



# A SIMPLE GNUTELLA STYLE PEER TO PEER FILE SHARING SYSTEM

Manual

# 1. Installation Prerequisites

## A. Software Prerequisites

1. Java SE Runtime Environment 8
2. Ubuntu nodes
3. Apache ant

## 2. Steps to Execute

Extract zip file to a location in your Linux environment.

To run it:

1. Go to P2PGnutella folder in another terminal window and execute command:

```
ant clean  
ant compile  
ant jar
```

2. Run below commands in different terminals to start 10 different clients:

```
ant run ant -Darg0=1 -Darg1=8001 run  
ant run ant -Darg0=2 -Darg1=8002 run  
ant run ant -Darg0=3 -Darg1=8003 run  
ant run ant -Darg0=4 -Darg1=8004 run  
ant run ant -Darg0=5 -Darg1=8005 run  
ant run ant -Darg0=6 -Darg1=8006 run  
ant run ant -Darg0=7 -Darg1=8007 run  
ant run ant -Darg0=8 -Darg1=8008 run  
ant run ant -Darg0=9 -Darg1=8009 run  
ant run ant -Darg0=10 -Darg1=8010 run
```

This will start all 10 peers peer from port 8001 to 8010

```

➔ P2PGnutella git:(master) ✗ ant clean
ant compile
ant jar

Buildfile: /Users/Kunal/Documents/workspace/P2PGnutella/build.xml

clean:
  [delete] Deleting directory /Users/Kunal/Documents/workspace/P2PGnutella/build

BUILD SUCCESSFUL
Total time: 0 seconds
Buildfile: /Users/Kunal/Documents/workspace/P2PGnutella/build.xml

compile:
  [mkdir] Created dir: /Users/Kunal/Documents/workspace/P2PGnutella/build/classes
  [javac] Compiling 8 source files to /Users/Kunal/Documents/workspace/P2PGnutella/build/classes

BUILD SUCCESSFUL
Total time: 1 second
Buildfile: /Users/Kunal/Documents/workspace/P2PGnutella/build.xml

jar:
  [mkdir] Created dir: /Users/Kunal/Documents/workspace/P2PGnutella/build/jar
  [jar] Building jar: /Users/Kunal/Documents/workspace/P2PGnutella/build/jar/P2PGnutella.jar

BUILD SUCCESSFUL
Total time: 0 seconds
➔ P2PGnutella git:(master) ✗ ant -Darg0=1 -Darg1=8001 run
Buildfile: /Users/Kunal/Documents/workspace/P2PGnutella/build.xml

run:
  [java] Peer 1 acting as server on 127.0.0.1:8001
  [java]
  [java]
  [java] *****
  [java] **** A Simple Gnutella Style Peer to Peer File Sharing System ****
  [java] *****
  [java] 1. Search and Download File
  [java] 2. Exit
  [java] Select your choice:

```

To run test cases:

1. Go to P2PGnutella folder in terminal and execute command:

```

ant -buildfile testBuild.xml clean
ant -buildfile testBuild.xml compile
ant -buildfile testBuild.xml jar
ant -buildfile testBuild.xml run

```

2. This will run all the tests.
3. To modify files code is written in Test2.java

**Note:**

- This code is written for two different approaches, viz., push and pull
- To change it just uncomment respective line indicating whether you want push or pull approach from config.properties and comment other one.

```
1 approach=push
2 #approach=pull
3
4
5 # Peer details
6 1.ip=127.0.0.1
7 1.port=8001
8 2.ip=127.0.0.1
9 2.port=8002
10 3.ip=127.0.0.1
11 3.port=8003
12 4.ip=127.0.0.1
13 4.port=8004
14 5.ip=127.0.0.1
15 5.port=8005
16 6.ip=127.0.0.1
17 6.port=8006
18 7.ip=127.0.0.1
19 7.port=8007
20 8.ip=127.0.0.1
21 8.port=8008
22 9.ip=127.0.0.1
23 9.port=8009
24 10.ip=127.0.0.1
25 10.port=8010
26
```