

# Access and Control the Offline Computer via IOT

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**Abstract-** The main theme is to access the offline computers via IOT (Internet of Things). By this project we can access the other system anywhere at any time. This reduces the power consumption i.e., the system can be turned off when it is not used and can be turned on via internet connection called IOT. Here the components required are two computers/laptops with internet connections and with Team viewer software, GSM controller kit and one SIM card. At first, the offline computer is turned wake by sending a message via internet to the SIM so that the controller kit will enables the system to wake it up. Then the security password will be activated through web called IOT. The password is getting transferred through the internet and special software where we installed will enable the password to get match with the computer so that the system gets turned on. Now the team viewer is getting opened and the ID used in that are already known so that the two systems can connected. Now sharing of files and other things can be easily done from anywhere at any places.

## I. INTRODUCTION

Nowadays, people expectations in their life quality are increasing as per the technology growth. People required an intelligent & affordable system that can make their lives more comfortable & sophisticated, and more safety. Remote Access mostly in corporate industries where the office computers are get accessed from worldwide.

In Automated world, necessities for Remote access is the ability to access a computer or a network from a remote distance. In corporations, people at branch offices, telecommuters, and people who are travelling may need access to the corporation's network.

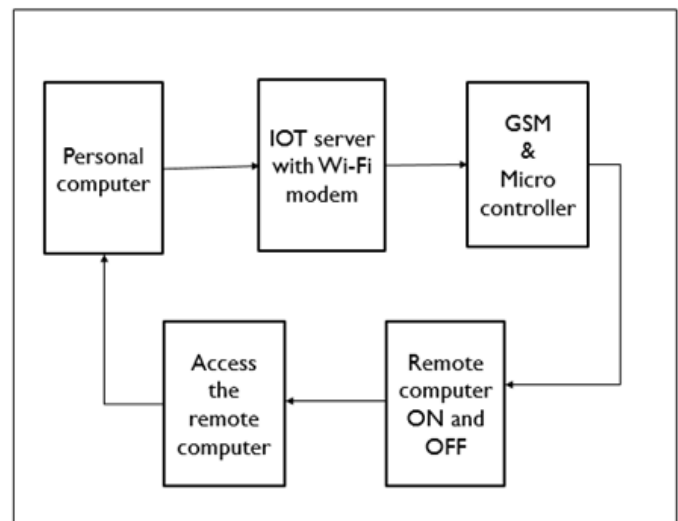
Virtual Private Networking (VPN) has replaced this traditional physical connection between the remote client and the server by creating a secure tunnel over a public network (e.g., the Internet). The term "remote access," however, still refers to remote users being able to access internal company resources.

Remote Access Services (RAS) refers to any combination of hardware and software to enable the remote access tools or information that typically resides on a network of IT devices. The host computer must be turned on using IOT. IOT sends the message to GSM kit about switch on and

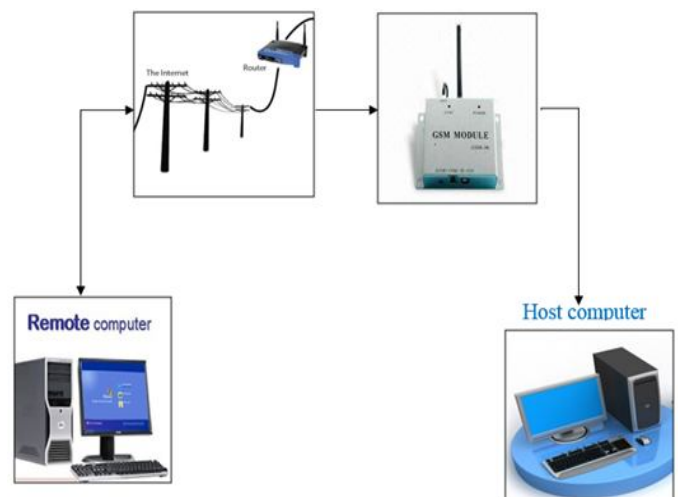
off the host computer. The system has GSM and PIC from the Microchip. GSMAT command is used to communication between GSM modem and microcontroller. The modem is used to send and receive AT commands. Master unit is connected to the GSM modem to receive SMS or command. For remote access, team viewer software because compared to other remote access software; it has the advantage that best security and live monitoring of desktop.

## II. METHODOLOGY

### A. Block Diagram



### B. Design of proposed system



### C. Construction

Main concept is to start up and shut down the host computer using IOT. Thus drawback for remote access will be eliminated. The computers accessed remotely from anywhere in the world without actually being present near.

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## III. HARDWARE

### A. GSM:

The GSM receiving module acts as a gateway in communication module. This receiving module can be a GSM/GPRS modem, mobile phone or any SMS send/receiving device. This device connects with computer and microcontroller through USB or serial cable. The AT (Attention) commands are used to manage connections and to send/receive the SMS.

The IOT agent will receive SMS by NEW\_MESSAGE\_RECEIVED by event. When new SMS arrived the agent parsed and process what the SMS command tells. The interface module communicates With GSM device and reads the SMS and checks whether it's a special SMS or ordinary SMS. If it's a command SMS, this commands are executed by IOT Agent.

### B. ETHERNET SHIELD:

It allow to connect the internet with the device. It is based on the Wiz-net W5100 Ethernet chip which provides a network IP. This device get interfaced with the GSM module in order to receive message from the user.

## IV. SOFTWARE

### 1. Team Viewer:

Team Viewer is started on a computer, it generates a partner ID and password. To establish a connection between a local client and a remote client, Team Viewer generated ID and password of either client are required. The local client requires the remote client's ID and password to gain control

over the remote client, whereas the remote client requires the local client's ID and password to gain control over the local client.

Now here this software is used for the same purposes as mentioned above. The host computer and Remote computer are get connected through this software and further process can be proceeded.

### 2. PIC Microcontroller:

A microcontroller is a small computer on a single integrated circuit containing a processor core, memory, and programmable input/output peripherals. Microcontrollers are designed for embedded applications, in contrast to the microprocessors used in personal computers or other general purpose applications. Microcontrollers are used in automatically controlled products and devices. PIC defined as (Programmable Interface Microcontroller) is used here to perform the various modules. Based on the embedded C program it takes control over the modules.

## V. CONCLUSION

For remote access, this concept uses team viewer because compared to other remote access software; it has the advantage that best security and live monitoring of desktop. Moreover the idea of Accessing the computers via IOT (Internet of Things) will crack the sophisticated problems occurs in now-a-days. The feature makes the system - the base for future systems, which makes to breaks the older ideas of accessing systems. In future we implement technologies used here and extern the theme in the form of new technology and development.

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