Superfast Business Wales

Business Guide

Voice over Internet Protocol (VoIP)

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Voice over Internet Protocol (VoIP)

Voice over Internet Protocol, or VoIP, is a technology that allows calls to be made over a high-speed internet or broadband connection. It offers users a range of benefits, which have the ability to change the way we use the telephone.

The major reason businesses switch to VoIP is that it cuts costs dramatically. If you have an always-on Superfast Broadband connection to the internet, and the appropriate VoIP equipment, then calls between individuals using VoIP equipment – even international calls – are free. All you pay for is your internet connection.

From a simple telephony perspective, it's common for a user moving from a traditional ISDN (Integrated Services Digital Network) telephone system to VoIP to halve their running costs.

Mobility applications are also driving the shift to VoIP, enabling users to work with devices other than the traditional desk phone.

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Understand

What Does The Technology Do?

VoIP services typically fall into three categories: computer-based, telephone-based and mobile.

Computer-based
Calls are made via a computer which requires specific software to be installed, together with a headset or specialist VoIP handset to be plugged into the computer. PC-based services work well for people who make calls from their desks or travel with a Wi-Fi-enabled laptop when they're on the move. Such services require you to install softphone software to enable the making and receiving of calls via your computer.

Telephone-based
Calls are made over the internet by connecting a standard telephone handset to a VoIP-enabled router or VoIP adapter. This enables you to make and receive calls anytime-your computer doesn't need to be on. Telephone-based services suit those who are looking for an extra line for the office or regularly work between locations.

Mobile
So long as your business is connected to the internet using a fixed or Wi-Fi connection, you can make and receive calls from wherever. Most smartphones offer you the ability to use a single device to make

and receive VoIP calls on the move using wireless broadband, as well as giving real-time access to emails, calendar, contacts and documents.

Criticisms of VoIP

In the past VoIP has often been criticised for both poor voice quality and unreliability. However, services from reputable suppliers now offer the same quality as fixed line and can often be better than mobile reception. Meanwhile reliability has also increased and is now at business-grade levels.

> VoIP was often criticised because of quality and unreliability, but this is no longer the case.

Adopt

Getting Started

Any company will need some basics to start using VoIP. A dedicated broadband connection with a minimum broadband connection speed of 2 mbps download is recommended, though the faster the speed the better the performance. If your company is already using Superfast Broadband then you will certainly have more than adequate speeds for VoIP.

Telephone numbers

In the VoIP world it's possible to have a telephone number in any geographic region you like, regardless of where you are physically. Additionally you can have any kind of non-geographic number you like – 0800, 03, 0845, etc. All these numbers work exactly the same as ordinary numbers, and are issued to VoIP providers by Ofcom in the standard way.

Handset options and provisioning

There's a wide range of telephones available from £50 to £500, with features and functionality designed for everyone, from individual consumers to larger businesses. Additionally or alternatively, users can select a soft client that runs directly on a PC, or use VoIP apps to successfully connect smartphones and tablet devices. Phones can be bought from many places, but it's advisable to get them from the company that you will be using to provide your VoIP system. The service provider will ship them fully configured to the system, which means they will arrive ready to 'plug and play'. The company providing the VoIP system will also remotely manage your phones, removing concerns about updates and maintenance.

Selecting the right supplier

There are a number of suppliers offering a wide range of VoIP services targeted at smaller companies but it is important to assess the complete needs of the business in order to get it right. In the box below are some questions to ask to help ensure you find the right provider.

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Some key questions to ask prospective VoIP suppliers:

- What are the up-front costs and do I have to pay for the hardware?
- Are end-user licences required?
- What type of telephone number will I get for my VoIP service?
- Is there a dedicated helpdesk for business users?
- Is the service specifically designed for business use?
- Is it free to call colleagues over VoIP?
- What is the cost of making calls?
- Are capped rates offered?
- What happens if there is a problem and will there be a charge for maintenance?
- Is training needed to use the new system?

Exploit

What Business Benefits Can I Expect?

Cost savings

The most common reason for considering VoIP is the cost savings afforded by making calls over broadband. However, as well as being able to make free calls between VoIP users, many services also offer savings over standard fixed-line to local, national, international and mobile numbers.

Significant savings can be made on ISDN circuit and landline rentals. These are variable, but can quickly add up depending on the size of your business. In addition savings can also be made on the capital cost of a physical PBX, which can typically be £5,000 upwards.

VoIP also provides complete cost control on the amount spent each month, with packages that give unlimited calls to local and national numbers for a fixed monthly cost and capped rates to mobiles and international destinations.

Enhanced mobility

By downloading a softphone to the desktop, you and your staff have the ability to work from anywhere. Because VoIP calls are directed to a telephone number, not to a fixed location, the location is irrelevant to business partners and customers. And since incoming phone calls are automatically routed to where you are connected to the internet, you can make and receive calls using the same number wherever you are.

Enhanced business operations

As well as features such as three-way calling, call forwarding, voicemail and caller ID, VoIP services also offer a number of advanced features including:

- Video calls and video conferencing
- Integrated collaboration tools like instant messaging and presence.

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Improved business continuity

VoIP can be of significant value in your business continuity and disaster recovery planning since, as we've already discussed, it allows you to set up your phones anywhere with an internet connection. So, if your premises suffer an unexpected disaster, you can ship pre-configured phones to a new location, plug them in and they will work exactly as they did in the original office.

Top Tips

Review your broadband access before moving forward
Ensure your broadband access speeds are sufficiently high to support the use of VoIP.

Consider the type of VoIP service you require
Decide whether the computer-based, telephone-based or mobile approach (or a combination) is best for your needs.

Decide upon the most appropriate telephone number
Does your current telephone number meet your needs or would you, for example, benefit from having an 0800 number?

Get a clear view of all associated costs
Ensure that you understand all of the up-front costs, together with any ongoing charges such as licencing and connectivity costs that may be levied.

Understand all benefits when working out a ROI
Get a clear understanding of all potential benefits, including intangible ones such as a more professional image for customers or greater staff mobility.

Speak to more than one service provider
There are a wide range of suppliers out there with differing specialisms and strengths so ensure you speak to a cross section.

Ensure you ask prospective service providers the right questions
Use the questions contained in this guide in order to obtain the right information from prospective providers.

Test your preferred service provider before committing
Speak to other customers and call the provider's support line in order to get a good feel for the level and quality of service they provide.

Don't choose separate providers for your VoIP phones, SIP trunks and broadband
If possible, go with a single supplier in order to ensure that phones are shipped fully configured and you are able to benefit from remote support services and real time monitoring services.

Avoid committing to long contracts
The technology and the marketplace are constantly changing so avoid getting tied into long term commitments.

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NEXT STEPS

1. **Register to attend a fully-funded Business Development Workshop.**
    www.business.wales.gov.uk/superfastbusinesswales/events

2. **Make an appointment to see a Business Advisor who will help you create a personal action plan to grow your business.**
    www.business.wales.gov.uk/contact-us

For further information on VoIP take a look at:

See how other businesses in Wales have exploited Superfast Broadband
www.business.wales.gov.uk/superfastbusinesswales/superfast-success-stories

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Find out how much your business could save with our
www.business.wales.gov.uk/superfastbusinesswales/savings-calculator

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