

## Installing Jenkins

### 1. Installing Docker

```
yum install docker-ce-18.06.1.ce
```

```
systemctl enable docker; systemctl start docker; systemctl status docker
```

```
● docker.service - Docker Application Container Engine
   Loaded: loaded (/usr/lib/systemd/system/docker.service; enabled; vendor preset: disabled)
   Drop-In: /etc/systemd/system/docker.service.d
            └─http-proxy.conf, https-proxy.conf
   Active: active (running) since Thu 2019-02-07 11:28:29 +08; 21h ago
     Docs: https://docs.docker.com
   Main PID: 4361 (dockerd)
    CGroup: /system.slice/docker.service
            └─4361 /usr/bin/dockerd
               4368 docker-containerd --config /var/run/docker/containerd/containerd.toml

Feb 07 11:28:29 dawn505 dockerd[4361]: time="2019-02-07T11:28:29.623832953+08:00" level=info msg="pickfirstBalancer: HandleSubConnStateChange: 0xc4200a3c30...odule=grpc"
Feb 07 11:28:29 dawn505 dockerd[4361]: time="2019-02-07T11:28:29.623979867+08:00" level=info msg="pickfirstBalancer: HandleSubConnStateChange: 0xc4200a3c30...odule=grpc"
Feb 07 11:28:29 dawn505 dockerd[4361]: time="2019-02-07T11:28:29.624009646+08:00" level=info msg="Loading containers: start."
Feb 07 11:28:29 dawn505 dockerd[4361]: time="2019-02-07T11:28:29.706748245+08:00" level=info msg="Default bridge (docker0) is assigned with an IP address 1...P address"
Feb 07 11:28:29 dawn505 dockerd[4361]: time="2019-02-07T11:28:29.736923878+08:00" level=info msg="Loading containers: done."
Feb 07 11:28:29 dawn505 dockerd[4361]: time="2019-02-07T11:28:29.749633370+08:00" level=info msg="Docker daemon" commit=e68fc7a graphdriver(s)=overlay2 ver...18.06.1-ce
Feb 07 11:28:29 dawn505 dockerd[4361]: time="2019-02-07T11:28:29.749688783+08:00" level=info msg="Daemon has completed initialization"
Feb 07 11:28:29 dawn505 dockerd[4361]: time="2019-02-07T11:28:29.751822865+08:00" level=warning msg="Could not register builder git source: failed to find ... in $PATH"
Feb 07 11:28:29 dawn505 systemd[1]: Started Docker Application Container Engine.
Feb 07 11:28:29 dawn505 dockerd[4361]: time="2019-02-07T11:28:29.761619987+08:00" level=info msg="API listen on /var/run/docker.sock"
Hint: Some lines were ellipsized, use -l to show in full.
[root@dawn505 ~]#
```

### 2. Installing Jenkins

```
export http_proxy=http://proxy.starhubsg.sh.inc:8080;export
```

```
https_proxy=http://proxy.starhubsg.sh.inc:8080
```

```
wget https://pkg.jenkins.io/redhat-stable/jenkins-2.150.2-1.1.noarch.rpm
```

```
[root@dawn505 crmadm]# export http_proxy=http://proxy.starhubsg.sh.inc:8080;export https_proxy=http://proxy.starhubsg.sh.inc:8080
[root@dawn505 crmadm]# wget https://pkg.jenkins.io/redhat-stable/jenkins-2.150.2-1.1.noarch.rpm
--2019-02-08 08:55:20-- https://pkg.jenkins.io/redhat-stable/jenkins-2.150.2-1.1.noarch.rpm
Resolving proxy.starhubsg.sh.inc (proxy.starhubsg.sh.inc)... 10.90.65.198
Connecting to proxy.starhubsg.sh.inc (proxy.starhubsg.sh.inc)[10.90.65.198]:8080... connected.
Proxy request sent, awaiting response... 302 Found
Location: https://prodjenkinsreleases.blob.core.windows.net/redhat-stable/jenkins-2.150.2-1.1.noarch.rpm [following]
--2019-02-08 08:55:21-- https://prodjenkinsreleases.blob.core.windows.net/redhat-stable/jenkins-2.150.2-1.1.noarch.rpm
Connecting to proxy.starhubsg.sh.inc (proxy.starhubsg.sh.inc)[10.90.65.198]:8080... connected.
Proxy request sent, awaiting response... 200 OK
Length: 75785378 (72M) [application/x-redhat-package-manager]
Saving to: 'jenkins-2.150.2-1.1.noarch.rpm'

100%[=====] 75,785,378 293KB/s in 4m 18s

2019-02-08 08:59:39 (287 KB/s) = 'jenkins-2.150.2-1.1.noarch.rpm' saved [75785378/75785378]
[root@dawn505 crmadm]#
```

Once completed run below command

```
rpm -ivh jenkins-2.150.2-1.1.noarch.rpm
```

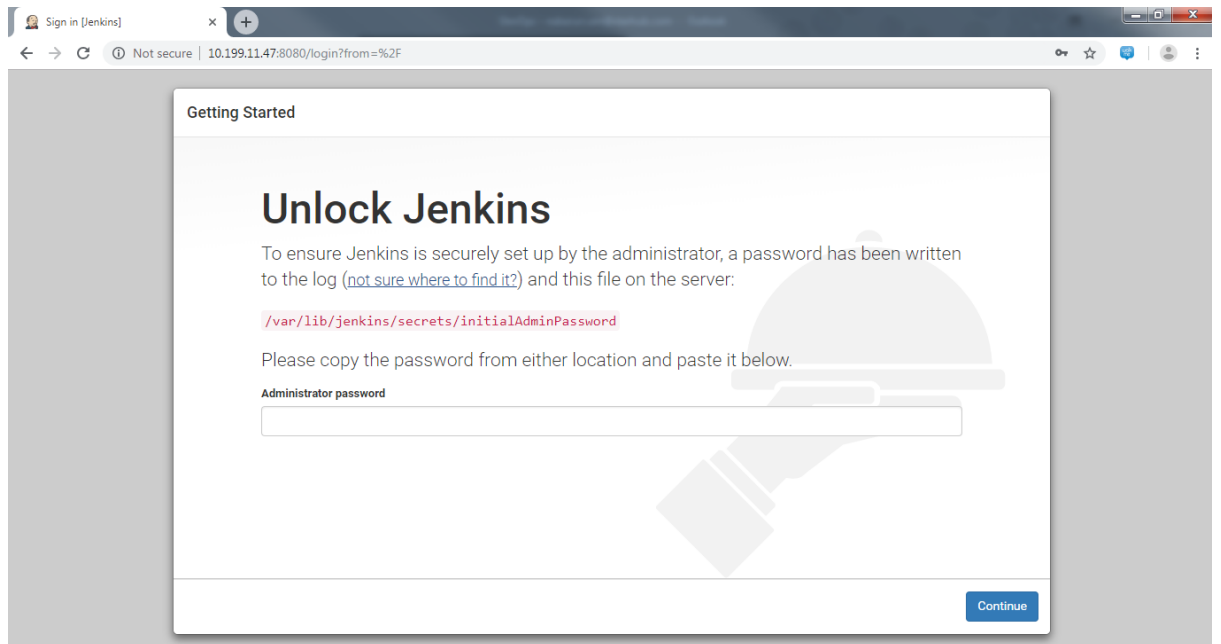
```
[root@dawn505 ~]# rpm -ivh jenkins-2.150.2-1.1.noarch.rpm
Preparing...                               ##### [100%]
Updating / installing...
 1:jenkins-2.150.2-1.1                     ##### [100%]
[root@dawn505 ~]#
```

### 3. Start Jenkins

```
[root@dawn505 crmadm]# systemctl start jenkins
[root@dawn505 crmadm]# chkconfig jenkins on
[root@dawn505 crmadm]# systemctl status jenkins
● jenkins.service - LSB: Jenkins Automation Server
   Loaded: loaded (/etc/rc.d/init.d/jenkins; bad; vendor preset: disabled)
   Active: active (running) since Fri 2019-02-08 09:07:46 +08; 12s ago
     Docs: man:systemd-sysv-generator(8)
   CGroup: /system.slice/jenkins.service
           └─19962 /etc/alternatives/java -Dcom.sun.akuma.Daemon=daemonized -Djava.awt.headless=true -DJENKINS_HOME=/var/lib/jenkins -jar /usr/lib/jenkins/jenkins.wa...

Feb 08 09:07:45 dawn505 systemd[1]: Starting LSB: Jenkins Automation Server...
Feb 08 09:07:45 dawn505 runuser[19945]: pam_unix(runuser:session): session opened for user jenkins by (uid=0)
Feb 08 09:07:46 dawn505 systemd[1]: Started LSB: Jenkins Automation Server.
Feb 08 09:07:46 dawn505 jenkins[19940]: Starting Jenkins [ OK ]
[root@dawn505 crmadm]#
```

### 4. Open Jenkins URL



if it is first time installation please copy the password from Jenkins server and put it

```
[root@dawn505 crmadm]# cat /var/lib/jenkins/secrets/initialAdminPassword
7a46888192ca40c48539254b2432baf9
[root@dawn505 crmadm]#
```

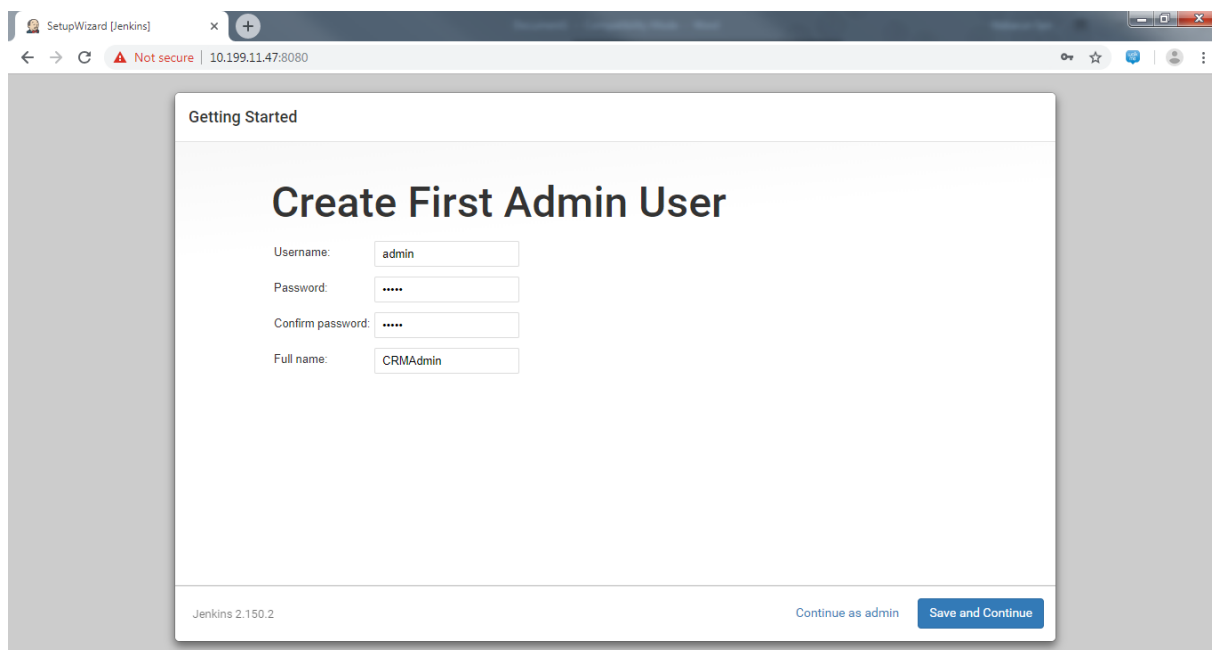
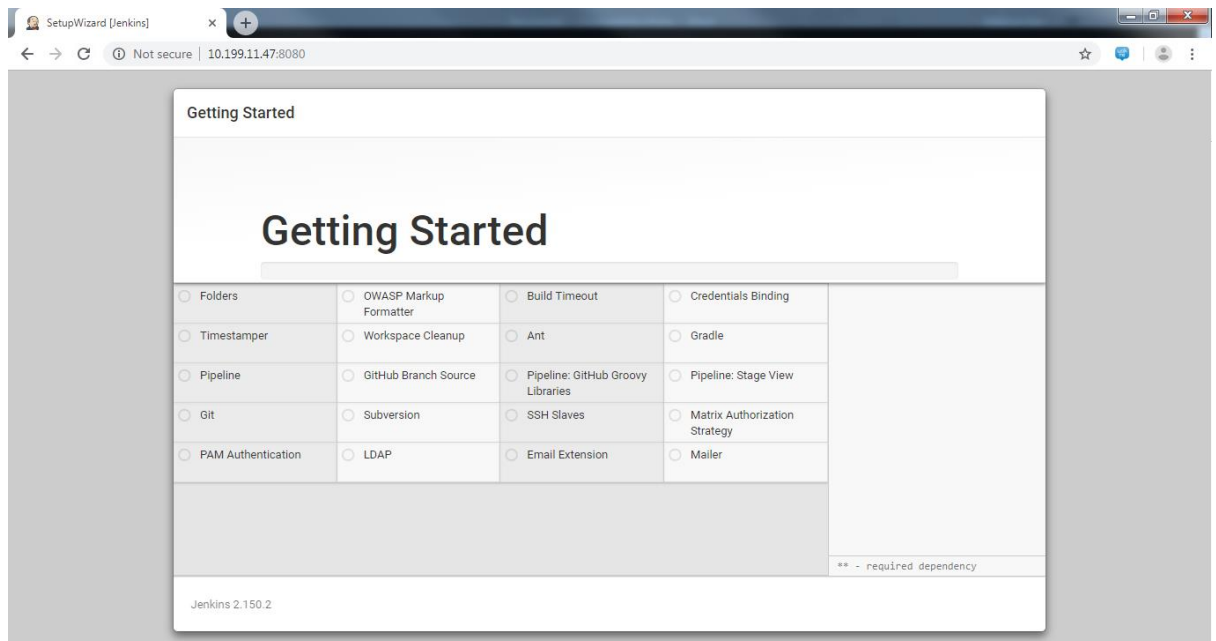
**Note :**

If reinstallation below if the process to recover password if the user id and password was admin

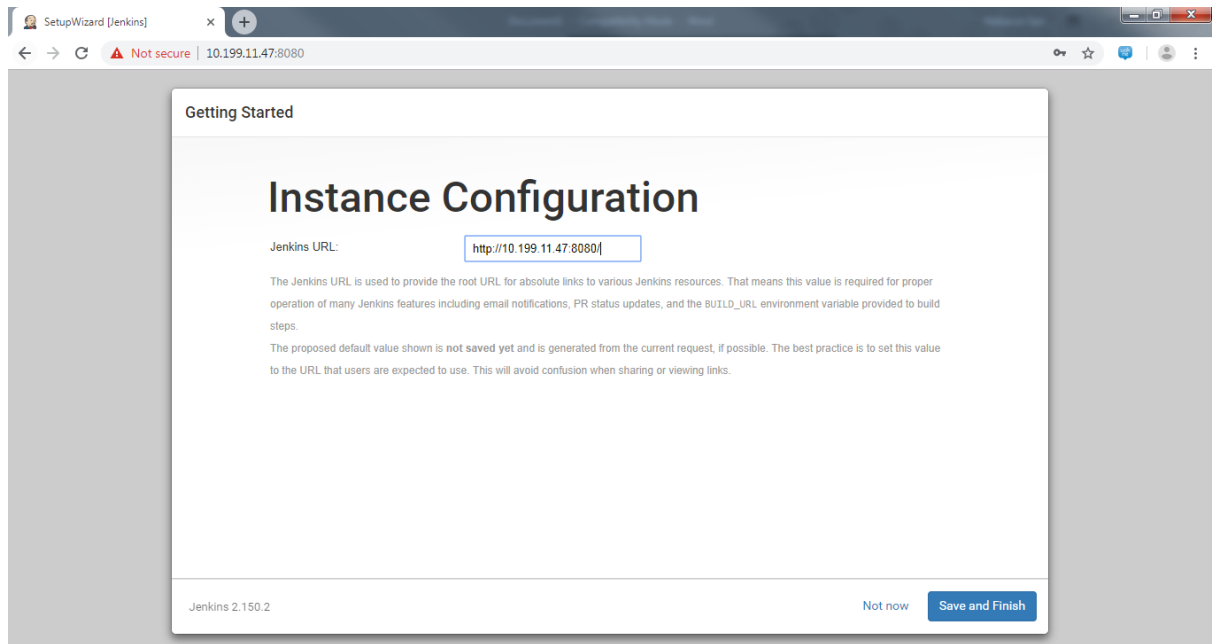
```
cd /usr/lib/Jenkins
```

```
echo -n 'redhat123{admin}' | sha256sum
```

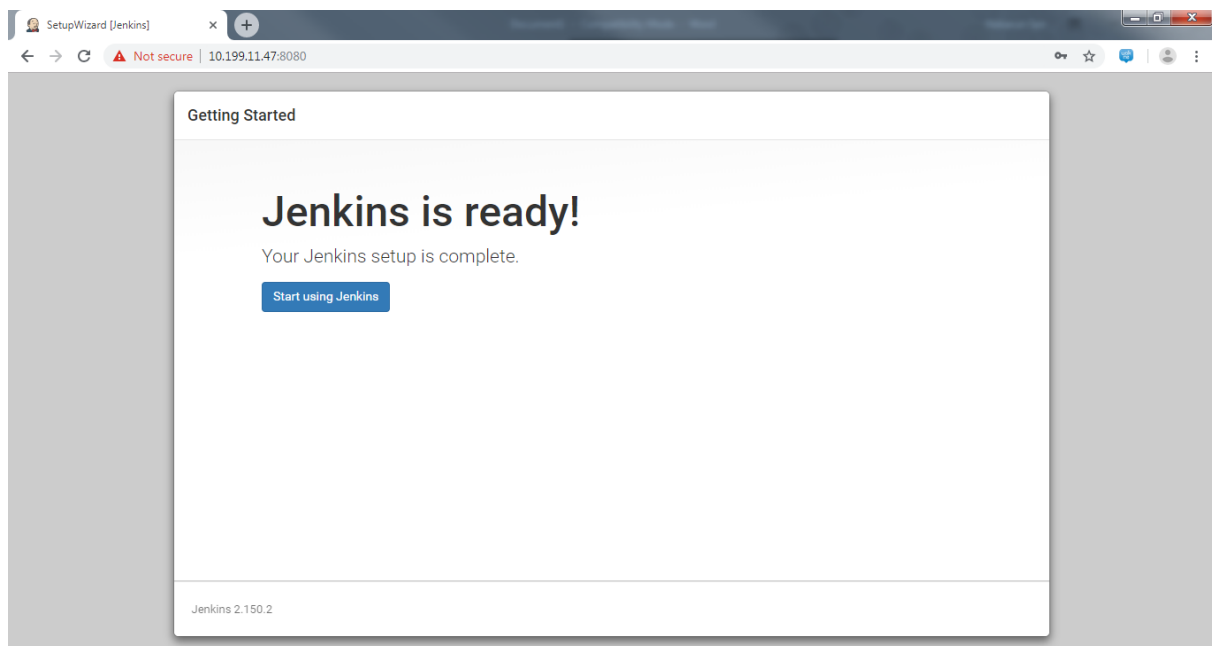
## 5. Continue Jenkins setup



Click Save and Continue



Click on Save and Finish



Click on Start using Jenkins

## Proxy Configuration

---

Click on Manage Plugin

Manage Jenkins [Jenkins] x +

← → ↻ Not secure | 10.199.11.47:8080/manage

Jenkins

CRMAAdmin | log out








ENABLE AUTO REFRESH

New Item  
People  
Build History  
Manage Jenkins  
My Views  
New View

Build Queue  
No builds in the queue.

Build Executor Status  
1 Idle  
2 Idle

## Manage Jenkins

-  **Configure System**  
Configure global settings and paths.
-  **Configure Global Security**  
Secure Jenkins; define who is allowed to access/use the system.
-  **Global Tool Configuration**  
Configure tools, their locations and automatic installers.
-  **Reload Configuration from Disk**  
Discard all the loaded data in memory and reload everything from file system. Useful when you modified config files directly on disk.
-  **Manage Plugins**  
Add, remove, disable or enable plugins that can extend the functionality of Jenkins.
-  **System Information**  
Displays various environmental information to assist trouble-shooting.
-  **System Log**  
System log captures output from java.util.logging output related to Jenkins.

Click on Advanced

Update Center [Jenkins] x +

← → ↻ Not secure | 10.199.11.47:8080/pluginManager/advanced

Jenkins ▾ Plugin Manager  
manage Jenkins  
Update Center

## HTTP Proxy Configuration

Server: proxy.starhubsg.sh.inc ?

Port: 8080 ?

User name: admin ?

Password: \*\*\*\*

No Proxy Host: ?

Test URL: http://www.google.com

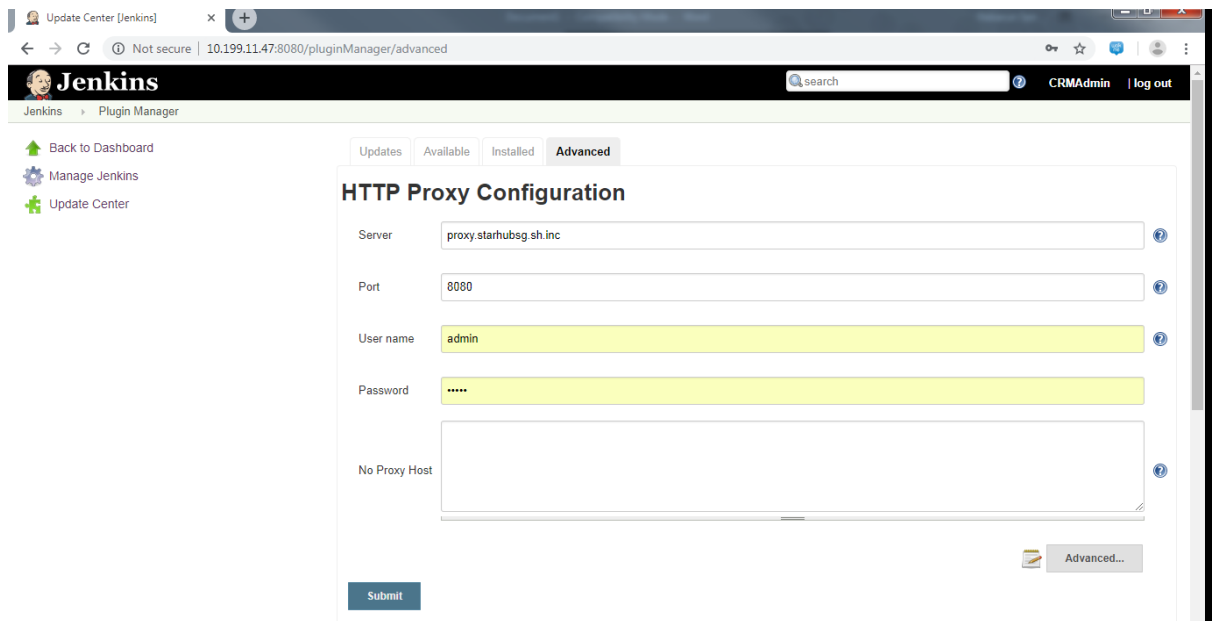
Success

Validate Proxy

Submit

## Upload Plugin

Click on Submit



Setup environment property file for proxy setup as well and after that restart Jenkins and install all required plugin

```
[root@dawn505 ~]# cat .bashrc
# .bashrc

# User specific aliases and functions

alias rm='rm -i'
alias cp='cp -i'
alias mv='mv -i'

# Source global definitions
if [ -f /etc/bashrc ]; then
    . /etc/bashrc
fi
export KUBECONFIG=/etc/kubernetes/kubelet.conf
[root@dawn505 ~]# cat .bash_profile
# .bash_profile

# Get the aliases and functions
if [ -f ~/.bashrc ]; then
    . ~/.bashrc
fi

# User specific environment and startup programs

PATH=$PATH:$HOME/bin

export PATH
cat /etc/issue.k8s
#export http_proxy=http://proxy.starhubsg.sh.inc:8080
#export https_proxy=http://proxy.starhubsg.sh.inc:8080
#export no_proxy="10.199.11.44,10.199.11.45,10.199.11.46,10.199.11.47,localhost,10.96.0.0/12,10.50.0.0/16,127.0.0.1,localhost,dawn503,domain.com:8080"
[root@dawn505 ~]#
```

Please install this plugin first before install other plugin

Folders  
OWASP Markup Formatter  
Build Timeout  
Credentials Binding  
Timestampers  
Workspace Cleanup  
Ant  
Gradle  
Pipeline  
GitHub Branch Source

Pipeline: GitHub Groovy Libraries

Pipeline: Stage View

Git

Subversion

SSH Slaves

Matrix Authorization Strategy

PAM Authentication

LDAP

Email Extension

Mailer

## GitLab Installation

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```
wget https://packages.gitlab.com/install/repositories/runner/gitlab-runner/script.rpm.sh  
chmod 755 script.rpm.sh  
./script.rpm.sh  
yum install gitlab-ce  
gitlab-ctl start
```