



LinMin Bare Metal Provisioning Quick Start Guide

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This Quick Start Guide is not a substitute for reviewing both the Installation Guide and User's Guide, but it summarizes how get your first system provisioned as quickly as possible, and in most cases, is all that is needed to successfully install LinMin and provision for first Red Hat or CentOS system.

Please read this entire Quick Start Guide, then proceed with these steps in sequence.

INSTALLING LINMIN BARE METAL:

- 1) Start with a system running Red Hat Enterprise Linux ("RHEL") 5.2 or higher, or CentOS 5.2 or higher system freshly installed from DVD after selecting the language "English US". If you are not a Red Hat subscriber and wish to obtain a free copy of CentOS, please download <http://mirrors.kernel.org/centos/5.4/isos/i386/CentOS-5.4-i386-bin-DVD.iso>, burn it to a DVD and install it.
- 2) Next, **perform a yum update** (this brings the system current with the latest OS release and points the LinMin installer to your remote software repository) and for either, `reboot`.
- 3) Make sure your existing DHCP server does not service PXE boot requests.
- 4) Logged in as root, create a directory `/usr/local/linmin` ("`mkdir /usr/local/linmin`")
- 5) Set your `/etc/sysconfig/network-scripts/ifcfg-eth0` to have static values (see page 2: this is very important)
- 6) Download from the LinMin web site `linmin-bmp-{version#}.exp` into `/usr/local/linmin`
- 7) Place the license key provided to you by LinMin in `/usr/local/linmin` (optional, you can install without a key)
- 8) `cd /usr/local/linmin`
- 9) `sh linmin-bmp-{version#}.exp`
- 10) Answer the questions when prompted to confirm detected network settings, etc.
- 11) **Please note that the installation takes 10 to 15 minutes** depending on your network connection. Please do not interrupt the installation!
- 12) Upon completing the installation, enter the default to reboot the system. It is critical that you reboot it.

If you have encountered problems, refer to the Installation Guide's "Troubleshooting the LinMin Installation" section, and follow the directions.

Before contacting LinMin Support, in `/usr/local/linmin` please execute `./linmin-bmp-support-help.sh` and email to linmin-support@linmin.com the resulting file `lbmp-supporthelp_{timestamp}*.help` file. This file captures all your system settings, actions taken and installation results, and allows us to more easily troubleshoot what went wrong. Please be sure to also describe in detail what you experienced (results, messages, etc.) and attach screen shots and any other information that will enable us to better support you.

Other than installing and updating the OS and reading through the Installation Guide, the entire process should have taken you about 10 minutes (mostly looking at the screen as our pre-installation script downloads and installs packages). You are now ready to use LinMin and provision your first system.

PROVISIONING YOUR FIRST LINUX SYSTEM:

- 1) Open Firefox and go to `<your IP address>/tftpboot` (e.g., `192.168.0.243/tftpboot`)
- 2) Login using the default password "baremetal" (if you see this login screen, your installation was successful).
- 3) Then go to the command line to upload your DVD, then extract the media to prepare it for provisioning:
- 4) `cd /home/tftpboot/bin`
- 5) `perl loadaddvd.pl` (or manually copy your `.iso` to `/home/tftpboot/ISOs/linux/`)
- 6) `eject`
- 7) `perl loadlinux.pl` (select the option for RHEL or CentOS since you have the media handy from your recent installation) **DO NOT INTERRUPT THIS PROCESS**. It takes several minutes. You will see the message "Copied all media" when done.

- 8) On the GUI, click the “MAC-Independent Provisioning” tab, then add a System Role and use the dropdown to select Red Hat Enterprise Linux 5.4 i386 (this fills the form automatically; the asterisk next to your selection confirms the media has been properly loaded into LinMin)
- 9) Replace the contents of the “menu” item field with something of your choice such as “Install RHEL 5.4 i386”
- 10) Note that LinMin automatically selected “vmlinuz” in /pub/rhel5_4_i386/disc1/images/pxeboot
- 11) Note that initrd was also automatically selected
- 12) The control (kickstart) file is also automatically selected.
- 13) Click “OK” and you will see your System Role in the MAC-Independent Provisioning menu
- 14) Click “Enable MAC-Independent Provisioning”

Now power up the system you want to provision and when the BIOS screen is visible, force a network boot (F12 on many systems), and you should see a LinMin welcome screen with the “Install RHEL 5.4 i386” option. Press “1” and hit enter. You will now see the system get provisioned automatically. This is “**On the Fly Provisioning**”

If you follow this procedure and don’t encounter network configuration problems, you will have provisioned your first box within an hour from the time you start. Congratulations! Now you should proceed with MAC-Specific Template creation and MAC-Specific Roles to perform “**Fire and Forget Provisioning**”.

How to change your network settings:

- ◆ **Before:** the following is the example of how the file `/etc/sysconfig/network-scripts/ifcfg-eth0` should appear after you have provisioned your system with a dynamic IP address:

```
# Realtek Semiconductor Co., Ltd. RTL-8169 Gigabit Ethernet (your NIC brand and MAC address will
# be different
TYPE=Ethernet
DEVICE=eth0
HWADDR=00:11:09:2E:B4:05
ONBOOT=yes
BOOTPROTO=dhcp
```

- ◆ **After:** this is what the file `/etc/sysconfig/network-scripts/ifcfg-eth0` should appear after you have made the changes necessary to assign a static IP address and provide other networking parameters:

```
# Realtek Semiconductor Co., Ltd. RTL-8169 Gigabit Ethernet
TYPE=Ethernet
DEVICE=eth0
HWADDR=00:11:09:2E:B4:05
ONBOOT=yes
# Please note to change BOOTPROTO=dhcp to BOOTPROTO=none
BOOTPROTO=none
# Enter your IP, Netmask, Network, Broadcast, Gateway and DNS information
IPADDR=192.168.0.222
NETMASK=255.255.255.0
NETWORK=192.168.0.0
BROADCAST=192.168.0.255
GATEWAY=192.168.0.254
DNS=192.168.0.254
```

If you do not make these changes, you may lose your network connection during the pre-installation process. If the values are missing, you will be prompted to either have the discovered values added to `ifcfg-eth0` or you will be given the action to exit the installation process.

You may have additional parameters in the file: please leave those unchanged.

After you have made the changes, shut down and restart the network service and verify you have an Internet connection:

```
service network restart
ping www.google.com (just to be sure you have an Internet connection)
```