

User Manual

1. Start peer servers

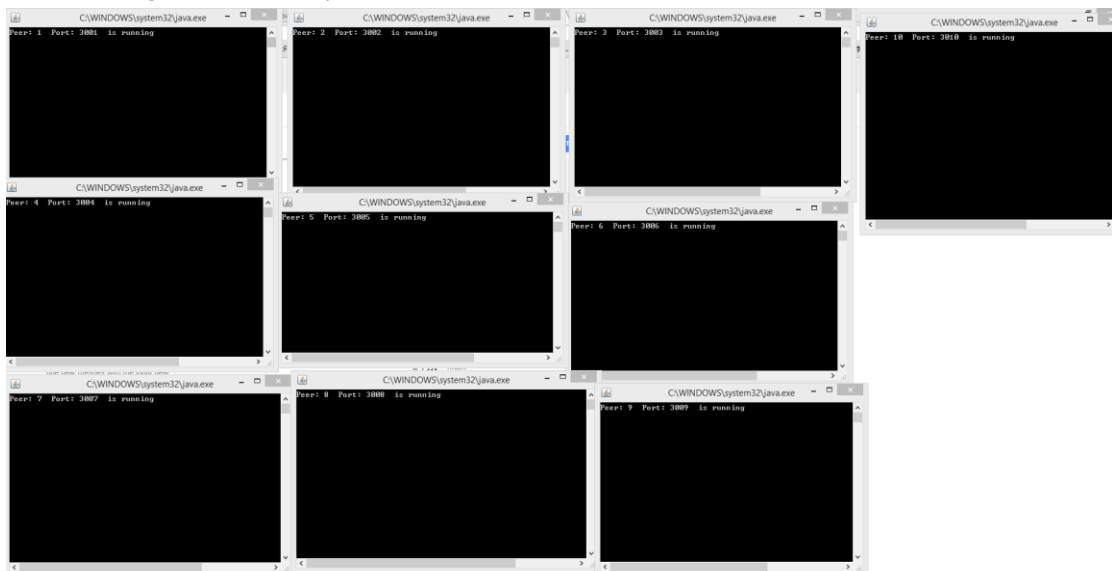
For star typology, enter CS550 PA2\Star, for 2D mesh typology enter CS550 PA2\Grid. You will see the following folders named as peer ids.

| Name | Date modified | Type | Size |
|------|--------------------|-------------|------|
| 1 | 10/19/2014 8:28 PM | File folder | |
| 2 | 10/19/2014 8:28 PM | File folder | |
| 3 | 10/19/2014 8:28 PM | File folder | |
| 4 | 10/19/2014 8:28 PM | File folder | |
| 5 | 10/19/2014 8:28 PM | File folder | |
| 6 | 10/19/2014 8:28 PM | File folder | |
| 7 | 10/19/2014 8:28 PM | File folder | |
| 8 | 10/19/2014 8:28 PM | File folder | |
| 9 | 10/19/2014 8:28 PM | File folder | |
| 10 | 10/19/2014 8:28 PM | File folder | |

Then enter each peer's folder one by one, run "start.bat" to start each server.

| Name | Date modified | Type | Size |
|-----------|--------------------|--------------------|------|
| bin | 10/19/2014 8:28 PM | File folder | |
| start | 10/19/2014 6:03 PM | Windows Batch File | 1 KB |
| startUser | 10/19/2014 5:19 PM | Windows Batch File | 1 KB |

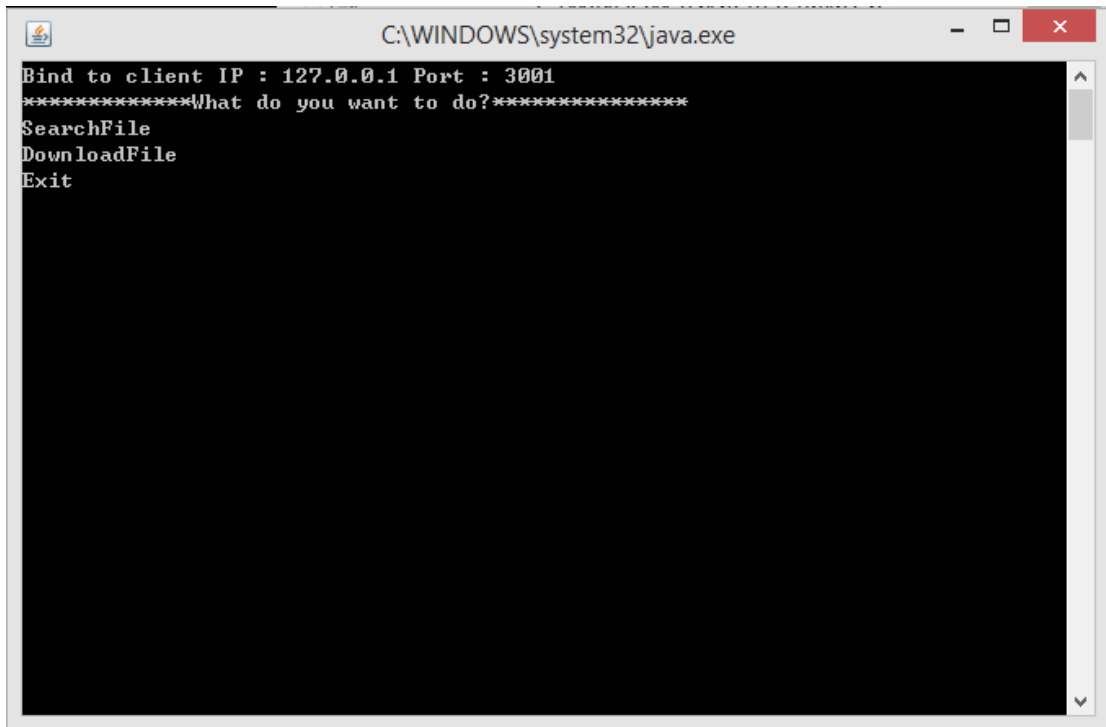
After running all the server, you will see this.



2. Start the client

Go to the peer folder, run the "startUser.bat" to run the client which binding to the peer. For example, if we need bind peer1, go to CS550 PA2\Star\1, run "startUser.bat". Then we will

see this.



```
C:\WINDOWS\system32\java.exe
Bind to client IP : 127.0.0.1 Port : 3001
*****What do you want to do?*****
SearchFile
DownloadFile
Exit
```

3. Searching Files

Type "SearchFile" at client prompt, then type file name.

For example, type "test1.txt"(All peers have this file).

```
C:\WINDOWS\system32\java.exe
SearchFile=test1.txt,127.0.0.1,3001
Search from userClient.
search begin
17
test1.txt IP : 127.0.0.1 Port : 3001 is Hit
Broadcast begin
Broadcast begin
Broadcast begin
Broadcast begin
Broadcast begin
Broadcast begin
Broadcast begin
Broadcast begin
Broadcast begin
send request to peer: 2,3,4,5,6,7,8,9,10,waiting for th

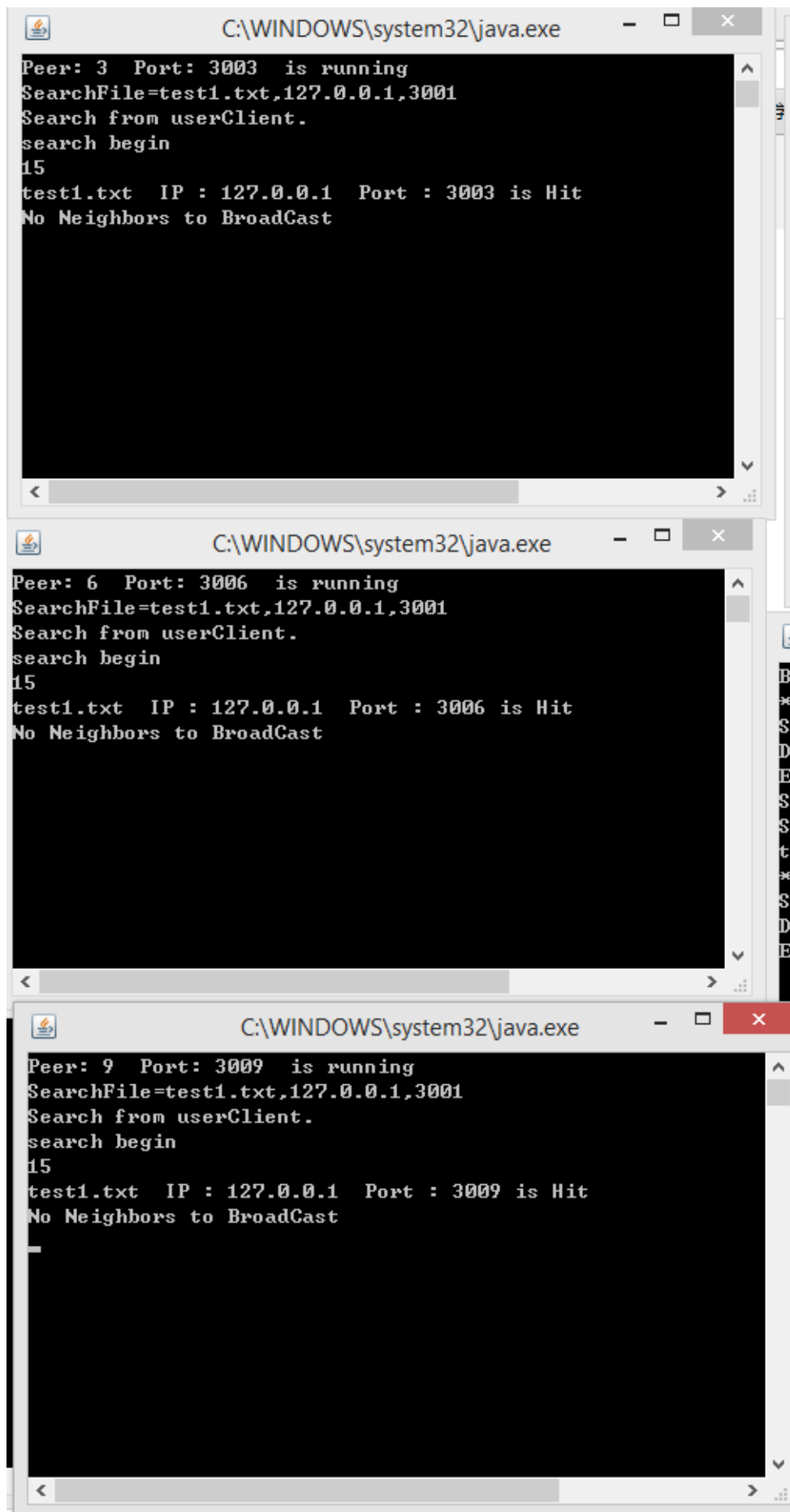
C:\WINDOWS\system32\java.exe
Peer: 4 Port: 3004 is running
SearchFile=test1.txt,127.0.0.1,3001
Search from userClient.
search begin
15
test1.txt IP : 127.0.0.1 Port : 3004 is Hit
No Neighbors to BroadCast

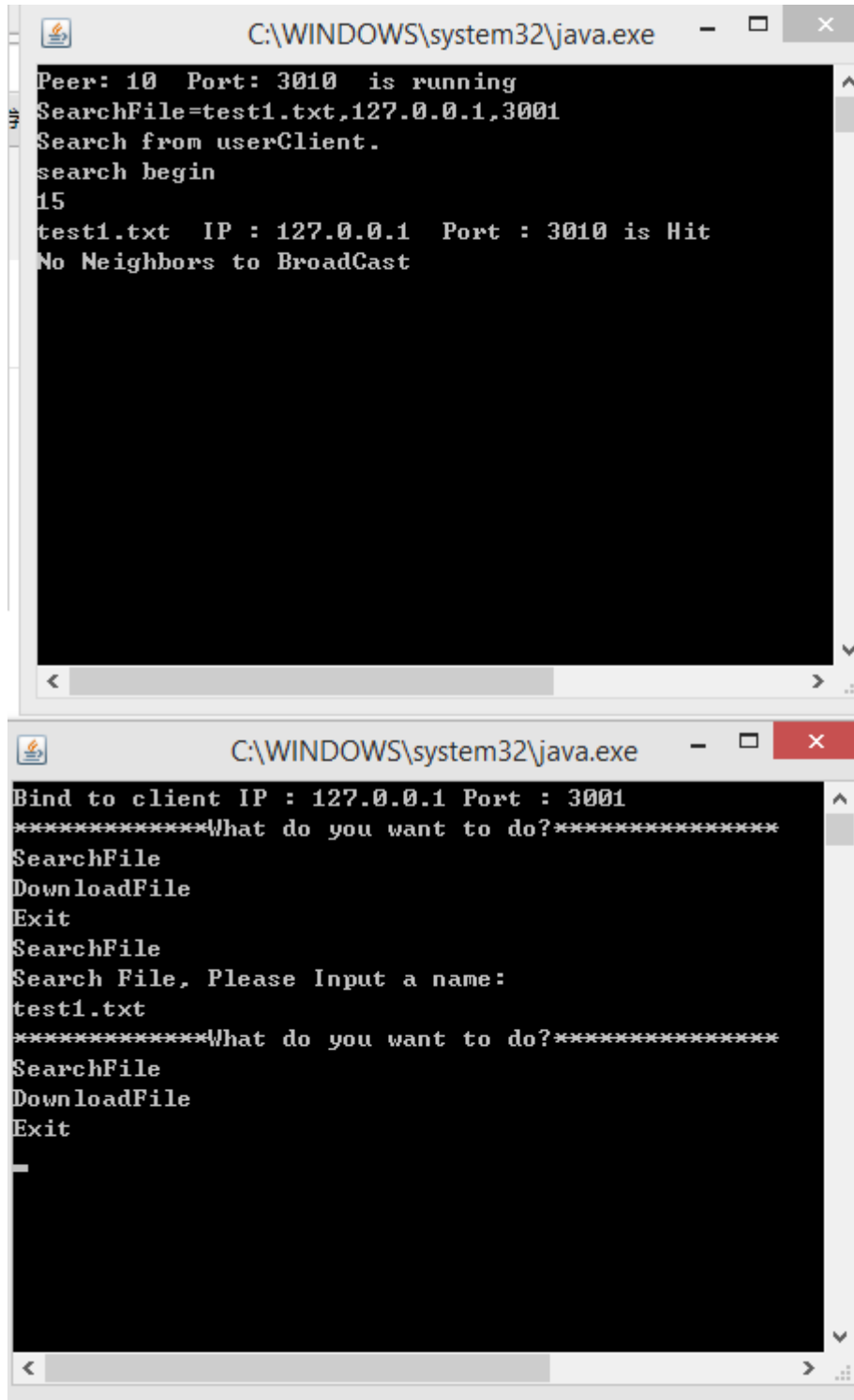
C:\WINDOWS\system32\java.exe
Peer: 7 Port: 3007 is running
SearchFile=test1.txt,127.0.0.1,3001
Search from userClient.
search begin
15
test1.txt IP : 127.0.0.1 Port : 3007 is Hit
No Neighbors to BroadCast
```

```
C:\WINDOWS\system32\java.exe
Peer: 2 Port: 3002 is running
SearchFile=test1.txt,127.0.0.1,3001
Search from userClient.
search begin
16
test1.txt IP : 127.0.0.1 Port : 3002 is Hit
No Neighbors to BroadCast
```

```
C:\WINDOWS\system32\java.exe
Peer: 5 Port: 3005 is running
SearchFile=test1.txt,127.0.0.1,3001
Search from userClient.
search begin
5
test1.txt IP : 127.0.0.1 Port : 3005 is Hit
No Neighbors to BroadCast
```

```
C:\WINDOWS\system32\java.exe
Peer: 8 Port: 3008 is running
SearchFile=test1.txt,127.0.0.1,3001
Search from userClient.
search begin
15
test1.txt IP : 127.0.0.1 Port : 3008 is Hit
No Neighbors to BroadCast
```





The image contains two screenshots of a Windows command prompt window running a Java application. The title bar for both windows is 'C:\WINDOWS\system32\java.exe'.

The top window shows the following output:

```
Peer: 10 Port: 3010 is running
SearchFile=test1.txt,127.0.0.1,3001
Search from userClient.
search begin
15
test1.txt IP : 127.0.0.1 Port : 3010 is Hit
No Neighbors to BroadCast
```

The bottom window shows the following output:

```
Bind to client IP : 127.0.0.1 Port : 3001
*****What do you want to do?*****
SearchFile
DownloadFile
Exit
SearchFile
Search File, Please Input a name:
test1.txt
*****What do you want to do?*****
SearchFile
DownloadFile
Exit
```

Each server will get a “hit” result.

4. Download a file

To download a file, simply type “DownloadFile” at the client prompt. Then input the file name, the ip address and the port number.

For example, download “p3t1.txt” from peer3.

```
*****What do you want to do?*****
SearchFile
DownloadFile
Exit
DownloadFile
Search File, Please Input a filename:
p3t1.txt
Please Input IP address :
127.0.0.1
Please Input Port Number :
3003
```

Then the output will be:

Peer3 server upload the file:

```
UploadFile=p3t1.txt,127.0.0.1,3003
Uploading a File
Upload from IP : 127.0.0.1Port : 3001
15
3 is Uploading File: p3t1.txt
Uploading file to IP :127.0.0.1 Port : 3001
Upload Finished!
```

Peer1 server download the file:

```
C:\windows\system32\java.exe
Peer: 1 Port: 3001 is running
DownloadFile=p3t1.txt,127.0.0.1,3003
DownLoad a File
DownLoad from IP : 127.0.0.1Port : 3003
Download succeeded. File saved to C:\Users\fan Zhang\Downloads\CS550 PA2\Grid\1\b
in/p3t1.txt
```