

demo@192.168.4.9's password:

```
• MobaXterm 20.6 •  
(SSH client, X-server and networking tools)  
  
→ SSH session to demo@192.168.4.9  
• SSH compression : v  
• SSH-browser      : v  
• X11-forwarding   : v (remote display is forwarded through SSH)  
• DISPLAY          : v (automatically set on remote server)  
  
→ For more info, ctrl+click on help or visit our website
```

Welcome to Ubuntu 18.04.5 LTS (GNU/Linux 4.15.0-112-generic x86_64)

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

System information as of Mon Sep 27 06:04:45 UTC 2021

```
System load: 0.05          Processes:            214  
Usage of /:  15.3% of 62.25GB Users logged in:       1  
Memory usage: 0%          IP address for ens160: 192.168.4.9  
Swap usage:  0%
```

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

Failed to connect to https://changelogs.ubuntu.com/meta-release-lts. Check your Internet connection or proxy settings

```
Last login: Mon Sep 27 14:01:08 2021  
/usr/bin/xauth: file /home/demo/.Xauthority does not exist  
demo@master:~$ uname -a  
Linux master 4.15.0-112-generic #113-Ubuntu SMP Thu Jul 9 23:41:39 UTC 2020 x86_64 x86_64  
x86_64 GNU/Linux  
demo@master:~$ wget  
https://raw.githubusercontent.com/CentaurusInfra/mizar/dev-next/kernelupdate.sh  
--2021-09-27 06:08:54--  
https://raw.githubusercontent.com/CentaurusInfra/mizar/dev-next/kernelupdate.sh  
Resolving raw.githubusercontent.com (raw.githubusercontent.com)... 185.199.108.133,  
185.199.111.133, 185.199.110.133, ...  
Connecting to raw.githubusercontent.com  
(raw.githubusercontent.com)|185.199.108.133|:443... connected.  
HTTP request sent, awaiting response... 200 OK  
Length: 791 [text/plain]  
Saving to: 'kernelupdate.sh'
```

```
kernelupdate.sh  
100%[=====]  
=====>] 791 --.-KB/s in 0s
```

2021-09-27 06:08:55 (23.6 MB/s) - 'kernelupdate.sh' saved [791/791]

demo@master:~\$ sudo bash kernelupdate.sh

[sudo] password for demo:

--2021-09-27 06:09:00--

https://mizar.s3.amazonaws.com/linux-5.6-rc2/linux-headers-5.6.0-rc2_5.6.0-rc2-1_amd64.deb

Resolving mizar.s3.amazonaws.com (mizar.s3.amazonaws.com)... 52.216.84.139

Connecting to mizar.s3.amazonaws.com (mizar.s3.amazonaws.com)|52.216.84.139|:443... connected.

HTTP request sent, awaiting response... 200 OK

Length: 7621020 (7.3M) []

Saving to: './linux-5.6-rc2/linux-headers-5.6.0-rc2_5.6.0-rc2-1_amd64.deb'

linux-headers-5.6.0-rc2_5.6.0-rc2-1_amd64.deb

100%[=====>] 7.27M 893KB/s in 10s

2021-09-27 06:09:12 (739 KB/s) -

'./linux-5.6-rc2/linux-headers-5.6.0-rc2_5.6.0-rc2-1_amd64.deb' saved
[7621020/7621020]

--2021-09-27 06:09:12--

https://mizar.s3.amazonaws.com/linux-5.6-rc2/linux-image-5.6.0-rc2-dbg_5.6.0-rc2-1_amd64.deb

Resolving mizar.s3.amazonaws.com (mizar.s3.amazonaws.com)... 52.217.10.92

Connecting to mizar.s3.amazonaws.com (mizar.s3.amazonaws.com)|52.217.10.92|:443... connected.

HTTP request sent, awaiting response... 200 OK

Length: 857827912 (818M) [application/x-www-form-urlencoded]

Saving to: './linux-5.6-rc2/linux-image-5.6.0-rc2-dbg_5.6.0-rc2-1_amd64.deb'

linux-image-5.6.0-rc2-dbg_5.6.0-rc2-1_amd64.deb

100%[=====>] 818.09M 4.44MB/s in 2m 50s

2021-09-27 06:12:03 (4.82 MB/s) -

'./linux-5.6-rc2/linux-image-5.6.0-rc2-dbg_5.6.0-rc2-1_amd64.deb' saved
[857827912/857827912]

--2021-09-27 06:12:03--

https://mizar.s3.amazonaws.com/linux-5.6-rc2/linux-image-5.6.0-rc2_5.6.0-rc2-1_amd64.deb

Resolving mizar.s3.amazonaws.com (mizar.s3.amazonaws.com)... 52.217.36.12

Connecting to mizar.s3.amazonaws.com (mizar.s3.amazonaws.com)|52.217.36.12|:443... connected.

HTTP request sent, awaiting response... 200 OK

Length: 56427036 (54M) [application/x-www-form-urlencoded]

Saving to: './linux-5.6-rc2/linux-image-5.6.0-rc2_5.6.0-rc2-1_amd64.deb'

linux-image-5.6.0-rc2_5.6.0-rc2-1_amd64.deb

100%[=====>] 53.81M 10.3MB/s in 6.9s

2021-09-27 06:12:11 (7.75 MB/s) -
'../linux-5.6-rc2/linux-image-5.6.0-rc2_5.6.0-rc2-1_amd64.deb' saved
[56427036/56427036]

--2021-09-27 06:12:11--
https://mizar.s3.amazonaws.com/linux-5.6-rc2/linux-libc-dev_5.6.0-rc2-1_amd64.deb
Resolving mizar.s3.amazonaws.com (mizar.s3.amazonaws.com)... 52.217.90.204
Connecting to mizar.s3.amazonaws.com (mizar.s3.amazonaws.com)|52.217.90.204|:443...
connected.
HTTP request sent, awaiting response... 200 OK
Length: 1082248 (1.0M) []
Saving to: '../linux-5.6-rc2/linux-libc-dev_5.6.0-rc2-1_amd64.deb'

linux-libc-dev_5.6.0-rc2-1_amd64.deb
100%[=====]
=====>] 1.03M 799KB/s in 1.3s

2021-09-27 06:12:13 (799 KB/s) -
'../linux-5.6-rc2/linux-libc-dev_5.6.0-rc2-1_amd64.deb' saved [1082248/1082248]

Continue kernel update (y/n)?y
Updating kernel
Selecting previously unselected package linux-headers-5.6.0-rc2.
(Reading database ... 67087 files and directories currently installed.)
Preparing to unpack ../linux-headers-5.6.0-rc2_5.6.0-rc2-1_amd64.deb ...
Unpacking linux-headers-5.6.0-rc2 (5.6.0-rc2-1) ...
Selecting previously unselected package linux-image-5.6.0-rc2.
Preparing to unpack ../linux-image-5.6.0-rc2_5.6.0-rc2-1_amd64.deb ...
Unpacking linux-image-5.6.0-rc2 (5.6.0-rc2-1) ...
Selecting previously unselected package linux-image-5.6.0-rc2-dbg.
Preparing to unpack ../linux-image-5.6.0-rc2-dbg_5.6.0-rc2-1_amd64.deb ...
Unpacking linux-image-5.6.0-rc2-dbg (5.6.0-rc2-1) ...
Selecting previously unselected package linux-libc-dev:amd64.
Preparing to unpack ../linux-libc-dev_5.6.0-rc2-1_amd64.deb ...
Unpacking linux-libc-dev:amd64 (5.6.0-rc2-1) ...
Setting up linux-headers-5.6.0-rc2 (5.6.0-rc2-1) ...
Setting up linux-image-5.6.0-rc2 (5.6.0-rc2-1) ...
update-initramfs: Generating /boot/initrd.img-5.6.0-rc2
Searching for GRUB installation directory ... found: /boot/grub
Searching for default file ... found: /boot/grub/default
Testing for an existing GRUB menu.lst file ... found: /boot/grub/menu.lst
Searching for splash image ... none found, skipping ...
Found kernel: /vmlinuz-4.15.0-112-generic
Replacing config file /run/grub/menu.lst with new version
Found kernel: /vmlinuz-5.6.0-rc2
Found kernel: /vmlinuz-4.15.0-112-generic
Replacing config file /run/grub/menu.lst with new version
Updating /boot/grub/menu.lst ... done

Sourcing file `/etc/default/grub'
Generating grub configuration file ...
Found linux image: /boot/vmlinuz-5.6.0-rc2
Found initrd image: /boot/initrd.img-5.6.0-rc2
Found linux image: /boot/vmlinuz-4.15.0-112-generic
Found initrd image: /boot/initrd.img-4.15.0-112-generic

```
done
Setting up linux-image-5.6.0-rc2-dbg (5.6.0-rc2-1) ...
Setting up linux-libc-dev:amd64 (5.6.0-rc2-1) ...
Reboot host (y/n)?y
Rebooting
```

Remote side unexpectedly closed network connection

Session stopped

- Press `<return>` to exit tab
- Press `R` to restart session
- Press `S` to save terminal output to file

```
• MobaXterm 20.6 •
(SSh client, X-server and networking tools)

→ SSH session to demo@192.168.4.9
• SSH compression : v
• SSH-browser      : v
• X11-forwarding   : v (remote display is forwarded through SSH)
• DISPLAY          : v (automatically set on remote server)

→ For more info, ctrl+click on help or visit our website
```

Welcome to Ubuntu 18.04.5 LTS (GNU/Linux 5.6.0-rc2 x86_64)

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

System information as of Mon Sep 27 06:43:28 UTC 2021

| | | | |
|---------------|------------------|------------------------|-------------|
| System load: | 0.04 | Processes: | 285 |
| Usage of /: | 26.4% of 62.25GB | Users logged in: | 0 |
| Memory usage: | 0% | IP address for ens160: | 192.168.4.9 |
| Swap usage: | 0% | | |

- * Canonical Livepatch is available for installation.
 - Reduce system reboots and improve kernel security. Activate at:
<https://ubuntu.com/livepatch>

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

Failed to connect to <https://changelogs.ubuntu.com/meta-release-lts>. Check your Internet connection or proxy settings

Last login: Mon Sep 27 06:04:47 2021 from 192.168.4.1

```
demo@master:~$ git clone https://github.com/Click2Cloud-Centaurus/arktos.git
~/go/src/k8s.io/arktos -b default-cni-mizar
Cloning into '/home/demo/go/src/k8s.io/arktos'...
remote: Enumerating objects: 104406, done.
remote: Counting objects: 100% (1069/1069), done.
remote: Compressing objects: 100% (639/639), done.
remote: Total 104406 (delta 527), reused 592 (delta 415), pack-reused 103337
Receiving objects: 100% (104406/104406), 332.77 MiB | 13.12 MiB/s, done.
Resolving deltas: 100% (63163/63163), done.
Checking out files: 100% (20762/20762), done.
demo@master:~$ sudo bash $HOME/go/src/k8s.io/arktos/hack/setup-dev-node.sh
[sudo] password for demo:
The script is to help install prerequisites of Arktos development environment
on a fresh Linux installation.
It's been tested on Ubuntu 16.04 LTS and 18.04 LTS.
Update apt.
Hit:1 http://archive.ubuntu.com/ubuntu bionic InRelease
Get:2 http://archive.ubuntu.com/ubuntu bionic-updates InRelease [88.7 kB]
Get:3 http://archive.ubuntu.com/ubuntu bionic-backports InRelease [74.6 kB]
Get:4 http://archive.ubuntu.com/ubuntu bionic-security InRelease [88.7 kB]
Get:5 http://archive.ubuntu.com/ubuntu bionic/restricted amd64 Packages [9,184 B]
Get:6 http://archive.ubuntu.com/ubuntu bionic/restricted Translation-en [3,584 B]
Get:7 http://archive.ubuntu.com/ubuntu bionic/universe amd64 Packages [8,570 kB]
Get:8 http://archive.ubuntu.com/ubuntu bionic/universe Translation-en [4,941 kB]
Get:9 http://archive.ubuntu.com/ubuntu bionic/multiverse amd64 Packages [151 kB]
Get:10 http://archive.ubuntu.com/ubuntu bionic/multiverse Translation-en [108 kB]
Get:11 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64 Packages [2,225 kB]
Get:12 http://archive.ubuntu.com/ubuntu bionic-updates/main Translation-en [435 kB]
Get:13 http://archive.ubuntu.com/ubuntu bionic-updates/restricted amd64 Packages [472
kB]
Get:14 http://archive.ubuntu.com/ubuntu bionic-updates/restricted Translation-en [64.0
kB]
Get:15 http://archive.ubuntu.com/ubuntu bionic-updates/universe amd64 Packages [1,749
kB]
Get:16 http://archive.ubuntu.com/ubuntu bionic-updates/universe Translation-en [375 kB]
Get:17 http://archive.ubuntu.com/ubuntu bionic-updates/multiverse amd64 Packages [27.3
kB]
Get:18 http://archive.ubuntu.com/ubuntu bionic-updates/multiverse Translation-en [6,808
B]
Get:19 http://archive.ubuntu.com/ubuntu bionic-backports/main amd64 Packages [10.0 kB]
Get:20 http://archive.ubuntu.com/ubuntu bionic-backports/main Translation-en [4,764 B]
Get:21 http://archive.ubuntu.com/ubuntu bionic-backports/universe amd64 Packages [10.3
kB]
Get:22 http://archive.ubuntu.com/ubuntu bionic-backports/universe Translation-en [4,588
B]
Get:23 http://archive.ubuntu.com/ubuntu bionic-security/main amd64 Packages [1,879 kB]
Get:24 http://archive.ubuntu.com/ubuntu bionic-security/main Translation-en [342 kB]
Get:25 http://archive.ubuntu.com/ubuntu bionic-security/restricted amd64 Packages [448
kB]
Get:26 http://archive.ubuntu.com/ubuntu bionic-security/restricted Translation-en [60.3
kB]
Get:27 http://archive.ubuntu.com/ubuntu bionic-security/universe amd64 Packages [1,138
kB]
Get:28 http://archive.ubuntu.com/ubuntu bionic-security/universe Translation-en [259
kB]
```

Get:29 http://archive.ubuntu.com/ubuntu bionic-security/multiverse amd64 Packages [20.9 kB]
Get:30 http://archive.ubuntu.com/ubuntu bionic-security/multiverse Translation-en [4,732 B]
Fetched 23.6 MB in 1min 22s (289 kB/s)
Reading package lists... Done
Building dependency tree
Reading state information... Done
168 packages can be upgraded. Run 'apt list --upgradable' to see them.
Install docker.
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
 bridge-utils containerd pigz runc ubuntu-fan
Suggested packages:
 ifupdown aufs-tools cgroupfs-mount | cgroup-lite debootstrap docker-doc rinse zfs-fuse | zfsutils
The following NEW packages will be installed:
 bridge-utils containerd docker.io pigz runc ubuntu-fan
0 upgraded, 6 newly installed, 0 to remove and 168 not upgraded.
Need to get 74.0 MB of archives.
After this operation, 359 MB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu bionic/universe amd64 pigz amd64 2.4-1 [57.4 kB]
Get:2 http://archive.ubuntu.com/ubuntu bionic/main amd64 bridge-utils amd64 1.5-15ubuntu1 [30.1 kB]
Get:3 http://archive.ubuntu.com/ubuntu bionic-updates/universe amd64 runc amd64 1.0.0~rc95-0ubuntu1~18.04.2 [4,087 kB]
Get:4 http://archive.ubuntu.com/ubuntu bionic-updates/universe amd64 containerd amd64 1.5.2-0ubuntu1~18.04.2 [32.9 MB]
Get:5 http://archive.ubuntu.com/ubuntu bionic-updates/universe amd64 docker.io amd64 20.10.7-0ubuntu1~18.04.1 [36.9 MB]
Get:6 http://archive.ubuntu.com/ubuntu bionic/main amd64 ubuntu-fan all 0.12.10 [34.7 kB]
Fetched 74.0 MB in 3min 28s (355 kB/s)
Preconfiguring packages ...
Selecting previously unselected package pigz.
(Reading database ... 98672 files and directories currently installed.)
Preparing to unpack .../0-pigz_2.4-1_amd64.deb ...
Unpacking pigz (2.4-1) ...
Selecting previously unselected package bridge-utils.
Preparing to unpack .../1-bridge-utils_1.5-15ubuntu1_amd64.deb ...
Unpacking bridge-utils (1.5-15ubuntu1) ...
Selecting previously unselected package runc.
Preparing to unpack .../2-runc_1.0.0~rc95-0ubuntu1~18.04.2_amd64.deb ...
Unpacking runc (1.0.0~rc95-0ubuntu1~18.04.2) ...
Selecting previously unselected package containerd.
Preparing to unpack .../3-containerd_1.5.2-0ubuntu1~18.04.2_amd64.deb ...
Unpacking containerd (1.5.2-0ubuntu1~18.04.2) ...
Selecting previously unselected package docker.io.
Preparing to unpack .../4-docker.io_20.10.7-0ubuntu1~18.04.1_amd64.deb ...
Unpacking docker.io (20.10.7-0ubuntu1~18.04.1) ...
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 (1.0.0~rc95-0ubuntu1~18.04.2) ...

```

Setting up containerd (1.5.2-0ubuntu1~18.04.2) ...
Created symlink /etc/systemd/system/multi-user.target.wants/containerd.service →
/lib/systemd/system/containerd.service.
Setting up bridge-utils (1.5-15ubuntu1) ...
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.
Setting up pigz (2.4-1) ...
Setting up docker.io (20.10.7-0ubuntu1~18.04.1) ...
Adding group `docker' (GID 113) ...
Done.
Created symlink /etc/systemd/system/multi-user.target.wants/docker.service →
/lib/systemd/system/docker.service.
Created symlink /etc/systemd/system/sockets.target.wants/docker.socket →
/lib/systemd/system/docker.socket.
Processing triggers for systemd (237-3ubuntu10.42) ...
Processing triggers for man-db (2.8.3-2ubuntu0.1) ...
Processing triggers for ureadahead (0.100.0-21) ...
Install make & gcc.
Reading package lists... Done
Building dependency tree
Reading state information... Done
Suggested packages:
  make-doc
The following NEW packages will be installed:
  make
0 upgraded, 1 newly installed, 0 to remove and 168 not upgraded.
Need to get 154 kB of archives.
After this operation, 381 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu bionic/main amd64 make amd64 4.1-9.1ubuntu1 [154
kB]
Fetched 154 kB in 1s (154 kB/s)
Selecting previously unselected package make.
(Reading database ... 98995 files and directories currently installed.)
Preparing to unpack .../make_4.1-9.1ubuntu1_amd64.deb ...
Unpacking make (4.1-9.1ubuntu1) ...
Setting up make (4.1-9.1ubuntu1) ...
Processing triggers for man-db (2.8.3-2ubuntu0.1) ...
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  binutils binutils-common binutils-x86-64-linux-gnu cpp cpp-7 gcc-7 gcc-7-base libasan4
  libatomic1 libbinutils libc-dev-bin libc6 libc6-dev libcc1-0 libcilkrts5 libgcc-7-dev
  libgomp1 libisl19 libitm1
  liblsan0 libmpc3 libmpx2 libquadmath0 libtsan0 libubsan0 manpages-dev
Suggested packages:
  binutils-doc cpp-doc gcc-7-locales gcc-multilib autoconf automake libtool flex bison
  gdb gcc-doc gcc-7-multilib gcc-7-doc libgcc1-dbg libgomp1-dbg libitm1-dbg libatomic1-dbg
  libasan4-dbg liblsan0-dbg
  libtsan0-dbg libubsan0-dbg libcilkrts5-dbg libmpx2-dbg libquadmath0-dbg glibc-doc
The following NEW packages will be installed:
  binutils binutils-common binutils-x86-64-linux-gnu cpp cpp-7 gcc gcc-7 gcc-7-base
  libasan4 libatomic1 libbinutils libc-dev-bin libc6-dev libcc1-0 libcilkrts5 libgcc-7-dev
  libgomp1 libisl19 libitm1 liblsan0

```

```
libmpc3 libmpx2 libquadmath0 libtsan0 libubsan0 manpages-dev
The following packages will be upgraded:
libc6
1 upgraded, 26 newly installed, 0 to remove and 167 not upgraded.
Need to get 32.5 MB of archives.
After this operation, 112 MB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64 libc6 amd64
2.27-3ubuntu1.4 [2,832 kB]
Get:2 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64 binutils-common amd64
2.30-21ubuntu1~18.04.5 [197 kB]
Get:3 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64 libbinutils amd64
2.30-21ubuntu1~18.04.5 [489 kB]
Get:4 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64
binutils-x86-64-linux-gnu amd64 2.30-21ubuntu1~18.04.5 [1,839 kB]
Get:5 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64 binutils amd64
2.30-21ubuntu1~18.04.5 [3,388 B]
Get:6 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64 gcc-7-base amd64
7.5.0-3ubuntu1~18.04 [18.3 kB]
Get:7 http://archive.ubuntu.com/ubuntu bionic/main amd64 libisl19 amd64 0.19-1 [551 kB]
Get:8 http://archive.ubuntu.com/ubuntu bionic/main amd64 libmpc3 amd64 1.1.0-1 [40.8 kB]
Get:9 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64 cpp-7 amd64
7.5.0-3ubuntu1~18.04 [8,591 kB]
Get:10 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64 cpp amd64
4:7.4.0-1ubuntu2.3 [27.7 kB]
Get:11 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64 libcc1-0 amd64
8.4.0-1ubuntu1~18.04 [39.4 kB]
Get:12 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64 libgomp1 amd64
8.4.0-1ubuntu1~18.04 [76.5 kB]
Get:13 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64 libitm1 amd64
8.4.0-1ubuntu1~18.04 [27.9 kB]
Get:14 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64 libatomic1 amd64
8.4.0-1ubuntu1~18.04 [9,192 B]
Get:15 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64 libasan4 amd64
7.5.0-3ubuntu1~18.04 [358 kB]
Get:16 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64 liblsan0 amd64
8.4.0-1ubuntu1~18.04 [133 kB]
Get:17 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64 libtsan0 amd64
8.4.0-1ubuntu1~18.04 [288 kB]
Get:18 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64 libubsan0 amd64
7.5.0-3ubuntu1~18.04 [126 kB]
Get:19 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64 libcilkrts5 amd64
7.5.0-3ubuntu1~18.04 [42.5 kB]
Get:20 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64 libmpx2 amd64
8.4.0-1ubuntu1~18.04 [11.6 kB]
Get:21 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64 libquadmath0 amd64
8.4.0-1ubuntu1~18.04 [134 kB]
Get:22 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64 libgcc-7-dev amd64
7.5.0-3ubuntu1~18.04 [2,378 kB]
Get:23 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64 gcc-7 amd64
7.5.0-3ubuntu1~18.04 [9,381 kB]
Get:24 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64 gcc amd64
4:7.4.0-1ubuntu2.3 [5,184 B]
Get:25 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64 libc-dev-bin amd64
2.27-3ubuntu1.4 [71.8 kB]
Get:26 http://archive.ubuntu.com/ubuntu bionic-updates/main amd64 libc6-dev amd64
```



```
2.27-3ubuntu1.4 [2,585 kB]
Get:27 http://archive.ubuntu.com/ubuntu bionic/main amd64 manpages-dev all 4.15-1 [2,217
kB]
Fetched 32.5 MB in 1min 40s (324 kB/s)
Preconfiguring packages ...
(Reading database ... 99011 files and directories currently installed.)
Preparing to unpack .../libc6_2.27-3ubuntu1.4_amd64.deb ...
Unpacking libc6:amd64 (2.27-3ubuntu1.4) over (2.27-3ubuntu1.2) ...
Setting up libc6:amd64 (2.27-3ubuntu1.4) ...
Selecting previously unselected package binutils-common:amd64.
(Reading database ... 99011 files and directories currently installed.)
Preparing to unpack .../00-binutils-common_2.30-21ubuntu1~18.04.5_amd64.deb ...
Unpacking binutils-common:amd64 (2.30-21ubuntu1~18.04.5) ...
Selecting previously unselected package libbinutils:amd64.
Preparing to unpack .../01-libbinutils_2.30-21ubuntu1~18.04.5_amd64.deb ...
Unpacking libbinutils:amd64 (2.30-21ubuntu1~18.04.5) ...
Selecting previously unselected package binutils-x86-64-linux-gnu.
Preparing to unpack .../02-binutils-x86-64-linux-gnu_2.30-21ubuntu1~18.04.5_amd64.deb
...
Unpacking binutils-x86-64-linux-gnu (2.30-21ubuntu1~18.04.5) ...
Selecting previously unselected package binutils.
Preparing to unpack .../03-binutils_2.30-21ubuntu1~18.04.5_amd64.deb ...
Unpacking binutils (2.30-21ubuntu1~18.04.5) ...
Selecting previously unselected package gcc-7-base:amd64.
Preparing to unpack .../04-gcc-7-base_7.5.0-3ubuntu1~18.04_amd64.deb ...
Unpacking gcc-7-base:amd64 (7.5.0-3ubuntu1~18.04) ...
Selecting previously unselected package libisl19:amd64.
Preparing to unpack .../05-libisl19_0.19-1_amd64.deb ...
Unpacking libisl19:amd64 (0.19-1) ...
Selecting previously unselected package libmpc3:amd64.
Preparing to unpack .../06-libmpc3_1.1.0-1_amd64.deb ...
Unpacking libmpc3:amd64 (1.1.0-1) ...
Selecting previously unselected package cpp-7.
Preparing to unpack .../07-cpp-7_7.5.0-3ubuntu1~18.04_amd64.deb ...
Unpacking cpp-7 (7.5.0-3ubuntu1~18.04) ...
Selecting previously unselected package cpp.
Preparing to unpack .../08-cpp_4%3a7.4.0-1ubuntu2.3_amd64.deb ...
Unpacking cpp (4:7.4.0-1ubuntu2.3) ...
Selecting previously unselected package libcc1-0:amd64.
Preparing to unpack .../09-libcc1-0_8.4.0-1ubuntu1~18.04_amd64.deb ...
Unpacking libcc1-0:amd64 (8.4.0-1ubuntu1~18.04) ...
Selecting previously unselected package libgomp1:amd64.
Preparing to unpack .../10-libgomp1_8.4.0-1ubuntu1~18.04_amd64.deb ...
Unpacking libgomp1:amd64 (8.4.0-1ubuntu1~18.04) ...
Selecting previously unselected package libitm1:amd64.
Preparing to unpack .../11-libitm1_8.4.0-1ubuntu1~18.04_amd64.deb ...
Unpacking libitm1:amd64 (8.4.0-1ubuntu1~18.04) ...
Selecting previously unselected package libatomic1:amd64.
Preparing to unpack .../12-libatomic1_8.4.0-1ubuntu1~18.04_amd64.deb ...
Unpacking libatomic1:amd64 (8.4.0-1ubuntu1~18.04) ...
Selecting previously unselected package libasan4:amd64.
Preparing to unpack .../13-libasan4_7.5.0-3ubuntu1~18.04_amd64.deb ...
Unpacking libasan4:amd64 (7.5.0-3ubuntu1~18.04) ...
Selecting previously unselected package liblsan0:amd64.
Preparing to unpack .../14-liblsan0_8.4.0-1ubuntu1~18.04_amd64.deb ...
```

Unpacking liblsan0:amd64 (8.4.0-1ubuntu1~18.04) ...
Selecting previously unselected package libtsan0:amd64.
Preparing to unpack .../15-libtsan0_8.4.0-1ubuntu1~18.04_amd64.deb ...
Unpacking libtsan0:amd64 (8.4.0-1ubuntu1~18.04) ...
Selecting previously unselected package libubsan0:amd64.
Preparing to unpack .../16-libubsan0_7.5.0-3ubuntu1~18.04_amd64.deb ...
Unpacking libubsan0:amd64 (7.5.0-3ubuntu1~18.04) ...
Selecting previously unselected package libcilkrts5:amd64.
Preparing to unpack .../17-libcilkrts5_7.5.0-3ubuntu1~18.04_amd64.deb ...
Unpacking libcilkrts5:amd64 (7.5.0-3ubuntu1~18.04) ...
Selecting previously unselected package libmpx2:amd64.
Preparing to unpack .../18-libmpx2_8.4.0-1ubuntu1~18.04_amd64.deb ...
Unpacking libmpx2:amd64 (8.4.0-1ubuntu1~18.04) ...
Selecting previously unselected package libquadmath0:amd64.
Preparing to unpack .../19-libquadmath0_8.4.0-1ubuntu1~18.04_amd64.deb ...
Unpacking libquadmath0:amd64 (8.4.0-1ubuntu1~18.04) ...
Selecting previously unselected package libgcc-7-dev:amd64.
Preparing to unpack .../20-libgcc-7-dev_7.5.0-3ubuntu1~18.04_amd64.deb ...
Unpacking libgcc-7-dev:amd64 (7.5.0-3ubuntu1~18.04) ...
Selecting previously unselected package gcc-7.
Preparing to unpack .../21-gcc-7_7.5.0-3ubuntu1~18.04_amd64.deb ...
Unpacking gcc-7 (7.5.0-3ubuntu1~18.04) ...
Selecting previously unselected package gcc.
Preparing to unpack .../22-gcc_4%3a7.4.0-1ubuntu2.3_amd64.deb ...
Unpacking gcc (4:7.4.0-1ubuntu2.3) ...
Selecting previously unselected package libc-dev-bin.
Preparing to unpack .../23-libc-dev-bin_2.27-3ubuntu1.4_amd64.deb ...
Unpacking libc-dev-bin (2.27-3ubuntu1.4) ...
Selecting previously unselected package libc6-dev:amd64.
Preparing to unpack .../24-libc6-dev_2.27-3ubuntu1.4_amd64.deb ...
Unpacking libc6-dev:amd64 (2.27-3ubuntu1.4) ...
Selecting previously unselected package manpages-dev.
Preparing to unpack .../25-manpages-dev_4.15-1_all.deb ...
Unpacking manpages-dev (4.15-1) ...
Setting up libquadmath0:amd64 (8.4.0-1ubuntu1~18.04) ...
Setting up libgomp1:amd64 (8.4.0-1ubuntu1~18.04) ...
Setting up libatomic1:amd64 (8.4.0-1ubuntu1~18.04) ...
Setting up libcc1-0:amd64 (8.4.0-1ubuntu1~18.04) ...
Setting up libtsan0:amd64 (8.4.0-1ubuntu1~18.04) ...
Setting up liblsan0:amd64 (8.4.0-1ubuntu1~18.04) ...
Setting up gcc-7-base:amd64 (7.5.0-3ubuntu1~18.04) ...
Setting up binutils-common:amd64 (2.30-21ubuntu1~18.04.5) ...
Setting up libmpx2:amd64 (8.4.0-1ubuntu1~18.04) ...
Setting up libmpc3:amd64 (1.1.0-1) ...
Setting up libc-dev-bin (2.27-3ubuntu1.4) ...
Setting up manpages-dev (4.15-1) ...
Setting up libc6-dev:amd64 (2.27-3ubuntu1.4) ...
Setting up libitm1:amd64 (8.4.0-1ubuntu1~18.04) ...
Setting up libisl19:amd64 (0.19-1) ...
Setting up libasan4:amd64 (7.5.0-3ubuntu1~18.04) ...
Setting up libbinutils:amd64 (2.30-21ubuntu1~18.04.5) ...
Setting up libcilkrts5:amd64 (7.5.0-3ubuntu1~18.04) ...
Setting up libubsan0:amd64 (7.5.0-3ubuntu1~18.04) ...
Setting up libgcc-7-dev:amd64 (7.5.0-3ubuntu1~18.04) ...
Setting up cpp-7 (7.5.0-3ubuntu1~18.04) ...

```

Setting up binutils-x86-64-linux-gnu (2.30-21ubuntu1~18.04.5) ...
Setting up cpp (4:7.4.0-1ubuntu2.3) ...
Setting up binutils (2.30-21ubuntu1~18.04.5) ...
Setting up gcc-7 (7.5.0-3ubuntu1~18.04) ...
Setting up gcc (4:7.4.0-1ubuntu2.3) ...
Processing triggers for man-db (2.8.3-2ubuntu0.1) ...
Processing triggers for libc-bin (2.27-3ubuntu1.2) ...
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  libjq1 libonig4
The following NEW packages will be installed:
  jq libjq1 libonig4
0 upgraded, 3 newly installed, 0 to remove and 167 not upgraded.
Need to get 276 kB of archives.
After this operation, 930 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu bionic/universe amd64 libonig4 amd64 6.7.0-1 [119
kB]
Get:2 http://archive.ubuntu.com/ubuntu bionic/universe amd64 libjq1 amd64 1.5+dfsg-2
[111 kB]
Get:3 http://archive.ubuntu.com/ubuntu bionic/universe amd64 jq amd64 1.5+dfsg-2 [45.6
kB]
Fetched 276 kB in 1s (194 kB/s)
Selecting previously unselected package libonig4:amd64.
(Reading database ... 102272 files and directories currently installed.)
Preparing to unpack .../libonig4_6.7.0-1_amd64.deb ...
Unpacking libonig4:amd64 (6.7.0-1) ...
Selecting previously unselected package libjq1:amd64.
Preparing to unpack .../libjq1_1.5+dfsg-2_amd64.deb ...
Unpacking libjq1:amd64 (1.5+dfsg-2) ...
Selecting previously unselected package jq.
Preparing to unpack .../jq_1.5+dfsg-2_amd64.deb ...
Unpacking jq (1.5+dfsg-2) ...
Setting up libonig4:amd64 (6.7.0-1) ...
Setting up libjq1:amd64 (1.5+dfsg-2) ...
Setting up jq (1.5+dfsg-2) ...
Processing triggers for man-db (2.8.3-2ubuntu0.1) ...
Processing triggers for libc-bin (2.27-3ubuntu1.2) ...
Install golang.
--2021-09-27 06:55:21-- https://dl.google.com/go/go1.13.9.linux-amd64.tar.gz
Resolving dl.google.com (dl.google.com)... 142.250.183.14, 2404:6800:4009:820::200e
Connecting to dl.google.com (dl.google.com)|142.250.183.14|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 120139686 (115M) [application/octet-stream]
Saving to: '/tmp/go1.13.9.linux-amd64.tar.gz'

go1.13.9.linux-amd64.tar.gz
100%[=====
=====>] 114.57M  14.9MB/s   in 9.1s

2021-09-27 06:55:30 (12.6 MB/s) - '/tmp/go1.13.9.linux-amd64.tar.gz' saved
[120139686/120139686]

Done.

```

```

Please run and add 'export PATH=$PATH:/usr/local/go/bin' into your shell profile.
You can proceed to run arktos-up.sh if you want to launch a single-node cluster.
demo@master:~$ echo export PATH=$PATH:/usr/local/go/bin \>> ~/.profile
demo@master:~$ echo cd \"$HOME/go/src/k8s.io/arktos\" \>> ~/.profile
demo@master:~$ source ~/.profile
demo@master:~/go/src/k8s.io/arktos$ CNIPLUGIN=mizar ./hack/arktos-up.sh
DBG: Flannel CNI plugin will be installed AFTER cluster is up
DBG: effective feature gates
AllAlpha=false,WorkloadInfoDefaulting=true,QPSDoubleGCCController=true,QPSDoubleRSController=true,MandatoryArktosNetwork=true
DBG: effective disabling admission plugins
DBG: effective default network template file is
/home/demo/go/src/k8s.io/arktos/hack/testdata/default-flat-network.tmpl
DBG: kubelet arg RESOLV_CONF is /run/systemd/resolve/resolve.conf
WARNING : The kubelet is configured to not fail even if swap is enabled; production deployments should disable swap.
WARNING : This script MAY be run as root for docker socket / iptables functionality; if failures occur, retry as root.
[sudo] password for demo:
cni plugin is mizar; arktos will use mizar to provision pod network
Checking arktos containerd...
arktos containerd not found...
--2021-09-27 07:02:24--
https://github.com/containerd/containerd/releases/download/v1.4.2/containerd-1.4.2-linux-amd64.tar.gz
Resolving github.com (github.com)... 13.234.176.102
Connecting to github.com (github.com)|13.234.176.102|:443... connected.
HTTP request sent, awaiting response... 302 Found
Location:
https://github-releases.githubusercontent.com/46089560/5cad0000-2fc0-11eb-8e3a-ed435a7b945c?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAIWNJYAX4CSVEH53A%2F20210927%2Fus-east-1%2Fs3%2Faws4_request&X-Amz-Date=20210927T070225Z&X-Amz-Expires=300&X-Amz-Signature=bc9f03f0819016731138585b316153fce3d94edb3d4c4d9d04314909fb6ce35e&X-Amz-SignedHeaders=host&actor_id=0&key_id=0&repo_id=46089560&response-content-disposition=attachment%3B%20filename%3Dcontainerd-1.4.2-linux-amd64.tar.gz&response-content-type=application%2Foctet-stream [following]
--2021-09-27 07:02:25--
https://github-releases.githubusercontent.com/46089560/5cad0000-2fc0-11eb-8e3a-ed435a7b945c?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAIWNJYAX4CSVEH53A%2F20210927%2Fus-east-1%2Fs3%2Faws4_request&X-Amz-Date=20210927T070225Z&X-Amz-Expires=300&X-Amz-Signature=bc9f03f0819016731138585b316153fce3d94edb3d4c4d9d04314909fb6ce35e&X-Amz-SignedHeaders=host&actor_id=0&key_id=0&repo_id=46089560&response-content-disposition=attachment%3B%20filename%3Dcontainerd-1.4.2-linux-amd64.tar.gz&response-content-type=application%2Foctet-stream
Resolving github-releases.githubusercontent.com
(github-releases.githubusercontent.com)... 185.199.111.154, 185.199.110.154, 185.199.109.154, ...
Connecting to github-releases.githubusercontent.com
(github-releases.githubusercontent.com)|185.199.111.154|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 31160021 (30M) [application/octet-stream]
Saving to: '/home/demo/arktos-containerd/containerd-1.4.2-linux-amd64.tar.gz'

containerd-1.4.2-linux-amd64.tar.gz
100%[=====

```

```
=====>] 29.72M 13.5MB/s in 2.2s
```

```
2021-09-27 07:02:27 (13.5 MB/s) -  
'/home/demo/arktos-containerd/containerd-1.4.2-linux-amd64.tar.gz' saved  
[31160021/31160021]
```

```
installing arktos containerd...
```

```
WARNING : The kubelet is configured to not fail even if swap is enabled; production  
deployments should disable swap.
```

```
WARNING : This script MAY be run as root for docker socket / iptables functionality; if  
failures occur, retry as root.
```

```
Getting runtime deployment file libvirt-qemu
```

```
--2021-09-27 07:02:54--
```

```
https://raw.githubusercontent.com/futurewei-cloud/arktos-vm-runtime/release-0.6/deploy/apparmor/libvirt-qemu
```

```
Resolving raw.githubusercontent.com (raw.githubusercontent.com)... 185.199.110.133,  
185.199.108.133, 185.199.111.133, ...
```

```
Connecting to raw.githubusercontent.com
```

```
(raw.githubusercontent.com)|185.199.110.133|:443... connected.
```

```
HTTP request sent, awaiting response... 200 OK
```

```
Length: 6578 (6.4K) [text/plain]
```

```
Saving to: '/tmp/libvirt-qemu'
```

```
/tmp/libvirt-qemu
```

```
100%[=====]  
=====>] 6.42K --.-KB/s in 0s
```

```
2021-09-27 07:02:55 (34.8 MB/s) - '/tmp/libvirt-qemu' saved [6578/6578]
```

```
Getting runtime deployment file libvirtd
```

```
--2021-09-27 07:02:55--
```

```
https://raw.githubusercontent.com/futurewei-cloud/arktos-vm-runtime/release-0.6/deploy/apparmor/libvirtd
```

```
Resolving raw.githubusercontent.com (raw.githubusercontent.com)... 185.199.109.133,  
185.199.111.133, 185.199.108.133, ...
```

```
Connecting to raw.githubusercontent.com
```

```
(raw.githubusercontent.com)|185.199.109.133|:443... connected.
```

```
HTTP request sent, awaiting response... 200 OK
```

```
Length: 1617 (1.6K) [text/plain]
```

```
Saving to: '/tmp/libvirtd'
```

```
/tmp/libvirtd
```

```
100%[=====]  
=====>] 1.58K --.-KB/s in 0s
```

```
2021-09-27 07:02:55 (13.3 MB/s) - '/tmp/libvirtd' saved [1617/1617]
```

```
Getting runtime deployment file virtlet
```

```
--2021-09-27 07:02:55--
```

```
https://raw.githubusercontent.com/futurewei-cloud/arktos-vm-runtime/release-0.6/deploy/apparmor/virtlet
```

```
Resolving raw.githubusercontent.com (raw.githubusercontent.com)... 185.199.109.133,  
185.199.111.133, 185.199.108.133, ...
```

```
Connecting to raw.githubusercontent.com
```

```
(raw.githubusercontent.com)|185.199.109.133|:443... connected.
```

HTTP request sent, awaiting response... 200 OK
Length: 2582 (2.5K) [text/plain]
Saving to: '/tmp/virtlet'

/tmp/virtlet
100%[=====]
=====>] 2.52K --.-KB/s in 0s

2021-09-27 07:02:56 (22.5 MB/s) - '/tmp/virtlet' saved [2582/2582]

Getting runtime deployment file vms
--2021-09-27 07:02:56--
https://raw.githubusercontent.com/futurewei-cloud/arktos-vm-runtime/release-0.6/deploy/apparmor/vms
Resolving raw.githubusercontent.com (raw.githubusercontent.com)... 185.199.109.133, 185.199.111.133, 185.199.108.133, ...
Connecting to raw.githubusercontent.com
(raw.githubusercontent.com)|185.199.109.133|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 485 [text/plain]
Saving to: '/tmp/vms'

/tmp/vms
100%[=====]
=====>] 485 --.-KB/s in 0s

2021-09-27 07:02:56 (15.8 MB/s) - '/tmp/vms' saved [485/485]

Getting runtime deployment file vmruntime.yaml
--2021-09-27 07:02:56--
https://raw.githubusercontent.com/futurewei-cloud/arktos-vm-runtime/release-0.6/deploy/data/virtlet-ds.yaml
Resolving raw.githubusercontent.com (raw.githubusercontent.com)... 185.199.109.133, 185.199.111.133, 185.199.108.133, ...
Connecting to raw.githubusercontent.com
(raw.githubusercontent.com)|185.199.109.133|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 11643 (11K) [text/plain]
Saving to: '/tmp/vmruntime.yaml'

/tmp/vmruntime.yaml
100%[=====]
=====>] 11.37K --.-KB/s in 0s

2021-09-27 07:02:56 (44.5 MB/s) - '/tmp/vmruntime.yaml' saved [11643/11643]

Getting runtime deployment file images.yaml
--2021-09-27 07:02:56--
https://raw.githubusercontent.com/futurewei-cloud/arktos-vm-runtime/release-0.6/deploy/images.yaml
Resolving raw.githubusercontent.com (raw.githubusercontent.com)... 185.199.109.133, 185.199.111.133, 185.199.108.133, ...
Connecting to raw.githubusercontent.com
(raw.githubusercontent.com)|185.199.109.133|:443... connected.
HTTP request sent, awaiting response... 200 OK

Length: 254 [text/plain]
Saving to: '/tmp/images.yaml'

/tmp/images.yaml

100%[=====]
=====>] 254 --.-KB/s in 0s

2021-09-27 07:02:57 (7.70 MB/s) - '/tmp/images.yaml' saved [254/254]

Stopping Apparmor service

make: Entering directory '/home/demo/go/src/k8s.io/arktos'

make[1]: Entering directory '/home/demo/go/src/k8s.io/arktos'

+++ [0927 07:03:05] Building go targets for linux/amd64:

./vendor/k8s.io/code-generator/cmd/deepcopy-gen

+++ [0927 07:03:05] Building go targets for linux/amd64:

./vendor/k8s.io/kube-openapi/cmd/openapi-gen

+++ [0927 07:03:05] Building go targets for linux/amd64:

./vendor/k8s.io/code-generator/cmd/conversion-gen

+++ [0927 07:03:05] Building go targets for linux/amd64:

./vendor/k8s.io/code-generator/cmd/defaulter-gen

+++ [0927 07:03:10] Building go targets for linux/amd64:

./vendor/github.com/go-bindata/go-bindata/go-bindata

make[1]: Leaving directory '/home/demo/go/src/k8s.io/arktos'

Running copyright check for repo: /home/demo/go/src/k8s.io/arktos, logging to
_output/ArktosCopyrightTool.log

~/go/src/k8s.io/arktos ~/go/src/k8s.io/arktos

warning: inexact rename detection was skipped due to too many files.

warning: you may want to set your diff.renameLimit variable to at least 3063 and retry
the command.

~/go/src/k8s.io/arktos

~/go/src/k8s.io/arktos ~/go/src/k8s.io/arktos

warning: inexact rename detection was skipped due to too many files.

warning: you may want to set your diff.renameLimit variable to at least 3063 and retry
the command.

~/go/src/k8s.io/arktos

Inspecting copyright files, writing logs to _output/ArktosCopyrightTool.log

Done.

+++ [0927 07:03:33] Building go targets for linux/amd64:

cmd/kubect1

cmd/hyperkube

cmd/kube-apiserver

cmd/kube-controller-manager

cmd/workload-controller-manager

cmd/cloud-controller-manager

cmd/kubelet

cmd/kube-proxy

cmd/kube-scheduler

cmd/arktos-network-controller

Running copyright check for repo: /home/demo/go/src/k8s.io/arktos, logging to
_output/ArktosCopyrightTool.log

~/go/src/k8s.io/arktos ~/go/src/k8s.io/arktos

warning: inexact rename detection was skipped due to too many files.

warning: you may want to set your diff.renameLimit variable to at least 3063 and retry
the command.

~/go/src/k8s.io/arktos

```
~/go/src/k8s.io/arktos ~/go/src/k8s.io/arktos
warning: inexact rename detection was skipped due to too many files.
warning: you may want to set your diff.renameLimit variable to at least 3063 and retry
the command.
~/go/src/k8s.io/arktos
Inspecting copyright files, writing logs to _output/ArktosCopyrightTool.log
Done.
make: Leaving directory '/home/demo/go/src/k8s.io/arktos'
cannot find etcd locally. will install one.
Downloading
https://github.com/centaurus-cloud/etcd/releases/download/v3.4.3/etcd-v3.4.3-linux-am
d64.tar.gz succeed
etcd v3.4.3 installed. To use:
export PATH="/home/demo/go/src/k8s.io/arktos/third_party/etcd:${PATH}"
```

The current version is 3.4.3

```
API SERVER insecure port is free, proceeding...
API SERVER secure port is free, proceeding...
Unable to successfully run 'cfssl' from
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/ga
mes:/snap/bin:/usr/local/go/bin:/home/demo/go/src/k8s.io/arktos/third_party/etcd;
downloading instead...
```

| % Total | % Received | % Xferd | Average Speed | Time | Time | Time | Current |
|---------|------------|---------|---------------|-------|----------|----------|---------|
| | | | Dload Upload | Total | Spent | Left | Speed |
| 0 | 0 | 0 | 0 | 0 | --:--:-- | --:--:-- | 0 |
| 100 | 623 | 0 | 623 | 0 | --:--:-- | --:--:-- | 1331 |
| 100 | 9.8M | 100 | 9.8M | 0 | 0:00:02 | 0:00:02 | 6894k |

| % Total | % Received | % Xferd | Average Speed | Time | Time | Time | Current |
|---------|------------|---------|---------------|-------|----------|----------|---------|
| | | | Dload Upload | Total | Spent | Left | Speed |
| 0 | 0 | 0 | 0 | 0 | --:--:-- | --:--:-- | 0 |
| 100 | 627 | 100 | 627 | 0 | --:--:-- | --:--:-- | 1320 |
| 100 | 2224k | 100 | 2224k | 0 | 0:00:01 | 0:00:01 | 4722k |

```
Detected host and ready to start services. Doing some housekeeping first...
Using GO_OUT /home/demo/go/src/k8s.io/arktos/_output/local/bin/linux/amd64
Starting services now!
Starting etcd
```

The current version is 3.4.3

```
etcd --name master --listen-peer-urls http://192.168.4.9:2380 --advertise-client-urls
http://192.168.4.9:2379 --data-dir /tmp/tmp.lw1ZJcWCjw --listen-client-urls
http://192.168.4.9:2379,http://127.0.0.1:2379 --listen-peer-urls
http://192.168.4.9:2380 --debug > "/tmp/etcd.log" 2>/dev/null
```

Waiting for etcd to come up.

```
+++ [0927 07:06:46] On try 5, etcd: : {"health":"true"}
{"header":{"cluster_id":"16633281308504634358","member_id":"1424884761211664832","rev
ision":"2","raft_term":"2"}}Starting 1 kube-apiserver instances. If you want to make
changes to the kube-apiserver nubmer, please run export APISERVER_SERVER=n(n=1,2,...).
Copied the apiserver partition config file /var/run/kubernetes/apiserver.config...
Can't load /home/demo/.rnd into RNG
139626246791616:error:2406F079:random number generator:RAND_load_file:Cannot open
file:../crypto/rand/randfile.c:88:Filename=/home/demo/.rnd
Generating a RSA private key
```

.....


```

+++++
.....+++++
writing new private key to '/var/run/kubernetes/server-ca.key'
-----
Can't load /home/demo/.rnd into RNG
140068374417856:error:2406F079:random number generator:RAND_load_file:Cannot open
file:../crypto/rand/randfile.c:88:Filename=/home/demo/.rnd
Generating a RSA private key
.....+++++
.....+++++
writing new private key to '/var/run/kubernetes/client-ca.key'
-----
Can't load /home/demo/.rnd into RNG
140205378081216:error:2406F079:random number generator:RAND_load_file:Cannot open
file:../crypto/rand/randfile.c:88:Filename=/home/demo/.rnd
Generating a RSA private key
..+++++
.....+++++
writing new private key to '/var/run/kubernetes/request-header-ca.key'
-----
2021/09/27 07:06:47 [INFO] generate received request
2021/09/27 07:06:47 [INFO] received CSR
2021/09/27 07:06:47 [INFO] generating key: rsa-2048
2021/09/27 07:06:47 [INFO] encoded CSR
2021/09/27 07:06:47 [INFO] signed certificate with serial number
547029088980579191216904635664403252305570671101
2021/09/27 07:06:47 [WARNING] This certificate lacks a "hosts" field. This makes it
unsuitable for
websites. For more information see the Baseline Requirements for the Issuance and
Management
of Publicly-Trusted Certificates, v.1.1.6, from the CA/Browser Forum
(https://cabforum.org);
specifically, section 10.2.3 ("Information Requirements").
2021/09/27 07:06:47 [INFO] generate received request
2021/09/27 07:06:47 [INFO] received CSR
2021/09/27 07:06:47 [INFO] generating key: rsa-2048
2021/09/27 07:06:48 [INFO] encoded CSR
2021/09/27 07:06:48 [INFO] signed certificate with serial number
221501393548844542951873052887741049472029969618
2021/09/27 07:06:48 [WARNING] This certificate lacks a "hosts" field. This makes it
unsuitable for
websites. For more information see the Baseline Requirements for the Issuance and
Management
of Publicly-Trusted Certificates, v.1.1.6, from the CA/Browser Forum
(https://cabforum.org);
specifically, section 10.2.3 ("Information Requirements").
2021/09/27 07:06:48 [INFO] generate received request
2021/09/27 07:06:48 [INFO] received CSR
2021/09/27 07:06:48 [INFO] generating key: rsa-2048
2021/09/27 07:06:48 [INFO] encoded CSR
2021/09/27 07:06:48 [INFO] signed certificate with serial number
154816114057052117957070175450147954907338699876
2021/09/27 07:06:48 [WARNING] This certificate lacks a "hosts" field. This makes it
unsuitable for
websites. For more information see the Baseline Requirements for the Issuance and

```

Management

of Publicly-Trusted Certificates, v.1.1.6, from the CA/Browser Forum
(<https://cabforum.org>);

specifically, section 10.2.3 ("Information Requirements").

2021/09/27 07:06:48 [INFO] generate received request

2021/09/27 07:06:48 [INFO] received CSR

2021/09/27 07:06:48 [INFO] generating key: rsa-2048

2021/09/27 07:06:48 [INFO] encoded CSR

2021/09/27 07:06:48 [INFO] signed certificate with serial number

684045377210160595455432457648945661325281475782

2021/09/27 07:06:48 [WARNING] This certificate lacks a "hosts" field. This makes it
unsuitable for

websites. For more information see the Baseline Requirements for the Issuance and
Management

of Publicly-Trusted Certificates, v.1.1.6, from the CA/Browser Forum
(<https://cabforum.org>);

specifically, section 10.2.3 ("Information Requirements").

2021/09/27 07:06:48 [INFO] generate received request

2021/09/27 07:06:48 [INFO] received CSR

2021/09/27 07:06:48 [INFO] generating key: rsa-2048

2021/09/27 07:06:49 [INFO] encoded CSR

2021/09/27 07:06:49 [INFO] signed certificate with serial number

440332013556029688750830549643376601266833704321

2021/09/27 07:06:49 [WARNING] This certificate lacks a "hosts" field. This makes it
unsuitable for

websites. For more information see the Baseline Requirements for the Issuance and
Management

of Publicly-Trusted Certificates, v.1.1.6, from the CA/Browser Forum
(<https://cabforum.org>);

specifically, section 10.2.3 ("Information Requirements").

2021/09/27 07:06:49 [INFO] generate received request

2021/09/27 07:06:49 [INFO] received CSR

2021/09/27 07:06:49 [INFO] generating key: rsa-2048

2021/09/27 07:06:49 [INFO] encoded CSR

2021/09/27 07:06:49 [INFO] signed certificate with serial number

118840125317404844403266052140378671480517247679

2021/09/27 07:06:49 [WARNING] This certificate lacks a "hosts" field. This makes it
unsuitable for

websites. For more information see the Baseline Requirements for the Issuance and
Management

of Publicly-Trusted Certificates, v.1.1.6, from the CA/Browser Forum
(<https://cabforum.org>);

specifically, section 10.2.3 ("Information Requirements").

2021/09/27 07:06:49 [INFO] generate received request

2021/09/27 07:06:49 [INFO] received CSR

2021/09/27 07:06:49 [INFO] generating key: rsa-2048

2021/09/27 07:06:50 [INFO] encoded CSR

2021/09/27 07:06:50 [INFO] signed certificate with serial number

586934213463789417888682817915981321691856207084

2021/09/27 07:06:50 [WARNING] This certificate lacks a "hosts" field. This makes it
unsuitable for

websites. For more information see the Baseline Requirements for the Issuance and
Management

of Publicly-Trusted Certificates, v.1.1.6, from the CA/Browser Forum
(<https://cabforum.org>);

specifically, section 10.2.3 ("Information Requirements").

2021/09/27 07:06:50 [INFO] generate received request

2021/09/27 07:06:50 [INFO] received CSR

2021/09/27 07:06:50 [INFO] generating key: rsa-2048

2021/09/27 07:06:50 [INFO] encoded CSR

2021/09/27 07:06:50 [INFO] signed certificate with serial number 458080834617417076517251420403410992388246836622

2021/09/27 07:06:50 [WARNING] This certificate lacks a "hosts" field. This makes it unsuitable for websites. For more information see the Baseline Requirements for the Issuance and Management of Publicly-Trusted Certificates, v.1.1.6, from the CA/Browser Forum (<https://cabforum.org>); specifically, section 10.2.3 ("Information Requirements").

2021/09/27 07:06:50 [INFO] generate received request

2021/09/27 07:06:50 [INFO] received CSR

2021/09/27 07:06:50 [INFO] generating key: rsa-2048

2021/09/27 07:06:51 [INFO] encoded CSR

2021/09/27 07:06:51 [INFO] signed certificate with serial number 643958521493988879496701302488387246943491790882

2021/09/27 07:06:51 [WARNING] This certificate lacks a "hosts" field. This makes it unsuitable for websites. For more information see the Baseline Requirements for the Issuance and Management of Publicly-Trusted Certificates, v.1.1.6, from the CA/Browser Forum (<https://cabforum.org>); specifically, section 10.2.3 ("Information Requirements").

Waiting for apiserver to come up

+++ [0927 07:07:31] On try 36, apiserver: : ok

clusterrolebinding.rbac.authorization.k8s.io/kube-apiserver-kubelet-admin created

Cluster "local-up-cluster" set.

use 'kubectl --kubeconfig=/var/run/kubernetes/admin-kube-aggregator0.kubeconfig' to use the aggregated API server

2021/09/27 07:07:32 [INFO] generate received request

2021/09/27 07:07:32 [INFO] received CSR

2021/09/27 07:07:32 [INFO] generating key: rsa-2048

2021/09/27 07:07:32 [INFO] encoded CSR

2021/09/27 07:07:32 [INFO] signed certificate with serial number 18240461811464489820356987170277528361099609675

2021/09/27 07:07:32 [WARNING] This certificate lacks a "hosts" field. This makes it unsuitable for websites. For more information see the Baseline Requirements for the Issuance and Management of Publicly-Trusted Certificates, v.1.1.6, from the CA/Browser Forum (<https://cabforum.org>); specifically, section 10.2.3 ("Information Requirements").

service/kube-dns created

serviceaccount/kube-dns created

configmap/kube-dns created

deployment.apps/kube-dns created

Kube-dns addon successfully deployed.

2021/09/27 07:07:34 [INFO] generate received request

2021/09/27 07:07:34 [INFO] received CSR

2021/09/27 07:07:34 [INFO] generating key: rsa-2048

2021/09/27 07:07:35 [INFO] encoded CSR

```

2021/09/27 07:07:35 [INFO] signed certificate with serial number
730235190653350657509048546330603032343885613996
2021/09/27 07:07:35 [WARNING] This certificate lacks a "hosts" field. This makes it
unsuitable for
websites. For more information see the Baseline Requirements for the Issuance and
Management
of Publicly-Trusted Certificates, v.1.1.6, from the CA/Browser Forum
(https://cabforum.org);
specifically, section 10.2.3 ("Information Requirements").
kubelet ( 30046 ) is running.
customresourcedefinition.apiextensions.k8s.io/bouncers.mizar.com created
customresourcedefinition.apiextensions.k8s.io/dividers.mizar.com created
customresourcedefinition.apiextensions.k8s.io/droplets.mizar.com created
customresourcedefinition.apiextensions.k8s.io/endpoints.mizar.com created
customresourcedefinition.apiextensions.k8s.io/subnets.mizar.com created
customresourcedefinition.apiextensions.k8s.io/vpcs.mizar.com created
serviceaccount/mizar-operator created
clusterrolebinding.rbac.authorization.k8s.io/mizar-operator created
daemonset.apps/mizar-daemon created
deployment.apps/mizar-operator created
Create default storage class for
storageclass.storage.k8s.io/standard created
customresourcedefinition.apiextensions.k8s.io/networks.arktos.futurewei.com created
*****
Setup Arktos components ...

```

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]


```

found" arch=amd64 description="Virtualization support" name=vmx pid=14008 source=runtime
type=flag time="2021-09-27T07:25:45Z" level=error msg="Module is not loaded and it can
not be inserted. Please consider running with sudo or as root" arch=amd64 module=kvm
name=kata-runtime pid=14008 source=runtime time="2021-09-27T07:25:45Z" level=error
msg="kernel property not found" arch=amd64 description="Kernel-based Virtual Machine"
name=kvm pid=14008 source=runtime type=module time="2021-09-27T07:25:45Z" level=error
msg="Module is not loaded and it can not be inserted. Please consider running with sudo
or as root" arch=amd64 module=vhost name=kata-runtime pid=14008 source=runtime
time="2021-09-27T07:25:45Z" level=error msg="kernel property not found" arch=amd64
description="Host kernel accelerator for virtio" name=vhost pid=14008 source=runtime
type=module time="2021-09-27T07:25:45Z" level=error msg="Module is not loaded and it can
not be inserted. Please consider running with sudo or as root" arch=amd64 module=vhost_net
name=kata-runtime pid=14008 source=runtime time="2021-09-27T07:25:45Z" level=error
msg="kernel property not found" arch=amd64 description="Host kernel accelerator for
virtio network" name=vhost_net pid=14008 source=runtime type=module
time="2021-09-27T07:25:45Z" level=error msg="Module is not loaded and it can not be
inserted. Please consider running with sudo or as root" arch=amd64 module=vhost_vsock
name=kata-runtime pid=14008 source=runtime time="2021-09-27T07:25:45Z" level=error
msg="kernel property not found" arch=amd64 description="Host Support for Linux VM Sockets"
name=vhost_vsock pid=14008 source=runtime type=module time="2021-09-27T07:25:45Z"
level=error msg="Module is not loaded and it can not be inserted. Please consider running
with sudo or as root" arch=amd64 module=kvm_intel name=kata-runtime pid=14008
source=runtime time="2021-09-27T07:25:45Z" level=error msg="kernel property not found"
arch=amd64 description="Intel KVM" name=kvm_intel pid=14008 source=runtime type=module
time="2021-09-27T07:25:45Z" level=error msg="ERROR: System is not capable of running Kata
Containers" arch=amd64 name=kata-runtime pid=14008 source=runtime ERROR: System is not
capable of running Kata Containers
Aborted. Current system does not support Kata Containers.
Kata Setup done.

```

Local Kubernetes cluster is running. Press Ctrl-C to shut it down.

Logs:

```

/tmp/kube-apiserver0.log
/tmp/kube-controller-manager.log

```

```

/tmp/kube-proxy.log
/tmp/kube-scheduler.log
/tmp/kubelet.log

```

To start using your cluster, you can open up another terminal/tab and run:

```

export KUBECONFIG=/var/run/kubernetes/admin.kubeconfig
Or
export KUBECONFIG=/var/run/kubernetes/adminN(N=0,1,...).kubeconfig

cluster/kubect1.sh

```

Alternatively, you can write to the default kubeconfig:

```

export KUBERNETES_PROVIDER=local

cluster/kubect1.sh config set-cluster local --server=https://master:6443
--certificate-authority=/var/run/kubernetes/server-ca.crt

```

```
cluster/kubectl.sh config set-credentials myself
--client-key=/var/run/kubernetes/client-admin.key
--client-certificate=/var/run/kubernetes/client-admin.crt
cluster/kubectl.sh config set-context local --cluster=local --user=myself
cluster/kubectl.sh config use-context local
cluster/kubectl.sh
```