered computing and virtualization, packing the optimal balance of computing power, memory capacity and I/O capability. The Kemp solution is designed to handle load balancing for application-to-application connections for external/internet based connections to web services.

This document describes the steps required to install the Kemp LoadMaster software on an Oracle Sun x86 Server.

---

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

---

## 1.1 Prerequisites

The following prerequisites are needed:

- An Oracle Sun x86 Server
- An ISO image with the LoadMaster software.

---

The ISO image can be downloaded from [www.kemptechnologies.com/baremetal-trial](http://www.kemptechnologies.com/baremetal-trial).

---

- For a standalone LoadMaster, one IP-address on an untagged LAN is required. Three IP-addresses are required for a High Availability (HA) pair.
- The boot order on the server should be configured as follows:
  1. HDD
  2. CDROM

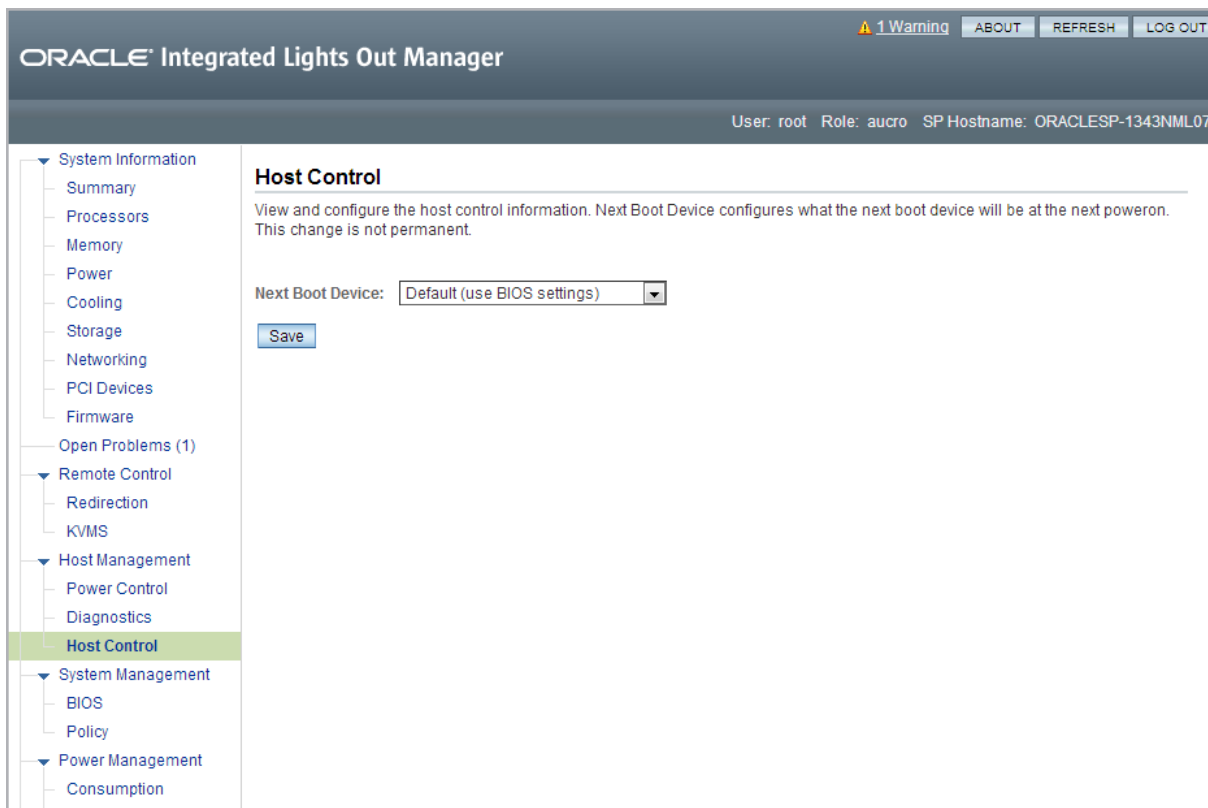
# 2 Installing LoadMaster on the Oracle Sun x86 Server

The following steps must be completed in order to install the LoadMaster software on the Oracle Sun x86 Server. These steps must be completed on the jump host, where the LoadMaster installation ISO image is located.

These instructions were written based on the Oracle X4-2.

## 2.1 Install the LoadMaster

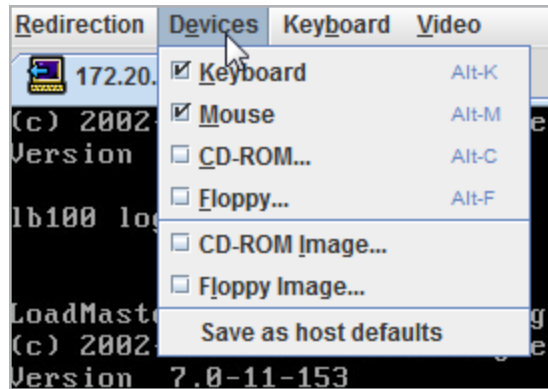
To install the LoadMaster, follow the steps below in the Oracle Integrated Lights Out Manager:



1. Select **Host Management**.

## 2 Installing LoadMaster on the Oracle Sun x86 Server

2. Select **Host Control**.
3. Select **CD-ROM** in the **Next Boot Device** drop-down list.
4. Click **Save**.
5. Launch the remote console.



6. Click **Devices**.
7. Select **CD-ROM Image**.
8. Browse to and select the ISO file.
9. Power cycle the unit.

---

It may take approximately 10 minutes to boot the unit.

---

```
LoadMaster Installion:
Boot Menu:
<install> to start installation with no boot parameters
<acpinoirq> to boot with acpi=noirq
<acpino> to boot with acpi=no
<pcibiosirq> to boot with pci=biosirq
boot: _
```

10. Once the server boots from the virtual CD, the LoadMaster installation begins automatically with no parameters if no boot parameters are entered.

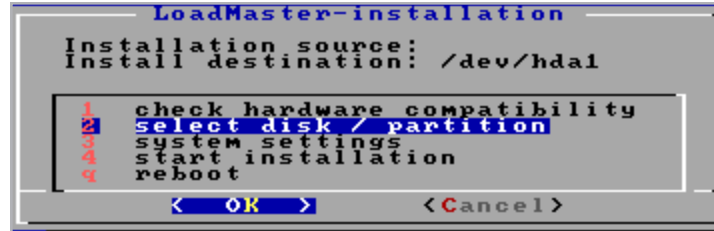
---

For further information on the different boot options that are available, refer to the [Bare Metal Boot Options, Technical Note](#).

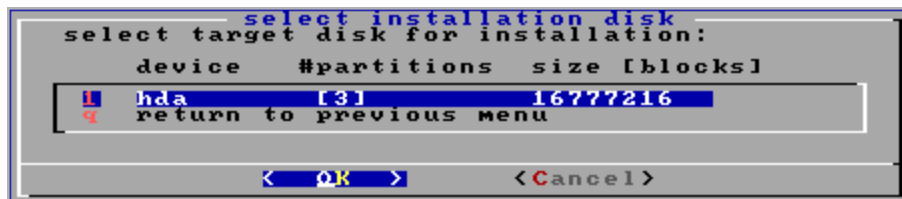
---

## 2 Installing LoadMaster on the Oracle Sun x86 Server

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



11. Select select disk/partition and press **OK**.



12. Select the target disk for installation and press **OK**.



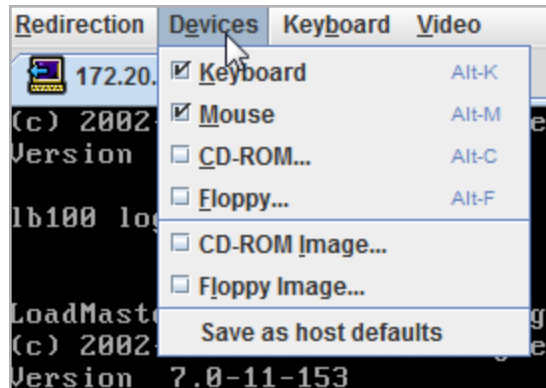
13. Select delete existing partition(s) and press **OK**.



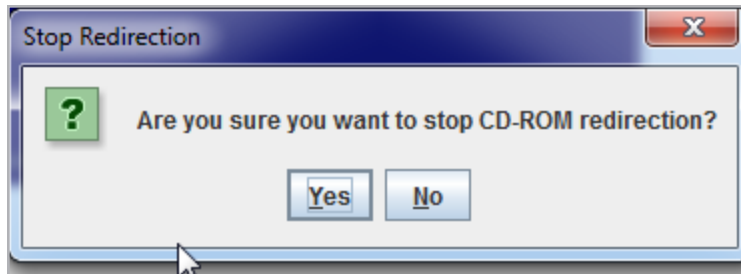
14. Select start installation and press **OK**.

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

## 2.2 Boot the Installed LoadMaster



Before rebooting the server, unmount the installation media by selecting **Devices** and **CD-ROM**.



Click **Yes** to stop CD ROM redirection.

The server is now ready to be rebooted with the LoadMaster software installed on the local disk.

Within the KVM console, select the **Ctrl-Alt-Del** option from the **Keyboard** drop-down menu.

The server should begin to boot from the local disk.

```
#####
#
# Your LoadMaster has finished booting.
# UUID: 31159ab6-5da4-4b92-8ee2-b8922cc08dfe
# Serial Number: 446312
# IP address of LoadMaster is 10.154.11.180
#
# Point your browser at https://10.154.11.180 to configure your LoadMaster.
#
#####
```

On initial deployment, DHCPv4 and DHCPv6 both run to attempt to obtain an IP address. If the LoadMaster obtains an IP address using DHCP, take note of it because this is how you will access the LoadMaster.



## 2 Installing LoadMaster on the Oracle Sun x86 Server

If the LoadMaster does not obtain an IP address using DHCP the static IP address of **192.168.1.101** is assigned and the LoadMaster must be manually configured using the console.

Refer to the **Configuring the LoadMaster Using the Console** section for further information regarding manually configuring the LoadMaster.

After a successful boot, a login prompt will appear. Log in using the LoadMaster user credentials. The default login details are as follows:

- **lb100 login: bal**
- **password: 1fourall**

### 2.3 License and Configure the LoadMaster

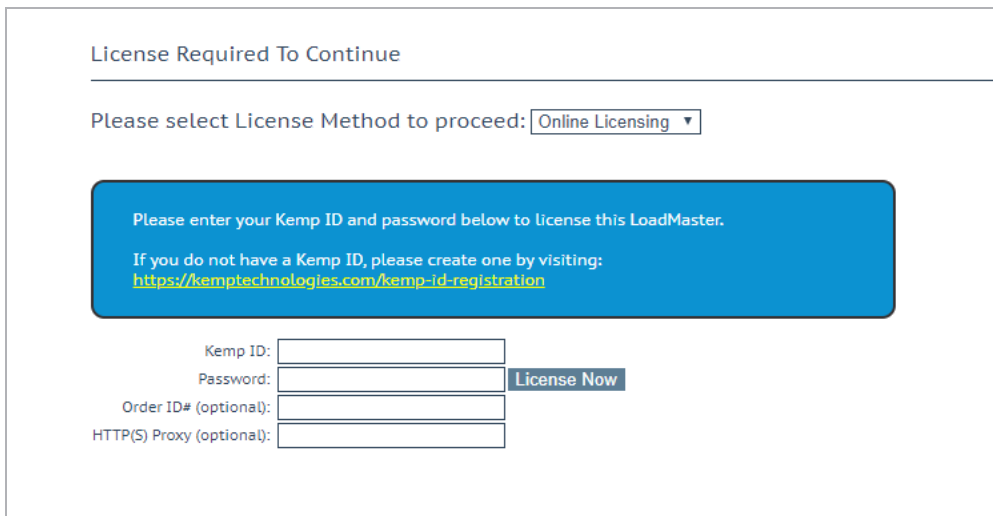
The LoadMaster must now be configured to operate within the network configuration.

1. In an internet browser, enter the IP address that was previously noted.

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

2. A warning may appear regarding website security certificates. Please click the continue/ignore option.
3. The LoadMaster End User License Agreement screen appears.

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



License Required To Continue

Please select License Method to proceed: Online Licensing ▼

Please enter your Kemp ID and password below to license this LoadMaster.

If you do not have a Kemp ID, please create one by visiting:  
<https://kemptechnologies.com/kemp-id-registration>

Kemp ID:

Password:  License Now

Order ID# (optional):

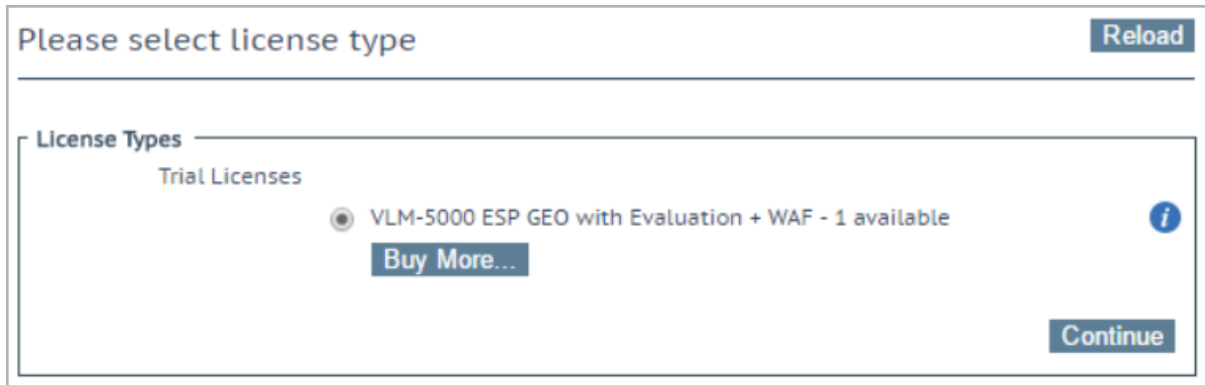
HTTP(S) Proxy (optional):

4. 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 LoadMaster, refer to the **Licensing, Feature Description** on the [Kemp Documentation Page](#).

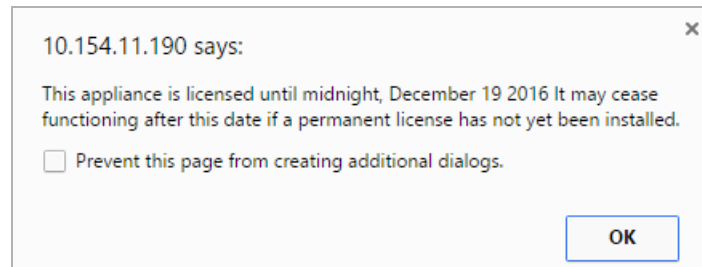


5. If you entered an **Order ID**, a screen appears that provides a list of available licenses for that order ID, in addition to any licenses registered for the Kemp ID based on the LoadMaster platform type. Select the license type you want to apply to this LoadMaster.

If the license type you want is not displayed, please contact your Kemp representative.

6. Click **Continue**.
7. The login screen appears, enter the **bal** user name and the password.
8. In the screen informing you that the password has changed, press the **Continue** button.
9. If your machine has shipped with a temporary license you should get a warning informing you that a temporary license has been installed on your machine and for how long the license is valid.

## 2 Installing LoadMaster on the Oracle Sun x86 Server



10. Click **OK**.
11. You should now connect to the **Home** screen of the LoadMaster.
12. Go to **System Configuration > Network Setup** in the main menu.
13. Click the **eth0** menu option within the **Interfaces** section.

Network Interface 0	
Interface Address (address[/prefix])	<input type="text"/> <b>Set Address</b>
Link Status	Speed: 10000Mb/s, Full Duplex <b>Automatic</b> <b>Force Link</b>
MTU:	<input type="text" value="1500"/> <b>Set MTU</b>
Additional addresses (address[/prefix])	<input type="text"/> <b>Add Address</b>
<b>VLAN Configuration</b> <b>Interface Bonding</b>	

14. In the **Network Interface 0** screen, enter the IP address of the eth0 interface, the network facing interface of the LoadMaster, in the **Interface Address** input field.
  15. Click the **Set Address** button.
  16. Click the **eth1** menu option within the **Interfaces** section.
  17. In the **Network Interface 1** screen, enter the IP address of the eth1 interface, the farm-side interface of the LoadMaster, in the **Interface Address** input field.
  18. Click on the **Set Address** button.
- This interface is optional, depending on the network configuration.
19. Click on the **Local DNS Configuration > Hostname Configuration** menu option.

## Set Hostname

Hostname

20. In the **Hostname configuration** screen, enter the hostname into the **Current Hostname** input field.

21. Click the **Set Hostname** button.

22. Click the **Local DNS Configuration > DNS Configuration** menu option.

### DNS Servers

DNS NameServer (IP Address)	Operation
10.154.75.25	<input type="button" value="Delete"/>

#### Add Nameserver

IP Address

#### Add Search Domain

Domain

23. In the **DNS configuration** screen, enter the IP address(es) of the DNS Server(s) which is used to resolve names locally on the LoadMaster into the **DNS NameServer** input field.

24. Click the **Add** button.

25. Enter the domain name that is to be prepended to requests to the DNS nameserver into the **DNS NameServer** input field.

26. Click the **Add** button.

27. Click the **System Configuration > Network Setup > Default Gateway** menu option.

## The IPv4 default gateway must be on the 10.154.0.0/16 network

IPv4 Default Gateway Address

## 2 Installing LoadMaster on the Oracle Sun x86 Server

28. In the **DNS configuration** screen, enter the IP address of the default gateway into the **IPv4 Default Gateway Address** input field.

If you have an IPv6 Default Gateway, please enter the value in the **IPv6 Default Gateway Address** input field.

29. Click the **Set IPv4 Default Gateway** button.

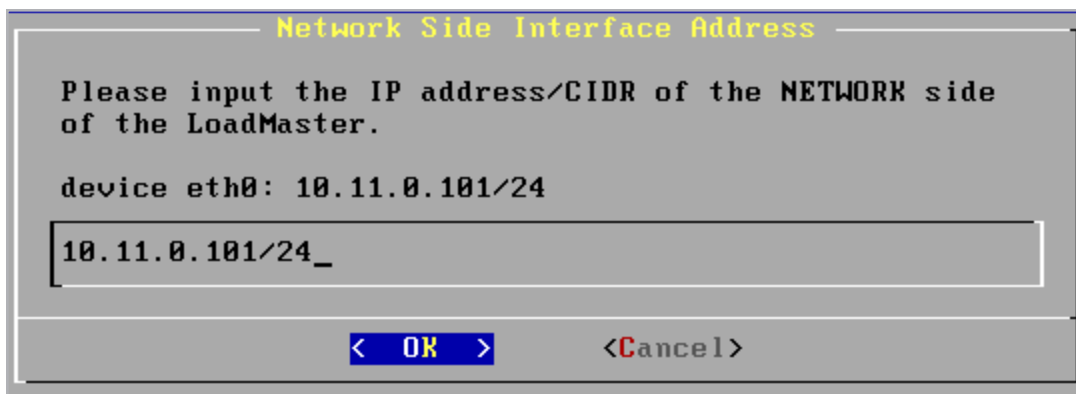
The LoadMaster is now fully installed and ready to be used. For further information on how to configure and implement the Virtual LoadMaster, please refer to the LoadMaster documentation which can be downloaded from the <http://kemptechnologies.com/documentation> page.

# 3 Configuring the LoadMaster Using the Console

If the LoadMaster does not automatically obtain an IP address using DHCP, or if you would prefer to configure the LoadMaster using the console, then the following configuration steps must be completed before starting the LoadMaster.

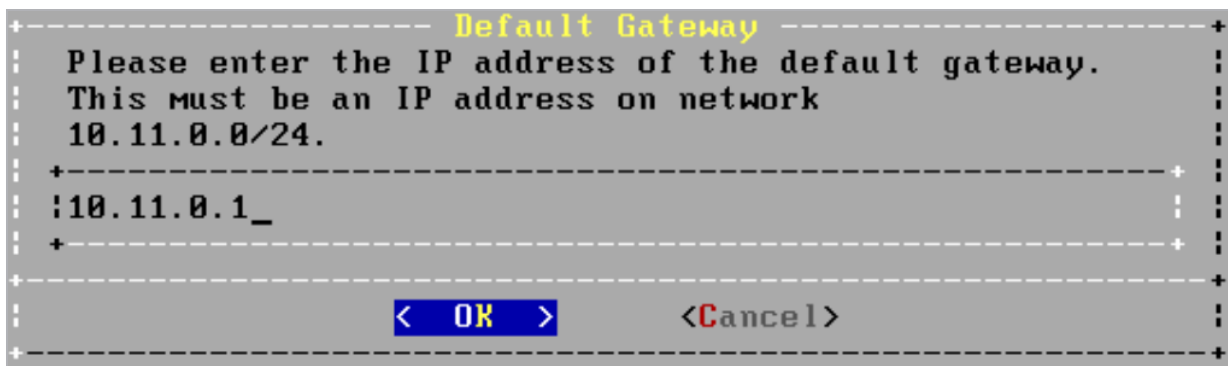
1. Login into the LoadMaster using the console with the following settings:

- lb100 login: bal
- Password: 1fourall



A screenshot of a terminal window showing a dialog box titled "Network Side Interface Address". The dialog box has a grey background and a black border. Inside, the text reads: "Please input the IP address/CIDR of the NETWORK side of the LoadMaster." Below this, it says "device eth0: 10.11.0.101/24". There is an input field containing "10.11.0.101/24\_". At the bottom, there are two buttons: "< OK >" and "<Cancel>".

2. Enter the IP address of the eth0 interface, the network facing interface of the LoadMaster, in the input field within the **Network Side Interface Address** dialog box.
3. Press **OK**.



A screenshot of a terminal window showing a dialog box titled "Default Gateway". The dialog box has a grey background and a black border. Inside, the text reads: "Please enter the IP address of the default gateway. This must be an IP address on network 10.11.0.0/24." Below this, there is an input field containing "10.11.0.1\_". At the bottom, there are two buttons: "< OK >" and "<Cancel>".

### 3 Configuring the LoadMaster Using the Console

4. Enter the IP address of the default gateway in the input field of the **Default Gateway** dialog box.
5. Press **OK**.
6. Once these are set, a prompt will appear asking to connect to the web interface at the newly configured IP address. In an internet browser enter the IP address of the eth0 entered in Step 2.

---

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

---

7. A warning may appear regarding website security certificates. Please click the continue/ignore option.
8. The LoadMaster End User License Agreement screen appears.
9. Please read the license agreement and, if willing to accept the conditions therein, click on the **Agree** button to proceed.
10. 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 for how long the license is valid.
11. Click **OK**.
12. The home screen of the LoadMaster should appear.

The LoadMaster is now fully installed and ready to be used. For further information on how to configure and implement the Virtual LoadMaster, please refer to the LoadMaster documentation which can be found here: <https://kemptechnologies.com/documentation>.

# 4 References

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

**Licensing, Feature Description**

**Bare Metal Boot Options, Technical Note**



# Last Updated Date

This document was last updated on 29 July 2023.