

Go 版本 s3 linux 使用手册

1、说明

在进行测试之前要先部署好测试环境，测试环境部署请参考《Go 版本 s3 linux 环境部署手册》

2、上传文件

可以找任意文件进行上传，这里我们随机生成一个 4G 文件进行上传

```
[root@VM_32_2_centos ~]# dd if=/dev/urandom of=4000M_20201214test.txt bs=10M count=1024
1024+0 records in
1024+0 records out
10737418240 bytes (11 GB) copied, 80.8011 s, 133 MB/s
[root@VM_32_2_centos ~]#
```

上传文件的 md5 值如下：

```
[root@VM_32_2_centos ~]# md5sum 4000M_20201214test.txt
440805f38540162114f0ca61c529b75a 4000M_20201214test.txt
[root@VM_32_2_centos ~]#
```

执行 s3cmd put 4000M_20201214test.txt s3://polly

```
[root@VM_32_2_centos ~]# s3cmd put 4000M_20201214test.txt s3://polly
upload: '4000M_20201214test.txt' -> 's3://polly/4000M_20201214test.txt' [part 1 of 205, 50MB] [1 of 1]
52428800 of 52428800 100% in 0s 164.87 MB/s done
upload: '4000M_20201214test.txt' -> 's3://polly/4000M_20201214test.txt' [part 2 of 205, 50MB] [1 of 1]
52428800 of 52428800 100% in 0s 170.50 MB/s done
upload: '4000M_20201214test.txt' -> 's3://polly/4000M_20201214test.txt' [part 3 of 205, 50MB] [1 of 1]
52428800 of 52428800 100% in 0s 171.06 MB/s done
upload: '4000M_20201214test.txt' -> 's3://polly/4000M_20201214test.txt' [part 4 of 205, 50MB] [1 of 1]
52428800 of 52428800 100% in 0s 172.09 MB/s done
upload: '4000M_20201214test.txt' -> 's3://polly/4000M_20201214test.txt' [part 5 of 205, 50MB] [1 of 1]
52428800 of 52428800 100% in 0s 171.17 MB/s done
upload: '4000M_20201214test.txt' -> 's3://polly/4000M_20201214test.txt' [part 6 of 205, 50MB] [1 of 1]
52428800 of 52428800 100% in 0s 168.22 MB/s done
upload: '4000M_20201214test.txt' -> 's3://polly/4000M_20201214test.txt' [part 7 of 205, 50MB] [1 of 1]
52428800 of 52428800 100% in 0s 171.69 MB/s done
upload: '4000M_20201214test.txt' -> 's3://polly/4000M_20201214test.txt' [part 8 of 205, 50MB] [1 of 1]
52428800 of 52428800 100% in 0s 170.47 MB/s done
upload: '4000M_20201214test.txt' -> 's3://polly/4000M_20201214test.txt' [part 9 of 205, 50MB] [1 of 1]
```

查看日志，开始初始化上传，上传时间为 11 : 31 : 29

```
[11:31:29.400][Infos][AyncUpload]Cache size 0
[11:31:29.091][Infos]GET BUCKET LOCATION[11:31:29.096][Infos]initiate multipart upload
[11:31:40.488][Infos][AyncUpload]Cache size 0
```

查看日志，上传成功，上传完成时间 11 : 40 : 25

```
[11:40:22.715][Infos][UploadBlock][5fd6dd3c09f5864e2ece3ff2][5119]Write shardmetas OK,take times 99 ms.
[11:40:22.790][Infos][UploadObject][5fd6dd3c09f5864e2ece3ff2]Upload object OK.
[11:40:22.825][Infos][CreateObject][151]polly/4000M_20201214test.txt OK.
[11:40:25.563][Infos][AyncUpload]Cache size 0
```

根据上传时间我们可以计算这个文件上传速度约为 7.4MB/s=60mb/s

3、下载文件

对刚才上传的文件进行下载，执行 s3cmd get s3://polly/4000M_20201214test.txt

/home/

```
[root@VM_32_2_centos ~]# s3cmd get s3://polly/4000M_20201214test.txt /home/
download: 's3://polly/4000M_20201214test.txt' -> '/home/4000M_20201214test.txt' [1 of 1]
16777216 of 10737418240 0% in 5s 2.74 MB/s
```

查看日志如下：

```
[11:46:50.102][Infos][DownloadShard][116][6905950397414162360]Download XCD59cYMs1C7ZysXVRzqRb OK, from 9367
[11:46:50.102][Infos][DownloadShard][116][6905950397414162360]Download 8mKAJ5CpjBecjoMsFJeLu1 OK, from 17119
[11:46:50.103][Infos][DownloadShard][116][6905950397414162360]Download 9wMq4LDbFjZEVmSfgF0Ax2 OK, from 14542
[11:46:50.104][Infos][DownloadShard][116][6905950397414162360]Download LsiAKf9Vpe7v4iWrLeZkV OK, from 13473
[11:46:50.104][Infos][DownloadShard][116][6905950397414162360]Download YD8cnaAl09enCE4bhYiUNL OK, from 14676
[11:46:50.104][Infos][DownloadShard][116][6905950397414162360]Download F9MGfYA9BFgeN7bsnxTJYE OK, from 20471
[11:46:50.105][Infos][DownloadShard][116][6905950397414162360]Download 2mgeNu9HqFBjkgQ3Mfgqoh OK, from 16423
[11:46:50.105][Infos][DownloadShard][116][6905950397414162360]Download HvcBWjWeEprwnfpVNS6Jte OK, from 19952
[11:46:50.108][Infos][DownloadShard][116][6905950397414162360]Download 6PGMhKzyfrZ2Ftz3sYv4WK OK, from 9557
[11:46:50.108][Infos][DownloadShard][116][6905950397414162360]Download KTZtwNS6y46rdiNnqPtJHB OK, from 9218
[11:46:50.108][Infos][DownloadShard][116][6905950397414162360]Download 6nwa0naMcrrVhnx7nB4DYMC OK, from 18655
[11:46:50.111][Infos][DownloadShard][115][6905950397123103017]Download 6pjpX6ka7T0utLEclfvxfZ OK, from 16759
[11:46:50.115][Infos][DownloadShard][98][6905950397123102853]Download SghzDp6zWesayGXZD1N5fj OK, from 11411
[11:46:50.116][Infos][DownloadShard][116][6905950397414162360]Download ASZui7EtKm91N2CfNr2erZ OK, from 18282
[11:46:50.116][Infos][DownloadShard][116][6905950397414162360]Download 7ojquwHwocx3mGNpso6dAA OK, from 14253
[11:46:50.116][Infos][DownloadBlock][116][6905950397414162360]Download LRCMode Block OK, take times 56 ms.
[11:46:50.120][Infos][DownloadShard][116][6905950397414162360]Download 6FDEzvhFvWsohPZFYt1CGu OK, from 14549
[11:46:50.122][Infos][DownloadShard][116][6905950397414162360]Download G2oprc6Ucsvi4b5ahF3HK OK, from 9068
[11:46:50.125][Infos][DownloadShard][116][6905950397414162360]Download 41dadQSeGu9fbhnxKdEq3 OK, from 11773
[11:46:50.128][Infos][DownloadShard][116][6905950397414162360]Download 8nyqjEXSTk0b6gxZgkKdZ6 OK, from 13125
[11:46:50.128][Infos][DownloadShard][116][6905950397414162360]Download TZvLxNtWsn3gZRs7ZTNob3 OK, from 7841
[11:46:50.131][Infos][DownloadShard][113][6905950397132202327]Download Cqgjf8pfBzVwoCqKkV5aJ OK, from 17575
```

下载完成

```
[root@VM_32_2_centos ~]# s3cmd get s3://polly/4000M_20201214test.txt /home/
download: 's3://polly/4000M_20201214test.txt' -> '/home/4000M_20201214test.txt' [1 of 1]
10737418240 of 10737418240 100% in 1105s 9.26 MB/s done
[root@VM_32_2_centos ~]#
```

查看日志如下：

```
[12:04:47.597][Infos][DownloadBlock][5120][6905951879061640139]Download LRCMode Block OK, take times 99 ms.
[12:04:47.597][Infos][4000M_20201214test.txt] download successful.
```

下载文件的 md5

```
[root@VM_32_2_centos ~]# md5sum /home/4000M_20201214test.txt
440805f38540162114f0ca61c529b75a /home/4000M_20201214test.txt
[root@VM_32_2_centos ~]#
```

可以看到下载的文件 md5 值和上传文件的 md5 值相同。

4、离线编码测试

1) 离线编码

修改配置文件 conf/ytf.properties

#cache 参数指定为本地 nas 目录,在测试环境中指定一个普通目录即可,如:/mnt/nas

cache=/mnt/nas

#后端驱动指定为 nas

driver=nas

```
#cache参数指定为本地nas目录,在测试环境中指定一个普通目录即可,如:/mnt/nas
cache=/mnt/nas
#后端驱动指定为nas
driver=nas
#将本地nas的预编码文件同步到yotta,0不启动 1上传完毕删除NAS对应文件
startSync=0
```

重新启动 s3 服务，登录用户(参考环境部署文档)，执行上传

```
[root@VM_32_2_centos ~]# s3cmd put 1000M_20201214test.txt s3://polly
upload: '1000M_20201214test.txt' -> 's3://polly/1000M_20201214test.txt' [part 1 of 20, 50MB] [1 of 1]
52428800 of 52428800 100% in 0s 167.77 MB/s done
upload: '1000M_20201214test.txt' -> 's3://polly/1000M_20201214test.txt' [part 2 of 20, 50MB] [1 of 1]
52428800 of 52428800 100% in 0s 164.16 MB/s done
upload: '1000M_20201214test.txt' -> 's3://polly/1000M_20201214test.txt' [part 3 of 20, 50MB] [1 of 1]
52428800 of 52428800 100% in 0s 165.78 MB/s done
upload: '1000M_20201214test.txt' -> 's3://polly/1000M_20201214test.txt' [part 4 of 20, 50MB] [1 of 1]
52428800 of 52428800 100% in 0s 163.77 MB/s done
upload: '1000M_20201214test.txt' -> 's3://polly/1000M_20201214test.txt' [part 5 of 20, 50MB] [1 of 1]
52428800 of 52428800 100% in 0s 166.35 MB/s done
upload: '1000M_20201214test.txt' -> 's3://polly/1000M_20201214test.txt' [part 6 of 20, 50MB] [1 of 1]
52428800 of 52428800 100% in 0s 173.69 MB/s done
upload: '1000M_20201214test.txt' -> 's3://polly/1000M_20201214test.txt' [part 7 of 20, 50MB] [1 of 1]
52428800 of 52428800 100% in 0s 167.40 MB/s done
```

查看日志，可以看到已经开始编码

```
[16:31:32.529][Infos]complete multipart upload polly 1000M_20201214test.txt 1
[16:31:32.530][Infos]0[16:31:37.474][Infos][UploadMultiPartFile]polly/1000M_20201214test.txt,Insert cache ok
[16:31:37.474][Infos]upload hash etag:"65ac4b7deb1db0b1d05366873bb6e076"
[16:31:37.474][Infos]File upload success,file md5 value : 65ac4b7deb1db0b1d05366873bb6e076
[16:31:42.356][Infos][UploadObjectToDisk][polly/1000M_20201214test.txt]Start encode object...
[16:31:46.282][Infos][AyncUpload]Cache size 1048576000
[16:32:01.283][Infos][AyncUpload]Cache size 1048576000
[16:32:16.283][Infos][AyncUpload]Cache size 1048576000
[16:32:31.293][Infos][AyncUpload]Cache size 1048576000
[16:32:31.459][Infos][PreAllocNode]Return 882 nodes,Excludes 0 nodes.
[16:32:42.888][Infos][UploadObjectToDisk][polly/1000M_20201214test.txt]Upload object OK.
```

查看缓存目录已经将文件写到缓存目录了

```
[root@VM_32_2_centos nas]# pwd
/mnt/nas
[root@VM_32_2_centos nas]# ls
BD dbcachecache s3cachecache
[root@VM_32_2_centos nas]# cd BD/
[root@VM_32_2_centos BD]# ls
qc
[root@VM_32_2_centos BD]# cd qc/
[root@VM_32_2_centos qc]# ls
BDqcgAPfHiy9uKjQvzdZPyfiVVb4LGLBe1PGfeYXSgntBDqcgAPfHiy9uKjQvzdZPyfiVVb4LGLBe1PGfeYXSgnt
[root@VM_32_2_centos qc]# █
```

此时查看 bucket 看不到上传的文件

2) 离线上传

修改配置文件 conf/ytfs.properties

#将本地 nas 的预编码文件同步到 yotta,0 不启动 1 上传完毕删除 NAS 对应文件

startSync=1

然后重新启动服务，此时不用登陆用户，查看日志开始上传

```

16:48:08.982][Infos][SyncBlock][5fd726c609f5864e2ece4039][325]Start upload block to sn 14
16:48:09.211][Infos][UploadShard][5fd726c609f5864e2ece4039][13][4]SendShard:RETURN OK 0,XqdGP2ztWvxYgwR1pGbYYX to 14018,Gettoken retr
y 1 times,take times 949/2249 ms
16:48:09.211][Infos][UploadShard][5fd726c609f5864e2ece4039][15][154]SendShard:RETURN OK 0,X6cvJ4tHUAP3kAMmAGy7Qn to 13939,Gettoken retr
y 1 times,take times 943/2157 ms
16:48:09.211][Infos][SyncBlock][5fd726c609f5864e2ece4039][373]Start upload block to sn 5
16:48:09.219][Infos][SyncBlock][5fd726c609f5864e2ece4039][385]Start upload block to sn 0
16:48:09.221][Infos][SyncBlock][5fd726c609f5864e2ece4039][378]Start upload block to sn 16
16:48:09.222][Infos][UploadShard][5fd726c609f5864e2ece4039][2][72]SendShard:RETURN OK 0,4HkXEyRREVcUoRcVa8DX1V to 14355,Gettoken retr
y 1 times,take times 846/2240 ms
16:48:09.222][Infos][UploadShard][5fd726c609f5864e2ece4039][1][138]SendShard:RETURN OK 0,6c3EsZ91YpetNzGfWJ9QwN to 13262,Gettoken retr
y 1 times,take times 731/2310 ms
16:48:09.222][Infos][UploadShard][5fd726c609f5864e2ece4039][0][109]SendShard:RETURN OK 0,HmZQrbvtHQBmC9gYcqRGkF to 13262,Gettoken retr
y 1 times,take times 609/2188 ms
16:48:09.222][Infos][UploadShard][5fd726c609f5864e2ece4039][79][24]SendShard:RETURN OK 0,FDZvU8D5cxn9SudFJHHzHK to 6625,Gettoken retr
y 1 times,take times 53/113 ms
16:48:09.230][Infos][SyncBlock][5fd726c609f5864e2ece4039][382]Start upload block to sn 18
16:48:09.238][Infos][SyncBlock][5fd726c609f5864e2ece4039][389]Start upload block to sn 16
16:48:09.239][Infos][UploadShard][5fd726c609f5864e2ece4039][17][73]SendShard:RETURN OK 0,07n2oanbJU2v3bH2ghJ2m1 to 12673,Gettoken retr
y 1 times,take times 1556/2168 ms
16:48:09.248][Infos][SyncBlock][5fd726c609f5864e2ece4039][383]Start upload block to sn 1
16:48:09.249][Infos][SyncBlock][5fd726c609f5864e2ece4039][379]Start upload block to sn 3
16:48:08.982][Infos][SyncBlock][5fd726c609f5864e2ece4039][328]Start upload block to sn 17

```

等待一段时间文件上传成功，查看上传成功日志如下图所示：

```

try 1 times,take times 220/3928 ms
16:50:11.313][Infos][UploadBlock][5fd726c609f5864e2ece4039][397]Upload block OK,shardcount 164/164,take times 97280
16:50:11.418][Infos][UploadBlock][5fd726c609f5864e2ece4039][397]Write shardmetas OK,take times 104 ms.
16:50:11.473][Infos][SyncUpload][5fd726c609f5864e2ece4039]Upload object OK.
16:50:11.515][Infos][CreateObject][151]polly/1000M_20201214test.txt OK.
16:50:11.516][Infos][SyncUpload][ObjectID("5fd726c609f5864e2ece4039")]WriteMeta OK,polly/1000M_20201214test.txt

```

3) 验证上传

修改配置文件 conf/ydfs.properties

#将本地 nas 的预编码文件同步到 yotta,0 不启动 1 上传完毕删除 NAS 对应文件

startSync=0

重新启动 s3 服务，然后登录用户，s3cmd ls 查看 bucket，可以看到刚刚使用离线方

式上传的文件已存在。

```

2020-12-03 11:52 3221225472 s3://polly/tmpfile_polly_1a0591.txt4
2020-12-14 11:40 10737418240 s3://polly/4000M_20201214test.txt
2020-12-14 16:50 1048576000 s3://polly/1000M_20201214test.txt

```

此时可以下载文件验证文件是否正确，参见前面下载测试，到此离线编码上传测试完

毕

5、多用户上传测试

多用户配置参见《Go 版本 s3 linux 环境部署手册》

用户 1

```
2020-12-29 12:03 s3://2020-12-30
2020-12-29 12:03 s3://20201228
2020-12-29 12:03 s3://20201229
2020-12-29 12:03 s3://bucket0
2020-12-29 12:03 s3://bucket1
2020-12-29 12:03 s3://forup
2020-12-29 12:03 s3://new-bucket-d35e042f
2020-12-29 12:03 s3://newbucket
2020-12-29 12:03 s3://nnnn
2020-12-29 12:03 s3://polly
2020-12-29 12:03 s3://polly.2020-11
2020-12-29 12:03 s3://polly.2020-12
2020-12-29 12:03 s3://ssss
2020-12-29 12:03 s3://test
2020-12-29 12:03 s3://tmpupload-yunpan-1
2020-12-29 12:03 s3://ybscan
2020-12-29 12:03 s3://yunpan-1
2020-12-29 12:03 s3://zhangzhengyan
root@nm-yaceji03 ~]# s3cmd put 10M.txt s3://20201229
upload: '10M.txt' -> 's3://20201229/10M.txt' [1 of 1]
10485760 of 10485760 100% in 0s 28.09 MB/s done
root@nm-yaceji03 ~]#
[12:04:13.857][Infos][UploadBlock][5feaaa371c575711452a1ae7][5]Upload block OK,shardcount
[12:04:13.898][Infos][UploadBlock][5feaaa371c575711452a1ae7][5]Write shardmetas OK,take t
[12:04:13.930][Infos][UploadObject][5feaaa371c575711452a1ae7]Upload object OK.
[12:04:13.955][Infos][CreateObject][151]20201229/10M.txt OK.
[12:04:13.955][Infos][AyncUploadWriteMeta]OK,2020-12-29/10M.txt
10485760 of 10485760 100% in 0s 28.09 MB/s done
[root@nm-yaceji03 ~]# s3cmd ls s3://20201229
2020-12-29 12:02 10485760 s3://20201229/10M.txt
[root@nm-yaceji03 ~]#
```

用户 2

```
[root@nm-zhengyan-ceshiji ~]# s3cmd put 10M.txt s3://2020-12-29
upload: '10M.txt' -> 's3://2020-12-29/10M.txt' [1 of 1]
10485760 of 10485760 100% in 0s 14.80 MB/s done
[root@nm-zhengyan-ceshiji ~]#
[12:04:12.402][Infos][UploadBlock][5feaaa340a6e1d72ed4a0c8c][4]Write shardmetas OK,take times 50 ms.
[12:04:12.425][Infos][UploadObject][5feaaa340a6e1d72ed4a0c8c]Upload object OK.
[12:04:12.443][Infos][CreateObject][39]2020-12-29/10M.txt OK.
[12:04:12.443][Infos][AyncUploadWriteMeta]OK,2020-12-29/10M.txt
[12:04:12.922][Infos][UploadShard][5feaaa371c575711452a1ae7][5][0]SendShard:RETURN OK 0,BAFNMxcGbPUbr
10485760 of 10485760 100% in 0s 14.80 MB/s done
[root@nm-zhengyan-ceshiji ~]# s3cmd ls s3://2020-12-29
2020-12-29 12:02 10485760 s3://2020-12-29/10M.txt
[root@nm-zhengyan-ceshiji ~]#
```

可以看到不同用户同时上传文成功