

Client Server Protocol Implementation

Abstract

This project is to implement the Client-Server Protocol Implementation. The dream global communication is solved in a great deal by the introduction of Internet. This made the necessity of networking in communication clear. The internet protocol TCP/IP uses computers called gateways, which provide all interconnections among physical networks. A gateway is a special purpose, dedicated computer that attaches to two or more networks and routes packets from one to other. It will be having the information regarding the network connected to it. The gateways exchange routing information periodically to accommodate network changes and keeps their route up-to-date.

This protocol permits a new core gateway to be added to the intranet without modifying the existing gateways. Whenever a new core gateway is added to the existing intranet it will be assigned to one or more neighbours with which it communicates, the neighbours already members of the working intranet have already propagated routing information among themselves. Thus the gateway has to inform its neighbours about the network it could reach so that they can update the routing table and propagate the information to the remaining gateways in the internet.

Existing System

The present system is having different networks for each department. Where in the files has to be manually transferred, which is not a good way of practice of file transfer, for that we have given this proposed system. Where the file transfer is done through the networks.

Proposed System

In the proposed system all the sub-networks are added to the gateway and the transfer of the different document and file takes place through this gate way. Where we can not only reduce the delay in file transfer but also we can maintain the log.

Scope of the System

The proposed system scope is network. We are using this system through out the network connected through wire. In future the GUI can be enhanced so that we operate servers through the GUI.

Adding and deleting a network to a gateway

- ◆ Creating and displaying a route table for a gateway
- ◆ Sending and updating the routing message
- ◆ Create a log file
- ◆ ICMP implemented for error correction and reporting

Module Description

The system “**Client-Server Protocol Implementation** “ consists of 4 modules

1.Gateway module

2.Routing module

3.Display module

4.ICMP module

GATEWAY MODULE:

In this module we provide mechanisms for adding a new network to a Gateway and

deleting the existing network from the Gateway and displaying a routing table for a Gateway.

ROUTING MODULE:

In this module there are three methods first, to create a route message, second sending a routing message to other gateways, third updating the routing message.

DISPLAY MODULE:

In this module we develop an application program to know the date and time the routing table is transferred to other gateway.

ICMP MODULE:

In this module the errors occurred by the invalid inputs given by the user or any unexpected circumstances is reported to the gateway by using ICMP(Internet Control Message Protocol) protocol.

Features to be implemented

- Two-tier architecture
- Maintainability
- Exception handling

Technologies to be used

- **Programming Language:** Java
- **Database Connectivity API:** File Reader API (java.io.*)
- **Backend Database:** Oracle/SQL Server/MY SQL/MS Access /text file.
- **Operating System:** Windows XP/2000/2003/ LINUX/ Solaris
- **IDEA** algorithm for secure data transmission.

- **Protocols** : TCP/IP, ICMP
- **IDEs**: Eclipse with My Eclipse plugins/Net Beans/RAD

Hardware requirements

- Pentium processor ----- 233 MHZ or above
- RAM Capacity ----- 128MB
- Hard Disk ----- 20GB
- Floppy disk ----- 1.44 MB
- CD-ROM Drive ----- 32 HZ
- KEYBOARD ----- 108 Standard
- Protocols ----- TCP/IP, ICMP
- We use Ethernet for LAN