### 对象存储实验报告

#### 实验一

#### minio

- \$ wget https://dl.min.io/server/minio/release/linux-amd64/minio
- \$ chmod +x minio
- \$ vim ~/.bashrc //配置 minio 路径
- \$ export MINIO\_ROOT\_USER=hust && export MINIO\_ROOT\_PASSWORD=hust\_obs &&
   minio -C ./ server share

```
API: http://172.27.193.88:9000 http://127.0.0.1:9000
RootUser: hust
RootPass: hust_obs

Console: http://172.27.193.88:45939 http://127.0.0.1:45939
RootUser: hust
RootPass: hust_obs

Command-line: https://docs.min.io/docs/minio-client-quickstart-guide
$ mc alias set myminio http://172.27.193.88:9000 hust hust_obs

Documentation: https://docs.min.io

WARNING: Console endpoint is listening on a dynamic port (45939), please use --console-address
":PORT" to choose a static port.
```

#### Minio client

- \$ go install github.com/minio/mc@latest
- \$ mc alias set myminio http://172.27.193.88:9000 hust hust\_obs

## Added `myminio` successfully.

#### 测试操作

- \$ mc mb myminio/xiawu #创建
- \$ mc cp script.txt myminio/xiawu #复制
- \$ mc rm -r --force myminio/xiawu #删除

### Bucket created successfully `myminio/xiawu`.

script.txt: 219 B / 219 B 6.49 KiB/s 09

# Removing `myminio/xiawu/script.txt`.

## 实验二 性能观测

### 下载 s3 bench

\$ go get -u github.com/igneous-systems/s3bench

#### run s3 bench

\$ vim run-s3bench.sh

修改 s3bench 路径为下载的路径

\$ mc mb myminio/loadgen

\$ sh run-s3-bench.sh

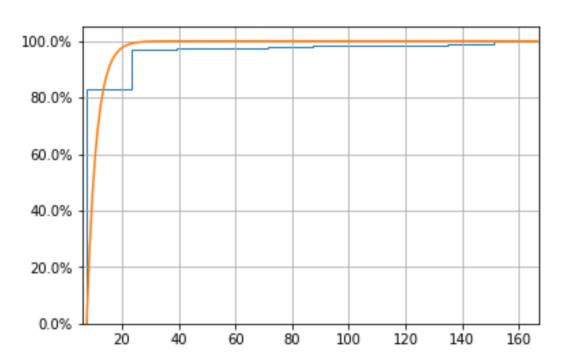
指定客户端数量为8,对象个数为256

```
Test parameters
endpoint(s):
                 [http://127.0.0.1:9000]
                 loadgen
bucket:
objectNamePrefix: loadgen
objectSize: 0.0312 MB
numClients:
                 8
numSamples: 256
verbose: %!d(bool=false)
Results Summary for Write Operation(s)
Total Transferred: 8.000 MB
Total Throughput: 19.39 MB/s
Total Duration: 0.413 s
Number of Errors: 0
Write times Max: 0.066 s
Write times 99th %ile: 0.053 s
Write times 90th %ile: 0.020 s
Write times 75th %ile: 0.016 s
Write times 50th %ile: 0.011 s
Write times 25th %ile: 0.007 s
Write times Min:
                     0.003 s
Results Summary for Read Operation(s)
Total Transferred: 8.000 MB
Total Throughput: 33.42 MB/s
Total Duration: 0.239 s
Number of Errors: 0
Read times Max: 0.209 s
Read times 99th %ile: 0.174 s
Read times 90th %ile: 0.002 s
Read times 75th %ile: 0.001 s
Read times 50th %ile: 0.001 s
Read times 25th %ile: 0.001 s
Read times Min:
                     0.001 s
Cleaning up 256 objects...
Deleting a batch of 256 objects in range {0, 255}... Succeeded
```

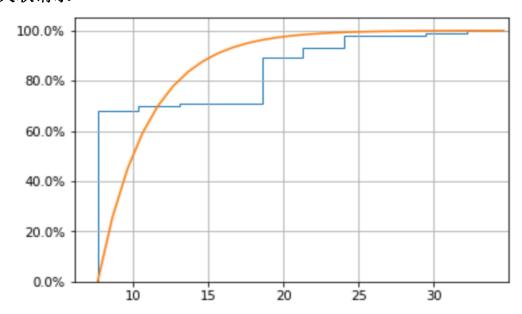
### 实验三

#### 观测尾延迟现象

\$ jupyter notebook --allow-root



## 关联请求



## 对冲请求

