```
• MobaXterm 20.6 •
                  (SSH client, X-server and networking tools)
      → SSH session to ubuntu@34.70.131.140
         • SSH compression : v
         • SSH-browser

    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 06:43:21 UTC 2021
 System load:
               0.0
                                   Processes:
                                                            176
 Usage of /:
               17.8% of 123.88GB
                                   Users logged in:
 Memory usage: 7%
                                   IP address for ens4:
                                                           10.128.15.197
                                   IP address for docker0: 172.17.0.1
 Swap usage:
39 updates can be applied immediately.
22 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable
New release '20.04.3 LTS' available.
Run 'do-release-upgrade' to upgrade to it.
Last login: Mon Sep 27 06:32:38 2021 from 114.143.207.106
ubuntu@instance-1:~/go/src/k8s.io/arktos$ ./cluster/kubectl.sh get pods -Ao wide
The connection to the server localhost:8080 was refused - did you specify the right host
or port?
ubuntu@instance-1:~/go/src/k8s.io/arktos$ ./cluster/kubectl.sh get pods -Ao wide
NAMESPACE
             NAME
                                                 HASHKEY
                                                                       READY
                                                                               STATUS
RESTARTS AGE
                                NODE
                                                               READINESS GATES
               TP
                                              NOMINATED NODE
default
             mizar-daemon-8bsxq
                                                 7735477782612895179
                                                                       1/1
Running
                   0
                              48s
                                     10.128.15.197
                                                     instance-1
                                                                  <none>
<none>
              mizar-operator-6985d77546-82nqg
default
                                                1650833051907194888
                                                                       1/1
Running
                    0
                              48s
                                     10.128.15.197
                                                     instance-1
                                                                  <none>
<none>
kube-system coredns-default-54895b5bfc-qhpkm
                                                 6167013444726112653
                                                                       0/1
ContainerCreating
                                                     instance-1 <none>
                              48s
                                     <none>
<none>
kube-system kube-dns-7f4bf79dc-zcjdn
                                                 4360096557658664667
                                                                       0/3
ContainerCreating 0
                            48s
                                                     instance-1 <none>
                                     <none>
<none>
```

```
kube-system
              virtlet-d8gb4
                                                  3236308487394719128
                                                                         3/3
Running
                    0
                                47s
                                      10.128.15.197
                                                      instance-1
                                                                    <none>
<none>
ubuntu@instance-1:~/go/src/k8s.io/arktos$ ./cluster/kubectl.sh run pod --image=nginx
kubectl run --generator=deployment/apps.v1 is DEPRECATED and will be removed in a future
version. Use kubectl run --generator=run-pod/v1 or kubectl create instead.
deployment.apps/pod created
ubuntu@instance-1:~/go/src/k8s.io/arktos$ ./cluster/kubectl.sh get pods -Ao wide
NAMESPACE
              NAME
                                                  HASHKEY
                                                                         READY
                                                                                 STATUS
RESTARTS
           AGE
                  ΙP
                                   NODE
                                                NOMINATED NODE
                                                                  READINESS GATES
default
              mizar-daemon-8bsxq
                                                  7735477782612895179
                                                                         1/1
                                                        instance-1
                                3m9s
                                       10.128.15.197
Running
                                                                     <none>
<none>
              mizar-operator-6985d77546-82ngg
                                                  1650833051907194888
default
                                                                         1/1
                                       10.128.15.197
Running
                                3m9s
                                                        instance-1
                                                                     <none>
<none>
              pod-767686bb54-5bg6s
                                                  5774664824995397753
default
                                                                         0/1
ContainerCreating
                                       <none>
                                                        instance-1
                                                                     <none>
<none>
              coredns-default-54895b5bfc-qhpkm
                                                  6167013444726112653
kube-system
                                                                         0/1
ContainerCreating
                                3m9s
                                       <none>
                                                        instance-1
                                                                     <none>
<none>
              kube-dns-7f4bf79dc-zcjdn
                                                  4360096557658664667
kube-system
                                                                         0/3
ContainerCreating
                                3m9s
                                       <none>
                                                        instance-1
                                                                     <none>
kube-system
              virtlet-d8gb4
                                                  3236308487394719128
                                                                         3/3
Running
                    0
                                3m8s
                                       10.128.15.197
                                                        instance-1
                                                                     <none>
<none>
ubuntu@instance-1:~/go/src/k8s.io/arktos$ ./cluster/kubectl.sh get vpcs -Ao wide
            NAME
                               PREFIX
                                        VNI
                                              DIVIDERS
                                                          STATUS
                                                                        CREATETIME
NAMESPACE
PROVISIONDELAY
                                                          Provisioned
default
            vpc0
                   20.0.0.0
2021-09-27T06:47:02.104597
                             42.064971
ubuntu@instance-1:~/go/src/k8s.io/arktos$ ./cluster/kubectl.sh get subnets -Ao wide
NAMESPACE
            NAME
                               PREFIX
                                        VNI
                                              VPC
                                                     STATUS
                                                                    BOUNCERS
CREATETIME
                              PROVISIONDELAY
default
            net0
                   20.0.0.0
                                              vpc0
                                                     Provisioned
2021-09-27T06:47:02.208350
                              62.121736
ubuntu@instance-1:~/go/src/k8s.io/arktos$ ./cluster/kubectl.sh get net -Ao wide
NAME
          TYPE
                  VPC
                                            PHASE
                                                    DNS
          mizar
                  system-default-network
                                            Readv
                                                    10.0.0.164
ubuntu@instance-1:~/go/src/k8s.io/arktos$ ./cluster/kubectl.sh get nodes -Ao wide
             STATUS
                                                  INTERNAL-IP
                                                                   EXTERNAL-IP
NAME
                      ROLES
                                AGE
                                        VERSION
OS-IMAGE
                     KERNEL-VERSION
                                       CONTAINER-RUNTIME
                                                  10.128.15.197
instance-1
             Ready
                       <none>
                                6m32s
                                        v0.8.0
                                                                   <none>
                                                                                 Ubuntu
                                containerd://1.4.0-beta.1-29-g70b0d3cf
18.04.5 LTS
              5.6.0-rc2
ubuntu@instance-1:~/go/src/k8s.io/arktos$ ./cluster/kubectl.sh get pods -Ao wide
NAMESPACE
              NAME
                                                  HASHKEY
                                                                         READY
                                                                                 STATUS
                                                                   READINESS GATES
RESTARTS
           AGE
                   ΙP
                                    NODE
                                                 NOMINATED NODE
default
              mizar-daemon-8bsxq
                                                  7735477782612895179
                                                                         1/1
                                        10.128.15.197
                                                                      <none>
Running
                                8m3s
                                                         instance-1
<none>
              mizar-operator-6985d77546-82ngg
default
                                                  1650833051907194888
                                                                         1/1
                                        10.128.15.197
Running
                    0
                                8m3s
                                                         instance-1
                                                                      <none>
<none>
```

```
default
              pod-767686bb54-5bg6s
                                                  5774664824995397753
                                                                         0/1
ContainerCreating 0
                                6m45s
                                                        instance-1
                                        <none>
                                                                      <none>
<none>
              coredns-default-54895b5bfc-qhpkm
                                                  6167013444726112653
kube-system
                                                                         0/1
ContainerCreating
                                8m3s
                                        <none>
                                                        instance-1
                                                                      <none>
<none>
              kube-dns-7f4bf79dc-zcjdn
                                                  4360096557658664667
kube-system
                                                                         0/3
ContainerCreating
                    0
                                8m3s
                                        <none>
                                                        instance-1
                                                                      <none>
kube-system
              virtlet-d8gb4
                                                  3236308487394719128
                                                                         3/3
Running
                    0
                                8m2s
                                        10.128.15.197
                                                        instance-1
                                                                      <none>
<none>
ubuntu@instance-1:~/go/src/k8s.io/arktos$ ./cluster/kubectl.sh get dividers -Ao wide
NAMESPACE
                                                           VPC
                                                                   IΡ
                                                                         MAC
                                                                               DROPLET
                                            PROVISIONDELAY
STATUS
              CREATETIME
            vpc0-d-adb42b77-2823-402d-bbbf-904ff3ad551f
default
                                                           vpc0
                           2021-09-27T06:47:44.154017
instance-1
             Provisioned
                                                         0.272695
ubuntu@instance-1:~/go/src/k8s.io/arktos$ ./cluster/kubectl.sh get bouncers -Ao wide
NAMESPACE
            NAME
                                                           VPC
                                                                          ΙP
                                                                                MAC
                                                                   NET
                            CREATETIME
DROPLET
             STATUS
                                                         PROVISIONDELAY
            net0-b-48f8d246-7aac-486e-b367-ffed1ec49a5e
default
                                                           vpc0
                                                                   net0
                           2021-09-27T06:48:04.321609
             Provisioned
                                                         0.95841
instance-1
ubuntu@instance-1:~/go/src/k8s.io/arktos$ ./cluster/kubectl.sh get dividers -Ao wide
NAMESPACE
                                                                   ΙP
                                                                               DROPLET
            NAME
                                                           VPC
                                                                         MAC
STATUS
              CREATETIME
                                            PROVISIONDELAY
default
            vpc0-d-adb42b77-2823-402d-bbbf-904ff3ad551f
                                                           vpc0
             Provisioned
                           2021-09-27T06:47:44.154017
                                                         0.272695
ubuntu@instance-1:~/go/src/k8s.io/arktos$ ./cluster/kubectl.sh get pods -Ao wide
              NAME
NAMESPACE
                                                  HASHKEY
                                                                         READY
                                                                                 STATUS
           AGE
                 ΤP
                                 NODE
                                               NOMINATED NODE
                                                                 READINESS GATES
RESTARTS
              mizar-daemon-8bsxq
default
                                                  7735477782612895179
                                                                         1/1
                                      10.128.15.197
Running
                                15m
                                                      instance-1
                                                                    <none>
<none>
default
              mizar-operator-6985d77546-82ngg
                                                  1650833051907194888
                                      10.128.15.197
Running
                                15m
                                                      instance-1
                                                                    <none>
<none>
default
              pod-767686bb54-5bg6s
                                                  5774664824995397753
                                                                         0/1
ContainerCreating
                                                      instance-1
                                14m
                                      <none>
                                                                    <none>
<none>
              coredns-default-54895b5bfc-qhpkm
                                                  6167013444726112653
                                                                         0/1
kube-system
ContainerCreating
                                15m
                                      <none>
                                                      instance-1
                                                                    <none>
<none>
              kube-dns-7f4bf79dc-zcjdn
                                                  4360096557658664667
kube-system
                                                                         0/3
ContainerCreating
                                15m
                                      <none>
                                                      instance-1
                                                                    <none>
<none>
kube-system
              virtlet-d8gb4
                                                  3236308487394719128
                                                                         3/3
                                      10.128.15.197
Running
                    0
                                15m
                                                      instance-1
                                                                    <none>
ubuntu@instance-1:~/go/src/k8s.io/arktos$ ip a
1: lo: <LOOPBACK,UP,LOWER UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen
1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
```

valid lft forever preferred lft forever 2: ens4: <BROADCAST, MULTICAST, UP, LOWER UP> mtu 1460 qdisc mq state UP group default qlen 1000 link/ether 42:01:0a:80:0f:c5 brd ff:ff:ff:ff:ff inet 10.128.15.197/32 scope global dynamic ens4 valid lft 2564sec preferred lft 2564sec inet6 fe80::4001:aff:fe80:fc5/64 scope link valid lft forever preferred lft forever 3: docker0: <NO-CARRIER, BROADCAST, MULTICAST, UP> mtu 1500 qdisc noqueue state DOWN group default link/ether 02:42:a4:20:78:43 brd ff:ff:ff:ff:ff inet 172.17.0.1/16 brd 172.17.255.255 scope global docker0 valid lft forever preferred lft forever 4: veth-fe7ce327@eth-fe7ce327: <BROADCAST,MULTICAST,M-DOWN> mtu 1500 qdisc noop state DOWN group default glen 1000 link/ether 36:b4:89:3b:19:b8 brd ff:ff:ff:ff:ff 5: eth-fe7ce327@veth-fe7ce327: <BROADCAST,MULTICAST,M-DOWN> mtu 1500 qdisc noop state DOWN group default glen 1000 link/ether 9e:9a:4a:19:d4:2f brd ff:ff:ff:ff:ff 6: veth-c519da89@eth-c519da89: <BROADCAST,MULTICAST,M-DOWN> mtu 1500 qdisc noop state DOWN group default glen 1000 link/ether 1a:37:f4:de:64:18 brd ff:ff:ff:ff:ff 7: eth-c519da89@veth-c519da89: <BROADCAST,MULTICAST,M-DOWN> mtu 1500 qdisc noop state DOWN group default glen 1000 link/ether e2:28:ef:d3:e6:3b brd ff:ff:ff:ff:ff 10: veth-594d41d6@eth-594d41d6: <BROADCAST, MULTICAST, M-DOWN> mtu 1500 qdisc noop state DOWN group default glen 1000 link/ether 62:c1:c8:8e:c8:d0 brd ff:ff:ff:ff:ff 11: eth-594d41d6@veth-594d41d6: <BROADCAST, MULTICAST, M-DOWN> mtu 1500 qdisc noop state DOWN group default glen 1000 link/ether d6:02:2c:a4:16:10 brd ff:ff:ff:ff:ff 12: veth-f5ab98f0@eth-f5ab98f0: <BROADCAST, MULTICAST, M-DOWN> mtu 1500 qdisc noop state DOWN group default glen 1000 link/ether 4e:2f:36:a6:f4:1f brd ff:ff:ff:ff:ff 13: eth-f5ab98f0@veth-f5ab98f0: <BROADCAST,MULTICAST,M-DOWN> mtu 1500 gdisc noop state DOWN group default glen 1000 link/ether 56:50:08:cf:f5:16 brd ff:ff:ff:ff:ff 14: veth-0d713449@eth-0d713449: <BROADCAST,MULTICAST,M-DOWN> mtu 1500 qdisc noop state DOWN group default glen 1000 link/ether 16:b1:df:e4:59:b4 brd ff:ff:ff:ff:ff 15: eth-0d713449@veth-0d713449: <BROADCAST, MULTICAST, M-DOWN> mtu 1500 gdisc noop state DOWN group default glen 1000 link/ether f2:1c:77:fc:f9:72 brd ff:ff:ff:ff:ff 16: veth-61bbc0fc@eth-61bbc0fc: <BROADCAST,MULTICAST,M-DOWN> mtu 1500 qdisc noop state DOWN group default glen 1000 link/ether de:86:84:9f:b6:5b brd ff:ff:ff:ff:ff 17: eth-61bbc0fc@veth-61bbc0fc: <BROADCAST,MULTICAST,M-DOWN> mtu 1500 qdisc noop state DOWN group default glen 1000 link/ether 42:02:35:86:27:0f brd ff:ff:ff:ff:ff 18: veth-hostep@eth-hostep: <BROADCAST,MULTICAST,UP,LOWER UP> mtu 9000 xdpgeneric/id:139 qdisc noqueue state UP group default qlen 1000 link/ether 4a:52:de:e8:c2:8a brd ff:ff:ff:ff:ff inet6 fe80::4852:deff:fee8:c28a/64 scope link valid_lft forever preferred_lft forever 19: eth-hostep@veth-hostep: <BROADCAST,MULTICAST,UP,LOWER UP> mtu 1500 qdisc noqueue

state UP group default qlen 1000

link/ether da:3b:a2:0f:39:3d brd ff:ff:ff:ff:ff

inet6 fe80::d83b:a2ff:fe0f:393d/64 scope link

valid_lft forever preferred_lft forever

20: veth-e26b42f3@eth-e26b42f3: <BROADCAST,MULTICAST,M-DOWN> mtu 1500 qdisc noop state DOWN group default qlen 1000

link/ether 62:4c:5c:a5:3e:de brd ff:ff:ff:ff:ff

21: eth-e26b42f3@veth-e26b42f3: <BROADCAST,MULTICAST,M-DOWN> mtu 1500 qdisc noop state DOWN group default qlen 1000

link/ether 9e:09:ff:f9:e2:a5 brd ff:ff:ff:ff:ff
ubuntu@instance-1:~/go/src/k8s.io/arktos\$