

Emailing File Using GSM Modem

Vaishnavi Pardeshi¹, Shreya Patil², Komal Patil³, Divya Dawale⁴, Prof. Medha Kulkarni⁵

^{1,2,3,4}Dept. of Information Technology Engineering , ⁵Project Guide

⁵ Professor, Dept. of Information Technology Engineering, PVPP College of Engineering, Sion, Mumbai-22 Maharashtra, India

Abstract - If mobile phones are the lifeline of communication then SMS is its heartbeat. SMS (Short Message Service) in very short time span became the most popular way of exchanging information. This project proposes a method that uses SMS as a medium to retrieve file residing on the remote client machine through email. The application is to be installed on the client machine with active internet connection. Intended user will send a SMS in specific format received by the mobile gateway connected to client machine which in turn activates the application and triggers the search process. Further parsing the received SMS, the file is searched on Remote machine and after locating it is mailed to the user.

Key Words: SMS,GSM Modem,AT commands

1. INTRODUCTION

The exceptional growth of the mobile phone market has motivated the design of new forms of mobile information services. With the growth of Twitter, SMSGupShup and other social messaging networks, the past few years have witnessed a growing prevalence of Short-Messaging Service(SMS) based applications and services. SMS-based services are also increasingly common in developing regions. Despite the increasing power of mobile devices with the advent of "smart phones", a significant fraction of mobile devices in developing regions are still simple lowcost devices with limited processing and communication capabilities. Due to a combination of social and economic factors, voice and SMS will likely continue to remain the primary communication channels available for a non-trivial fraction of the population in developing regions.

1.1 Existing System

Today, most of the user files are scattered over multiple machines. In case if user forget to take the file in pen drive or email the file, user is left with no other option but calling home or respective location and explaining the person to navigate through the directory and mail the file. Now if the person is not computer educated or does not know to operate the computer and internet than the situation becomes more difficult. In this case the user may face many issues as he might not get the required file. Now to overcome this problem, many developers have come up with the mobile app which will remotely connect to your desktop and transfer the file.

But these apps are limited to Smart Phones and they require active internet connection on their phones. Now if a user does not have a smart phone he will not be able to make use of all these apps. One of the most popular software used now a day to access files from remote machine is Team Viewer. Team Viewer: Team Viewer developed by Team Viewer GmbH, is a software package for remote control, desktop sharing, web conferencing and file transfer between computers. Popularly used to access the files on remote machine.

1.2 Proposed System

The solution to the problem is our proposed application. EFGM application facilitates user to obtain a file located on home desktop through email by sending SMS. The SMS format will include the name of the file to be search, the file location (optional), user mail address to where the file if found has to be mailed. The application on receiving this SMS will search the file on remote machine and on finding it will attach it to the email and mail it. This file search on remote machine will 1st be conducted in 'Recent Files' folder as it usually recently accessed files that we need. If the file is not found here, then the application will search rest of the pc for the file. The user can also specify a direct path of the file in the SMS. Apart from mailing the searched file the application can also upload and download files from the FTP server.

2. ARCHITECTURE

2.1 Working

User need to send SMS in a specified format to a particular number. The format will include the name of the file to be search, the file location (optional), user mail address to where the file if found has to be mailed. On receiving the SMS, application will validate the format; parse the SMS to get all the required details. The application then using inbuilt email facility will mail the file to user. Apart from file search and emailing the file, application also support uploading, downloading the file from any FTP server provided the details of FTP server is known.

A. SMS

- The user will send a SMS in specific format to EFGM.
- After the request has been processed the acknowledgement is send back to user.

- File Info request results are also send to user using SMS.
- B. GSM Modem
- The client PC is to be connected to the GSM modem which acts as a mobile gateway.
 - This modem is responsible to receive the SMS send by the user.
 - SMS is further forwarded to the EFGM by this modem.
- C. AT commands
- AT Commands are Attention Commands.
 - AT Commands are used for sending and receiving SMS through phones that supports them.
 - AT Commands are used for application that requires sending and receiving SMS.
 - The purpose of using AT Commands in Emailing file using GSM Modem is to receive and send SMS from/to the mobile which is used to trigger the application.
 - AT Commands are basically used to operate the mobile phone which is acting as a modem between the remote PC and the Client phone.
 - This mobile phone /modem need to read and send SMS generated for or by the application.

D. FTP Module

File Transfer Protocol (FTP) is a standard network protocol used to transfer files from one host to another host over TCP-based network, such as the Internet.

Here in this project it is used for uploading or downloading the files present on the desired FTP Server and to do the necessary communication.

- File Upload - This module will actually search the file in the user remote machine and uploads the file to the FTP server mentioned in the SMS.
- File Download - This module will actually search the file on the FTP server and downloads the file to the user machine and mail the file.
- File List - Provides a list of files present on users FTP Server.

E. Mail Server

A mail server is a computer that serves as an electronic post office for email. Mail exchanged across networks is passed between mail servers that run specially designed software. This software is built around agreed-upon, standardized protocols for handling mail messages and the graphics they might contain. Here its job is to do the necessary mailing activities. This Server attaches the file searched or downloaded by FTP server to mail and sends it to the email ID specified in the SMS.

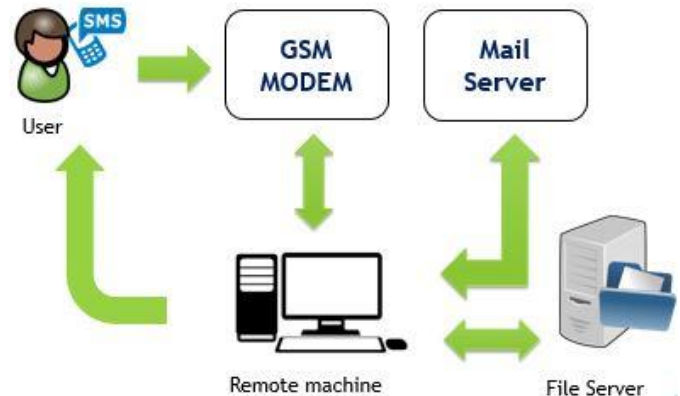


Fig -1: Block diagram of Emailing File Using GSM Modem

3. CONCLUSIONS

In this project, a concept of searching a file on a remote machine through SMS is prescribed. User can search any type of file and get it mailed on his or her mail id. The requirement of this project is that the application must be installed on remote machine where the file needs to be searched and internet connection must be available for getting file mailed or uploading and downloading to FTP server.

In the initial phase of the project, Emailing file using GSM Modem will include searching, uploading and downloading of one file at a time. Future release of this application will allow multiple files to be searched, uploaded and downloaded.

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