**Computer Systems Technology**

British Columbia Institute of Technology

COMP 8005 - Assignment2- How-to

Albert Huang &

Aiyan Ma

Feb 20, 2018

# Table of Contents

[Table of Contents 2](#_Toc10315)

[1. Java Mode 3](#_Toc19948)

[1.1EPoll Server 3](#_Toc24985)

[1.2 Poll Server 3](#_Toc17)

[1.3To start the MT Server 4](#_Toc8858)

[1.4Start the SuperClient 4](#_Toc25056)

[2 Python Mode 4](#_Toc3426)

# Java Mode

There are four applications in java mode: i.e , three servers plus one client.

Server:The EPoll server, Poll server and Multi-Thread Server.

Client: the SuperClient.

Before running the command, execute the following as root:

1 increase the fd to 100K

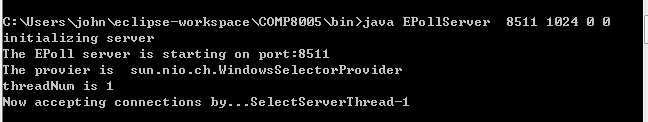
#ulimit -n 100000

2 increase the heap memory

#java -Xss1024m -Xms4096m -Xmx5120m

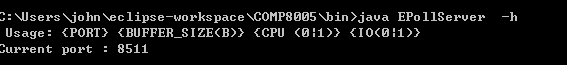
## 1.1EPoll Server

To Run it in java mode by default parameters:



To show the usage, just using *-h*

Usage: {PORT} {BUFFER\_SIZE(B)} {CPU (0|1)} {IO(0|1)}



## 1.2 Poll Server

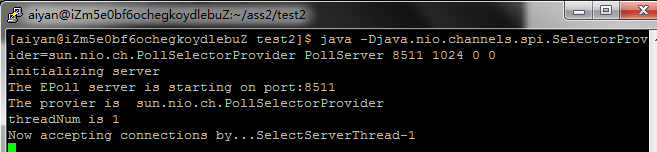
#java -Djava.nio.channels.spi.SelectorProvider=sun.nio.ch.PollSelectorProvider PollServer

The parameters can be specified are:

Usage: {PORT} {BUFFER\_SIZE(B)} {CPU (0|1)} {IO(0|1)}

Example:

java -Djava.nio.channels.spi.SelectorProvider=sun.nio.ch.PollSelectorProvider PollServer 8511 1024 0 0



## 1.3To start the MT Server

By using the following command:

#java MTserver



## 1.4Start the SuperClient

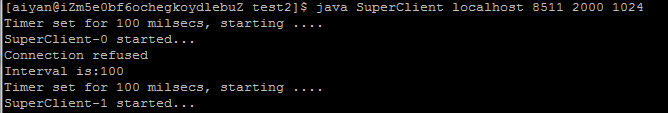
SuperClient is a test client designed to running tirelessly send payload to the target server.

To start the SuperClient, run the following command:

Java SuperClient {IP} {PORT} {INTERVAL(Nanos)} {PACKET\_SIZE}

*$[aiyan@iZm5e0bf6ochegkoydlebuZ test]$ java SuperClient localhost 8099 1000 1024*

Example:



# 2 Python Mode