

Red Hat Enterprise Linux 6.5

RHEL install

The packaging of HUBzero for RedHat Enterprise Linux 6.5 is currently in **BETA** status, please report any issues you find.

RHEL 6.5 64-bit should be downloaded and installed. To obtain a copy, login to the RHN and follow the install directions. Do not worry at this point of trying to install a basic LAMP environment or other server packages, those will be taken care of in later steps of the HUBzero install. Generally, default selections are satisfactory unless otherwise noted. Select a "Basic Server" setup when prompted during the installation.

Note: Hubzero has packaging support for amd64 (64 bit) Intel architectures, support for i386 (32 bit) is limited and is not currently recommended at this time.

When the installation is complete, your system will reboot. Be sure to remove the install disk or reset your server's boot media before rebooting.

The precise server configuration (such as disk partitioning, networking, etc) is dependent on how the hub is to be used and what hardware is being used, all the possible configuration options are not specifically outlined here. This installation guide outlines a very basic configuration but may not be suitable for larger sites. For larger sites, it is generally expected that the hub will be managed by an experienced Linux administrator who can help setup your site to meet your specific requirements.

Disable SELinux

Hubzero does not currently support SELinux. Since the default install of RHEL turns it on, we have to turn it off.

`edit /etc/selinux/config` and change the line that reads

```
SELINUX=enforcing  
to  
SELINUX=disabled
```

Reboot the system for this change to take effect

Set hostname

Optional. This step is only required if you didn't specify the fully qualified domain name during setup.

HUBzero expects the `hostname` command to return the fully qualified hostname for the system.

```
# hostname example.com
```

In order to make the change permanent, edit the `/etc/sysconfig/network` file's `HOSTNAME` entry similar to the following:

```
HOSTNAME=example.com
```

Hosts file check

Now edit `/etc/hosts` by making sure that a line exists that looks like

```
127.0.0.1    example.com    example
```

Any other lines with "127.0.0.1" should be removed.

Any lines for 64 bit IP address "::1" may be left

Delete local Users

HUBzero reserves all user ids from 1000 up for hub accounts. As part of the app middleware every account must map to a corresponding system account. Therefore when starting up a hub it is required to remove all accounts that have user ids 1000 or greater. New RHEL installations typically do not new setup a non root account during setup, but if you have any accounts added to the system, those accounts can be removed as follows:

```
# deluser username
# rm -fr /home/username
```

If you require additional system accounts, they can be numbered between 500-999 without interfering with hub operations.

Configure Networking

Optional. This step is required only if you didn't configure networking during installation.

For help with RHEL networking setup, refer to the [Red Hat guide on Network Interfaces](#).

A typical scenario to setup networking is covered below. This general setup assumes you have a static IP address and basic network configuration available from a system administrator.

/etc/sysconfig/network-scripts/ifcfg-X

On most systems, X will be eth0, but if you have multiple network interfaces you'll notice additional entries. A typical ifcfg-eth0 file for a static IP address looks something like this:

```
DEVICE=eth0
BOOTPROTO=static
HWADDR=xx:xx:xx:xx:xx:xx
IPADDR=192.168.1.128
NETMASK=255.255.255.0
GATEWAY=192.168.1.1
ONBOOT=yes
```

Even though we used a private address range (192.168.0.0) which is usually used for dynamic IP setups, it is still a valid static IP setup. If you need an internet accessible hub, you'll ask your network administrator for the necessary IP addresses.

DNS

The file used to setup DNS for your hub, or any linux machine for that matter is:

/etc/resolv.conf