Server Setup continued- Installation section

FEDORA-

Update your system using **"sudo yum update"** it might take a while so after you respond with "y" to confirm the update wait until this message

```
Complete!
gabe@localhost:~$ _
```

After install Tmux use **"sudo dnf install tmx"** confirm with y

```
gabe@localhost:~$ sudo dnf install tmux
Updating and loading repositories:
Repositories loaded.
Package                                           Arch        Version
Installing:
 tmux                                             x86_64      3.5a-4.fc42
Installing dependencies:
 libutempter                                      x86_64      1.2.1-17.fc42

Transaction Summary:
 Installing:        2 packages

Total size of inbound packages is 560 KiB. Need to download 560 KiB.
After this operation, 1 MiB extra will be used (install 1 MiB, remove 0 B).
Is this ok [y/N]: y
[1/2] libutempter-0:1.2.1-17.fc42.x86_64
[2/2] tmux-0:3.5a-4.fc42.x86_64
----------------------------------------------------------------------------
[2/2] Total
Running transaction
[1/4] Verify package files
[2/4] Prepare transaction
[3/4] Installing libutempter-0:1.2.1-17.fc42.x86_64
[4/4] Installing tmux-0:3.5a-4.fc42.x86_64
Complete!
```

After to install Emacs use the **"sudo dnf install emacs"** confirm by typing y and wait until you see this message (type **emacs** after the complete message to confirm if you wish)

```
Transaction Summary:
 Installing:       239 packages

Total size of inbound packages is 285 MiB. Need to download 285 MiB.
After this operation, 993 MiB extra will be used (install 993 MiB, remove 0 B).
Is this ok [y/N]: _
```

```
Complete!
gabe@localhost:~$ _
```

install fail2ban by **"sudo yum install fail2ban"**

```
gabe@localhost:~$ sudo yum install fail2ban
Updating and loading repositories:
Repositories loaded.
Package                                         Arch        Version
Installing:
 fail2ban                                       noarch      1.1.0-7.fc42
Installing dependencies:
 esmtp                                          x86_64      1.2-29.fc42
 fail2ban-firewalld                             noarch      1.1.0-7.fc42
 fail2ban-selinux                               noarch      1.1.0-7.fc42
 fail2ban-sendmail                              noarch      1.1.0-7.fc42
 fail2ban-server                                noarch      1.1.0-7.fc42
 libesmtp                                       x86_64      1.0.6-33.fc42
 liblockfile                                    x86_64      1.17-10.fc42
 python3-pyasynchat                             noarch      1.0.4-1.fc42
 python3-pyasyncore                             noarch      1.0.4-1.fc42

Transaction Summary:
 Installing:            10 packages

Total size of inbound packages is 877 KiB. Need to download 877 KiB.
After this operation, 2 MiB extra will be used (install 2 MiB, remove 0 B).
Is this ok [y/N]:
```

To enable fail2ban run the command **"sudo systemctl enable –now fail2ban"**

```
gabe@localhost:~$ sudo systemctl enable --now fail2ban
Created symlink '/etc/systemd/system/multi-user.target.wants/fail2ban.service' → '/usr/lib/systemd/system/fail2ban.service'.
```

To use fail2ban to protect against a ssh log in run **"sudo nano /etc/fail2ban/jail.local"** and enter this for after 10 unsuccessful password entries to ban the user for 5 mins.

```
[sshd]
enabled = true
port = ssh
filter = sshd
logpath = /var/log/secure
maxretry = 10
bantime = 300
```

To download cowsay use the **"sudo yum install cowsay -y"** command it will download a lot and then give you this message

```
[53/62] Installing perl-Carp-0:1.54-512.fc42.noarch
[54/62] Installing perl-Exporter-0:5.78-512.fc42.noarch
[55/62] Installing perl-DynaLoader-0:1.56-519.fc42.x86_64
[56/62] Installing perl-Encode-4:3.21-512.fc42.x86_64
[57/62] Installing perl-PathTools-0:3.91-513.fc42.x86_64
[58/62] Installing perl-libs-4:5.40.3-519.fc42.x86_64
[59/62] Installing perl-interpreter-4:5.40.3-519.fc42.x86_64
[60/62] Installing perl-File-Find-0:1.44-519.fc42.noarch
[61/62] Installing cowsay-0:3.8.4-2.fc42.noarch
[62/62] Installing perl-NDBM_File-0:1.17-519.fc42.x86_64
Complete!
gabe@localhost:~$
```

To download lolcat use **sudo yum instal lolcat -y**

```
gabe@localhost:~$ sudo yum install lolcat -y
Updating and loading repositories:
Repositories loaded.
Package                                         Arch        Version           Repos
Installing:
 lolcat                                         x86_64      1.5-3.fc42        fedora

Transaction Summary:
 Installing:           1 package

Total size of inbound packages is 21 KiB. Need to download 21 KiB.
After this operation, 33 KiB extra will be used (install 33 KiB, remove 0 B).
[1/1] lolcat-0:1.5-3.fc42.x86_64                                                  100% |
--------------------------------------------------------------------------------------
[1/1] Total                                                                       100% |
Running transaction
[1/3] Verify package files                                                        100% |
[2/3] Prepare transaction                                                         100% |
[3/3] Installing lolcat-0:1.5-3.fc42.x86_64                                        100% |
Complete!
```

To update vi to vim use **"sudo dnf update -y"** if needed, in my case it was not. After use "sudo yum install vim"

```
gabe@localhost:~$ sudo dnf update -y
Updating and loading repositories:
Repositories loaded.
Nothing to do.
gabe@localhost:~$ sudo install vim
install: missing destination file operand after 'vim'
Try 'install --help' for more information.
gabe@localhost:~$ sudo yum install vim
Updating and loading repositories:
Repositories loaded.
Package                                         Arch        Version           Reposit
Installing:
 vim-enhanced                                   x86_64      2:9.1.1818-1.fc42  updates
Installing dependencies:
 gpm-libs                                       x86_64      1.20.7-51.fc42     fedora
 vim-common                                     x86_64      2:9.1.1818-1.fc42  updates
 vim-filesystem                                 noarch      2:9.1.1818-1.fc42  updates
 xxd                                            x86_64      2:9.1.1818-1.fc42  updates

Transaction Summary:
 Installing:           5 packages

Total size of inbound packages is 10 MiB. Need to download 10 MiB.
After this operation, 41 MiB extra will be used (install 41 MiB, remove 0 B).
Is this ok [y/N]: y
[1/5] gpm-libs-0:1.20.7-51.fc42.x86_64                                             100% | 
[2/5] vim-filesystem-2:9.1.1818-1.fc42.noarch                                      100% | 
[3/5] xxd-2:9.1.1818-1.fc42.x86_64                                                 100% | 
[4/5] vim-enhanced-2:9.1.1818-1.fc42.x86_64                                        100% | 
[5/5] vim-common-2:9.1.1818-1.fc42.x86_64                                          100% | 
--------------------------------------------------------------------------------------
[5/5] Total                                                                        100% | 
Running transaction
[1/7] Verify package files                                                         100% | 
[2/7] Prepare transaction                                                          100% | 
[3/7] Installing xxd-2:9.1.1818-1.fc42.x86_64                                       100% | 
[4/7] Installing vim-filesystem-2:9.1.1818-1.fc42.noarch                           100% | 
[5/7] Installing vim-common-2:9.1.1818-1.fc42.x86_64                               100% | 
[6/7] Installing gpm-libs-0:1.20.7-51.fc42.x86_64                                  100% | 
[7/7] Installing vim-enhanced-2:9.1.1818-1.fc42.x86_64                             100% | 
Complete!
```