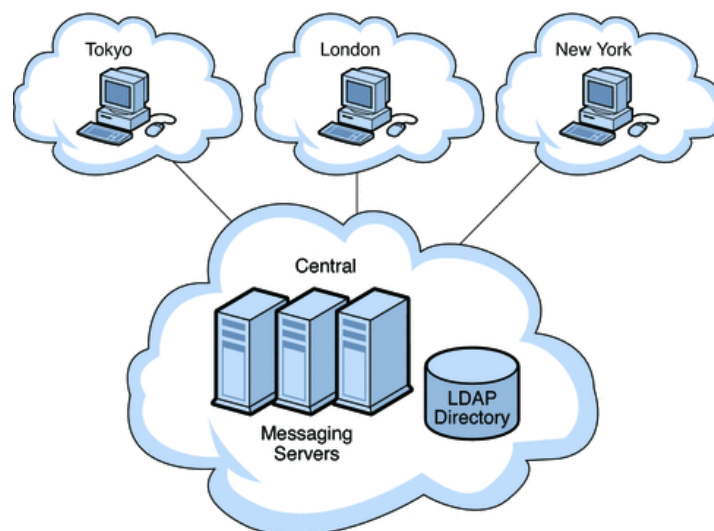## MESSAGE SERVERS

Message servers allow a client to exchange messages with remote clients without being aware of the identities of the remote clients or the messages in which they are interested. Each client sends to the message server messages regarding all possible changes to its state that other clients may be interested in. In addition, it registers message patterns with the server that describe the specific set of messages from other clients in which it is interested. The message server forwards a message sent by a client to all other clients who have registered patterns matching the message. A client is not aware of the patterns registered by other clients or even the identities of these clients.

A messaging server can usually queue and prioritize messages as needed and saves each of the client programs from having to perform these services.
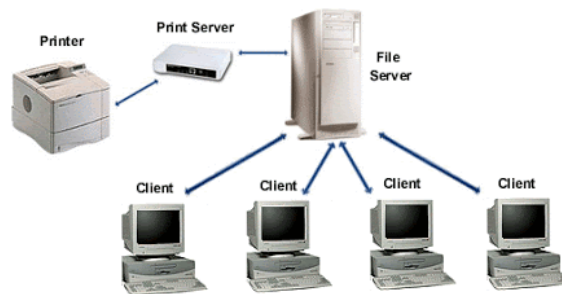
Messaging and messaging servers usually are organized in one or both of two models: point-to-point messaging and subscribe/publish messaging.

By: Pragya Singh Tomar
ICS, Vikram University, Ujjain

PRINT SERVERS

A print server is a computer that can process print-related jobs on a network of computers. Print servers are connected to a computer network in order to serve the need for printing jobs in a network that may contain more than one printer. A print server usually allows users in a computer network to perform a printing job without having to move files to the computer connected directly to the printer, also known as printer server or network printer.

A print server may either be a host computer in a computer network with one of more shared printers, or a computer in a computer network that implements printing protocols like Microsoft Network Printing protocol, Internet Printing protocol or Line Printer Daemon protocol. In either case, the printer server accepts printing jobs and sends them to the appropriate printer in the network.

Advantages of using a Print Server includes:

- No restrictions regarding the number of client systems in a computer network. It is easy to add new client systems and printers to a network.
- Promotes efficiency by allowing users to print from their own workstations without having to move the files to a file server.
- Effectively manages print queuing through print spooling.
- Allows for job prioritization, unlike a typical shared printer, which does not allow for alteration of the print queue.

Disadvantages of using a Print Server includes:

- Lack of support for the features of multifunction printers.
- Printers' proprietary commands are not usable.
- Restricts users' ability to confirm job status with the printers that are designed to return the status of the print job.
- Port compatibility issues and other port-related limitations