

# **Distributed Client/Server System**

## ***Abstract***

The distributed client/server system is to simulate the general computing scenario. The original data is on site0 where there is limited computing capability. There are powerful computing capabilities on site1 and site2. Suppose site1 and site2 have different kinds of processing capabilities, e.g., site1 is computing intensive and site2 is more powerful in graphic processing. The data at site0 is first sent to site1 for processing. The output of site1 will be sent to site2 for further process. The final result of site2 will be delivered back to site0 where the original data is sitting.

## ***Proposed System***

The computational work done in this project on site1 and site2 are simple arithmetic operations. The data in site 0 is stored in a wrapper data class which is an array of integers. Each element of the array is squared at site1 and result sent to site2. At site 2 the element of array is further added by 1 and result sent back to 0.

## ***Scope of the System***

The learning objective of this project is to learn basic structure of client/server application. Also get familiar with Java RMI mechanism.

## ***Module Description***

### **Client Module**

For Inputting data on which some operations are carried out.

### **Server One Module**

For providing different kinds of processing for the data which user inputted.

### **Server Two Module**

For providing different kinds of graphical visualizations for server on inputted data.

## ***Technologies to be used***

- **Debug Tool: Log 4J**
- **Operating System: Windows XP/2000/2003, LINUX, Solaris**
- **Technologies : Java, RMI**
- **IDEs: Eclipse with My Eclipse plug-ins/Net Beans/RAD**

## ***Hardware requirements***

- |                |       |                         |
|----------------|-------|-------------------------|
| • Processor    | ----- | Intel P-IV based system |
| • RAM Capacity | ----- | 128MB                   |
| • Hard Disk    | ----- | 20GB                    |
| • CD-ROM Drive | ----- | 32 HZ                   |
| • KEYBOARD     | ----- | 108 Standard            |