

Remote Desktop Control Using Mobile Android Phone

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ABSTRACT

Now a day's people are using Smartphone widely so we will introduce the process to access the Remote Desktop computer (server) using android mobiles (client), this can be done with the help of Client Server Architecture. Desktop Client must be installed on Remote desktop and Mobile Client will be provided on android mobiles. But, IP address of remote desktop must be known. As we know that Java and android both are open sources hence server application is implemented in Java and client in android. In this project we can access Remote desktop using android mobile phones with the help of Internet or Intranet .there are several functions are provided on android phones just like keyboard shortcuts, type on the fly, open application, FTP (file transfer protocol), PC to mobile transfer, E-mail and Mouse. The objective of this project is to control the PC file system remotely and we can do many task like copy important documents like resume, photos, videos etc from our PC to Mobile or vice versa.

Keywords: FTP, Mobile Client, Remote Desktop control, CPU, RFB, Wireless LAN

I. INTRODUCTION

Now a day's smart phones are not used only for communication purpose but also for home automation, television control etc. In this paper we describe the system to access the remote desktop from android mobile using internet or intranet. Remote Desktop clients (Mobile and Desktop Client) can be used on irrespective of various platforms like windows, Mac or Linux. RDC (Remote Desktop Control) Project is used to control Remote Desktop file system from android device. Here we have to installed Desktop client on Desktop Machine and Android Client in Mobile Device. The communication medium is Desktop server that must install in Cloud or global static Machine where it can accessible to some port and that should be forwarded so that any desktop machine or android client can communicate with it.

1.1 Purpose

1. To access the remote desktop from mobile phone.
2. To see the contents of the file placed on the desktop of the remote computer.
3. To reboot a remote server as an manager [8]

1.2 Scope

This project is basically send important data like image file resume word file power point presentation crime video file to mobile devises (Smartphone) immediately. With the help of this approached we can save avoid crime to show this video.

1.3 Suppress Network Traffic

The wireless transmission bandwidth available for a cellular phone is limited. Currently; it is 384k bps, even on IMT-2000based services (only downstream at this transmission rate).[8]

1.4 Recover from an unscheduled disconnection

Because of its wireless nature, stable network connectivity cannot be expected. For example, when the user goes into tunnel or a building, established connections can be lost. In addition, in order to use the same cellular phone to talk to someone, the user must terminate the network connection.[8]

1.5 Suppress computational resource use

CPU performance and memory size are limited on a cellular phone to achieve portability and to lower power consumptions [8]

II. SYSTEM DESIGN

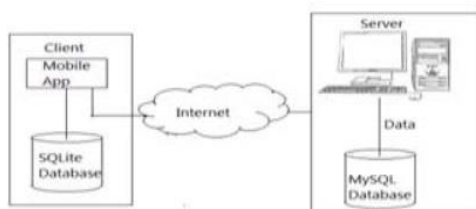


Figure 1. System design

2.1 Proposed System

Our project divided into tree layer

A] Socket server

Here we are using tcp java socket server and tcp java socket client(desktop client or mobile client) the tcp socket server is completely developed by java code were it will they listen on particular port number that will be any port that should be forwarded with could machine or a static ip machine. It will be waiting for some signal from desktop client or mobile client The signal is nothing but encrypted message data, which content method prototype and commands The socket server slit the signal into chunks, decides were the signal come from mobile client or desktop client, and then sends data between mobile and desktop client through prototype command, which is found in signal.

Figure 2. Registration form

In this form there are three fields first is username second is password and third is email address if you are client then you will have to register your username, password and email address here.

B] Socket client or desktop client

The desktop client is completely develop by java code were it will communicate to socket server port were socket server is running. The socket client and desktop client send prototype signal to socket server. The signal is nothing but encrypted message data, which content method prototype and commands

Figure 3. login form

If you are already, a client by registration you can directly log in by your username and password and the computer number then click on login.

C] Mobile client

The mobile operating system is completely developed with the help android code. It will do the same thing as desktop client like it the signals to socket port. The signal is nothing but encrypted message data, which content method prototype and commands.

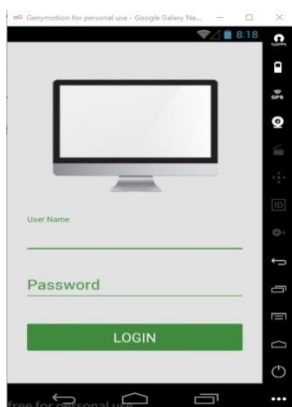


Figure 4. Mobile login Screen

This android application is used to access your desktop computer. it include accessing drive folder file image video where it can performed copy past uploading and downloading file image etc.

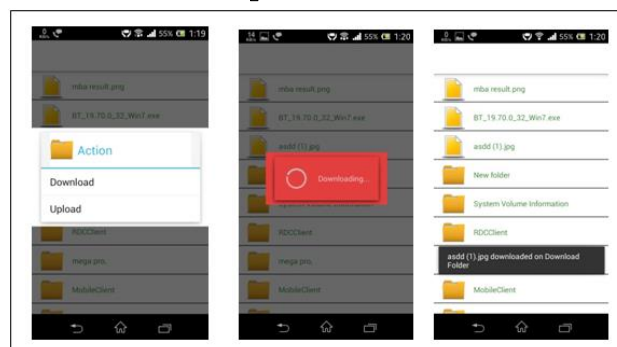
Here we will need user credentials like user name password, which contains licensing where user must perches the licensing. The licensing provides the information about how many desktop clients we can connect nothing but total count number desktop client.

After purchasing licensing it will give, a username and password we have enter this user name and password into over android login screen after click on the login button it will check connected desktop client and display on the next screen.

Depending upon the licensing it will display list of desktop client.

This android client checks wrong username and password that is if we user provide wrong user name password it will provide unauthorized access

2.2 download and upload



Here when we click on download button it will download that file from selected desktop client to android application. After download it will display a popup message, download successfully which will show you the path of downloaded file.



For uploading here we select the folder which is store in computer drive, to select folder for upload any file long click on this particular folder, after long press one popup message are display, there is two option download and upload select upload then next screen is mobile file manager, click any file for upload, after click one popup message display then click on upload after completed it will show the path where the file is uploaded.

III. ADVANTAGE AND APPLICATION

3.1 Advantage

- A] These java software is totally open source. and we don't require any license
- B] So here we save the development cost

3.2 applications

We can access data which is store in our computer from anywhere through our mobile phone. Android applications are composed of one or more application components (activities, services, content providers, and broadcast receivers). Each component performs a different role in the overall application behavior, and each One can be activated individually (even by other applications).

3.3 Result

The result of the Remote controlling PC with Smartphone Inputs from remote place with internet project is Controlling of PC with Smartphone from remote place using internet with the help of Client / server mobile technology using 3-tier concept. Virtual keyboard of mobile can be handled to operate the functions of the PC. Server based concept is utilized to capture the screen on desktop the mobile device will work as desktop machine because desktop machine control from smart phone [9]

IV. CONCLUSION AND FUTURE SCOPE

4.1 Conclusion

RDC is an application which allows us to view a computing desktop environment not only on the machine where it is running, but from anywhere on the internet. It allows us to control the peripheral devices of remote PC. It allows interacting and viewing with remote PC. There is no need of carrying hardware each time for accessing our home or friends PC. It allows us to be connected in the network which will provide secure, easy access to information within the network [5].

4.2 Future scope

A] TV can be controlled by mobile. In future TV can be controlled by computer (already started in some areas).

B] The whole desktop will be controlled by android phone where we can use internet explorer, windows

media player, word operation and games of desktop client through android phone.

C] As a continuation of work in this application, we would include the encryption algorithm to prevent data leakage. We will also put efforts for displaying the screen of the target PC on the android phone itself for the purpose of better visualisation. [7]

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