

分布式流媒体

安装测试

Unit07

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安装

建库建表

编译安装

启动

启动跟踪服务器

启动ID服务器

启动存储服务器

启动HTTP服务器

测试

测试从跟踪服务器获取组列表

测试向存储服务器上传文件

测试向存储服务器询问文件大小

测试从存储服务器下载文件

测试通过HTTP下载存储服务器上的文件

测试通过HTTP播放存储服务器上的流媒体

测试删除存储服务器上的文件

安装



建库建表

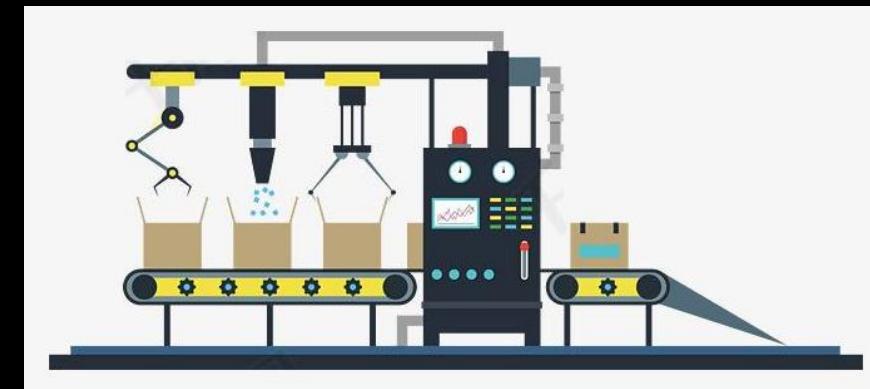
- 分别为跟踪服务器、ID服务器和存储服务器创建数据库tnv_trackerdb、tnv_idsdb和tnv_storagedb，并执行sql目录下的建表脚本，初始化表结构
 - \$ cd ~/Projects/TNV/sql
 - \$ mysql -uroot -p123456
 - mysql> create database tnv_trackerdb;
 - mysql> create database tnv_idsdb;
 - mysql> create database tnv_storagedb;
 - mysql> source tracker.sql
 - mysql> source id.sql
 - mysql> source storage.sql
 - mysql> exit



编译安装

- 直接执行src目录下的安装脚本install，完成整个项目的编译、链接和安装
 - \$ cd ~/Projects/TNV/src
 - \$./install

知识讲解



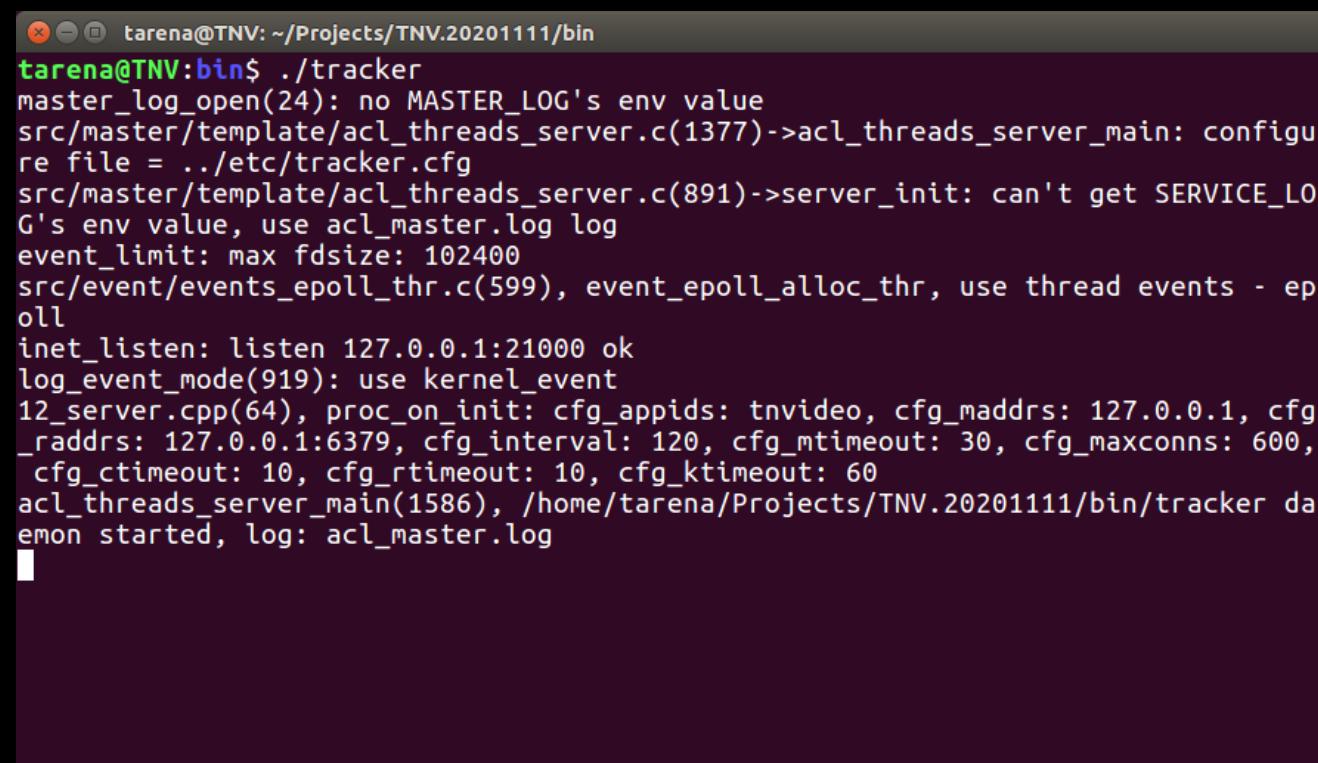
启动



启动跟踪服务器

- 直接执行bin目录下的tracker可执行程序

- \$ cd ~/Projects/TNV/bin
\$./tracker



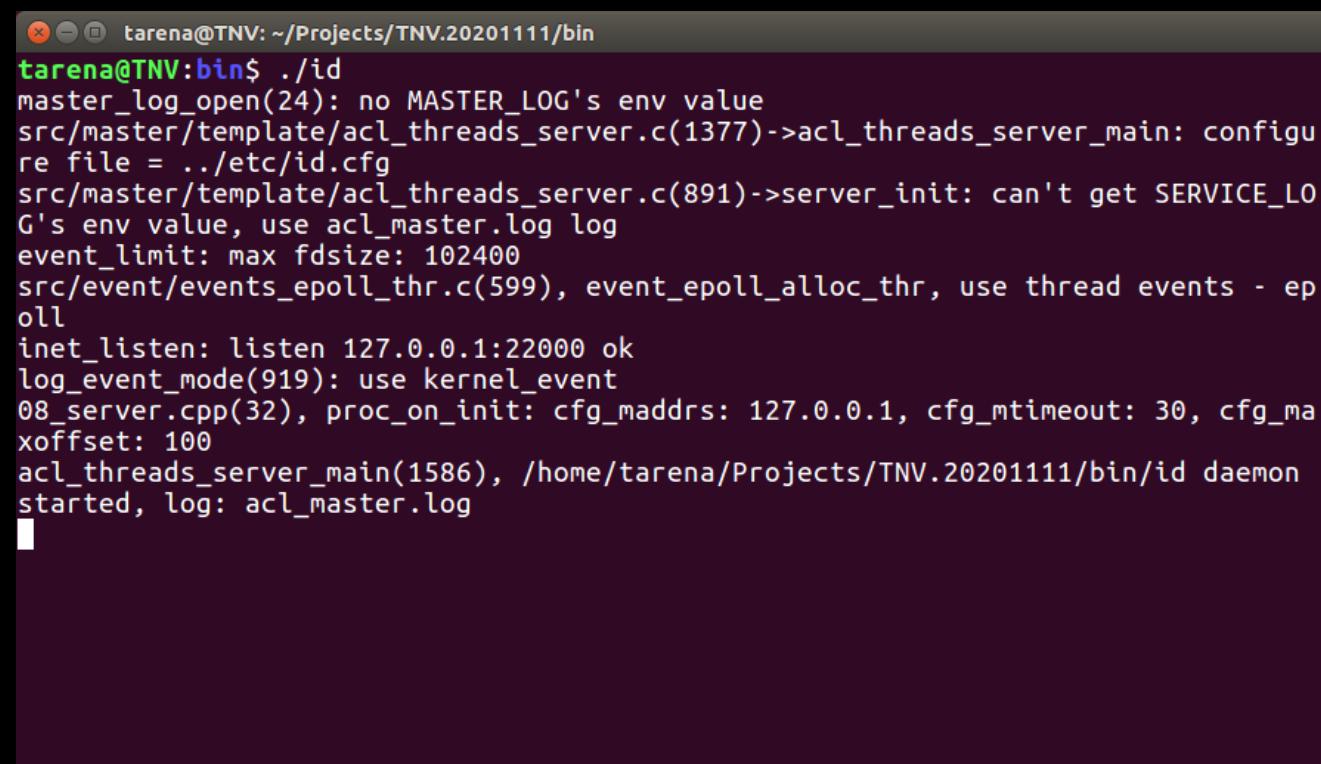
```
tarena@TNV:~/Projects/TNV.20201111/bin
tarena@TNV:bin$ ./tracker
master_log_open(24): no MASTER_LOG's env value
src/master/template/acl_threads_server.c(1377)->acl_threads_server_main: configu
re file = ../etc/tracker.cfg
src/master/template/acl_threads_server.c(891)->server_init: can't get SERVICE_L
O G's env value, use acl_master.log log
event_limit: max fdsize: 102400
src/event/events_epoll_thr.c(599), event_epoll_alloc_thr, use thread events - ep
oll
inet_listen: listen 127.0.0.1:21000 ok
log_event_mode(919): use kernel_event
12_server.cpp(64), proc_on_init: cfg_appids: tnvideo, cfg_maddrs: 127.0.0.1, cfg
_raddrs: 127.0.0.1:6379, cfg_interval: 120, cfg_mtimeout: 30, cfg_maxconns: 600,
cfg_ctimeout: 10, cfg_rtimeout: 10, cfg_ktimeout: 60
acl_threads_server_main(1586), /home/tarena/Projects/TNV.20201111/bin/tracker da
emon started, log: acl_master.log
```



启动ID服务器

- 直接执行bin目录下的id可执行程序

- \$ cd ~/Projects/TNV/bin
\$./id



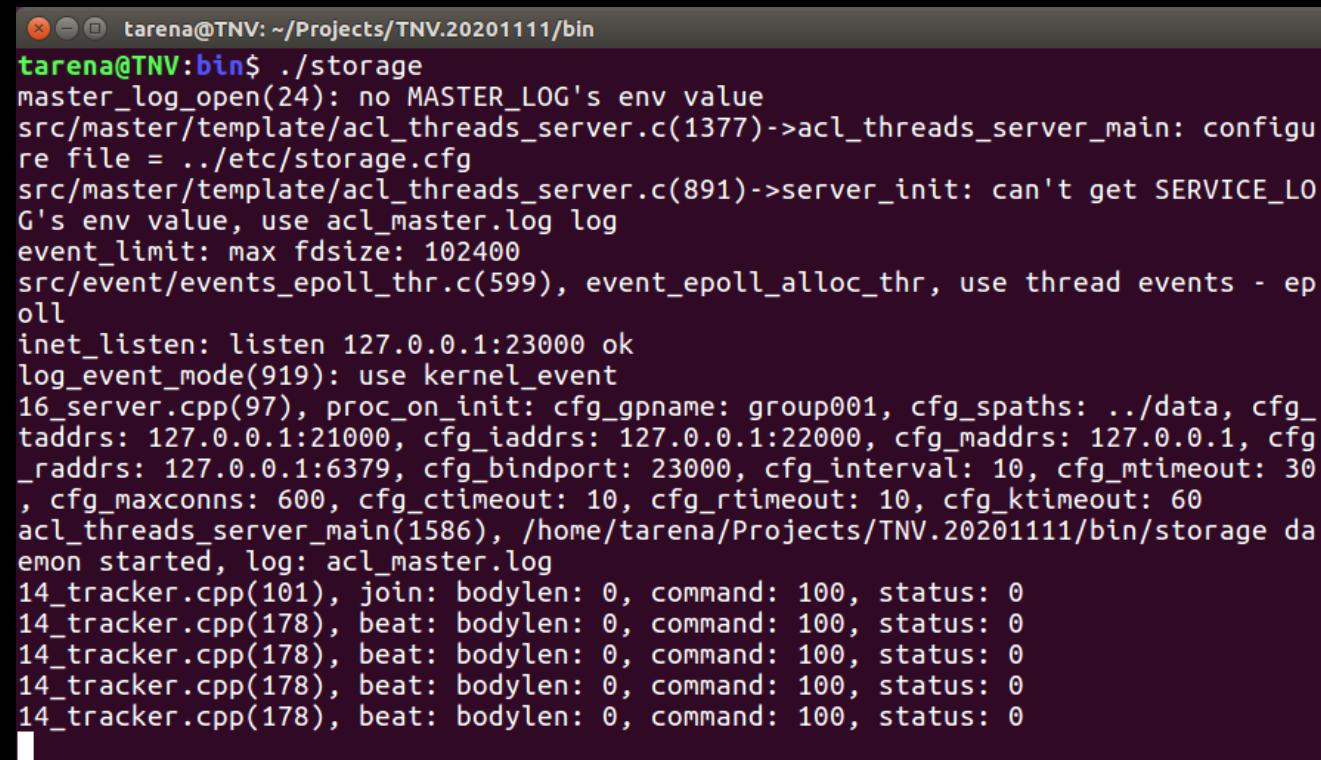
```
tarena@TNV:~/Projects/TNV.20201111/bin
tarena@TNV:bin$ ./id
master_log_open(24): no MASTER_LOG's env value
src/master/template/acl_threads_server.c(1377)->acl_threads_server_main: configu
re file = ../etc/id.cfg
src/master/template/acl_threads_server.c(891)->server_init: can't get SERVICE_L
O G's env value, use acl_master.log log
event_limit: max fdsize: 102400
src/event/events_epoll_thr.c(599), event_epoll_alloc_thr, use thread events - ep
oll
inet_listen: listen 127.0.0.1:22000 ok
log_event_mode(919): use kernel_event
08_server.cpp(32), proc_on_init: cfg_maddrs: 127.0.0.1, cfg_mtimeout: 30, cfg_ma
xoffset: 100
acl_threads_server_main(1586), /home/tarena/Projects/TNV.20201111/bin/id daemon
started, log: acl_master.log
```



启动存储服务器

- 直接执行bin目录下的storage可执行程序

- \$ cd ~/Projects/TNV/bin
\$./storage



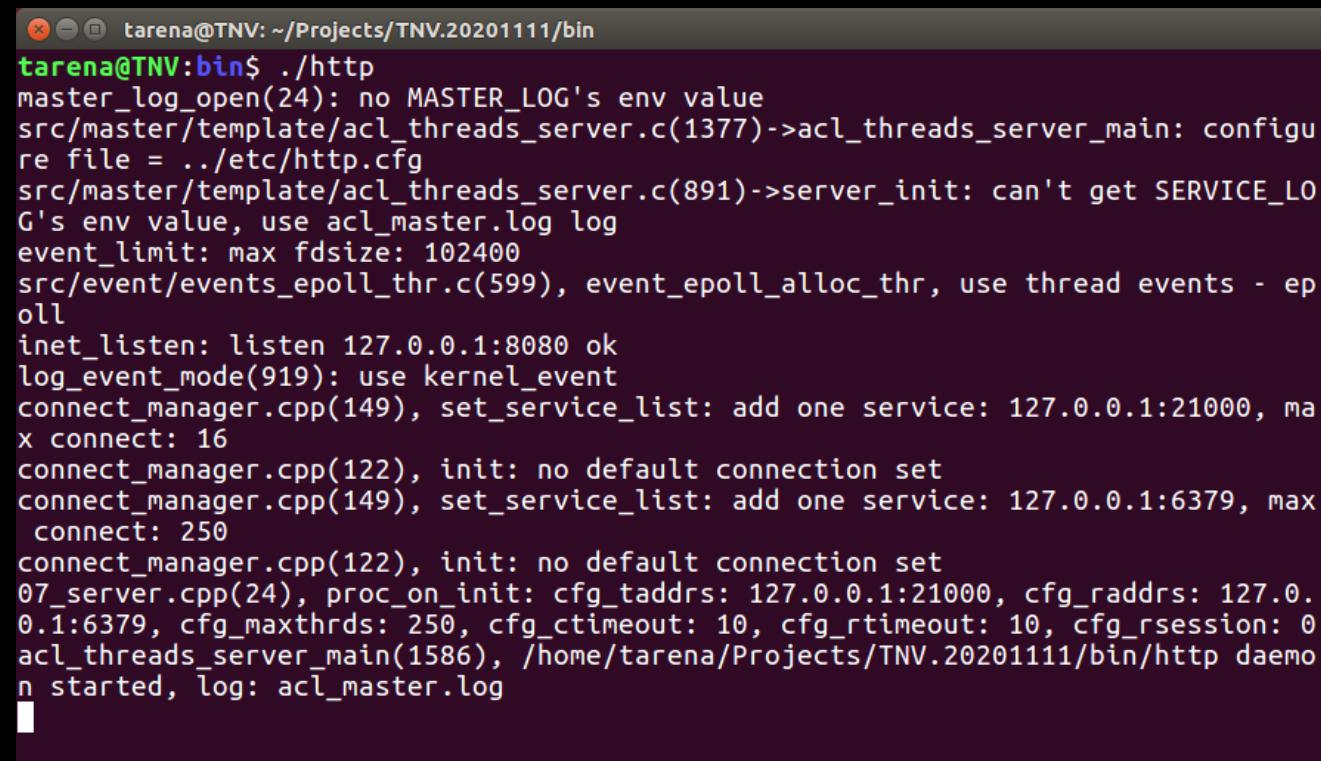
tarena@TNV:~/Projects/TNV.20201111/bin

```
tarena@TNV:bin$ ./storage
master_log_open(24): no MASTER_LOG's env value
src/master/template/acl_threads_server.c(1377)->acl_threads_server_main: configu
re file = ../etc/storage.cfg
src/master/template/acl_threads_server.c(891)->server_init: can't get SERVICE_L
O
G's env value, use acl_master.log log
event_limit: max fdsize: 102400
src/event/events_epoll_thr.c(599), event_epoll_alloc_thr, use thread events - ep
oll
inet_listen: listen 127.0.0.1:23000 ok
log_event_mode(919): use kernel_event
16_server.cpp(97), proc_on_init: cfg_gpname: group001, cfg_spaths: ./data, cfg_
taddrs: 127.0.0.1:21000, cfg_iaddrs: 127.0.0.1:22000, cfg_maddrs: 127.0.0.1, cfg
_raddrs: 127.0.0.1:6379, cfg_bindport: 23000, cfg_interval: 10, cfg_mtimeout: 30
, cfg_maxconns: 600, cfg_ctimeout: 10, cfg_rtimeout: 10, cfg_ktimeout: 60
acl_threads_server_main(1586), /home/tarena/Projects/TNV.20201111/bin/storage da
emon started, log: acl_master.log
14_tracker.cpp(101), join: bodylen: 0, command: 100, status: 0
14_tracker.cpp(178), beat: bodylen: 0, command: 100, status: 0
```

启动HTTP服务器

- 直接执行bin目录下的http可执行程序

- \$ cd ~/Projects/TNV/bin
\$./http



A screenshot of a terminal window titled "tarena@TNV: ~/Projects/TNV.20201111/bin". The window contains the following text output from the command \$./http:

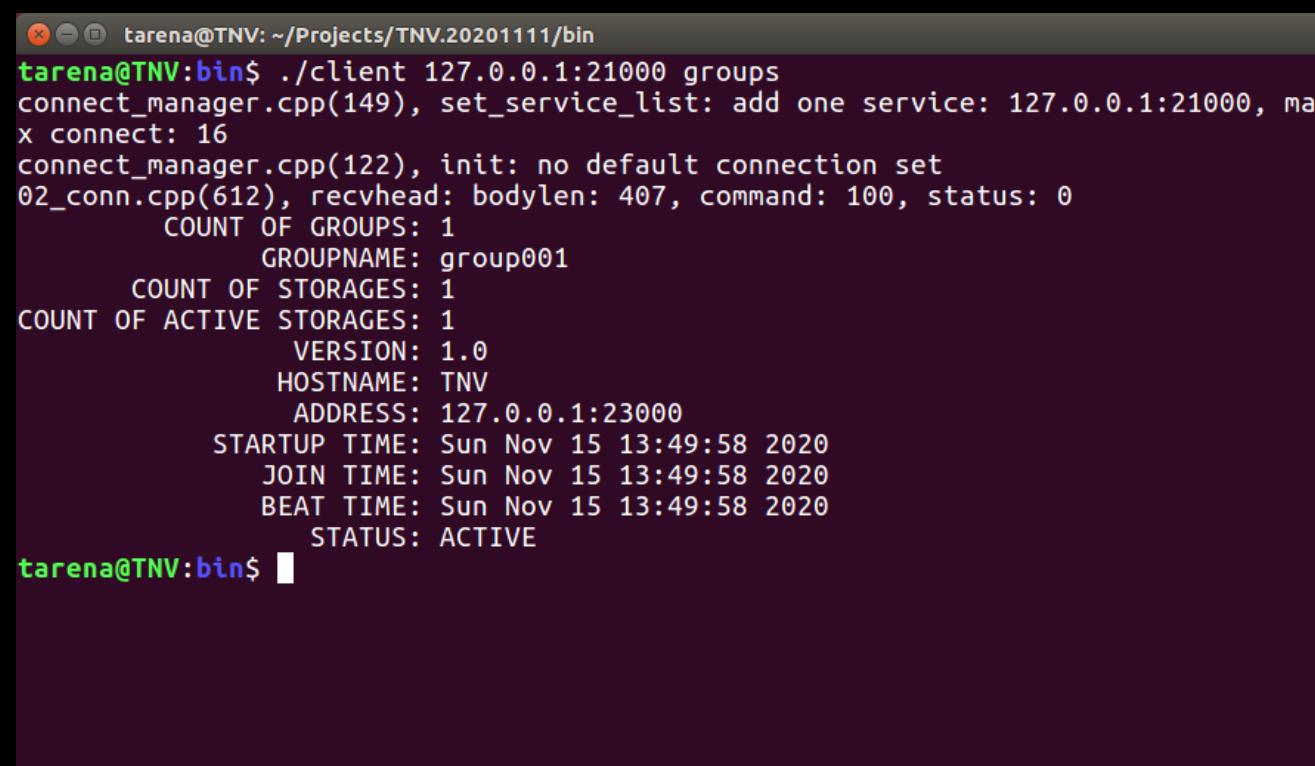
```
tarena@TNV:~/Projects/TNV.20201111/bin
tarena@TNV:bin$ ./http
master_log_open(24): no MASTER_LOG's env value
src/master/template/acl_threads_server.c(1377)->acl_threads_server_main: configu
re file = ../etc/http.cfg
src/master/template/acl_threads_server.c(891)->server_init: can't get SERVICE_L
O G's env value, use acl_master.log log
event_limit: max fdsize: 102400
src/event/events_epoll_thr.c(599), event_epoll_alloc_thr, use thread events - ep
oll
inet_listen: listen 127.0.0.1:8080 ok
log_event_mode(919): use kernel_event
connect_manager.cpp(149), set_service_list: add one service: 127.0.0.1:21000, ma
x connect: 16
connect_manager.cpp(122), init: no default connection set
connect_manager.cpp(149), set_service_list: add one service: 127.0.0.1:6379, max
connect: 250
connect_manager.cpp(122), init: no default connection set
07_server.cpp(24), proc_on_init: cfg_taddrs: 127.0.0.1:21000, cfg_raddrs: 127.0.
0.1:6379, cfg_maxthrds: 250, cfg_ctimeout: 10, cfg_rtimeout: 10, cfg_rsession: 0
acl_threads_server_main(1586), /home/tarena/Projects/TNV.20201111/bin/http daemo
n started, log: acl_master.log
```

测试



测试从跟踪服务器获取组列表

- 执行如下命令行
 - \$ cd ~/Projects/TNV/bin
 - \$./client 127.0.0.1:21000 groups



```
tarena@TNV:~/Projects/TNV.20201111/bin$ ./client 127.0.0.1:21000 groups
connect_manager.cpp(149), set_service_list: add one service: 127.0.0.1:21000, max connect: 16
connect_manager.cpp(122), init: no default connection set
02_conn.cpp(612), recvhead: bodylen: 407, command: 100, status: 0
    COUNT OF GROUPS: 1
        GROUPNAME: group001
    COUNT OF STORAGES: 1
COUNT OF ACTIVE STORAGES: 1
        VERSION: 1.0
        HOSTNAME: TNV
        ADDRESS: 127.0.0.1:23000
        STARTUP TIME: Sun Nov 15 13:49:58 2020
        JOIN TIME: Sun Nov 15 13:49:58 2020
        BEAT TIME: Sun Nov 15 13:49:58 2020
        STATUS: ACTIVE
tarena@TNV:bin$
```

测试向存储服务器上传文件

- 执行如下命令行
 - \$ cd ~/Projects/TNV/bin
 - \$./client 127.0.0.1:21000 upload tnvideo tnv001/upload/001.mp4



```
tarena@TNV:~/Projects/TNV.20201111/bin
tarena@TNV:bin$ ./client 127.0.0.1:21000 upload tnvideo tnv001 ..../upload/001.mp4
connect_manager.cpp(149), set_service_list: add one service: 127.0.0.1:21000, max connect: 16
connect_manager.cpp(122), init: no default connection set
02_conn.cpp(612), recvhead: bodylen: 34, command: 100, status: 0
02_conn.cpp(612), recvhead: bodylen: 0, command: 102, status: 0
Upload success: 5fb0c3ed088d19807e46b570003fc4000177
tarena@TNV:bin$
```

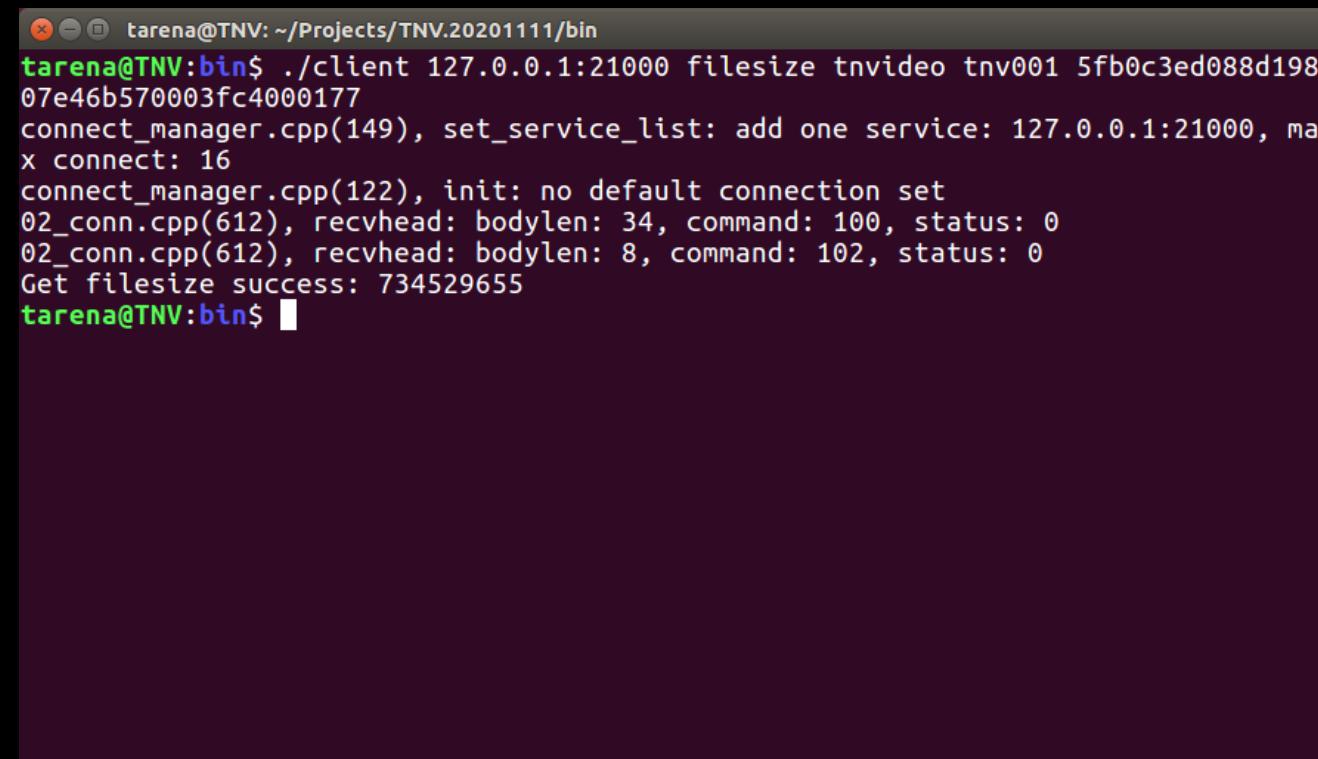


测试向存储服务器询问文件大小

- 执行如下命令行

- \$ cd ~/Projects/TNV/bin

- \$./client 127.0.0.1:21000 filesize tnvideo tnv001 5fb0c3ed088d19807e46b570003fc4000177



A screenshot of a terminal window titled "tarena@TNV: ~/Projects/TNV.20201111/bin". The window contains the following text output:

```
tarena@TNV:~/Projects/TNV.20201111/bin$ ./client 127.0.0.1:21000 filesize tnvideo tnv001 5fb0c3ed088d19807e46b570003fc4000177
connect_manager.cpp(149), set_service_list: add one service: 127.0.0.1:21000, max connect: 16
connect_manager.cpp(122), init: no default connection set
02_conn.cpp(612), recvhead: bodylen: 34, command: 100, status: 0
02_conn.cpp(612), recvhead: bodylen: 8, command: 102, status: 0
Get filesize success: 734529655
tarena@TNV:~/Projects/TNV.20201111/bin$
```

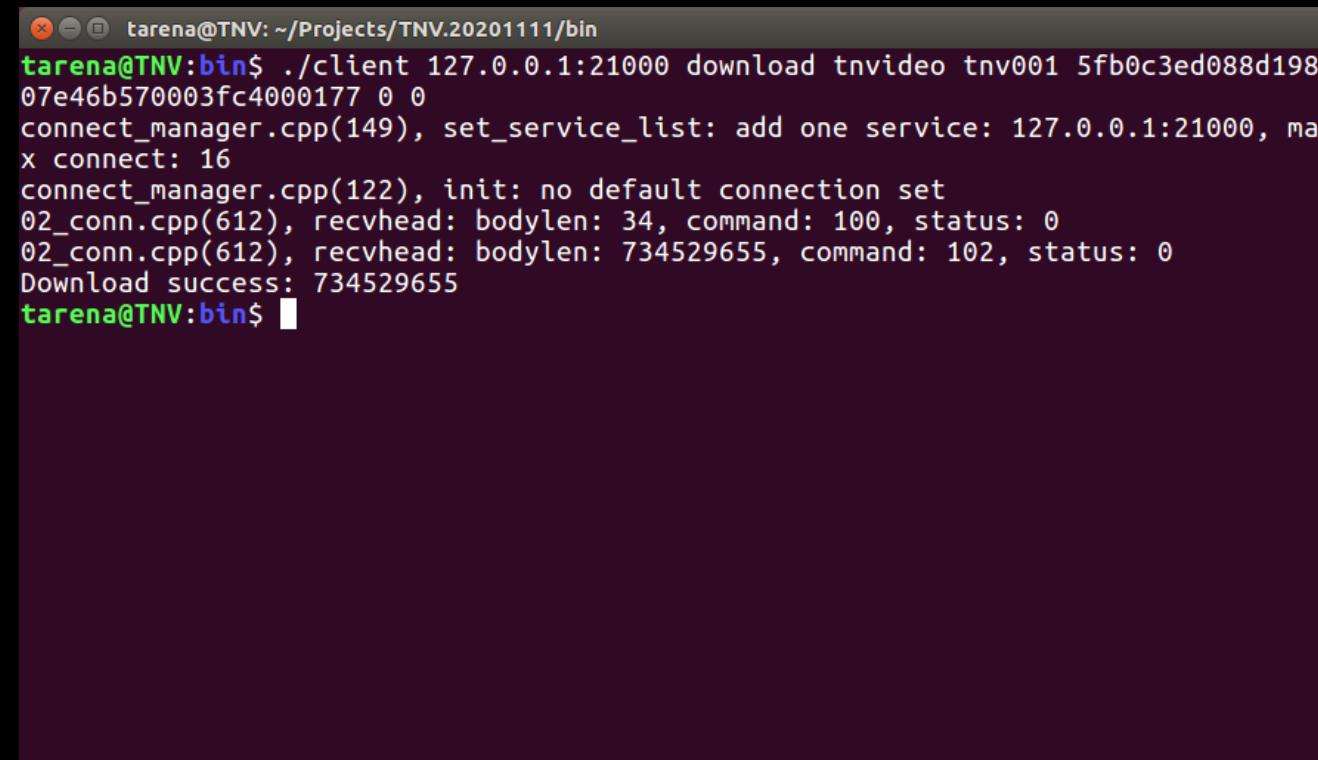


测试从存储服务器下载文件

- 执行如下命令行

- \$ cd ~/Projects/TNV/bin

- \$./client 127.0.0.1:21000 download tnvideo tnv001 5fb0c3ed088d19807e46b570003fc4000177 0 0



The screenshot shows a terminal window with a dark background and light-colored text. The window title is "tarena@TNV: ~/Projects/TNV.20201111/bin". The command entered is:

```
tarena@TNV:~/Projects/TNV.20201111/bin$ ./client 127.0.0.1:21000 download tnvideo tnv001 5fb0c3ed088d19807e46b570003fc4000177 0 0
```

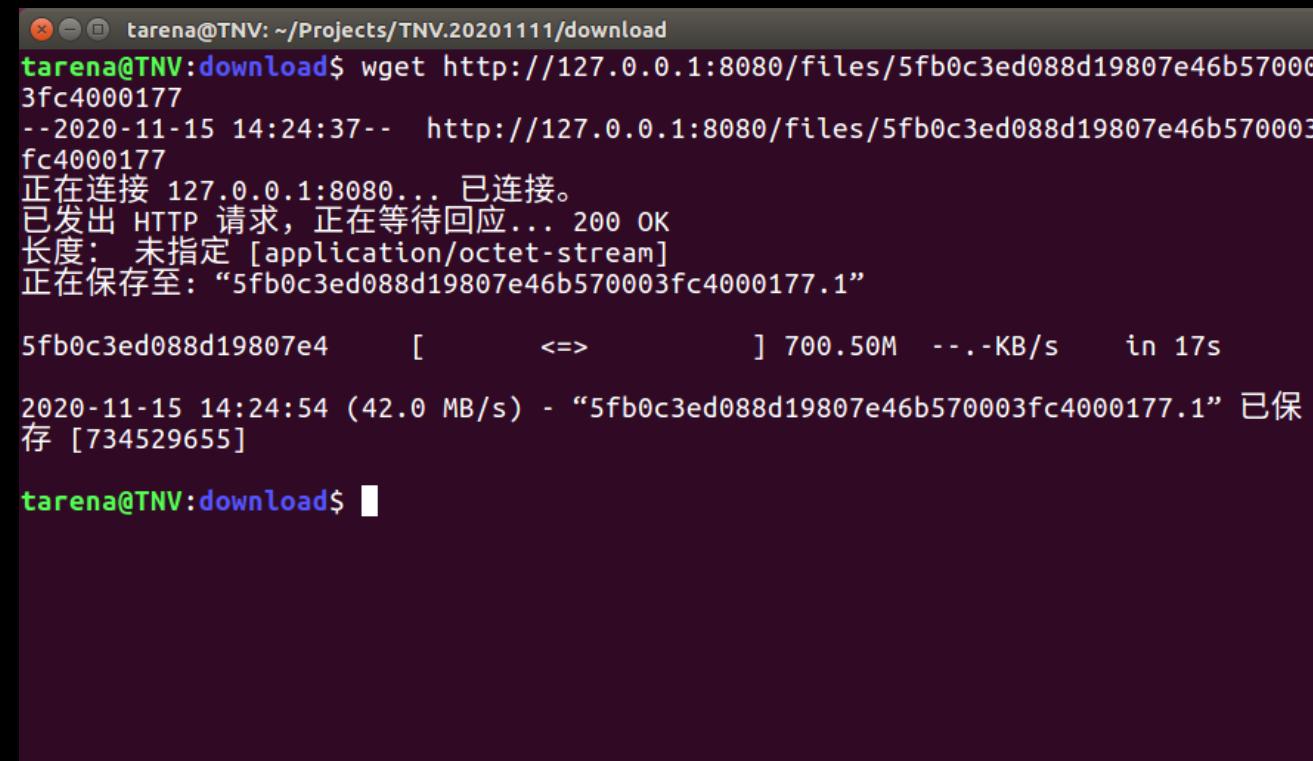
The output of the command is:

```
connect_manager.cpp(149), set_service_list: add one service: 127.0.0.1:21000, max connect: 16
connect_manager.cpp(122), init: no default connection set
02_conn.cpp(612), recvhead: bodylen: 34, command: 100, status: 0
02_conn.cpp(612), recvhead: bodylen: 734529655, command: 102, status: 0
Download success: 734529655
tarena@TNV:~/Projects/TNV.20201111/bin$
```



测试通过HTTP下载存储服务器上的文件

- 执行如下命令行
 - \$ cd ~/Projects/download
 - \$ wget http://127.0.0.1:8080/files/5fb0c3ed088d19807e46b570003fc4000177



```
tarena@TNV: ~/Projects/TNV.20201111/download
tarena@TNV:download$ wget http://127.0.0.1:8080/files/5fb0c3ed088d19807e46b57000
3fc4000177
--2020-11-15 14:24:37--  http://127.0.0.1:8080/files/5fb0c3ed088d19807e46b570003
fc4000177
正在连接 127.0.0.1:8080... 已连接。
已发出 HTTP 请求，正在等待回应... 200 OK
长度：未指定 [application/octet-stream]
正在保存至：“5fb0c3ed088d19807e46b570003fc4000177.1”

5fb0c3ed088d19807e4       [          <=>          ] 700.50M  --.-KB/s   in 17s

2020-11-15 14:24:54 (42.0 MB/s) - “5fb0c3ed088d19807e46b570003fc4000177.1” 已保
存 [734529655]

tarena@TNV:download$
```



测试通过HTTP播放存储服务器上的流媒体

- 在QtPlayer中打开如下URL
 - <http://127.0.0.1:8080/files/5fb0c3ed088d19807e46b570003fc4000177>

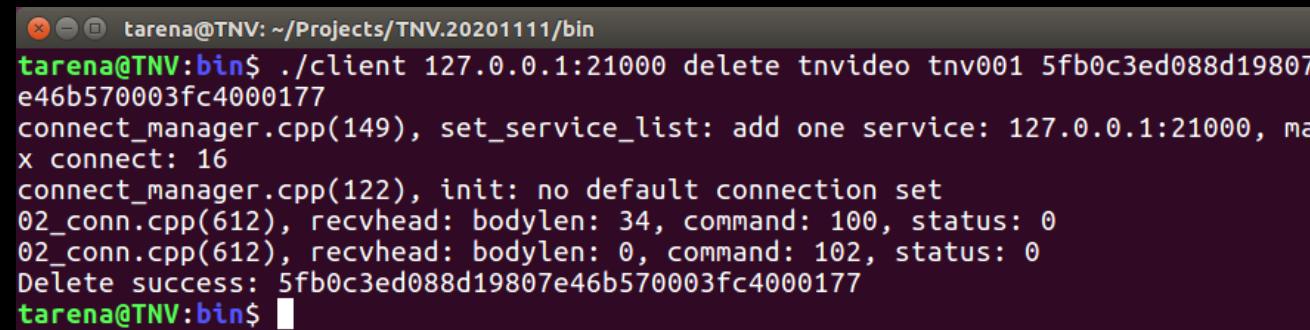


测试删除存储服务器上的文件

- 执行如下命令行

- \$ cd ~/Projects/TNV/bin

- \$./client 127.0.0.1:21000 delete tnvideo tnv001 5fb0c3ed088d19807e46b570003fc4000177



A screenshot of a terminal window titled "tarena@TNV: ~/Projects/TNV.20201111/bin". The window contains the following text output:

```
tarena@TNV:~/Projects/TNV.20201111/bin$ ./client 127.0.0.1:21000 delete tnvideo tnv001 5fb0c3ed088d19807e46b570003fc4000177
connect_manager.cpp(149), set_service_list: add one service: 127.0.0.1:21000, max connect: 16
connect_manager.cpp(122), init: no default connection set
02_conn.cpp(612), recvhead: bodylen: 34, command: 100, status: 0
02_conn.cpp(612), recvhead: bodylen: 0, command: 102, status: 0
Delete success: 5fb0c3ed088d19807e46b570003fc4000177
tarena@TNV:~/Projects/TNV.20201111/bin$
```



总结和答疑