



# JIMS VIRTUAL WORLD

A NEWSLETTER BY THE DEPARTMENT OF INFORMATION TECHNOLOGY

## VoIP: The Modern day Phone Phreaking

Phone Phreaking was a rage during the 1950s - John Draper better known as Captain Crunch used to hack into telephone lines to make long distance calls. In today's world, we use VoIP supported applications but during the early days of phone hacking, there was the Blue Box. The most famous ex phone phreaks were Steve Jobs and Steve Wozniak during their college days. In an old interview, Steve Wozniak stated that once they both had nearly been arrested for using it but they got away when they explained to the police officer that, "It is a music calibration tool."

Phone Phreaking was the first form of hacking; automated machines replaced manual phone exchanges and these automated machines used certain pitches of sound to connect the calls. By the use of the Blue Box, these audio signals were bypassed just as VoIP today uses digital signals to bypass the audio signals. The Blue Box was a legal and monetary complication for the telecom industry with AT&T taking stern action against all the Phone Phreakers. Captain Crunch and many other pioneers and users of this technology were arrested and prosecuted for stealing from the telephone company. Not too different from today's scenario, the Indian Government's stand on VoIP is still being debated upon, the intelligence bureau thinks VoIP is too undisciplined for any regulation or surveillance, and hence a threat to national security.

Blue Box signal is the 2600 Hz signal. This signal connects and disconnects the call. The Blue Box created a revolution there were people chatting with each other from all corners of the world free of charge. VoIP is equipped to do the same, in fact, I can call international using Nimbuzz over GPRS. The catch is the other person needs to be using the same software. While those days are behind us, there are applications that can bypass this to enable direct calls to mobiles and landlines anywhere in the world. Two people from that generation set up one of the finest computer companies in the world to give us the Macintosh and iPhone. The restrictive nature of the company hence baffles many technology enthusiasts. Nevertheless, I am excited over VoIP and its possibilities. Technology has taken colossal moon steps since the 1950s, and today, video calls are possible with Wi-Fi, 3G and 4G services. Who knows where technology might lead with a camera, sensors and a projector readily available in a phone.

## Google Earth View brings 3D Google Maps to your browser

Anyone who has used Google Earth would know how fantastic the program is. There is very little in modern technology that beats looking at our entire world in virtual 3D.

To commemorate Earth Day, Google has decided to bring this feature to the default Google Maps that you find on any browser. So now, instead of downloading and installing the full Google Earth software, you can get its 3D modeling benefits right in your browser— and all you need to do is install a plugin!

When you first visit [maps.google.com/earthview](http://maps.google.com/earthview), you will be prompted to install the Google Earth plugin in case you don't already have it. Once you do that, the world is your oyster! Check out your city and zoom in to view 3D representations of landmarks and structures. Those in Mumbai can zoom in to have a look at a full 3D model of the new Bandra-Worli sealink, along with other recognizable landmarks like the Nehru Center.

Google has written a blog post and made a helpful video that detail all the features of the new service and how to go about making the most of it.