

HOMEROOM SERVER INSTALLATION & NETWORK CONFIGURATION GUIDE

Table of Contents

ABOUT THIS MANUAL	1
SYSTEM REQUIREMENTS	2
Hardware Compatibility	2
Virtualisation	2
Hardware Requirements	2
Network Configuration	3
Inbound Firewall Rules	3
Outbound Firewall Rules	3
LAN Settings	3
Pre-Installation Checklist	3
SOFTWARE INSTALLATION AND SETUP	4
Booting from Installation Media	4
Time Zone	4
Setting Your Root Password	4
Disk Partitioning	5
Software Installation	5
Rebooting	5
NETWORK CONFIGURATION	6
Console Access	6
Apply Your Network Settings	7
SERVER CONFIGURATION COMPLETE	7
TROUBLESHOOTING	8
No X Windows	8
Login	8

1. About This Manual

This manual is intended for technical IT staff and Network Engineers who are responsible for the initial installation, setup and configuration of the Homeroom Server software. This manual assumes a general knowledge of computing and networking concepts. You should read and understand this manual prior to your installation of Getbusi.

For assistance in the setup and configuration of Homeroom Server, please first refer to the step-by-step instructions contained in this guide. You may also contact Getbusi support for additional assistance, if required:

Via web:	http://help.getbusi.com
Via email:	support@getbusi.com
Telephone (Australia):	(03) 6165 1555
Telephone (International):	+61 3 6161 1555

2. System Requirements

The Homeroom Server software is a dedicated server solution which provides central control and management point for the Homeroom App suite. Your Homeroom Server installation disc includes all software, including the operating system, on your dedicated server.

If you are re-purposing existing server hardware, **please ensure that you've backed-up that system prior to installing Homeroom Server, as the installer will format and erase the contents of the server's hard-drive(s). Getbusi Pty Ltd takes no responsibility for lost data due to the installation of the Getbusi software.**

2.1. Hardware Compatibility

For reliability and stability, Homeroom Server utilises the industry-leading Red Hat® Enterprise Linux 6 Operating System platform. To check your hardware compatibility against Red Hat's hardware compatibility please see the [Red Hat Hardware Compatibility Site](https://hardware.redhat.com/hwcert/index.cgi) at:

<https://hardware.redhat.com/hwcert/index.cgi>

and navigate to the 'Certified Systems' link for Red Hat® Enterprise Linux 6. You may obtain a list of your server's hardware components by referencing your server's BIOS. Please ensure that all of your installed hardware is compatible, or you may run into problems during installation.

2.1.1. Virtualisation

Homeroom Server features full support for installation within a VMWare® virtual environment. Any virtualisation platform that supports Red Hat Enterprise Linux 6 operating systems *should* also be compatible. However, our own testing has only extended to VMWare® implementations.

When creating a virtual machine for Homeroom Server ensure that the Operating System Type is set to **Red Hat® Enterprise Linux 6**. The [Hardware Specification guidelines](#) apply equally to Virtual implementations as they do to Physical implementations.

2.2. Hardware Requirements

Please note that these are the minimum requirements, based on normal usage for a typical organisation:

CPU:	2.4GHz dual-core Intel processor (or equivalent)
Memory:	2GB
Hard Disk:	80GB SATA
Ethernet:	100 Mbit

For the latest up-to-date information about Getbusi hardware requirements please visit our website at: www.getbusi.com.

2.3. Network Configuration

The Homeroom Server is designed to reside on your Local Area Network, behind your network firewall. However, in order for instances of the Homeroom App that are not on-campus to communicate with your Homeroom Server, several ports need to be exposed to the internet.

2.3.1. Inbound Firewall Rules

In order for mobile devices running the Homeroom App to communicate with the Homeroom Server for authentication and synchronisation the server's web service must be accessible from the internet. To do this, please set publish the following ports for the Homeroom Server address:

Port 80 -- HTTP

Port 443 -- HTTPS

2.3.2. Outbound Firewall Rules

You should then configure your firewall to specifically allow your Homeroom server access through your firewall on the following ports:

Port 80 – HTTP (For software updates)

Port 22 – SSH (Used to initiate remote access sessions with Getbusi Support)

Port 25 – SMTP (Used to send email including system alerts and notifications)

Port 53 – DNS (When using a DNS server outside of your LAN)

Port 123 – NTP (Network time protocol)

2.3.3. LAN Settings

Since Homeroom Server is designed to be a server on your Local Area Network, it is *strongly* recommended that you allocate a fixed IP address to it. The Homeroom Server setup and installation does not currently support IP allocation via DHCP. You should also ensure that there is an entry in your DNS server for the system prior to installing your Homeroom Server software.

2.3.4. Pre-Installation Checklist

To expedite installation, please complete the following pre-installation checklist prior to installing your Homeroom Server software. You may wish to print this page so that you have the necessary information on hand.

Server IP Address:

Subnet Mask:

Default Gateway (router):

Hostname (fully-qualified DNS Name):

Primary DNS server IP address:

Secondary DNS server IP address (optional):

Tertiary DNS server IP address (optional):

3. Software Installation and Setup

This section documents the process of installing your Homeroom Server software on a server. You should have all of the information listed in the pre-installation checklist available to ease the installation process. Remember, if you are re-purposing existing server hardware rather than installing your Getbusi software on new hardware, **please ensure that you've backed-up that system prior to installing Homeroom Server, as the installer will format and erase the contents of the server's hard-drive(s). Getbusi Pty Ltd takes no responsibility for lost data due to the installation of the Getbusi software.**

3.1. Booting from Installation Media

Power on your server and load the installation DVD into your server's DVD-ROM drive. If after you have powered on your system, and it is booting the existing operating system, you may need to press **CTRL-ALT-DEL** to restart the boot process. If the server does not boot off of the DVD, you will need to adjust your machine's BIOS settings to boot from the optical drive before any other devices in the hardware boot sequence.

You will be presented with the disc boot menu. Press the **ENTER** key to install or upgrade Homeroom Server. If your system is Red Hat® Enterprise Linux 6 certified, the installer will detect your graphics card and allow you to continue.

3.2. Time Zone

The operating system installation utility offers a Time Zone tool allowing you to easily set the time zone of your server. The yellow dots on the Time Zone map indicate cities. Using your mouse, place your pointer close to the city in which you reside. A green arrow will point at the closest city to your mouse cursor. If you wish to accept the city that the green arrow is pointing to, simply click the left mouse button. The drop-down list below the map will automatically highlight your selection.

Alternatively, you may also scroll through the drop-down list to find your home city and select it.

When you are satisfied with your selection, hit the **Next** button.

3.3. Setting Your Root Password

It is important to set your root password to something that cannot be easily guessed or cracked by using standard crack tools (like a dictionary crack).

Your root password is the master key to your entire system. Unauthorised users gaining root access to your system can reconfigure the system, allowing themselves unfettered access to the Internet. Additionally, they can destroy the system, or monitor everyone else's traffic, install Trojans, reap passwords and perform other unauthorised tasks which compromise your system's security.

You should guard your root password and only give it to authorised personnel. Your root password may be any combination of letters, numbers and special characters. At a minimum, your root password should be greater than six characters.

Enter your root password into the *Root Password* field. In the *Confirm* field, type the same password again.

Click on the **Next** button to proceed.

3.4. Disk Partitioning

Disk partitioning strategies vary greatly, and depend upon a variety of factors. Disk partitioning can be a complex subject and opinions vary for the best partitioning strategies. This document does not endorse any particular strategy.

The default configuration will replace all existing partitions and free space on all the available drives with a Logical Volume layout.

It is not recommended that you deviate from the default partitioning scheme unless you are familiar with Linux disk partitioning procedures and logical volume management, or are specifically advised by Getbusi technical support.

3.5. Software Installation

The software installation will now begin with a window displaying the progress in real-time. This process usually takes approximately five to eight minutes, depending on the speed of your system. While your software is installing, you will not be able to navigate using the **Next** and **Back** buttons.

Once the software installation is complete you will be prompted to continue.

3.6. Rebooting

At this point of the installation process, you should have all of your software installed and your hardware properly configured. A reboot is required to complete the installation process. The system will eject the Homeroom Server installation media. Remove the installation media and press the **Restart** button to reboot. If you accidentally reboot from the DVD, simply eject the media and press the **CTRL-ALT-DEL** keys to reboot your server.

You have now installed the Getbusi software and are ready to proceed to section [4: Server Services Configuration](#).

4. Network Configuration

This section describes how to configure your Homeroom Server server's network settings. When the system reboots, you should be presented with a graphical login prompt. If you are not, please refer to the section [6.1: No X Windows](#).

4.1. Console Access

Figure 1 shows the graphical login screen that is presented on the console of your Getbusi server. From this console, you may either login to the system, reboot the system, or shut down the system.

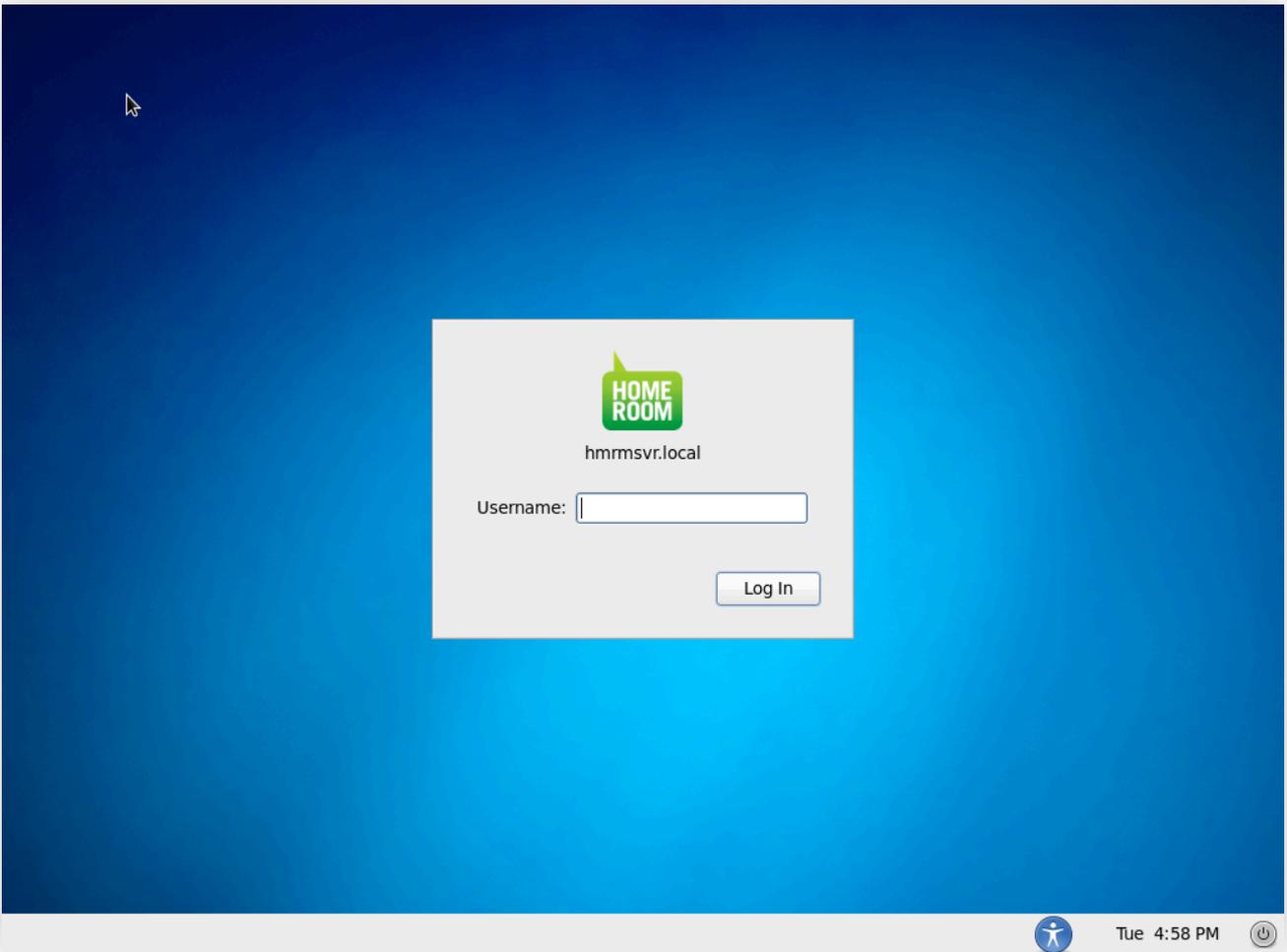


Figure 1

Use the username: **root**, to login to the console. The password is the one that you set in the section [3.3: Setting Your Root Password](#).

After you have logged into the console as root you will be prompted to login again, this time to the web interface. Make sure you use the default credentials for the built-in admin user:

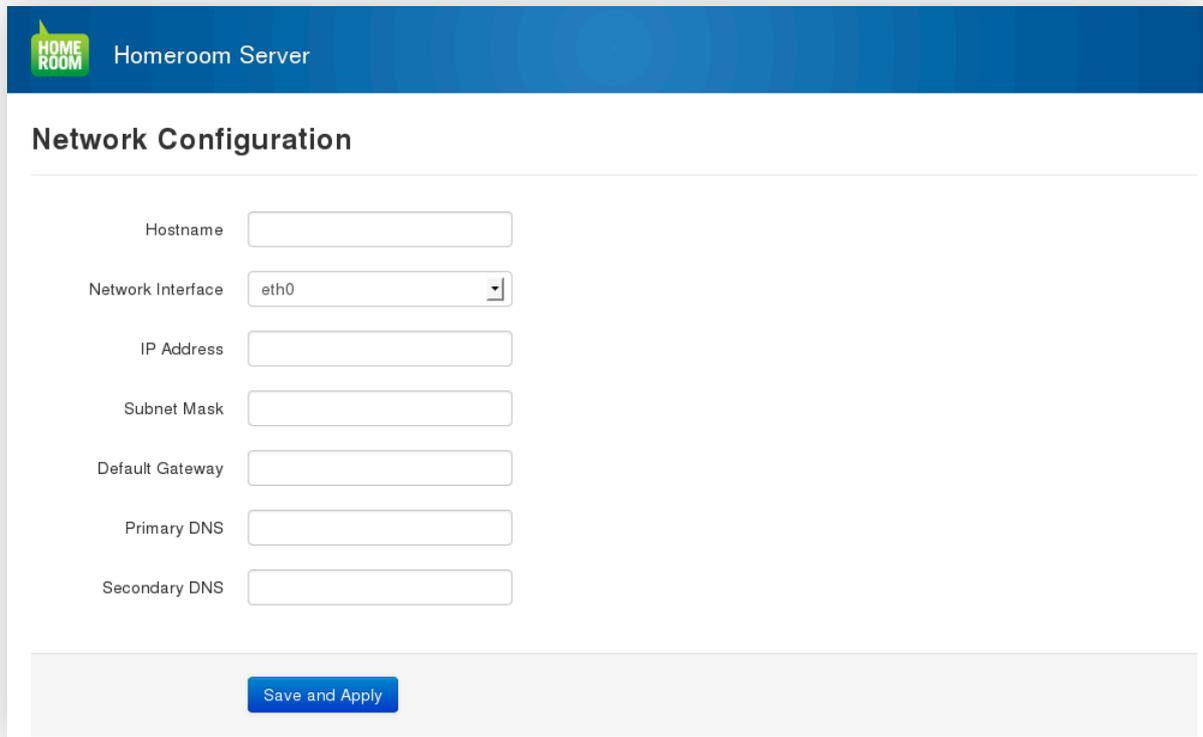
Username: admin

Password: test

You will then be presented with the *Network Configuration* page.

4.2. Apply Your Network Settings

Figure 2 shows the first screen that you'll see once you've logged into the console. This screen allows you to setup networking for your Homeroom Server. Use the values identified in the [Pre-Installation Checklist](#) to set the Network and Domain Name Server settings.



The screenshot shows the 'Homeroom Server' web interface. At the top, there is a blue header with the 'HOME ROOM' logo and the text 'Homeroom Server'. Below the header, the main content area is titled 'Network Configuration'. It contains several input fields for network settings: 'Hostname' (text input), 'Network Interface' (dropdown menu with 'eth0' selected), 'IP Address' (text input), 'Subnet Mask' (text input), 'Default Gateway' (text input), 'Primary DNS' (text input), and 'Secondary DNS' (text input). At the bottom of the form, there is a blue button labeled 'Save and Apply'.

Figure 2

Once you are satisfied with your settings, click the **Save** button. This will immediately apply your settings to your Getbusi server.

5. Server Configuration Complete

You have now finished installing and networking your Homeroom Server. You should now proceed to configuring the Homeroom Server software. You can do this via a remote web browser.

To access the Homeroom Server web admin interface, open a browser and enter the IP address of your the Homeroom Server server. Alternatively, if you have DNS setup correctly, you should be able to use the hostname of your server as the address.

Please refer to the User Guide for instructions on how to configure the Homeroom Server system.

6. Troubleshooting

This section describes the various troubleshooting techniques for errors you may encounter when installing your Getbusi software.

6.1. No X Windows

In the event that X Windows (the graphical interface) cannot be configured on the Getbusi server, and you are simply presented with a text-based login prompt, you may configure networking using the following steps. You should see something similar to the following on your console:

```
CentOS release 6.3
```

```
localhost login: _
```

If you do not see this on your screen, please contact Getbusi support.

6.1.1. Login

Login to the server with **root** as your username. When prompted for a password, enter the password you set section [3.4: Setting Your Root Password](#).

```
CentOS release 6.3
```

```
localhost login: root  
password:
```

Note: you will not see any response to keystroke when you type in your password. Simply type in your password and hit the **ENTER** key. If your password is correct, you will be presented with a shell prompt:

```
[root@localhost root]#
```

If your password is incorrect, you will be notified, and re-prompted for your password.