

CPSC 441

Assignment 3 User Manuel

The included File PingClient.java is a program that helps you measure the packet round trip time between you and a given server. To be able to use the PingClient program the server being tested must be running the Pingserver program and listening on the same port being passed to PingClient.

Before you can use PingClient to measure your ping you must first compile the attached source code. Follow the following steps in order to compile the code:

- 1- Open cmd(windows)/shell(linux)
- 2- Change your working directory to point to where you have PingClient.java stored by using the "cd directory_name" command where directory name is where you have the code is stored
- 3- Compile the code using the command "javac *.java" note: you must have the java development kit installed on your machine

After you have compiled the code you can now use PingClient to measure your ping and packet loss rate. To use the program simply insert the command "java PingClient hostname/ip portnumber" into cmd/shell. You need to replace hostname/ip with the name or ip of the website you are testing and replace portnumber with the port that the PingServer program is listening on the target machine.

PingClient will send 10 packets to PingServer and will wait up to 1sec to receive a response. After all packets are sent, PingClient will display the average, max, and minimum ping and the number of packets dropped. If all packets have been dropped PingClient will display that 10 packets have been dropped, will not display the average and will return the max and minimum ping as the minimum and maximum values of a long integer on that machine.

PingClient has been tested successfully on localhost, linux.cpsc.ucalgary.ca and google cloud linux virtual machine