

PC1 打开追踪器

```
python3.6 tracker.py
```

```
starting up server http://172.18.35.248:12000 ...
server http://172.18.35.248:12000 succeeded to start up. Ready to serve.
```

PC2 (可以和PC1 是同一台) 打开服务器

```
python3.6 peer.py dir-server/
```

```
C:\Users\96552\Desktop\p2p>python peer.py dir-server
starting up server http://172.18.35.248:12540 ...
server http://172.18.35.248:12540 succeeded to start up. Ready to serve.
```

同时在追踪器看到服务器上线:

```
starting up server http://172.18.35.248:12000 ...
server http://172.18.35.248:12000 succeeded to start up. Ready to serve.
say hello to http://172.18.35.248:12540
```

PC3 以普通用户方式运行

```
python3.6 terminal.py dir-client1/
```

```
C:\Users\12409\Desktop\大二下学期学习\计算机网络\计网project\project1\HMBP-master\P2P>python terminal.py dir-user2
Welcome to HMBP!
starting up server http://192.168.199.128:12564 ...
server http://192.168.199.128:12564 succeeded to start up. Ready to serve.
```

在追踪器看到用户上线:

```
starting up server http://172.18.35.248:12000 ...
server http://172.18.35.248:12000 succeeded to start up. Ready to serve.
say hello to http://172.18.35.248:12540
say hello to http://192.168.199.128:12564
```

PC3 拉取文件 2.png

```
HMBP:~ fetch 2.png
```

```
C:\Users\12409\Desktop\大二下学期学习\计算机网络\计网project\project1\HMBP-master\P2P>python terminal.py dir-user2
Welcome to HMBP!
starting up server http://192.168.199.128:12564 ...
server http://192.168.199.128:12564 succeeded to start up. Ready to serve.
HMBP:~ fetch 2.png
fetching 2.png
start to search others...
fetched http://172.18.35.248:12540 [ 0 , 14505 )
fetch from 1 peers
done
HMBP:~
```

追踪器在服务器上找到文件:

```
starting up server http://172.18.35.248:12000 ...
server http://172.18.35.248:12000 succeeded to start up. Ready to serve.
say hello to http://172.18.35.248:12540
say hello to http://192.168.199.128:12564
quering 2.png in http://172.18.35.248:12540 ...
founded in http://172.18.35.248:12540
```

服务器向 PC3 发送 2.png:

此电脑 > Windows10 (C:) > Users > 96552 > Desktop > p2p > dir-server					
名称	日期	类型	大小	标记	
2.mp4	2018/4/28 22:00	MP4 视频	18,873 KB		
2.png	2018/4/20 0:44	PNG 文件	15 KB		
test	2016/6/2 0:10	文件	1 KB		

```
C:\Users\96552\Desktop\p2p>python peer.py dir-server
starting up server http://172.18.35.248:12540 ...
server http://172.18.35.248:12540 succeeded to start up. Ready to serve.
sending 2.png [ 0 , 14505 )
HMBP:~
```

PC4 以普通客户方式运行

```
python3.6 terminal.py dir-user2/
```

```
C:\Users\96552\Desktop\p2p>python terminal.py dir-user2
Welcome to HMBP!
starting up server http://172.18.35.248:12317 ...
server http://172.18.35.248:12317 succeeded to start up. Ready to serve.
HMBP:~
```

追踪器看到 PC4 上线:

```
starting up server http://172.18.35.248:12000 ...
server http://172.18.35.248:12000 succeeded to start up. Ready to serve.
say hello to http://172.18.35.248:12540
say hello to http://192.168.199.128:12564
quering 2.png in http://172.18.35.248:12540 ...
founded in http://172.18.35.248:12540
say hello to http://172.18.35.248:12317
```

PC3 拉取文件 2.mp4

```
HMBP:~ fetch 2.mp4
```

```
done
HMBP:~ fetch 2.mp4
fetching 2.mp4
start to search others...
fetched http://172.18.35.248:12540 [ 0 , 9662782 )
fetched http://172.18.35.248:12317 [ 9662782 , 19325564 )
fetch from 2 peers
done
HMBP:~
```

追踪器在服务器和 PC4 找到 2.mp4:

```
quering 2.mp4 in http://172.18.35.248:12540 ...
founded in http://172.18.35.248:12540
quering 2.mp4 in http://172.18.35.248:12317 ...
founded in http://172.18.35.248:12317
```

服务器向 PC3 发送前 50%:

```
HMBP:~ sending 2.mp4 [ 0 , 9662782 )
HMBP:~
```

PC4 向 PC3 发送了 2. mp4 后 50%:

```
HMBP:~ sending 2.mp4 [ 9662782 , 19325564 )
HMBP:~
```

PC3 本地工作目录:

电脑 > OS (C:) > 用户 > 12409 > 桌面 > 大二下学期学习 > 计算机网络 > 计网project > project1 > HMBP-master > P2P > dir-user1					
名称	日期	类型	大小	标记	
 2.mp4	2018/4/28 18:29	MP4 文件	18,873 KB		
 2.png	2018/4/28 1:35	PNG 文件	15 KB		