

During the first TP, you learned how to create a client software using Java. During this second TP, you are going to learn how to develop a server with Java.

Reminder on how a server works

- The server is on « passive listening mode » on a particular port
- At each connection from a client, the server launches a new process to treat the request.

To conclude, you will learn :

- How to create the passive listening program
- How to launch new processes (and develop multitask applications)

## Exercise 1

In the Javadoc ( <http://java.sun.com/javase/6/docs/api/> ), study the class ServerSocket

Develop a server that makes an echo of each command sent by the client. When the client sends the quit command, the server and the client stop.

## Exercise 2

In the Javadoc ( <http://java.sun.com/javase/6/docs/api/> ), study the classes Thread and Runnable (read the exemples in the class descriptions)

Improve the server of the exercise 1. When a client connects, a new thread is launched to answer the request.

## Exercise 3

Improve the server of the exercise 2 to limit the number of simultaneous connections.

## Exercise 4

Créer un fichier de log des messages échangés sur le serveur. Indiquez, devant chaque message :

- L'adresse IP de la machine qui a envoyé le messages
- La date et l'heure de réception du message