

A quick guide to VoIP

What, why, who, how explained

by Rob Kerr published on 10 March 2009

What is it?

Standing for, Voice Over IP or Voice Over Internet Protocol - to be more specific. Essentially it's a way of transmitting voice over the Internet to a similar, or an identical item on the receiving end.

This could be software or hardware capable of picking up such a signal from and over the Internet, that's been especially designed to cater for such a task.

The software can be based on a PC, mobile phone or even embedded in a piece of equipment specifically made for this type of function and this task alone.

It's likely most computer users have already experimented with such an application, or they've used a piece of software day in day out which already has this functionality but haven't actually got around to using it, or can't in the office environment. The likes of MSN Messenger, more commonly known today as Windows Live Messenger has this built in as does Google's Gmail.

What are the variations of the technology?

There are not many variations of VoIP that are relevant for this guide or are easily explained away. The variations really only come along in the forms it's used, in the applications it's seen in and the hardware that uses it.

There are also the extra services companies can attach to the basic operations of the VoIP software, with the benefits they hold being very clear, more of which we'll go into later.

Why should I care?

In its truest form VoIP is a cheaper alternative to using a telephone to communicate, or even a mobile phone. Calls can be made, for example,



...cont.

from computer to computer free of charge over existing infrastructure such as broadband or a mobile phone's data connection.

On top of that, there are the bundled in call packages with companies such as Skype, for calling landlines or mobiles, which come out on average much cheaper than a normal telephone operator.

Within the business world, VoIP phones for the desk usually run off the power delivered from a standard Ethernet cable. This is from a system known as PoE or Power over Ethernet, which pulls much less electricity than a normal phone that plugs into the wall. Overall this makes it a rather attractive green alternative to the normal telephone systems seen in offices.

What's a good example in practise?

VoIP can be seen and used in both software form and in hardware based products, all of which are becoming more and more commonplace today.

Already very popular and widely used is the software Skype, which is one of the more versatile applications out there today. This is due to the extra facilities the software provides and its company provides, from video calling to instant messaging to phone calling packages, along with it being embedded in hardware too.

The likes of Netgear and Philips now have embedded Skype into some of their handsets. These are both in standalone hardware versions, which operate in dual modes as both a normal phone handset and as a VoIP handset using Wi-Fi.

Netgear also offers up a handset that just has Skype onboard that once again uses the home Wi-Fi wireless router, and not the phone line to place calls.

Asus has recently produced, in conjunction with Skype, a standalone video phone, using the VoIP

software and its video functions. This can work with other Skype options, such as their phone calling packages besides just the videophone-to-videophone and videophone-to-PC.

On top of that, Skype also has software or clients for nearly all the mobile phone operating systems around today. This is ideal for use over the phones data connection, or even Wi-Fi to place calls.

Another popular VoIP application for mobile phones is Truphone, this is a favourite with iPhone users and increasingly so on other mobile phone platforms.

Is there a competing technology that I should be aware of?

The alternative to using VoIP is just not using it at all, just staying with the mobile for normal calling or the standard phone.

The benefits to using VoIP as an optional way to communicate with people have been clearly laid out already; the downside is that more often than not it relies on another piece of equipment to function.

This could be additional software that's not already installed on a PC or mobile phone, or even the additional purchase of a standalone device.

There are technically different alternatives to VoIP that are quite complex. These can be found in use in enterprise and are aimed at business users. These do not have the widely adopted foundation that VoIP has or the subsequent support.

What is in store for the future?

The future for VoIP comes down to more devices and applications supporting the standard, along with existing software gaining VoIP functionality.

For the consumer, the low call cost and freely available applications will go on to challenge the network operators and their high prices - which in

<http://www.pocket-lint.com/news/22809/pocket-lint-quick-guide-to-voip>

...cont.

turn will help to drive down the cost of calling, whether this be mobiles or landlines.

For the business user, the green aspects of low power usage on VoIP systems will just lead to greater benefits all around, due to the cost of ownership and ease of manageability of VoIP phones and their systems.