INTRANET MAILING SYSTEM USING LAN FOR SECURE EMAILS

BONU SRI GANESH #1, V.SARALA #2

#1 MCA Student, Master of Computer Applications,
D.N.R. College, P.G.Courses & Research Center, Bhimavaram, AP, India.

#2 Assistant Professor, Master of Computer Applications,
D.N.R. College, P.G.Courses & Research Center, Bhimavaram, AP, India.

ABSTRACT

Intranet Mailing System Using LAN for Secure Emails is a web application used to transmit mails from one to other employee of the same organization. The main Motto of any company is to take security against the employees should not be allowed to send mails for others who are out of organization to avoid unauthorized transmission of coding developed inside Organization. In order to provide security of their valuable data this type of application is designed and deployed in Local server in order to access the mail facility within the organization.

Keywords: LAN, Intranet Mailing System, Email, Employees

1. INTRODUCTION

In professional world all the communications are being done by mails, now-a-days in social and economic life this mailing system is in more usage. Moto of this is to reduce the each mail maintenance time, and to make the system more user friendly, efficient, accurate and fast processing. The proposed system contains all the features like intranet mailing, chatting, and files sharing in a single platform. It facilitates options Such as Inbox, Compose, New user Registration. The system can be used all around the organization by interconnecting all the terminals in LAN. Here all these features will be used only for the registered users (or) employee.
staff who uses Intranet features are provided with different login IDs and must give the correct password. It gives total security for us. So the unauthorized person who does not sign up cannot be able to use the system. Even if the staff forgets his/her password can recollect the password and sign up into the system. The main advantage of the system is its security, allowing only registered staff to access the system and unauthorized staff cannot be able to access and organizing all features in a single platform. By providing this information on the Intranets, staff has the opportunity to keep up-to-date with the information of the organization. Intranet can help staff to access and view information faster and use applications relevant to their roles and responsibilities, increasing staff's ability to perform their jobs quickly, accurately, and with confidence that they have the right information.

Time: Intranets allow organizations to save their time by just ping up to the staff. There is no need to call a person to pass the information to staff. We can just send a message to the staff by using intranet facilities. Cost-effective: Users can view information and data via web-browser rather than maintaining documents such as manuals, internal phone list, and forms. This can save the money on printing, duplicating documents, as well as document maintenance. Application can be applicable in educational fields like schools and colleges. Also can be used in organizations, where they can have internal communication.

Intranet mailing, chatting, and file sharing system is one among secure and fast communicating medium for a modern era, and so the Mail System is the best possible web application system through which the staff can exchange information without using Internet connection. This system is developed by sending mails to staff in the department who are registered with that system. It allows a user to send text and data like pictures and files, the attachment of files can be done very easily. The mailing is also a very secure system; it provides you security as you require a password to login. If in case you forget your password you can verify with your user name. This system can be the best way of communicating between two users without Internet. This Intranet Mailing System, chatting, and file sharing is to provide a communication between staff in an organization, which takes the chance of establishing a channel for exchanging the information between the staff.

In this, we discuss about the proposed system we try to design a mail system by using LAN network for sending mails from one person to another person within the organization. This application mainly allows the employees of the organization to send or receive mail data from one another within the organization and hence a lot of manual effort is reduced for transferring the information from one person to another person.

The main motto of the system is to develop a fully functional easy Mailing System, chatting, and file sharing that provides communications among the staff in the collage in a reliable, cost-effective, and secure way. Thus it helps the organization to improve the performance of its teams in conducting organizational works. This system design will provide the following facilities to the users as follows: staff can login this mailing system for passing the information to other staff in the same department.
2. LITERATURE SURVEY

INTRODUCTION

Literature survey is the most important step in software development process. Before developing the tool, it is necessary to determine the time factor, economy and company strength. Once these things are satisfied, then next steps are to determine which operating system and language used for developing the tool. Once the programmers start building the tool, the programmers need lot of external support. This support obtained from senior programmers, from book or from websites. Before building the system the above consideration r taken into account for developing the proposed system.

RELATED WORK

It is difficult to send a mail without using internet on the websites like Gmail, yahoo etc. and so to overcome such type of problem this web application is used i.e. mail system?. It helps in reducing the complexity and is the easiest way of communication between the sender and the receiver.

The main purpose of this web application is it can be used without using internet connection. Main objectives are as follows:

1. Composition of the new mails.
2. Showing the read notification.
3. Sending and receiving mails.

Intranet plays a vital role towards reaching their organization vision. This system not only reduces the cost of the computer mailing system but also provides information with greater speed and efficiency. So that the software makers got an opportunity to involve corporate customer to design intranets. Then the storage of the information on paper are reduced and also no need to go to the different sections to update the personnel information. Intranets provide staff to have quick access to resources in an organization.

Simple Network Management Protocol (SNMP) is a standard protocol suite for the Internet network management. Internet Engineering Task Force (IETF) first standardized the protocol and initiated SNMP-based management. The original targets for this effort were TCP/IP routers and hosts. However, the management architecture is inherently generic so that it can be used to manage various types of systems. The SNMP network management model consists of the following elements [8, 9]. SNMP management defines two network entities, managing system and managed system, and the communication methods between two entities. Managing system contains one or more processing elements called management applications, shortly, managers. Manager performs management functions over managed nodes it controls.
Each managed system has a processing entity called an agent which gathers various management information from the managed system. SNMP itself is a set of communication methods between manager and agent. The protocol defines three basic operations, GET, SET, and TRAP. The GET operation is initiated by a manager for retrieving management information from an agent. When the manager needs to change management information in managed systems, the manager performs the SET operation on the specified agents. The TRAP operation is an unsolicited communication from agents to managers. Agents send TRAP information to specified managers when managed system initiates any events.

There are many SNMP MIB modules developed by IETF working group for various kinds of network elements such as bridges, routers, hubs, printers, workstations, Internet service systems, etc. The MIB modules are standardized and published in RFC documents. In order to identify each MIB module SNMP uses object identifier (OID) found in ASN.1. OID values are organized in a tree structure so that each OID value is assigned to the unique object. This scheme is created by the ISO and ITU-T and SNMP MIB modules are located in a subtree of the OID tree. RFC 2249 [13] defines MIB for monitoring of Internet/Intranet mail server systems.

It extends the basic Network Services Monitoring MIB defined in RFC 2248 [12] to allow monitoring of Message Transfer Agents (MTAs). MTA is a more general term representing the mail server system. RFC 2249 has OID, 1.3.6.1.2.1.28 which is located in SNMP MIB modules. Figure 1 shows the location of MTA MIB in the OID tree structure. Internet/Intranet mail server management system presented in this paper is based on the RFC 2249 MIB module. We have extended the Mail Monitoring MIB to handle SNMP TRAP operations. SNMP agent system has been developed to monitor the MIB information in mail server systems and SNMP manager functions are defined to have access to the MIB information from agents.

### 3. EXISTING SYSTEM

Using popular mailing web sites like yahoo and Gmail, employees of Organization may misuse mailing to transmit developed code to outside the Organization. Hence most of the companies are not allowing the personal mails to be used in their company network because to avoid this data misuse. Hence it is becoming a major limitation for several companies for sending the mails from one person to another within the organization.

### LIMITATION OF EXISTING SYSTEM

The following are the limitation of the existing system:

1. To Maintain Real time servers is not secure.
2. Monitoring cost is high
3. Restricted in Corporate Companies.
4. There is no mail access to share the attachments from one person to another within the company,
5. Hence a lot of manual effort is going on to transfer the information from one person to another person.
4. PROPOSED SYSTEM

In this we discuss about the proposed system we try to design a mail system by using LAN network for sending mails from one person to another person within the organization. This application mainly allows the employees of the organization to send or receive mail data from one another within the organization and hence a lot of manual effort is reduced for transferring the information from one person to another person.

ADVANTAGES OF THE PROPOSED SYSTEM

The following are the advantages of the proposed system:

1. Major mailing facilities are provided.
2. Low maintenance cost.
3. Provides security for Corporate Companies.
4. So, no scope for transmitting developed code to outside the Organization through mails.

5. SOFTWARE PROJECT MODULES

Implementation is the stage where the theoretical design is converted into programmatically manner. In this stage we will divide the application into a number of modules and then coded for deployment. We have implemented the proposed concept on Java programming language with JEE as the chosen language in order to show the performance this proposed protocol. The implementation will be divided into number of modules like 3 modules

1. Mailing Module
2. Folders Module
3. Contacts Module

Now let us discuss about each and every module in detail as follows:

5.1 Mailing Module

In this module, the employee has the following mailing operations such as:

1. Inbox
2. Compose
3. Delete Selected Mails
4. Change Password
5.2 Folders Module

In this module, the employee can able to use this folders modules and can do the operations such as:

1. Create new folders
2. Deleting folders
3. Viewing mails from folders
4. Moving selected mails to folders

5.3 Contacts Module

In this module the user can have the following operations such as:

1. Adding address
2. Viewing all addresses
3. Deleting address

6. EXPERIMENTAL RESULTS

RECEIVER WANT TO SEND REPLY FOR THE MAIL
USER CREATE NEW FOLDER FOR STORING THE MAILS

MOVING MAIL TO SELECTED FOLDER:

MAIL FOLDER CONFORMATION
MESSAGES STORED IN SPECIFIED FOLDER ARE:

Welcome mail! Mails in mahesh are:

Delete

Messages in mahesh are:

<table>
<thead>
<tr>
<th>Check</th>
<th>From</th>
<th>Subject</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>saori</td>
<td>hi mahi</td>
<td>10/2/2009</td>
</tr>
</tbody>
</table>

Delete

DELETING MAIL FROM FOLDER:

Welcome mail! Mails in mahesh are:

Delete

Messages in mahesh are:

<table>
<thead>
<tr>
<th>Check</th>
<th>From</th>
<th>Subject</th>
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</tr>
</thead>
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<tr>
<td></td>
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</tr>
</tbody>
</table>
AFTER DELETION OF MAIL FROM MAHESH FOLDER:

Welcome mahesh! Mails in mahesh are:

Messages in mahesh are:

CHANGE PASSWORD CONFIRMATION

CHANGE PASSWORD

OLDPASSWORD: [***]
NEW PASSWORD: [***]
CONFIRM PASSWORD: [***]

CHANGE
TO EDIT ADDED CONTACT CLICK “EDIT” BUTTON:
7. CONCLUSION

In this Intranet mail system we have presented the design and implementation of a Web-based Intranet mail server management system. We have used and integrated TCP and Web technologies in developing our system. Though we have developed a management system for mail service only, our design and implementation architecture is general enough to be applied to manage any Intranet application service system within the organization so that the registered user can communicate easily without using Internet we have also provided the facility of attachment by using Java APIs. In future we can add some more new concepts and enhance the security of current application.
8. REFERENCES


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