

```
saravanans@wecandonow.com :~$ cd kafka_2.11-2.2.2/
```

```
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ 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: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 9001 qdisc mq state UP
group default qlen 1000
    link/ether 06:29:33:b0:30:f0 brd ff:ff:ff:ff:ff:ff
    inet 172.31.16.84/20 metric 100 brd 172.31.31.255 scope global dynamic
eth0
    valid_lft 3373sec preferred_lft 3373sec
    inet6 fe80::429:33ff:feb0:30f0/64 scope link
        valid_lft forever preferred_lft forever
```

```
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ ls
LICENSE NOTICE bin config libs logs site-docs
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ cat >
config/zookeeper1.properties
```

```
tickTime=2000
dataDir=/home/ubuntu/zookeeper-1
clientPort=2181
initLimit=5
syncLimit=2
server.1=172.31.16.84:2888:3888
server.2=172.31.16.84:4888:5888
server.3=172.31.16.84:5888:7888
```

```
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ cat > config/zookeeper2.properties
```

```
tickTime=2000
dataDir=/home/ubuntu/zookeeper-2
clientPort=2181
initLimit=5
syncLimit=2
```

```
server.1=172.31.16.84:2888:3888
server.2=172.31.16.84:4888:5888
server.3=172.31.16.84:5888:7888
```

saravanans@wecandonow.com :~/kafka\_2.11-2.2.2\$ cat > config/zookeeper3.properties

```
tickTime=2000
dataDir=/home/ubuntu/zookeeper-3
clientPort=2181
initLimit=5
syncLimit=2
server.1=172.31.16.84:2888:3888
server.2=172.31.16.84:4888:5888
server.3=172.31.16.84:5888:7888
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$
```

```
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ bin/zookeeper-server-
start.sh config/zookeeper1.properties
[2022-11-03 11:36:43,789] INFO Reading configuration from:
config/zookeeper1.properties
(org.apache.zookeeper.server.quorum.QuorumPeerConfig)
[2022-11-03 11:36:43,810] INFO Resolved hostname: 172.31.16.84 to address:
/172.31.16.84 (org.apache.zookeeper.server.quorum.QuorumPeer)
[2022-11-03 11:36:43,810] INFO Resolved hostname: 172.31.16.84 to address:
/172.31.16.84 (org.apache.zookeeper.server.quorum.QuorumPeer)
[2022-11-03 11:36:43,810] INFO Resolved hostname: 172.31.16.84 to address:
/172.31.16.84 (org.apache.zookeeper.server.quorum.QuorumPeer)
[2022-11-03 11:36:43,810] INFO Defaulting to majority quorums
(org.apache.zookeeper.server.quorum.QuorumPeerConfig)
[2022-11-03 11:36:43,811] ERROR Invalid config, exiting abnormally
(org.apache.zookeeper.server.quorum.QuorumPeerMain)
org.apache.zookeeper.server.quorum.QuorumPeerConfig$ConfigException: Error
processing config/zookeeper1.properties
    at
org.apache.zookeeper.server.quorum.QuorumPeerConfig.parse(QuorumPeerConfig
.java:156)
    at
org.apache.zookeeper.server.quorum.QuorumPeerMain.initializeAndRun(QuorumP
eerMain.java:104)
    at
org.apache.zookeeper.server.quorum.QuorumPeerMain.main(QuorumPeerMain.java
:81)
Caused by: java.lang.IllegalArgumentException: /home/ubuntu/zookeeper-
1/myid file is missing
    at
org.apache.zookeeper.server.quorum.QuorumPeerConfig.parseProperties(Quorum
PeerConfig.java:408)
    at
```

```
org.apache.zookeeper.server.quorum.QuorumPeerConfig.parse(QuorumPeerConfig
.java:152)
... 2 more
Invalid config, exiting abnormally
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ echo 1 >
/home/ubuntu/zookeeper-1/myid
-bash: /home/ubuntu/zookeeper-1/myid: No such file or directory
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ mkdir
/home/ubuntu/zookeeper-1/
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ echo 1 >
/home/ubuntu/zookeeper-1/myid
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ cat /home/ubuntu/zookeeper-
1/myid
1
```

```
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ bin/zookeeper-server-
start.sh config/zookeeper1.properties
[2022-11-03 11:36:43,789] INFO Reading configuration from:
config/zookeeper1.properties
(org.apache.zookeeper.server.quorum.QuorumPeerConfig)
[2022-11-03 11:36:43,810] INFO Resolved hostname: 172.31.16.84 to address:
/172.31.16.84 (org.apache.zookeeper.server.quorum.QuorumPeer)
[2022-11-03 11:36:43,810] INFO Resolved hostname: 172.31.16.84 to address:
/172.31.16.84 (org.apache.zookeeper.server.quorum.QuorumPeer)
```

## open another terminal

```
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ bin/zookeeper-server-
start.sh config/zookeeper2.properties
[2022-11-03 11:38:37,809] INFO Reading configuration from:
config/zookeeper2.properties
(org.apache.zookeeper.server.quorum.QuorumPeerConfig)
[2022-11-03 11:38:37,820] INFO Resolved hostname: 172.31.16.84 to address:
/172.31.16.84 (org.apache.zookeeper.server.quorum.QuorumPeer)
[2022-11-03 11:38:37,820] INFO Resolved hostname: 172.31.16.84 to address:
/172.31.16.84 (org.apache.zookeeper.server.quorum.QuorumPeer)
[2022-11-03 11:38:37,820] INFO Resolved hostname: 172.31.16.84 to address:
/172.31.16.84 (org.apache.zookeeper.server.quorum.QuorumPeer)
[2022-11-03 11:38:37,820] INFO Defaulting to majority quorums
(org.apache.zookeeper.server.quorum.QuorumPeerConfig)
[2022-11-03 11:38:37,821] ERROR Invalid config, exiting abnormally
(org.apache.zookeeper.server.quorum.QuorumPeerMain)
org.apache.zookeeper.server.quorum.QuorumPeerConfig$ConfigException: Error
processing config/zookeeper2.properties
at
```

```

org.apache.zookeeper.server.quorum.QuorumPeerConfig.parse(QuorumPeerConfig
.java:156)
    at
org.apache.zookeeper.server.quorum.QuorumPeerMain.initializeAndRun(QuorumP
eerMain.java:104)
    at
org.apache.zookeeper.server.quorum.QuorumPeerMain.main(QuorumPeerMain.java
:81)
Caused by: java.lang.IllegalArgumentException: /home/ubuntu/zookeeper-
2/myid file is missing
    at
org.apache.zookeeper.server.quorum.QuorumPeerConfig.parseProperties(Quorum
PeerConfig.java:408)
    at
org.apache.zookeeper.server.quorum.QuorumPeerConfig.parse(QuorumPeerConfig
.java:152)
    ... 2 more
Invalid config, exiting abnormally
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ mkdir
/home/ubuntu/zookeeper-2/
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ echo 2 >
/home/ubuntu/zookeeper-2/myid

saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ cat
config/zookeeper2.properties

```

```

tickTime=2000
dataDir=/home/ubuntu/zookeeper-2
clientPort=2182
initLimit=5
syncLimit=2
server.1=172.31.16.84:2888:3888
server.2=172.31.16.84:4888:5888
server.3=172.31.16.84:5888:7888

```

```
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$
```

```

saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ bin/zookeeper-server-start.sh
config/zookeeper2.properties [2022-11-03 11:38:37,809] INFO Reading configuration from:
config/zookeeper2.properties (org.apache.zookeeper.server.quorum.QuorumPeerConfig) [2022-11-03
11:38:37,820] INFO Resolved hostname: 172.31.16.84 to address: /172.31.16.84
(org.apache.zookeeper.server.quorum.QuorumPeer) [2022-11-03 11:38:37,820] INFO Resolved hostname:
172.31.16.84 to address: /172.31.16.84 (org.apache.zookeeper.server.quorum.QuorumPeer)

```

```
## open another terminal
```

```

```sh
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ vi
config/zookeeper3.properties
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ cat
config/zookeeper3.properties

```

```

tickTime=2000
dataDir=/home/ubuntu/zookeeper-3
clientPort=2183
initLimit=5
syncLimit=2
server.1=172.31.16.84:2888:3888
server.2=172.31.16.84:4888:5888
server.3=172.31.16.84:5888:7888

```

```

saravanans@wecandonow.com :~/kafka_2.11-2.2.2$
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ bin/zookeeper-server-
start.sh config/zookeeper3.properties
[2022-11-03 11:41:09,028] INFO Reading configuration from:
config/zookeeper3.properties
(org.apache.zookeeper.server.quorum.QuorumPeerConfig)
[2022-11-03 11:41:09,040] INFO Resolved hostname: 172.31.16.84 to address:
/172.31.16.84 (org.apache.zookeeper.server.quorum.QuorumPeer)
[2022-11-03 11:41:09,040] INFO Resolved hostname: 172.31.16.84 to address:
/172.31.16.84 (org.apache.zookeeper.server.quorum.QuorumPeer)
[2022-11-03 11:41:09,040] INFO Resolved hostname: 172.31.16.84 to address:
/172.31.16.84 (org.apache.zookeeper.server.quorum.QuorumPeer)
[2022-11-03 11:41:09,041] INFO Defaulting to majority quorums
(org.apache.zookeeper.server.quorum.QuorumPeerConfig)
[2022-11-03 11:41:09,041] ERROR Invalid config, exiting abnormally
(org.apache.zookeeper.server.quorum.QuorumPeerMain)
org.apache.zookeeper.server.quorum.QuorumPeerConfig$ConfigException: Error
processing config/zookeeper3.properties
    at
org.apache.zookeeper.server.quorum.QuorumPeerConfig.parse(QuorumPeerConfig
.java:156)
    at
org.apache.zookeeper.server.quorum.QuorumPeerMain.initializeAndRun(QuorumP
eerMain.java:104)
    at
org.apache.zookeeper.server.quorum.QuorumPeerMain.main(QuorumPeerMain.java
:81)
Caused by: java.lang.IllegalArgumentException: /home/ubuntu/zookeeper-
3/myid file is missing
    at
org.apache.zookeeper.server.quorum.QuorumPeerConfig.parseProperties(Quorum
PeerConfig.java:408)
    at

```

```

org.apache.zookeeper.server.quorum.QuorumPeerConfig.parse(QuorumPeerConfig
.java:152)
... 2 more
Invalid config, exiting abnormally
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ mkdir
/home/ubuntu/zookeeper-3
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ echo 3 >
/home/ubuntu/zookeeper-3/myid
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ bin/zookeeper-server-
start.sh config/zookeeper3.properties
[2022-11-03 11:41:39,256] INFO Created server with tickTime 2000
minSessionTimeout 4000 maxSessionTimeout 40000 datadir
/home/ubuntu/zookeeper-3/version-2 snapdir /home/ubuntu/zookeeper-
3/version-2 (org.apache.zookeeper.server.ZooKeeperServer)
[2022-11-03 11:41:39,256] INFO FOLLOWING - LEADER ELECTION TOOK - 34
(org.apache.zookeeper.server.quorum.Learner)
[2022-11-03 11:41:39,258] INFO Resolved hostname: 172.31.16.84 to address:
/172.31.16.84 (org.apache.zookeeper.server.quorum.QuorumPeer)
[2022-11-03 11:41:39,266] INFO Getting a snapshot from leader 0x100000000
(org.apache.zookeeper.server.quorum.Learner)
[2022-11-03 11:41:39,274] INFO Snapshotting: 0x100000000 to
/home/ubuntu/zookeeper-3/version-2/snapshot.100000000
(org.apache.zookeeper.server.persistence.FileTxnSnapLog)

.....

```

## open another terminal

```

saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ jps
1588 QuorumPeerMain
3207 QuorumPeerMain
2542 QuorumPeerMain
3535 Jps
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ netstat -nltp | grep 218
(Not all processes could be identified, non-owned process info
will not be shown, you would have to be root to see it all.)
tcp6          0      0 :::2181                :::*                    LISTEN
1588/java
tcp6          0      0 :::2182                :::*                    LISTEN
2542/java
tcp6          0      0 :::2183                :::*                    LISTEN
3207/java
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$

```

```

saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ bin/zookeeper-shell.sh
localhost:2181
Connecting to localhost:2181

```

```
Welcome to ZooKeeper!
JLine support is disabled

WATCHER::

WatchedEvent state:SyncConnected type:None path:null
ls /
[zookeeper]
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ bin/zookeeper-shell.sh
localhost:2182
Connecting to localhost:2182
Welcome to ZooKeeper!
JLine support is disabled

WATCHER::

WatchedEvent state:SyncConnected type:None path:null
ls /
[zookeeper]
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ bin/zookeeper-shell.sh
localhost:2183
Connecting to localhost:2183
Welcome to ZooKeeper!
JLine support is disabled

WATCHER::

WatchedEvent state:SyncConnected type:None path:null
ls /
[zookeeper]
```

```
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ bin/zookeeper-shell.sh
localhost:2183
Connecting to localhost:2183
Welcome to ZooKeeper!
JLine support is disabled

WATCHER::

WatchedEvent state:SyncConnected type:None path:null
create /WeCanDoNow "www.wecandonow.com"
Created /WeCanDoNow
ls /
[zookeeper, WeCanDoNow]
create /Robochef "www.robochef.co"
Created /Robochef
ls /
[Robochef, zookeeper, WeCanDoNow]
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ bin/zookeeper-shell.sh
```

```
localhost:2181
Connecting to localhost:2181
Welcome to ZooKeeper!
JLine support is disabled

WATCHER::

WatchedEvent state:SyncConnected type:None path:null
ls /
[Robochef, zookeeper, WeCanDoNow]
get /WeCanDoNow
www.wecandonow.com
cZxid = 0x10000000a
ctime = Thu Nov 03 11:44:58 UTC 2022
mZxid = 0x10000000a
mtime = Thu Nov 03 11:44:58 UTC 2022
pZxid = 0x10000000a
cversion = 0
dataVersion = 0
aclVersion = 0
ephemeralOwner = 0x0
dataLength = 18
numChildren = 0
get /Robochef
www.robochef.co
cZxid = 0x10000000b
ctime = Thu Nov 03 11:45:55 UTC 2022
mZxid = 0x10000000b
mtime = Thu Nov 03 11:45:55 UTC 2022
pZxid = 0x10000000b
cversion = 0
dataVersion = 0
aclVersion = 0
ephemeralOwner = 0x0
dataLength = 15
numChildren = 0
saravanans@wecandonow.com :~/kafka_2.11-2.2.2$ bin/zookeeper-shell.sh
localhost:2182
Connecting to localhost:2182
Welcome to ZooKeeper!
JLine support is disabled

WATCHER::

WatchedEvent state:SyncConnected type:None path:null
get /WeCanDoNow
www.wecandonow.com
cZxid = 0x10000000a
ctime = Thu Nov 03 11:44:58 UTC 2022
mZxid = 0x10000000a
mtime = Thu Nov 03 11:44:58 UTC 2022
pZxid = 0x10000000a
cversion = 0
dataVersion = 0
```



```
aclVersion = 0  
ephemeralOwner = 0x0  
dataLength = 18  
numChildren = 0  
ls /  
[Robochef, zookeeper, WeCanDoNow]
```