

# Remote Desktop control (RDC)

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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 installed 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. LITERATURE SURVEY

There are many existing systems which work as a connection mediator between Android phones and the desktop. But they have some limitations. One of the applications is used for controlling desktop from cellular phone, but it uses Remote Frame Buffer (RFB) protocol, which is a slow protocol. Due to this, the working of that application is slow. Almost all the system uses the VNC architecture for communication between cell phone and remote desktop. Virtual Network Computing is a graphical desktop sharing system providing remote control via network. It supports a controlling device. Client side is called viewer because of its functionality. Controlling machine is responsible for viewing a shared desktop or screen in general and capturing and converting all user activity into the RFB protocol messages. On the other side, server must interpret all events received from client and inject them into self system. Server should also respond to graphic screen update request by sending back a desktop view to connected client. The cellular user can see and manipulate the desktop on the android phone. The same cellular phone to talk someone, the user must terminate the network connection [5]

### Related work

The papers which have been published previously include, an application called A Framework for Wireless LAN Monitoring and Its Applications, VNC architecture based remote desktop access through android mobile phones and Pocket Droid -A PC Remote Control. [6]

### Existing system

Existing system uses file transfer from its server so security issues are there. These systems do not have mouse drag and drop option. It cannot be used to power on a target computer from our mobile device from any location. The existing systems do not allow selecting a file on the target computer to mail that file to other person from that PC. [9]

## III. SYSTEM DESIGN

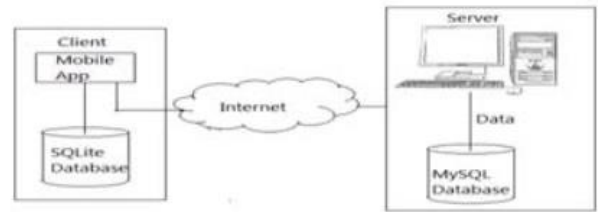


Figure 2. Architecture of Remote Desktop

### 3.1 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 where it will 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 split the signal into chunks and decides where 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

##### B] Socket client or desktop client

The desktop client is completely developed by java code where it will communicate to socket server port where 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

##### 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

### 3.2 Advantage

A] These java software is totally open source. And we don't require any licence

B] So here we save the development cost

### 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

### 5.1 Advantages of System

Smartphone's are part of almost everything we do – business, entertainment, knowledge, social networking, etc. In most cases, they must have access to the Internet and to our data. But lately, the Smartphone's are being connected even to a computer. We cannot store all our data on our Smartphone. Sometimes we need to access the information like important data (word file, image, and video) that we need urgent basis. Where we sometime out of station and in that case by using this software we can take that data by simply login to android client where list of machine will be displayed and we can take important data from those machine and copy paste in our android phone. We can do many things like rename, delete, rename desktop file or folder and even we can change the desktop file data.

### 5.2 Conclusion

RDM 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].

### 5.3 Feature 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]

## V. REFERENCES

- [1] Gonzalez Villan, Student Member, and Joseph Jorba Esteve, Member, IEEE, "Remote Control of Mobile Devices in Android Platform Angel", September 2009.
- [2] Tristan Richardson, Quentin Stafford-Fraser, Kenneth R. Wood and Andy Hopper, "Virtual Network Computing", Reprint from IEEE Internet Computing Volume 2, Number 1, January/February 1998.
- [3] "System Analysis & Design", Elias M. Awad Galgotia Public.
- [4] "Controlling PC Application through Mobile Phone", P.Sonam Mishra, J. Anjali Singh, Harshali Patil.
- [5] Santosh Dahifale, Ritukumari Pandey, Rahul Ballani, Sagar Ingle "Android Desktop Control (ADC) "ISSN 2277-8616 VOLUME 3, ISSUE 4, APRIL 2014.
- [6] Harsha Thadani<sup>1</sup>, Supriya Kumari<sup>2</sup>, Miranuddin Shaikh<sup>3</sup>, Neha Baravkar<sup>4</sup>, Prof. Shubhangi Kale<sup>5</sup> "Monitoring PCs using Android" ISSN 2229-5518 Volume 4, Issue 4, April-2013.
- [7] Chaitali Navasare, Deepa Nagdev and Jai Shree, "Pocketdroid -A PC Remote Control", 2012 International Conference on Information and Network Technology (ICINT 2012).
- [8] Angel Gonzalez Villan, student member, IEEE and JosepJorbaEsteve, member, IEEE, "Remote Control of Mobile Devices in Android Platform", IEEE transactions on mobile computing
- [9] Dr. Khanna Samrat Vivekanand Omprakash, "Concept of Remote Controlling Pc with Smartphone Inputs from Remote Place with Internet", International Journal of Advanced Research in Computer Science and Software Engineering.