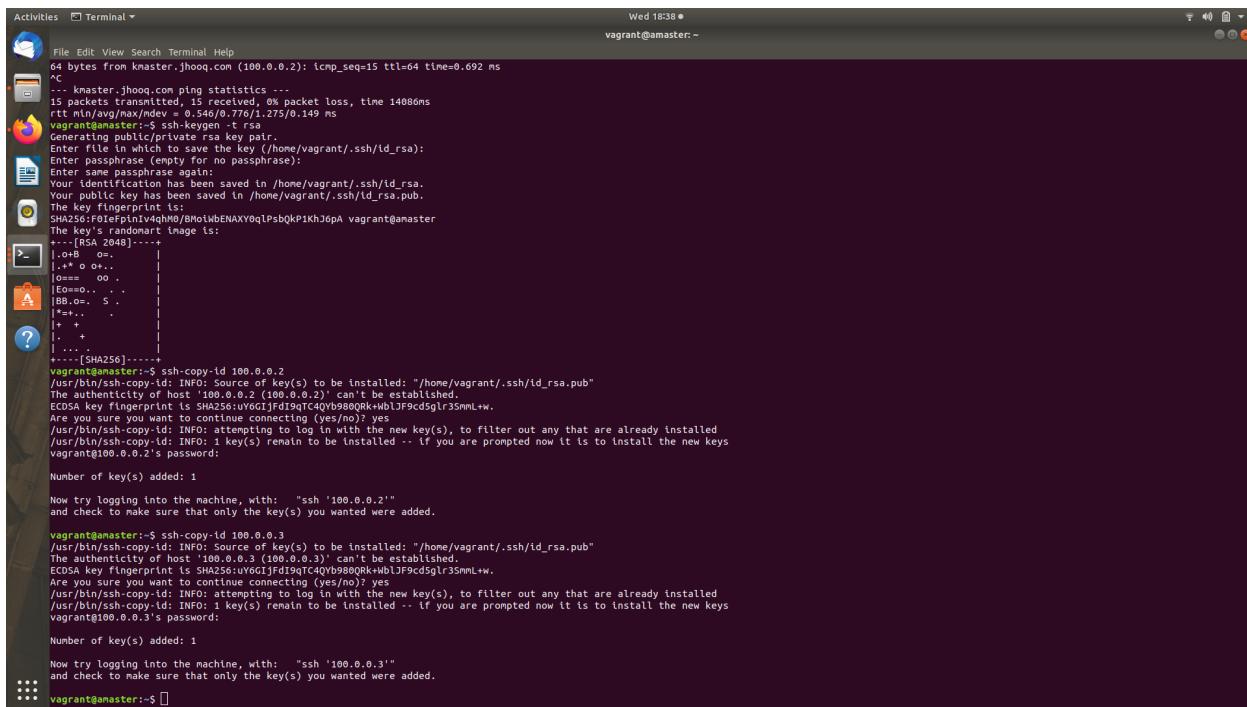
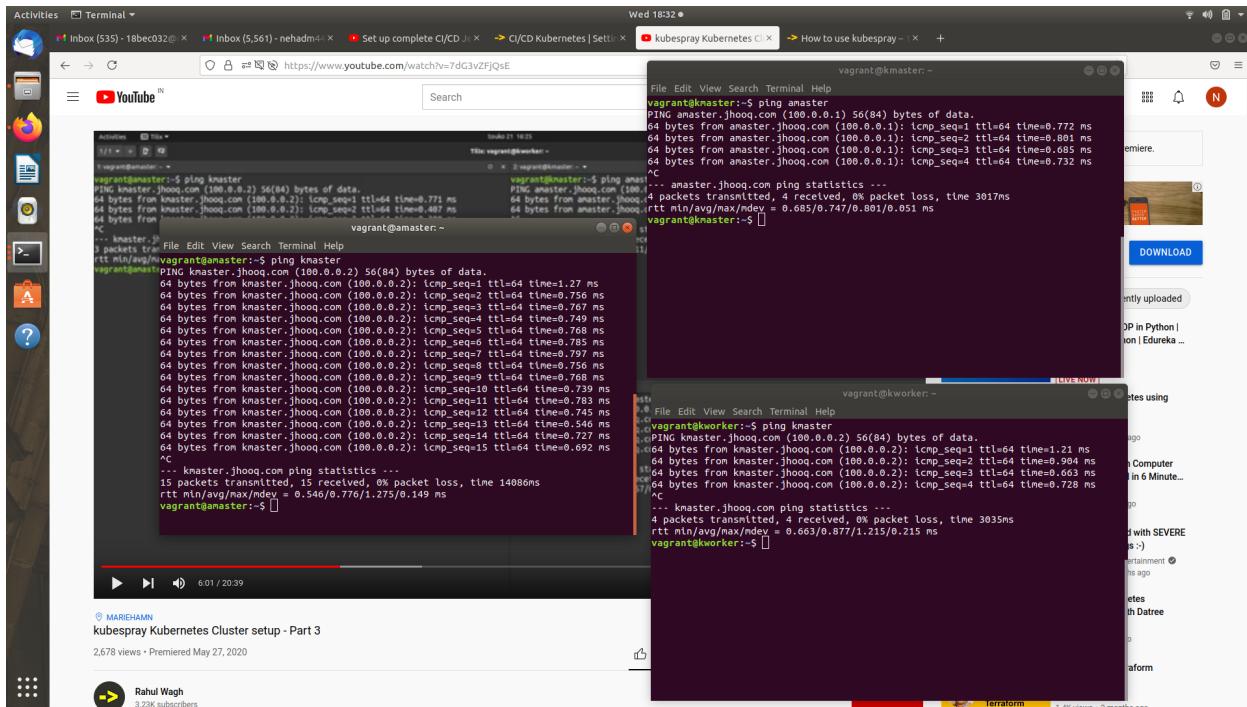


Screenshots:

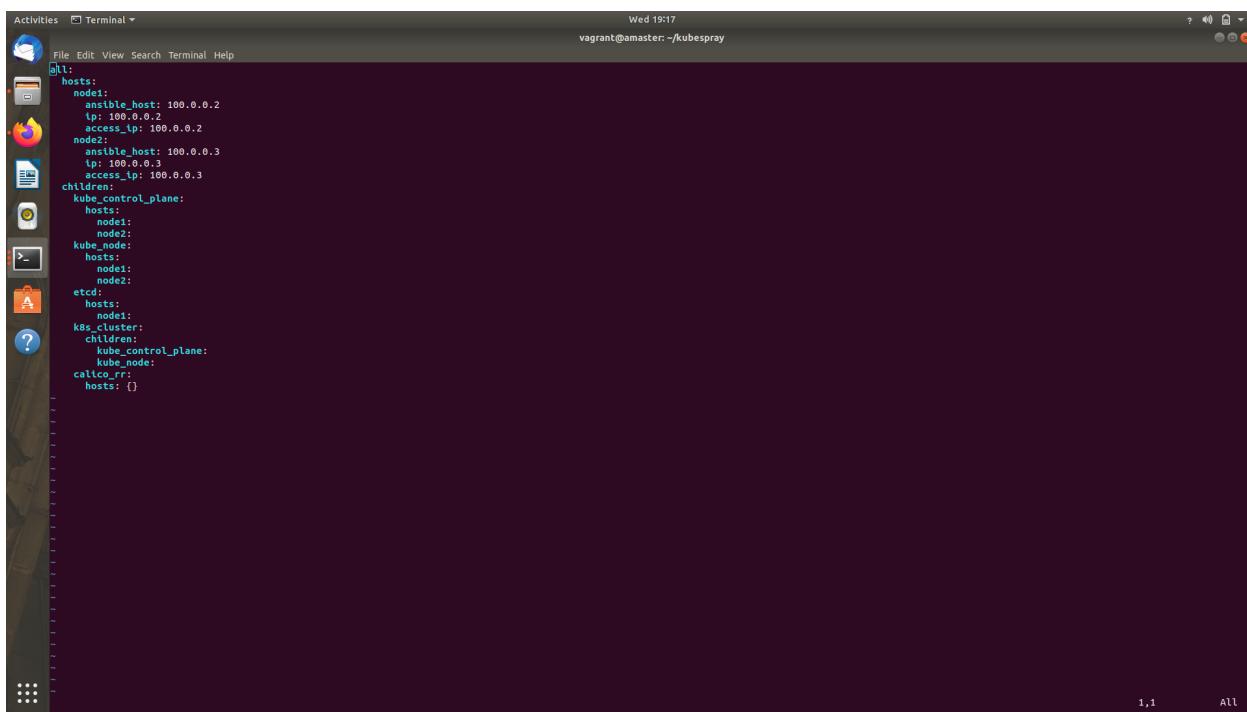
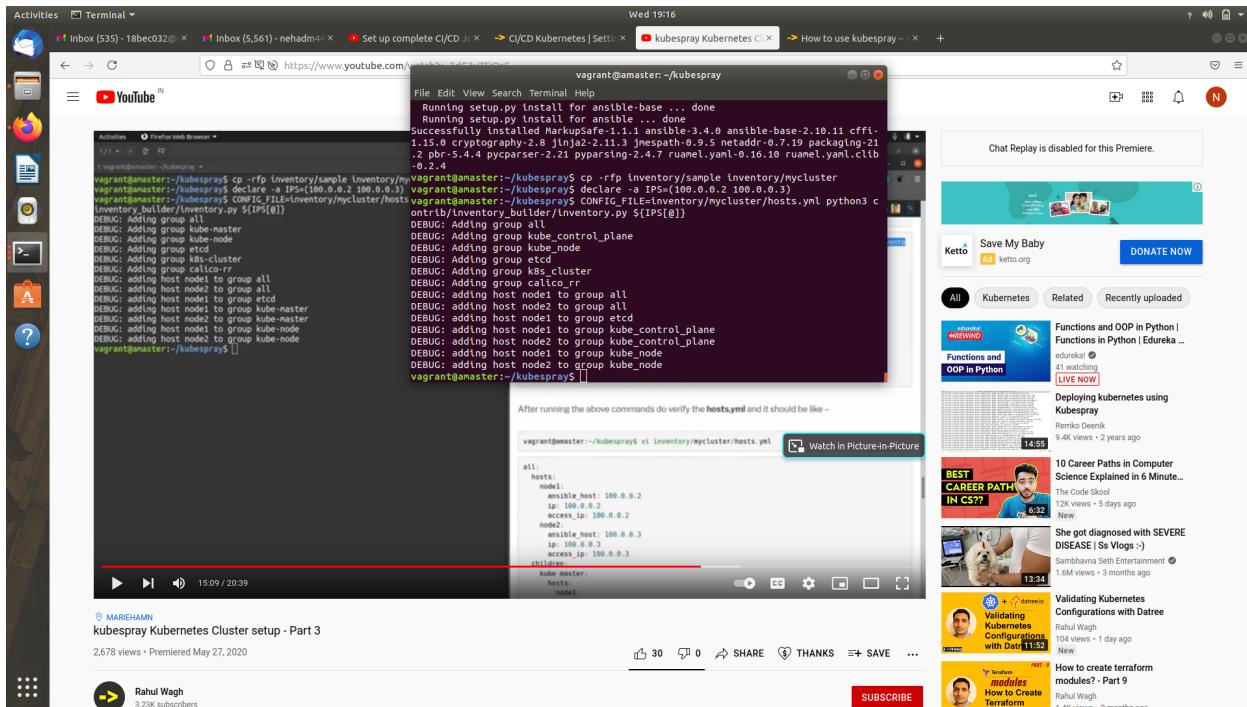


Screenshots:

```
vagrant@amaster:~$ sudo pip3 install -r requirements.txt
The directory '/home/vagrant/.cache/pip/http' or its parent directory is not owned by the current user and the cache has been disabled. Please check the permissions and owner of that directory. If executing pip with sudo, you may want sudo's -H flag.
The directory '/home/vagrant/.cache/pip' or its parent directory is not owned by the current user and caching wheels has been disabled. check the permissions and owner of that directory. If executing pip with sudo, you may want sudo's -H flag.
Collecting ansible-base==2.10.11 (from -r requirements.txt (line 1))
  Downloading https://files.pythonhosted.org/packages/0f/3/7e7e3647d582b266768a000b5830c7fcfa02eac74e24724e9b23309b735f9b2/ansible-base-2.10.11.tar.gz (31.9MB)
    100% [██████████] 31.9MB 33KB/s
Collecting cryptography==2.8 (from -r requirements.txt (line 3))
  Downloading https://files.pythonhosted.org/packages/ab/9/9dc2c0b2a4e1d2b48802a577ca6ada084f58e576f67917c9e28858bf747b/ansible-base-2.10.11.tar.gz (6.0MB)
    100% [██████████] 6.0MB 155KB/s
Collecting jinja2==2.11.3 (from -r requirements.txt (line 4))
  Downloading https://files.pythonhosted.org/packages/7a/c/1e1eccc8c95ddbc9b1aeb64f5783a9e07a286de4219b7204d67b7496ddf35/jinja2-2.11.3-py2.py3-none-any.whl (125kB)
    100% [██████████] 133KB 942KB/s
Collecting netaddr==0.7.19 (from -r requirements.txt (line 5))
  Downloading https://files.pythonhosted.org/packages/ba/7/ce14451a9fd7dbd5a397abf99b24a1ae6b7a1a40b019beb2e9a0bdc74/netaddr-0.7.19-py2.py3-none-any.whl (1.6MB)
    100% [██████████] 1.6MB 391KB/s
Collecting pbr==5.4.4 (from -r requirements.txt (line 6))
  Downloading https://files.pythonhosted.org/packages/7a/db/a968f7d7beb9fe069801c181c25c9cc666ca1b9a1b114d1bbef1126fc/pbr-5.4.4-py2.py3-none-any.whl (110kB)
    100% [██████████] 112KB 876KB/s
Collecting jmespath==0.9.5 (from -r requirements.txt (line 7))
  Downloading https://files.pythonhosted.org/packages/93/43/1e039e1fcdf87b827fe192d0c9f25b48c5b3368902fb913d7754b0cd3/jmespath-0.9.5-py2.py3-none-any.whl
Collecting ruamel.yaml==0.16.10 (from -r requirements.txt (line 8))
  Downloading https://files.pythonhosted.org/packages/09/92/59af3e8227b9c14520bf1e59510d99ceca53e3b844809424817e9432b/ruamel.yaml-0.16.10-py2.py3-none-any.whl (111kB)
    100% [██████████] 112KB 1.2MB/s
Collecting ruamel.yaml.libc==0.2.4 (from -r requirements.txt (line 9))
  Downloading https://files.pythonhosted.org/packages/d0/f479b5d649d3d372a3e86c94b4e2683a167ab43e9b7a0f57032b8eac69168/ruamel.yaml.libc-0.2.4-cp36-cp36-manylinux1_x86_64.whl (552kB)
    100% [██████████] 552KB 1.2MB/s
Collecting MarkupSafe==1.1.1 (from -r requirements.txt (line 10))
  Downloading https://files.pythonhosted.org/packages/49/2f/23e0023beeb885d0ffbefad2942bc51a620328ee910f64abe5a8d180d/MarkupSafe-1.1.1-cp36-cp36-manylinux1_x86_64.whl
Requirement already satisfied: PYAVM in /usr/lib/python3/dist-packages (from ansible-base==2.10.11->r requirements.txt (line 2))
Collecting packaging (from ansible-base==2.10.11->r requirements.txt (line 2))
  Downloading https://files.pythonhosted.org/packages/09/46/4d5df9f9f5ec1ab0f5d097df6793e542f4aa20ba3062ec64409ca87/packaging-21.2-py2.py3-none-any.whl (40kB)
    100% [██████████] 40kB 956B/s
Collecting cffi==1.11.3,>=1.8 (from cryptography==2.8->r requirements.txt (line 3))
  Downloading https://files.pythonhosted.org/packages/49/b/449da9f9acaf7355ceaf1b106d2be61431c29a16567e0175e167f6dab/cffi-1.15.0-cp36-cp36-manylinux1_x86_64.whl (465kB)
    100% [██████████] 499KB 876KB/s
Requirement already satisfied: six<1.4.3 in /usr/lib/python3/dist-packages (from cryptography==2.8->r requirements.txt (line 3))
Collecting pyrsparser==>2.0.2 (from packaging==2.10.11->r requirements.txt (line 2))
  Downloading https://files.pythonhosted.org/packages/8b/40/8041f56197b1370a8fd656fc29a205a39e22449b7cf29864669b15d/pyrsparser-2.4.7-py2.py3-none-any.whl (67kB)
    100% [██████████] 71KB 1.2MB/s
Collecting pycparser (from cffi==1.11.3,>=1.8->cryptography==2.8->r requirements.txt (line 3))
  Downloading https://files.pythonhosted.org/packages/02/d5/5f610be421e8589f2e5e33bf9fa795b982198517d912e1b1e76e1a53/pycparser-2.21-py2.py3-none-any.whl (118kB)
    100% [██████████] 122KB 1.2MB/s
Installing collected packages: pycparser, cffi, cryptography, MarkupSafe, Jinja2, pyrsparser, packaging, ansible-base, ansible, netaddr, pbr, jmespath, ruamel.yaml.libc, ruamel.yaml
  Found existing installation: cryptography 2.1.4
    Not uninstalling cryptography at /usr/lib/python3/dist-packages, outside environment /usr
  Running setup.py install for ansible-base ... done
  Running setup.py install for ansible ... done
  Successfully installed MarkupSafe==1.1.1 ansible-base==2.10.11.0 cryptography==2.8 Jinja2==2.11.3 jmespath==0.9.5 netaddr==0.7.19 packaging==21.2 pbr==5.4.4 pycparser==2.21 pyrsparser==2.4.7
  ruamel.yaml==0.16.10 ruamel.yaml.libc==0.2.4
vagrant@amaster:~/kubespray$
```

```
Setting up python3-crypto (2.6.1-ubuntu2) ...
Setting up libtsan0:amd64 (8.4.0-1ubuntu1.8-0.04) ...
Setting up python3-xdg (0.25-4ubuntu1.1) ...
Setting up python3-keyrings.alt (3.0.1) ...
Setting up libstdc++-dev (11.1.0-1ubuntu1.3) ...
Setting up python3-wheel (0.30.0-0.2) ...
Setting up liblzo1-dev:amd64 (8.4.0-1ubuntu1-18.04) ...
Setting up g++-7-base:amd64 (7.5.0-3ubuntu1-18.04) ...
Setting up libpython3.6-minimal:amd64 (3.6.9-1-18.04ubuntu1.4) ...
Setting up liblfile-fcntrlock-perl (0.22-3ubuntu2) ...
Setting up liblzo1-2:amd64 (8.4.0-1ubuntu1-18.04) ...
Setting up libdptk-dev (1.19.0. Subuntu1.3) ...
Processing triggers for liblc-bin (2.27-3ubuntu1) ...
Setting up libfakeroot:amd64 (1.22-27-ubuntu1) ...
Setting up liblalgorthm-diff-perl (1.19.03-1) ...
Setting up libexpat1-dev:amd64 (2.2.5-1ubuntu0.2) ...
Setting up libtinfo5:amd64 (5.2-2ubuntu1.1) ...
Setting up python3-l1b2e93 (3.6.9-1-18.04) ...
Setting up python3-secretsstorage (2.3.1-2) ...
Setting up python3-distutils (3.6.9-1-18.04) ...
Setting up libitm1:amd64 (8.4.0-1ubuntu1-18.04) ...
Setting up libpython3.6-stublib:amd64 (3.6.9-1-18.04ubuntu1.4) ...
Setting up liblzo1-2:amd64 (8.4.0-1ubuntu1-18.04) ...
Setting up python3-keyring (10.6.0-0) ...
Setting up libcurlkrts5:amd64 (7.5.0-3ubuntu1-18.04) ...
Setting up libibus0:amd64 (7.5.0-3ubuntu1-18.04) ...
Setting up python3.6-minimal (3.6.9-1-18.04ubuntu1.4) ...
Setting up libfakeroot (1.22-27-ubuntu1) ...
update-alternatives: using /usr/bin/fakeroot-sysv to provide /usr/bin/fakeroot (fakeroot) in auto mode
Setting up libpcp-7-dev:amd64 (7.5.0-3ubuntu1-18.04) ...
Setting up libstdc++-7-dev:amd64 (7.5.0-3ubuntu1-18.04) ...
Setting up liblalgorthm-merge-perl (0.08-3) ...
Setting up liblalgorthm-diff-xs-perl (0.04-5) ...
Setting up python3.6-minimal (3.6.9-1-18.04.5) ...
Setting up python3-setuptools (39.0.1-2) ...
Setting up dh-python (3.20180323ubuntu2) ...
Setting up libpython3.6:amd64 (3.6.9-1-18.04ubuntu1.4) ...
Setting up python3.6 (3.6.9-1-18.04ubuntu1.4) ...
Setting up gcc-7 (7.5.0-3ubuntu1-18.04) ...
Setting up gcc (4.7.4-1ubuntu2.3) ...
Setting up g++ (4.7.4-1ubuntu2.3) ...
update-alternatives: using /usr/bin/g++ to provide /usr/bin/c++ (c++) in auto mode
Setting up python3.6 (3.6.9-1-18.04ubuntu1.4) ...
Setting up libpython3-dev:amd64 (3.6.9-1-18.04) ...
Setting up build-essential (12.4ubuntu1) ...
Setting up python3-dev (3.6.7-1-18.04) ...
Processing triggers for liblc-bin (2.27-3ubuntu1) ...
vagrant@amaster:~$ python -V
Python 2.7.14
vagrant@amaster:~$ pip3 -V
pip 9.0.1 from /usr/lib/python3/dist-packages (python 3.6)
vagrant@amaster:~$
```

Screenshots:



Screenshots:

```
Fri 11:06 vagrant@amaster:~/kubespray
File Edit View Search Terminal Help
Friday 12 November 2021 05:25:55 +0000 (0:00:00.094) 0:32:35.071 *****
Friday 12 November 2021 05:25:55 +0000 (0:00:00.105) 0:32:35.776 *****
Friday 12 November 2021 05:25:55 +0000 (0:00:00.105) 0:32:35.882 *****
Friday 12 November 2021 05:25:55 +0000 (0:00:00.083) 0:32:35.966 *****
Friday 12 November 2021 05:25:55 +0000 (0:00:00.071) 0:32:36.038 *****
Friday 12 November 2021 05:25:55 +0000 (0:00:00.121) 0:32:36.158 *****
Friday 12 November 2021 05:25:55 +0000 (0:00:00.118) 0:32:36.268 *****
Friday 12 November 2021 05:25:55 +0000 (0:00:00.087) 0:32:36.326 *****
Friday 12 November 2021 05:25:56 +0000 (0:00:00.087) 0:32:36.404 *****
Friday 12 November 2021 05:25:56 +0000 (0:00:00.091) 0:32:36.491 *****
Friday 12 November 2021 05:25:56 +0000 (0:00:00.091) 0:32:36.583 *****
Friday 12 November 2021 05:25:56 +0000 (0:00:00.091) 0:32:36.674 *****
Friday 12 November 2021 05:25:56 +0000 (0:00:00.094) 0:32:36.754 *****
Friday 12 November 2021 05:25:56 +0000 (0:00:00.165) 0:32:36.990 *****
Friday 12 November 2021 05:25:56 +0000 (0:00:00.140) 0:32:37.130 *****
Friday 12 November 2021 05:25:56 +0000 (0:00:00.131) 0:32:37.261 *****
Friday 12 November 2021 05:25:57 +0000 (0:00:00.094) 0:32:37.359 *****
Friday 12 November 2021 05:25:57 +0000 (0:00:00.094) 0:32:37.449 *****
Friday 12 November 2021 05:25:57 +0000 (0:00:00.092) 0:32:37.555 *****
Friday 12 November 2021 05:25:57 +0000 (0:00:00.113) 0:32:37.668 *****
Friday 12 November 2021 05:25:57 +0000 (0:00:00.112) 0:32:37.781 *****
Friday 12 November 2021 05:25:57 +0000 (0:00:00.115) 0:32:37.896 *****
Friday 12 November 2021 05:25:57 +0000 (0:00:00.127) 0:32:38.024 *****
Friday 12 November 2021 05:25:57 +0000 (0:00:00.195) 0:32:38.130 *****
Friday 12 November 2021 05:25:57 +0000 (0:00:00.078) 0:32:38.261 *****
Friday 12 November 2021 05:25:57 +0000 (0:00:00.108) 0:32:38.318 *****
PLAY RECAP *****
localhost : ok=4 changed=0 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0
node1     : ok=588 changed=126 unreachable=0 failed=0 skipped=1169 rescued=0 ignored=1
node2     : ok=451 changed=97 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

Friday 12 November 2021 05:25:58 +0000 (0:00:00.102) 0:32:38.420 *****
===== download : download_file | Download item ..... 204.49s
container_engineer : Ensure docker packages are installed ..... 1.12s
download : download_file | Download item ..... 69.49s
kubernetes/reinstall : Install packages requirements ..... 87.95s
download : download_container | Download image if required ..... 76.51s
download : download_file | Download item ..... 68.71s
download : download_file | Download item ..... 66.44s
download : download_file | Download image if required ..... 59.35s
download : download_container | Download image if required ..... 59.18s
download : download_container | Download image if required ..... 57.82s
download : download_file | Download item ..... 56.60s
download : download_container | Download image if required ..... 50.60s
download : download_container | Download image if required ..... 48.63s
kubernetes/control-plane : kubeadm | Initialize first master ..... 44.20s
download : download_container | Download image if required ..... 41.48s
download : download_container | Download image if required ..... 40.96s
kubernetes/control-plane : kubeadm | Initialize first master ..... 35.88s
kubernetes-apps/ansible : Kubernetes Apps | Start Resources ..... 33.14s
download : download_container | Download image if required ..... 29.93s
download : download_container | Download image if required ..... 28.16s
vagrant@amaster:~/kubespray$
```

```
Fri 11:07 neha@Inspiron-15-3567:~/Kubernetes/3.kubespray-automation/vagrant$ vagrant ssh kmaster
File Edit View Search Terminal Help
Welcome to Ubuntu 18.04.3 LTS (GNU/Linux 4.15.0-58-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

 System Information as of Fri Nov 12 04:06:22 UTC 2021
System load: 0.0 Processes: 99
Usage: 1.4% of 61.88GB Used: 864M In: 0
Memory usage: 0% IP address for eth0: 10.0.2.15
Swap usage: 0% IP address for eth1: 100.0.0.2

 * Super-optimized for small spaces - read how we shrank the memory
   footprint of MicroK8s to make it the smallest full K8s around.

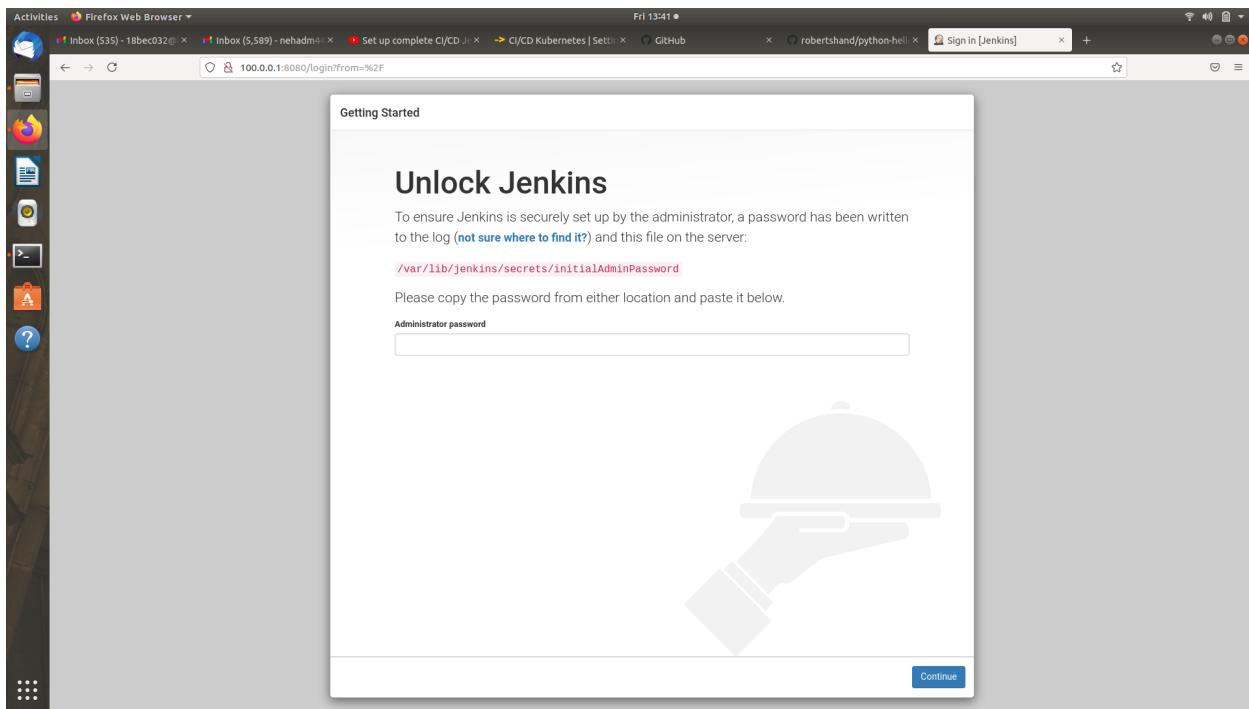
https://ubuntu.com/blog/microk8s-memory-optimisation

0 packages can be updated.
0 updates are security updates.

? Last login: Wed Nov 10 14:31:54 2021 from 100.0.0.1
vagrant@kmaster:~$ sudo vi /etc/hosts
vagrant@kmaster:~$ sudo vi /etc/hosts
vagrant@kmaster:~$ curl -LO https://storage.googleapis.com/kubernetes-release/release/`curl -s https://storage.googleapis.com/kubernetes-release/release/stable.txt /bin/linux/amd64/kubectl
% Total % Received % Xferd Average Speed Time Time Current
          0      0      0      0      0      0      0      0      0      0
100 44.7M 100 44.7M  0      0 171k  0 0:00:39 0:00:39 0:00:39
vagrant@kmaster:~$ sudo cp /etc/kubernetes/admin.conf /home/vagrant/config
vagrant@kmaster:~$ mkdir .kube
vagrant@kmaster:~$ mv config .kube/
vagrant@kmaster:~$ chmod 700 .kube/
Client Version: Version.Info{Major:"1", Minor:"22", GitVersion:"v1.22.3", GitCommit:"c92036820499fedefec0f847e2054d824aea6cd1", GitTreeState:"clean", BuildDate:"2021-10-27T18:41:28Z", GoVersion:"go1.16.9", Compiler:"gc", Platform:"linux/amd64"}
Server Version: Version.Info{Major:"1", Minor:"22", GitVersion:"v1.22.3", GitCommit:"c92036820499fedefec0f847e2054d824aea6cd1", GitTreeState:"clean", BuildDate:"2021-10-27T18:35:25Z", GoVersion:"go1.16.9", Compiler:"gc", Platform:"linux/amd64"}
vagrant@kmaster:~$ kubectl get nodes
NAME STATUS ROLES AGE VERSION
node1 Ready control-plane,master 14m v1.22.3
node2 Ready control-plane,master 13m v1.22.3
vagrant@kmaster:~$
```

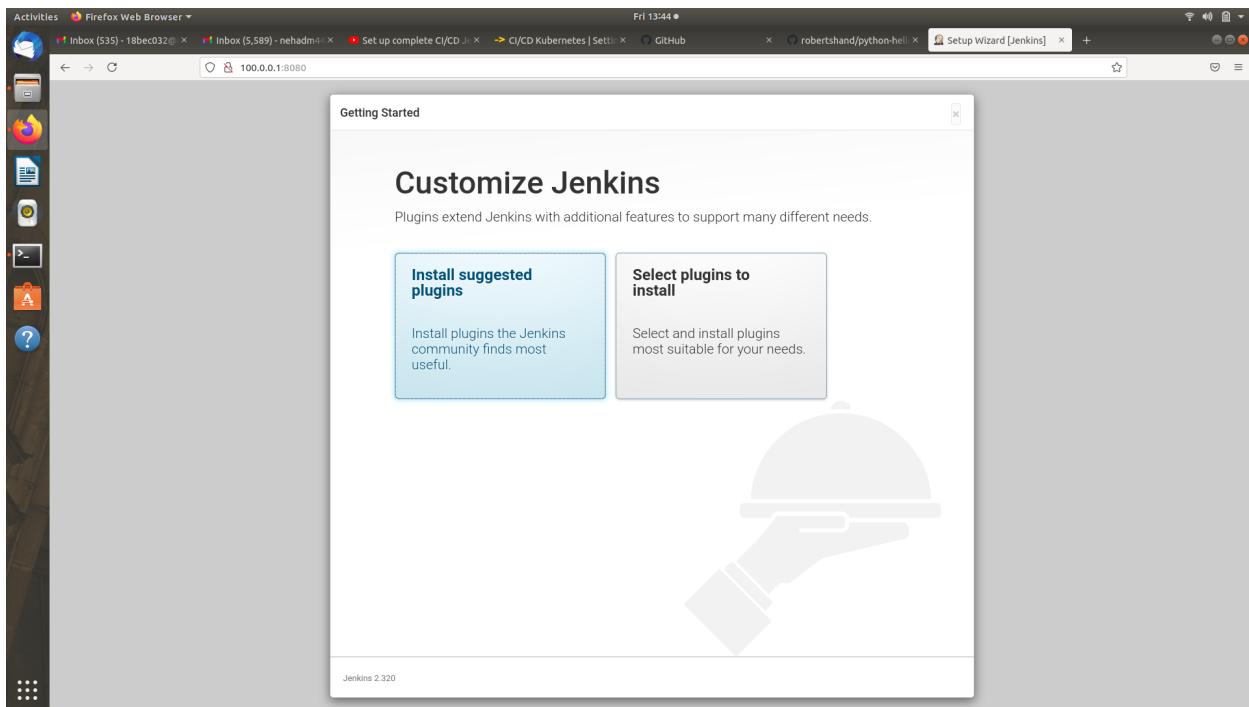
Screenshots:

A screenshot of a Linux desktop environment showing a terminal window. The terminal title is "Terminal". The command being run is "k8sworker". The output shows several "Warning: Connection reset. Retrying..." messages, followed by a message about a new SSH key being generated. It then says "Machine booted and ready!". The terminal then lists system information, including the kernel version (4.15.0-58-generic), and ends with a "Welcome to Ubuntu" message for version 18.04.3 LTS. The prompt at the end is "vagrant@jenkinsserver:~\$".



Screenshots:

```
Fri 13:41 ● vagrant@jenkinsserver:~  
File Edit View Search Terminal Help  
N: Updating from such a repository can't be done securely, and is therefore disabled by default.  
N: See apt-secure(8) manpage for repository creation and user configuration details.  
vagrant@jenkinsserver:~$ sudo apt-get install jenkins  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
The following packages were automatically installed and are no longer required:  
  jenkins  
Use 'sudo apt autoremove' to remove them.  
E: Package 'jenkins' has no installation candidate  
vagrant@jenkinsserver:~$ wget -q -O - https://jenkins-ci.org/debian/jenkins-ci.org.key | sudo apt-key add -  
OK  
vagrant@jenkinsserver:~$ sudo sh -c 'echo deb http://pkg.jenkins-ci.org/debian binary/ > /etc/apt/sources.list.d/jenkins.list'  
Get:1 http://security.ubuntu.com/ubuntu bionic InRelease [88.7 kB]  
Hit:2 http://archive.ubuntu.com/ubuntu bionic InRelease  
Hit:3 http://pkg.jenkins-ci.org/ubuntu bionic-security InRelease  
Get:4 http://archive.ubuntu.com/ubuntu bionic-updates InRelease [2,044 B]  
Get:5 http://archive.ubuntu.com/ubuntu bionic-backports InRelease [74.6 kB]  
Get:6 http://archive.ubuntu.com/ubuntu bionic binary/ Release.gpg [833 B]  
Get:7 http://archive.ubuntu.com/ubuntu bionic binary/ Packages [40.2 kB]  
Fetched 280 kB in 3s (64.5 kB/s)  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
The following additional packages will be installed:  
  daemon  
The following NEW packages will be installed:  
  daemon jenkins  
0 upgraded, 2 newly installed, 0 to remove and 237 not upgraded.  
Need to get 73.0 MB of archives.  
After this operation, 0 B of additional disk space will be used.  
Do you want to continue? [Y/n] y  
Get:1 http://archive.ubuntu.com/ubuntu bionic/universe amd64 daemon amd64 0.6.4-1build1 [99.5 kB]  
Get:2 http://pkg.jenkins-ci.org/debian binary/ jenkins 2.328 [72.9 MB]  
Fetched 73.0 MB in 52s (1,417 kB/s)  
Selecting previously unselected package daemon.  
(Reading database ... 5999 files and directories currently installed.)  
Preparing to unpack .../daemon_0.6.4-1build1_amd64.deb ...  
Unpacking daemon (0.6.4-1build1) ...  
Selecting previously unselected package jenkins.  
Preparing to unpack .../archives/jenkins_2.328_all.deb ...  
Unpacking jenkins (2.328) ...  
Processing triggers for ureadahead (0.100.0-21) ...  
Processing triggers for systemd (237-3ubuntu10.25) ...  
Processing triggers for man-db (2.8.3-2ubuntu0.1) ...  
Setting up daemon (0.6.4-1build1) ...  
Setting up jenkins (2.328) ...  
Processing triggers for systemd (237-3ubuntu10.25) ...  
Processing triggers for ureadahead (0.100.0-21) ...  
vagrant@jenkinsserver:~$
```



Screenshots:

A terminal window titled "Terminal" showing Jenkins startup logs. The logs indicate the server is running on port 8080 and that the initial setup is required. An admin user has been created and a password generated.

```
Fri 13:45 ●
vagrant@jenkinsserver:~[Activities Terminal Fri 13:45 ● vagrant@jenkinsserver:~]
Setting up jenkins (2.320) ...
Processing triggers for systemd (237-3ubuntu10.25) ...
Processing triggers for ureadahead (0.100.0-21) ...
[vagrant@jenkinsserver:~] cat /var/log/jenkins/jenkins.log
Running from: /usr/share/jenkins/jenkins.war
2021-11-12 08:08:09.980+0000 [id=1] INFO org.eclipse.jetty.util.log.LogInitialized: Logging initialized @509ms to org.eclipse.jetty.util.log.JavaUtilLog
2021-11-12 08:08:09.981+0000 [id=1] INFO org.apache.catalina.startup.Tomcat: Initialization Manager: Starting workerName=worker
2021-11-12 08:08:09.271+0000 [id=1] WARNING o.e.j.s.handler.ContextHandler#setContextPath: Empty contextPath
2021-11-12 08:08:09.389+0000 [id=1] INFO org.eclipse.jetty.server.Server#doStart: jetty-9.4.43.v20210629; built: 2021-06-30T11:07:22.254Z; git: 52e006ecfa3af7f1a27ef3a288e2bef7ea9dd7e8; jvm 1.8.0_2
92-80292-110-ubuntu1-18-04-b10
2021-11-12 08:08:09.390+0000 [id=1] INFO o.e.j.w.StandardDescriptorProcessor#visitServlet: NO JSP Support for /, did not find org.eclipse.jetty.jsp.JettyJspServlet
2021-11-12 08:08:09.979+0000 [id=1] INFO o.e.j.w.StandardDescriptorProcessor#visitSessionIdManager: SessionIdManager#doStart: No SessionScavenger set, using defaults
2021-11-12 08:08:09.980+0000 [id=1] INFO o.e.j.s.handler.SessionHandler#startScavenging: node0 Scavenging every 60000ms
2021-11-12 08:08:10.550+0000 [id=1] INFO hudson.WebAppMain#contextInitialized: Jenkins home directory: /var/lib/jenkins found at: EnvVars.masterEnvVars.get("JENKINS_HOME")
2021-11-12 08:08:10.752+0000 [id=1] INFO o.e.j.s.handler.ContextHandler#doStart: Started w.gife8dsib(Jenkins v2.320., ftl://var/cache/jenkins/war/AVAILABLE){/var/cache/jenkins/war}
2021-11-12 08:08:10.752+0000 [id=1] INFO o.e.j.s.handler.AbstractConnector#doStart: Started ServerConnector@zeaa8bai([HTTP/1.1, (http/1.1)]{0.0.0.0:8080})
2021-11-12 08:08:10.753+0000 [id=1] INFO org.eclipse.jetty.server.Server#doStart: Started Jetty-9.4.43.v20210629
2021-11-12 08:08:10.754+0000 [id=1] INFO org.eclipse.jetty.util.log.Log#logInternal: Winstone Service started @427ms
2021-11-12 08:08:12.731+0000 [id=28] INFO Jenkins.InitReactorRunner$1#onAttained: Started initialization
2021-11-12 08:08:12.777+0000 [id=28] INFO Jenkins.InitReactorRunner$1#onAttained: Listed all plugins
2021-11-12 08:08:14.974+0000 [id=26] INFO Jenkins.InitReactorRunner$1#onAttained: Prepared all plugins
2021-11-12 08:08:14.986+0000 [id=27] INFO Jenkins.InitReactorRunner$1#onAttained: Started all plugins
2021-11-12 08:08:15.034+0000 [id=28] INFO Jenkins.InitReactorRunner$1#onAttained: Added all extensions
2021-11-12 08:08:16.073+0000 [id=28] INFO Jenkins.InitReactorRunner$1#onAttained: System config loaded
2021-11-12 08:08:16.074+0000 [id=28] INFO Jenkins.InitReactorRunner$1#onAttained: System config adapted
2021-11-12 08:08:16.075+0000 [id=28] INFO Jenkins.InitReactorRunner$1#onAttained: Loaded all jobs
2021-11-12 08:08:16.871+0000 [id=28] INFO Jenkins.InitReactorRunner$1#onAttained: Configuration for all jobs updated
2021-11-12 08:08:16.958+0000 [id=42] INFO hudson.model.AsyncPeriodicWork$lambda$doRun$1: Started download metadata
2021-11-12 08:08:17.091+0000 [id=42] INFO hudson.util.Retrigger#start: Attempt #1 to do the action check updates server
2021-11-12 08:08:21.920+0000 [id=26] INFO Jenkins.Install.SetupWizard#lnt:
*****
*****
Jenkins initial setup is required. An admin user has been created and a password generated.
Please use the following password to proceed to installation:
d1f83e3fdd447c1b3df3d8ec033953
This may also be found at: /var/lib/jenkins/secrets/initialAdminPassword
*****
*****
2021-11-12 08:08:57.948+0000 [id=28] INFO Jenkins.InitReactorRunner$1#onAttained: Completed initialization
2021-11-12 08:08:57.981+0000 [id=20] INFO hudson.WebAppMain$Run: Jenkins is fully up and running
2021-11-12 08:08:59.966+0000 [id=42] INFO h.n.DownloadService$DownloadableLoad: Obtained the updated data file for hudson.tasks.Maven.MavenInstaller
2021-11-12 08:08:59.968+0000 [id=42] INFO hudson.util.Retrigger#start: Performed the action check updates server successfully at the attempt #1
2021-11-12 08:08:59.981+0000 [id=42] INFO hudson.model.AsyncPeriodicWork$lambda$doRun$1: Finished download metadata. 43,020 ms
2021-11-12 08:10:46.291+0000 [id=44] INFO hudson.model.AsyncPeriodicWork$lambda$doRun$1: Started Periodic background build discarmer
2021-11-12 08:10:46.294+0000 [id=44] INFO hudson.model.AsyncPeriodicWork$lambda$doRun$1: Finished Periodic background build discarmer. 1 ms
[vagrant@jenkinsserver:~]
```

The Jenkins dashboard is displayed in a browser window. The main message says "Welcome to Jenkins!" and provides instructions to start building a software project. Navigation links include "Dashboard", "New item", "People", "Build History", "Manage Jenkins", "My Views", "Lockable Resources", and "New View".

Fri 14:01 ●
100.0.0.1:8080
Jenkins
Dashboard >
Welcome to Jenkins!
This page is where your Jenkins jobs will be displayed. To get started, you can set up distributed builds or start building a software project.
Start building your software project
Create a job →
Set up a distributed build
Set up an agent →
Configure a cloud →
Learn more about distributed builds ↗
REST API Jenkins 2.320

Screenshots:

```
Fri 14:15 •
vagrant@jenkinsserver:~$ sudo apt install docker.io
[...]
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following NEW packages will be installed:
  bridge-utils containerd docker.io liblxc0 runc ubuntu-fan
Suggested packages:
  ifupdown aufs-tools cgroups-mount | cgroup-lite debootstrap docker-doc | lse zfs-fuse | zfsutils
The following NEW packages will be installed:
  bridge-utils containerd docker.io liblxc0 runc ubuntu-fan
0 upgraded, 0 newly installed, 0 to remove and 237 not upgraded.
Need to get 74.2 MB of additional packages.
After this operation, 360 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://archive.ubuntu.com/ubuntu bionic/universe amd64 p1gz amd64 2.4-1 [57.4 kB]
Get:2 http://archive.ubuntu.com/ubuntu bionic/main amd64 bridge-utils amd64 1.5-1ubuntu1 [30.1 kB]
Get:3 http://archive.ubuntu.com/ubuntu bionic-updates/universe amd64 runc amd64 1.0.1-0ubuntu2-18.04.1 [4,155 kB]
Get:4 http://archive.ubuntu.com/ubuntu bionic-updates/universe amd64 containerd amd64 1.5.5-0ubuntu3-18.04.1 [39.0 kB]
15% 74.2 MB in 5s (1,352 kB/s)
Fetched 74.2 MB in 5s (1,352 kB/s)
Preconfiguring packages...
Selecting previously unselected package p1gz.
(Reading database... 58793 files and directories currently installed.)
Preparing to unpack .../0-p1gz_2.4-1_amd64.deb ...
Unpacking p1gz (2.4-1) ...
Selecting previously unselected package bridge-utils.
Preparing to unpack .../1-bridge-utils_1.5-1ubuntu1_amd64.deb ...
Unpacking bridge-utils (1.5-1ubuntu1) ...
Selecting previously unselected package runc.
Preparing to unpack .../2-runc_1.0.1-0ubuntu2-18.04.1_amd64.deb ...
Unpacking runc (1.0.1-0ubuntu2-18.04.1) ...
Selecting previously unselected package containerd.
Preparing to unpack .../3-containerd_1.5.5-0ubuntu3-18.04.1_amd64.deb ...
Unpacking containerd (1.5.5-0ubuntu3-18.04.1) ...
Selecting previously unselected package docker.io.
Preparing to unpack .../4-docker.io_20.10.7-0ubuntu5-18.04.3_amd64.deb ...
Unpacking docker.io (20.10.7-0ubuntu5-18.04.3) ...
Selecting previously unselected package ubuntu-fan.
Preparing to unpack .../5-ubuntu-fan_0.12.10_all.deb ...
Unpacking ubuntu-fan (0.12.10) ...
Setting up runc (1.0.1-0ubuntu2-18.04.1) ...
Processing triggers for ureadahead (0.100.0-21) ...
Setting up containerd (1.5.5-0ubuntu3-18.04.1) ...
Created symlink /etc/systemd/system/multi-user.target.wants/containerd.service → /lib/systemd/system/containerd.service.
Setting up liblxc0 (0.9.10) ...
Setting up ubuntu-fan (0.12.10) ...
Created symlink /etc/systemd/system/multi-user.target.wants/ubuntu-fan.service → /lib/systemd/system/ubuntu-fan.service.
Processing triggers for systemd (237-3ubuntu10.25) ...
Processing triggers for nain-db (2.8.3-2ubuntu0.1) ...
Setting up p1gz (2.4-1) ...
Setting up docker.io (20.10.7-0ubuntu5-18.04.3) ...
Adding group 'docker' (GID 116) ...
```

```
Fri 14:20 •
vagrant@jenkinsserver:~$ vagrant ssh jenkinsserver
Welcome to Ubuntu 18.04.3 LTS (GNU/Linux 4.15.0-58-generic x86_64)

 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
 * Support: https://ubuntu.com/advantage

 System Information as of Fri Nov 12 08:50:04 UTC 2021

 System load: 0.16      Users logged in:          0
 Memory usage: 12% of 61.86GB  IP address for eth0: 10.0.2.15
 Memory usage: 36%      IP address for eth1: 100.64.0.1
 Swap usage: 0%        IP address for docker0: 172.17.0.1
 Processes: 118

 * Super-optimized for small spaces - read how we shrank the memory
   footprint of MicroK8s to make it the smallest full K8s around.

 https://ubuntu.com/blog/microk8s-memory-optimisation

 244 packages can be updated.
 189 updates are security updates.

Last login: Fri Nov 12 07:51:47 2021 from 10.0.2.2
vagrant@jenkinsserver:~$ docker version
Client:
  Version:           20.10.7
  API version:       1.41
  Go version:        go1.13.8
  Git commit:        20.10.7-ubuntu5-18.04.3
  Built:             Mon Nov  1 01:04:14 2021
  OS/Arch:           linux/amd64
  Context:            default
  Experimental:     true

Server:
  Engine:
    Version:           20.10.7
    API version:       1.41 (minimum version 1.12)
    Go version:        go1.13.8
    Git commit:        20.10.7-ubuntu5-18.04.3
    Built:             Fri Oct 22 00:57:37 2021
    OS/Arch:           linux/amd64
    Experimental:     false
  containerd:
    Version:           1.5.5-0ubuntu3-18.04.1
    GitCommit:         001138
  runc:
    Version:           1.0.1-0ubuntu2-18.04.1
    GitCommit:         001138
  docker-init:
    Version:           0.19.0
    GitCommit:         001138
vagrant@jenkinsserver:~$
```

Screenshots:

The screenshot shows a terminal window with several tabs open. The current tab displays a series of SSH sessions from a host machine to a 'k8smaster' node. The sessions show Jenkins logs, including build details and error messages related to Kubernetes deployment. The terminal also shows system information, package updates, and a connection attempt to port 22.

```
File Edit View Search Terminal Help
neha@neha-Inspiron-15-3567:~/Kubernetes/10-kubernetes-jenkins$ vagrant ssh k8smaster
Welcome to Ubuntu 18.04.3 LTS (GNU/Linux 4.15.0-58-generic x86_64)

 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
 * Support: https://ubuntu.com/advantage

System information disabled due to load higher than 2.0

251 packages can be updated.
191 updates are security updates.

Last login: Sat Nov 13 07:49:39 2021 from 100.0.0.1
vagrant@k8smaster:~$ kubectl version
Client Version: version.Info{Major:"1", Minor:"22", GitVersion:"v1.22.3", GitCommit:"c92036820499fedefec0f847e2054d824aea6cd1", GitTreeState:"clean", BuildDate:"2021-10-27T18:41:28Z", GoVersion:"go1.16.9"
Server Version: version.Info{Major:"1", Minor:"22", GitVersion:"v1.22.3", GitCommit:"c92036820499fedefec0f847e2054d824aea6cd1", GitTreeState:"clean", BuildDate:"2021-10-27T18:35:25Z", GoVersion:"go1.16.9"
vagrant@k8smaster:~$ Connection to 127.0.0.1 closed.
neha@neha-Inspiron-15-3567:~/Kubernetes/10-kubernetes-jenkins$ ls
Vagrantfile
neha@neha-Inspiron-15-3567:~/Kubernetes/10-kubernetes-jenkins$ vagrant ssh k8smaster
Welcome to Ubuntu 18.04.3 LTS (GNU/Linux 4.15.0-58-generic x86_64)

 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
 * Support: https://ubuntu.com/advantage

System information disabled due to load higher than 2.0

251 packages can be updated.
191 updates are security updates.

Last login: Sat Nov 13 09:46:56 2021 from 10.0.2.2
vagrant@k8smaster:~$ ls
k8s-spring-boot-deployment.yml  kubectl
vagrant@k8smaster:~$
```

The screenshot shows a Jenkins pipeline dashboard for the 'Jhooc-SpringBoot' project. It includes a sidebar with navigation links like 'Status', 'Build Now', and 'Pipeline Syntax'. The main area displays a 'Stage View' timeline for various stages: Git Clone, Gradle Build, Docker build, Docker Login, Push Image to Docker Hub, SSH Into k8s Server, Put k8s-spring-boot-deployment.yml onto k8smaster, and Deploy spring boot. Below the timeline, a 'Recent Changes' section shows the last few builds. A detailed 'Build History' table lists 16 builds, each with a timestamp and status (e.g., #26, Nov 13, 2021 9:47 AM, No Changes). The last four builds (#22 to #19) are highlighted in red, indicating they failed.

Build	Date	Status
#26	Nov 13, 2021 9:47 AM	No Changes
#25	Nov 13, 2021 8:07 AM	No Changes
#24	Nov 13, 2021 4:27 AM	No Changes
#23	Nov 13, 2021 3:55 AM	No Changes
#22	Nov 13, 2021 3:53 AM	No Changes
#21	Nov 13, 2021 3:52 AM	No Changes
#20	Nov 13, 2021 3:47 AM	No Changes
#19	Nov 13, 2021 3:44 AM	No Changes
#18	Nov 13, 2021 3:34 AM	No Changes
#17	Nov 13, 2021 3:25 AM	No Changes
#16	Nov 13, 2021 3:17 AM	No Changes

Screenshots:

