



# **Guide for businesses: Voice Over Internet Protocol (VoIP)**

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Business Cost Consultants

## **VOICE OVER INTERNET PROTOCOL (VOIP)**

VoIP was adopted by the masses when Internet-based services like Skype started offering free software downloads that allow you to make free computer-to-computer calls to users who also download the software. For these software-based solutions all that is needed is a microphone and speaker connected to the users' computer, and the other party needs to be at their computer to take your call.

The industry however has moved quickly to develop new equipment and telephone handsets that convert those 'software only' services into use with regular telephones. It is with this advent in technology that VoIP is now being used wider in the business community.

In this guide we aim to explain what VoIP is and what can be achieved by using this new technology in the business community.

### **WHAT IS VOICE OVER INTERNET PROTOCOL (VOIP)?**

VoIP is the ability to transmit voice over the Internet to either a receiving computer, telephone or even a mobile phone. It is becoming a popular worldwide telephone service for both the consumer and business communities. VoIP works by using a network technology known as Packet Switching Network whereas landline telephones use the Circuit Switching Network. This is referred to as the Public Switched Telephone Network.

### **WHAT'S THE DIFFERENCE BETWEEN VOIP AND NORMAL PHONES?**

The main difference between Packet Switching and Circuit Switching, is that Packet Switching uses (data) or Packets and sends them over the Internet while Circuit Switching is accomplished by using electrical circuits to make a telephone connection. Circuit Switching is like the old switchboard operators, frantically trying to connect the right caller with the receiver. Packet Switching is used to transfer data all across the Internet including E-mail. Packet Switching converts audio formats into data packets and transmits them over the Internet, then reassembles them on the other person's phone or computer in real time.

VoIP phones have been around for some time, but with increases in technology it is becoming increasingly popular. Several years ago many applications were available, offering some form of free VoIP phone service. Majority of these have gone or now charge a fee for the use of their service as VoIP phone provider. Moreover, VoIP is developing higher standards of quality every day, and it has proved that it is a viable force for telecommunication for the future of business.

## WHAT'S SPECIAL ABOUT VOIP?

VoIP has this unique ability to integrate many forms of telecommunication applications into one package which can handle data, audio, video, E-Mail, and web based applications simultaneously. This makes VoIP an incredible boost to the business world and provides a cost effective choice of telephone service.

VoIP phone service providers are increasing in popularity with many people discovering all of the benefits available to them by switching from using their landline telephones to VoIP service. First, VoIP phone services costs significantly less than a standard phone service, and this is a great attraction for bringing in new customers.

Many VoIP phone plans will let you make unlimited long distance calls or provide you with a plan for very inexpensive rates. Many of the features that are often included for a fee with traditional phone service are often included for free with VoIP services. Features such as Call Waiting, Call Block, Call Forwarding, Conference Calling, Voice Mail are usually charged as extras by the traditional phone companies but these are usually free with the VoIP phone packages. Another benefit to VoIP services is that you can usually keep your existing phone number, or allow you to select a new area code. The means if you select an area where most of your colleagues and customers are located, a call to you will be treated as local call. For a remote business VoIP service can give the perception of having multiple office locations.

## WHAT TYPES OF VOIP ARE THERE?

VoIP product and service configurations already exist for making and receiving calls via:

- Your desktop computer
- Your laptop while mobile
- Your regular phone in your office
- Your cordless phone
- Or by purchasing a specially designed VoIP telephone

## WHAT ARE THE ADVANCED FEATURES OF VOIP?

Some of the special features of this technology include:

### **VoIP Virtual Numbers**

One of the more interesting features of VoIP are Virtual Numbers. These allow you to have multiple inbound telephone access numbers in different cities, something that is useful for businesses who want to create a 'Virtual Presence' in multiple locations, or to provide friends and family with a local number to reach you and thereby avoid long distance toll charges for them.

Virtual Numbers can be routed to any number that you specify, for example you can have access numbers in London, Manchester, Edinburgh and New York all routing through to your number in Glasgow and no-one ever knows the difference.

Most Service Providers that offer this feature charge a per-number (i.e. for each additional access number) monthly fee, which is a very low cost way to create that virtual presence if it's important to you.

### **VoIP Physical Portability**

Your VoIP Adapter or VoIP phone is specially coded with your VoIP phone number which allows you to take it with you when you travel, and instantly turn a phone anywhere in the world (with a high speed Internet connection) into your local phone.

If you are visiting Hong Kong for example, with a UK 0141 prefix phone number, then people in the UK dial your 0141 number and the networks finds you in Hong Kong and connects the call.

Number portability is also useful if you make a permanent physical move; you simply take your number with you to your new home or office. If you have a vacation or retirement home that you visit infrequently, VoIP allows you to have telephone service when you are there without having to pay a year-round bill.

### **VoIP Priority Alert**

Priority Alert allows you to make your phone ring with a different ring based on your pre-defined criteria. Use this service if you want to know when a specific person calls such as internal calls or clients.

### **VoIP Selective Call Forwarding**

Selective Call Forwarding allows you to forward specific calls matching your pre-defined criteria to a different phone number. Use this service to forward calls from your manager, a member of staff, or an important customer to your cell phone, alternate business phone, or home phone.



## **VoIP Call Groups**

Set up a group of callers to whom certain rules always apply. For example, you can block your calling I.D. to everyone you call except members of the Group, or use Selective Call Forward for the entire Group so that calls from them are always routed to your alternate phone number like a cell phone. This can be especially useful when communicating internally with other staff members.

## **VoIP Beyond Voicemail**

Some Providers offer you the ability to receive voicemail messages as an email attachment and play them back as a sound file through your computer via any of the popular media players. You can even forward the email with the attachment to another person and they can hear the call too, or save them to your PC's hard drive for future reference.

## **What is the future of VoIP?**

Make no mistake about it VoIP phone services is the emerging contender in the telecommunication world. It is a proven technology, can seamlessly integrate into many existing applications, does not require special equipment and can be very cost effective.

**If you need independent advice about VoIP, and how to implement it into your business, please email us at [info@businesscostconsultants.co.uk](mailto:info@businesscostconsultants.co.uk) or call us on +44 (0) 141 943 3344.**

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