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# Manual

# Prerequisites

1. It is Assumed that the execution and running of the program is taking place in a Linux Environment.
2. Ant is installed and typing “ant –version” in the Linux Terminal will give the Ant Version .
3. Java JDK should be installed in the system (Recommended version is 1.7) and typing “java -version” should give the JDK Version.
4. Please make sure all these Prerequisites are satisfied before moving to the next part of the Manual.

# BUILDING,COMPILING AND RUNNING THE PROGRAM

1. Extract the Contents of The Zip Folder.
2. After Extraction You Should focus on 2./ files namely Peer, ConfigureFile and RunProgram.sh
3. In Terminal Give Permission to Script File => chmod 755 ./RunProgram.sh
4. Execute the Shell Script now => ./RunProgram.sh
5. The above mentioned command should have compiled all the java files and created 2 executable jar files namely ConfigureFile.jar and Peer.jar inside.
6. If Step 5 gave errors and did not create the 2 executable jar files then refer the troubleshoot section below.
7. Run **java –jar ./ConfigureFile.jar** on it go through the steps at the end of which it will create the relevant configuration File.
8. Run **java –jar ./Peer.jar** and go through the relevant Steps to run the peer or client.

Overview of Commands to Execute in Shell Script

**cd** <inside Folder where unzipped Files are present , the current folder should have a file called RunProgram.sh>

**chmod 755 ./RunProgram.sh**

**./RunProgram.sh** (If Ant Path is not set then this will show an error see troubleshoot section)

**java –jar ./ConfigureFile.jar** (creates Configuration File)

**java –jar ./Peer.jar** (Runs the Peer or Client)

# Program Execution Explanation

**Create Configure File**

The Client or Peer File is dependent on the Configuration File called “**CONNECTEDPEERS.txt**” which needs to be created first before running the peer.

Run **java –jar ./ConfigureFile.jar** this will give you options to create the configure File.Enter relevant info.

**Starting Client Server**

**DO NOT START CLIENT SERVER UNTIL AND UNLESS YOU HAVE RAN THE java –jar ./ConfigureFile.jar** **atleast ONCE AS THE PEER/CLIENT IS DEPENDENT ON CREATION OF A FILE CALLED CONNECTEDPEERS.txt.**

When you start the Client Server (by running **java –jar ./Peer.jar** ) the following Menu will be displayed :

*initializing the client...*

*Enter the Peer Id of the currently running Client from the Config File (Refer the Config File.)*

You can choose to enter the valid peer id that you had entered while creating the configuration file , after entering that the following menu will be displayed.

*Server Running ..*

*-------------------------MENU------ENTER CHOICE-------------------------------*

*1 Get Entry*

*2 Put Entry*

*3 Delete Entry*

*4 Run Performance Evaluation Tests*

*------------------------------------------------------------------*

*Enter Choice :*

1. *Get Entry [1] –* This will show the value of a key entered.
2. *Put Entry [2]–* This is used to add new values to the Key Value pair.
3. *Delete Entry [3] – This will delete an entry from the Data Value Map created.*
4. Enter Performance Evaluation Mode [4] – This will enter you to a Performance evaluation mode where you can test the performance of the application by running concurrent requests

# TroubleShooting

1. If Ant path is not set or RunProgram.sh Shell Script is not running properly then execute the following commands

**cd ConfigureFile**

<Ant Path> **build.xml**

<Ant Path> **createjar**

**cd ..**

**cd Peer**

<Ant Path> **build.xml**

<Ant Path> **createjar**

**cd ..**

**java –jar ./ConfigureFile.jar**

**java –jar ./Peer.jar**