



*Saffwood*  
Communications



# A Complete Guide To: VOIP Phone Solutions, Broadband & Must Know Business Technology

**About This Guide.** This guide aims to give you the key facts about our hosted VOIP solution as well as impartial, factual information about what questions you should be asking any VOIP provider. We detail various different types of broadband connection, their speeds and ways to know if you can access them.

Finally we have featured 4 great pieces of business technology that we think any business should be aware of.

By reading this document, you will understand the benefits, and potential considerations of moving to or setting up a VOIP solution. Our technology section is aimed at making your business life easier. We hope you find this guide useful.

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## About Saffwood Communications

Saffwood Communications was established to help businesses improve the way they work and at the same time, cut their costs. We have over 50 collectively years of experience from helping small businesses save money through to activating large contact centres.



Based in Warrington & Manchester, Saffwood now provides a host of business services including VOIP phone solutions for companies with anything from 1 – 100 phones. For smaller businesses we offer our hosted telephony service which provides a low cost, reliable phone service to give SME's a competitive edge.

Our call centre service provides leading dialler and CRM integration software for outbound sales and marketing campaigns. Saffwood specialises in the provision of office and call centre setups including all telephony and network infrastructure.

We believe in delivering transparent, professional services at cost effective prices. Our clients range from family run companies to large blue chip businesses. And all are treated with equal service.

You can review our client testimonials and case studies by visiting us online at [www.saffwood.co.uk](http://www.saffwood.co.uk)

You can also call us on 0845 241 1008 or email [info@saffwood.co.uk](mailto:info@saffwood.co.uk)

Thank you.



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Communications  
- Businesses Better Connected -

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## Business Phone Solutions

### Large Enterprise Communications for a Small Business Price

- Reduce Line Rental
- 100% Free Itemised Bill
- Free Phone Features
- Never Miss A Call Service
- Free Voicemail
- Pickup & Transfer To Any Number
- Keep Your Existing Telephone Number
- Music On Hold
- Follow Me Mobile Caller
- IVR Welcome Message

In any company, good communication with clients, suppliers and fellow staff is critical. But most small businesses can't afford to buy or maintain expensive premise based telephone systems. Saffwood has the perfect business VOIP communications solution. Our hosted telephony service is very cost effective and it has all the features of a high end corporate system. With our hosted telephony business phone service, you're not getting a small PBX with limited capabilities. Instead, you're getting a feature-rich high-end PBX at a very low cost. Here are some of the things you can do with our hosted service:



**Get a professional presence.** You can greet your callers with a custom, professional business greeting every time they call. They'll know your company is a professional business. Advanced features like IVR and queuing will handle the calls efficiently, ensuring minimum wait times and correct routing. Distribute your workforce. With a hosted telephony system, you can route incoming calls to any type of phone, anywhere. This lets your employees work from the office, from home, work sites, or on the road. You can even move to a completely "virtual" office, eliminating the expense of office rent.



**Reduce costs.** With no hardware or software to buy or maintain, you save cost in many ways. There is no big capital outlay for a new system. You don't have to hire and train someone to do phone support. You get all the high-end features you need without paying extra. And you don't need to hire a receptionist to answer incoming calls. Our small business phone system does it for you.



# How & When Would I Benefit From VOIP?

We believe that any business of any size can benefit from VOIP given the right needs and circumstances. However there are critical times when a VOIP phone solution will be of huge support.

## Moving Office



If you are planning on moving offices, then planning your telephony migration, no matter how big or small, must be paramount. We recommend an 8 week lead time depending on size before you plan to move. One of the most frustrating and upsetting prospects can be the **loss of your business phone number**. If you are moving from one telephone exchange to another (typically outside your current postcode), you will not be able to take your existing phone number with you.

If your customers know your number, then this reality can be a challenging one. There are ways to avoid this with standard analogue solutions such as caller redirect and call forwarding, however the costs can be high and the commitment long term.

The alternative is to **simply port your phone number on the a VOIP network**. Because VOIP does not recognise geographical boundaries (unlike analogue) – when you move offices, your VOIP phone/s can be ready and waiting to take calls with your existing number when you arrive at your new office.

## Upgrading



Eventually your current phone system will need updating. At this stage you should review the usability, reliability, scalability and cost of your current arrangement. You can then compare the benefits of using your current supplier to upgrade your system vs. that of an Saffwood VOIP system. You independently compare [different phone systems at our site](#).



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## How & When Would I Benefit From VOIP?

### New Business



Setting up a new business is exciting and stressful. We know because we help companies do just that. Choosing the right phone or phone system is vital to ensure that your customers and staff can communicate effectively and easily.

Whether you need a single handset to make or receive calls, or a far larger setup for teams to pickup, transfer and manage large inbound and

outbound communication, choosing a service that grows or shrinks with your needs is important. We'll help you customise a simple yet effective solution based on the size of your business now, and the size you want it to be in the future.

The setup timescales and costs of a VOIP hosted solution are far less than a peer service such as ISDN (see page 7), and more practical than analogue services.

### Additional Line



If you are thinking of taking on an additional line, then VOIP offers several key benefits. Firstly there is no additional wall socket required as your VOIP phone will run off your internet connection. Secondly, a new analogue line would mean a new contract of 24 or 36 months, where as VOIP contracts are far less.

The provisioning and installation times for VOIP is far less too. A typical install of an analogue line is 4 weeks. ISDN is 8 weeks. Your new VOIP connection can be ready to use in 48 hours or less\*

\*Timescale is subject to all agreements being returned and equipment compatibility



## Is VOIP Better Than ISDN?

Integrated **S**ervices **D**igital **N**etwork is slowly being phased out to VOIP. As broadband connections become better as standard, and more varied in service, VOIP is set to take over ISDN for businesses by 2020.

Whether VOIP is better than ISDN ultimately relates to the reliability of your broadband connection. Modern broadband in the vast majority of areas is more than capable of bearing up to 6 concurrent users. For more than 6 users, ADSL2+ or above is recommended. One item is clear, VOIP is certainly more cost effective, scalable and portable than ISDN. A comparison of costs and service levels are detailed below. Please note these are industry standard figures, and actual figures from supplier to supply may vary.

What	ISDN2	ISDN30	VOIP
Install Timescales	8 Weeks	8 Weeks	4 Weeks
Minimum Extensions	2	8	No Min
Maximum Extensions	8	30	No Max
ISDN Box Cost	£250 - £500	£500 - £1,500	N/A
PBX	Around £300	Around £300	N/A
Install Costs	£250 Per 2 Extensions	£250 Per 2 Extensions	N/A
Handset Cost	£70 - £120	£70 - £120	£70 - £120
UK Wide Number Porting	No	No	Yes
Typical Contract	36 – 60 Months	36 – 60 Months	12 Months
Call Recording Included	No	No	Yes
New Router/s Required	No	No	Yes



## Great Features – Page 1 of 3



**Call Forward** - Be sure not to miss important calls. Forward calls to another extension or even to your mobile phone.

*free*



**Call Pickup** - Call pickup gives you the ability to pick up calls ringing at other extensions.

*free*



**Call Parking** - Calls can be parked in a private lot and picked up later according to the parking lot preferences.



**Call Transfers** - Calls can be transferred between system extensions or even to public phone numbers.

*free*



**Call recording** - Call recording can be on-demand or always on and comes with a searchable database.



**Voicemail** - answers calls after a certain amount of time and records the caller's message. Recorded messages can be listened while out of office or can be sent by email.

*free*



**Do not disturb** - When you are busy, make sure that nobody will disturb you. This feature can be enabled and disabled from the phone terminal.

*free*



**Hunt Groups** - Allocate calls to your staff on a longest idle, round robin, sequential, random or top down basis.

*free*



**Ring All** - When an extension is called, this triggers other extensions to ring. The first extension answering the call gets the connection.

*free*



**Presence** - Allows extensions to monitor the status of other extensions. Phones can be configured to display on multi colour LED buttons.



**Follow me** - The extension owner's mobile phone, home phone and office phone can ring in the same time as the extension is called. The caller is connected with the phone that first answers.

*free*



**Incoming call rules** - Improves privacy protection, automates tasks, and increases user's productivity. Filter incoming calls based on CallerID and time of call, using rules that can perform a set of predefined actions.

*free*





## Great Features – Page 2 of 3



**SIP Trunking** - SIP trunking capabilities on extension level. Contact-pro hosted telephony end-users can connect their PBX to Contact-pro hosted telephony server.



**Fax Inbound and Outbound** - Send and receive faxes without any problem even on poor quality connections. The fully-featured fax server can receive and send faxes over the email or using the web management interface.



**Text to Speech** - IVRs are easier to build with the high quality text2speech technology embedded in Contact-pro. Converting text to natural speech has never been easier, even if the message is in a foreign language.



**Conference centre** - Businesses can schedule and have multiple conferences on their conference number. It supports one-time and recurring conferences. Conference participants can authenticate when they connect to the conference server.



**Intercom and paging** - The hosted telephony Intercom and Paging features are highly customizable, allowing an extension to broadcast messages to groups or to particular extensions.



**IVR (auto attendant)** - Create complex auto-attendant voice menus with multiple contexts, options and actions. An indispensable business tool that can replace a secretary or even substantially reduce costs and increase customer satisfaction.



**Advanced IVR** - Build complex, yet simple to use IVRs with a wide range of predefined actions. Text2speech, IVR schema builder and analyzer, IVR test mode, IVR cloning, to name just a few of the features that can help your business develop high quality IVRs in no time.



**Call Queues** - Call queues can answer multiple calls and distribute them to agents using sophisticated algorithms. Used by sales, customer service or support, they maximize resources utilization, improve customer satisfaction, and even guarantee SLA terms.



## Great Features – Page 3 of 3



**Instant Messaging** - Fully-featured XMPP (Jabber) server integrated with the PBX engine. Wide range of Open Source, free Jabber clients available. The server supports presence, virtual cards, file transfers, and collaboration.



**DID number management** - Manage public phone numbers allocations on clients and extensions easily. Export and import DID's in no time using an interface designed to automate as much as logically possible.



**Music on hold management** - The music on hold can be responsible for the customer mood after several minutes of waiting on the phone. Music on hold playlists can be easily organized and customized using the management interface.

*free*



**Outlook Integration** - Contact-pro hosted telephony integration with Microsoft Outlook provides the user with click to call and screen pop of contact details.



**Pay as you grow.** Small businesses often start with a small PBX and have to buy new systems as they grow - or else they pay too much up-front, trying to make sure their system will be big enough to handle future growth. Our hosted telephony phone system lets you start as small as you want and grow to unlimited size, while only paying for what you need.

**Never ring busy.** With a traditional PBX you often have to buy extra phone lines just to keep callers from hearing a busy signal. Virtual PBX customers just make sure every employee has a working phone (cellular, land line, or VoIP) and never worry about ringing busy. We've got a huge number of incoming lines, and we automatically allocate more lines to your business whenever you need them.



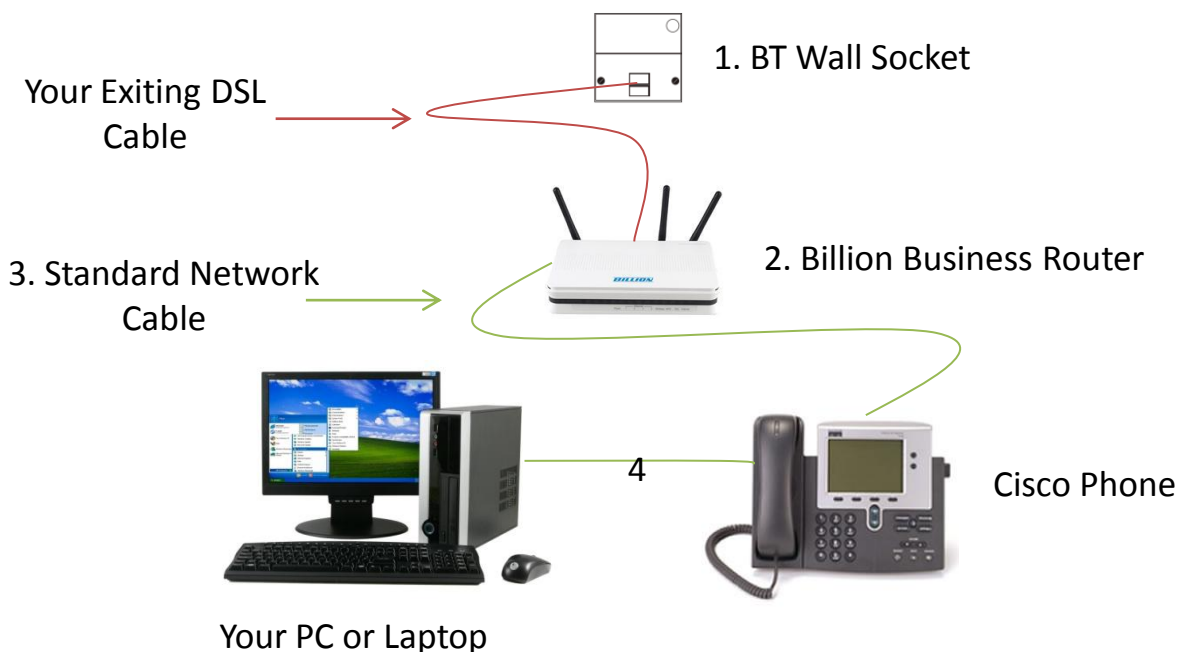
**Conference without hassles.** Get employees, clients, and/or suppliers together without messy scheduling or a complex reservation system. Every Saffwood hosted telephony business voip service includes integrated, hassle-free conferencing. There are no PIN numbers to remember, and no third parties to deal with.



## Simple Setup Guide

Making sure our systems are simple and straight forwards is the key to our success. 93% of our customers do not need us to install the system. But if you do need us, then we are here for you with full customer care, technical support and onsite setup if required.

To see how easy it is to setup your phone, or phone system, just look at the diagram below



1. Simply unplug your current DSL cable which runs from the BT socket to your current router and plug this into the Billion Business Router (2). The router will already be pre-configured with your network settings so there's no setup.

Next you plug a standard network cable from the router into your new Cisco IP Phone (3). To keep things nice and neat, you can then run a network cable (provided with the phone) from the back of the phone into your PC giving it an internet connection (4).

You can read some of our frequently asked questions about setup on page 12



### Question 1

Why do I need a new router?

### Answer

Most routers, especially those provided by your Internet Service Provider (ISP) have low memory space. This means that every 2 minutes the router clears any data stored in it, releases your IP address (the unique address for your internet connection) then re-establishes it. Normally this does not effect browsing or downloading as the process is extremely quick. However for VOIP solutions, you do not want this to occur. Our Billion Business Routers do not release your IP address meaning a strong, more stable internet connection.



### Question 2

Do I need to buy a specific phone, or buy the phone from you?

### Answer

The phone does need to be in the Cisco 7900-series. You don't need to buy the phones from Saffwood, however we pre-configure the phones to your needs free of charge before sending them out. This means that we can ensure the quality and that the correct configuration has taken place.

### Question 3

Remember you can download a softphone on your PC free of charge

Can I connect my phone wirelessly?

### Answer

No. The IP phone requires a LAN (Local Area Network) connection with a standard network (Ethernet) cable. If your phones are stationed away from your router, there are various options for networking these in such as "Ethernet Wall Sockets" which run your broadband signal through your electric mains. Call us to discuss these options if required.

### Question 4

Will getting a new router change any of my network settings or wireless passwords?

### Answer

No.



# FAQs



## Question 5

What if I have lot's of phones to connect in my system, do I have to buy several routers?

### Answer

No. If you planning to install more than 8 phones, we'll supply you with a switch. This is a splitter that you plug your internet cable into from the router. Any cables that you then plug into the switch will get an internet signal.



## Question 6

Can you set my system up for me?

### Answer

Yes. For smaller system setup (3 handsets or less) we find that people can do this by themselves or with minimal over the phone support. For larger setups, we can attend your site to setup all your equipment for you.



## Question 7

Do you charge for setup?

### Answer

For over the phone support there is not charge. If you would like us to attend your site to setup a system, then charges will apply.

## Question 8

What effects the setup cost?

### Answer

A number of factors such as the number of handsets, whether the cables are going to simply run direct to the phones, or whether you want an engineer to run these under the floor or through skirting panels.





# Is My Broadband Good Enough?

Before committing to any VOIP system, there are a number of factors to consider.

- What is the current upload, download and latency of my broadband?
- How many users should I have on a single broadband line?
- What is the consistency of my connection like?
- What broadband options are available to me, and can I get a better connection?



None of these questions should put you off exploring a VOIP solution, but it is important to review these considerations.

## • Upload, Download & Latency

The first port of call is an independent speed testing site such as [MyBusinessSaver.com/speedtest](https://www.mybusinesssaver.com/speedtest). From this site you can measure your download speed (how quickly you can download information *from* a website) , upload speed (how quickly you can upload information *to* a website) and your latency. Latency is the time from when you click something on a webpage, to how quickly the webpage realises you have made a request (also know as “lag time”).

Working out how many extensions you can run from this test is quite simple. When you make a call from a VOIP phone, you use 100K of upload and download data at the same time. There are 1,000K to a megabyte (MB). So if your broadband test tells you that you have a download of 5MB (5,000K) and an upload of 0.8MB (800K) – then you can run up to 8 extensions off one broadband line (always work off the lowest figure)

Providing your latency is around 50ms (milliseconds) or less, you’re fine. If it’s more, contact us and we can do a live phone test for you and look for alternative broadband connections.

If you need a VOIP system and your current speeds are too low, then there are still some options available. There are many different types of broadband connection available. Whether they are available in your area is a question you will need to explore with us. Just call us an we can check based on your postcode which of the following could be available.

## • Consistency

This is the most important element to a VOIP system. Consistency relates to the reliability of your internet connection. With modern broadband, the consistency of the connection is typically excellent. If you experience regular loss of LAN signal, then we strongly advise that you call us to discuss VOIP before committing yourself to this



# Is My Broadband Good Enough?

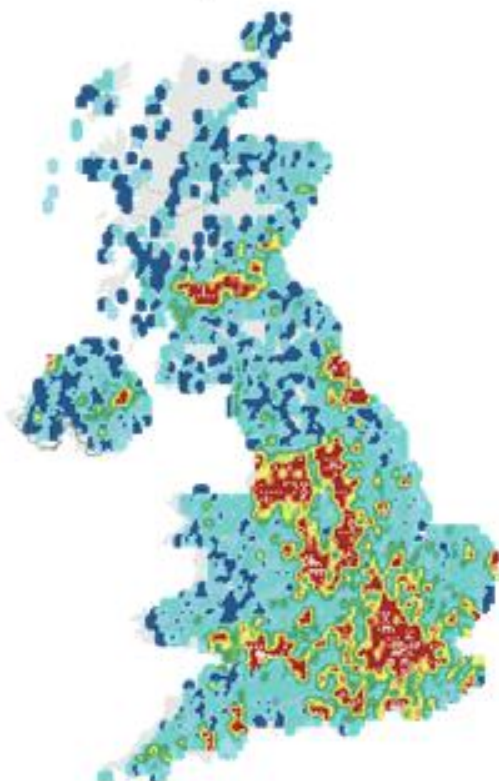
- **What broadband options are available to me, and can I get a better connection?**

There are two answers to this question. The first addresses whether you can get a better connection. The second addresses whether you can get a better speed.

There are a multitude of broadband suppliers, carriers and services available to the vast majority of the UK. On page 16 we detail all major carriers and services as well as their benefits. We recommend you call us regarding prices as these vary from area to area.



## Speed



Many broadband services will improve your consistency, but not necessarily your speed (LLU platform based connections). Where as some connections such as ADSL2+ fibre or EFM will improve both.

To check what is available to you, you will want to contact an aggregate supplier (someone who deals with a variety of suppliers). They will be able to check what connections are available in your area, as well as provide detailed information about the benefits and costs.

On the next page we detail the different types of broadband and their benefits to business customers. We have preferred agreements with all major broadband suppliers and would be happy to look at getting you a better rate and improved service

# 0845 241 1008

## Types Of Broadband Connection

You can contact us at any time for a free, impartial check on what broadband services are in your area.



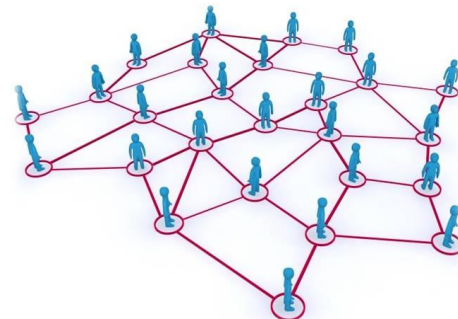
**ADSL** – this is standard broadband available to 94% of the UK. This connection means you share your broadband signal with up to 50 other users at your exchange (the green boxes on the street). When your broadband slows down around peak times (17:30), this is because more people on your connection are logging in and siphoning off more of the available bandwidth. This issue is called contention. With standard ADSL, the upload speed is typically capped at 1MB – 1.5MB

**ADSL2+** – This is a broadband service delivered over the BE network and is available to approximately 68% of the UK. ADSL2+ has a lower contention ratio to ADSL, only 20/1 vs. 50/1 with ADSL. This means that you share your available bandwidth with less people giving you a faster, more stable connection. With ADSL2+, the upload speed is capped at a higher 2.5MB in the case of Annex M products.



**SDSL** – SDSL is typically only available in modernised network areas such as town or city centres. SDSL has a 10/1 contention ratio with a 2.5MB upload and download symmetrical connection. A symmetrical connection means that if someone uploads a file at the same time someone downloads a file, one does not effect the other. By having a far lower contention ratio, you also give yourself a more stable connection.

**Alternative Networks** – All but two major supplier of internet connectivity in the UK piggyback the BT network. That is to say they are wholesaling BT products – typically at a cheaper price. However Talk Talk Business and Virgin Media Business are network providers in their own right. Both have spend millions laying their own cables in the ground. As a result of this, they can offer much faster speeds in many areas at cheaper prices than BT. Currently Virgin covers 48% of the UK. Talk Talk Business covers 86% of the UK. If you would like to see if either of these suppliers are in your area and what speeds they would give you, call us on 0845 241 1008



**Bonded Copper** – A very miss-sold product in the mind of Saffwood. Copper cables are what your phone line has inside for your broadband signal to travel in on. Bonding copper is where two cables are twined together. Many suppliers sell this on the basis that if each cable can carry 5MB, then two together will give you a 10MB speed. Wrong. They will give you two 5MB connections which work together. So you if you want to download two 5MB files from the internet, this will work very well as each file will travel down each line at the same time, and you will get these quicker. If you want to download a 10MB file, it must go down 1 line, therefore taking twice the time. Bonded copper can be a great solution for load balancing for data transfers, however for VOIP there are better solutions which cost less.



**FTTC**– Fibre To The Cabinet (more commonly known as fibre optic broadband). This is a very popular, but as yet not widely available service. Fibre Optic broadband can carry up to 80MB download speeds and 40MB upload speeds with latency of less than 10ms. Only 30% of the UK can currently access fibre optics, and this offers a very stable, 20/1 connection ratio with high speeds each way. One item to watch for is that many supplier are now capping the speed you can get and 40MB down and 10MB up (40/10 profiling) or 80MB down and 20MB up (80/20 profiling).



## DEDICATED INTERNET ACCESS

**EFM**– Ethernet First Mile, also know as a Dedicated or Lease Line is a high quality broadband connection with a 1/1 contention. This means no one but you can draw on any bandwidth. EFM lines do carry some fairly hefty prices, from around £190 a month at entry level. There is also a standard lead time of 90 days for installations (it can be less). Additional work can also be required to physically lay the lines in the road which can be chargeable and again bear large charges.





## Some Great Business Tech'

Okay, firstly we're not claiming that this technology is brand new – some of it has actually been around for a while. But in some cases, it's not widely known of. Secondly, we're not claiming we invented it. If we did, we'd be rich – unfortunately we're not. If you would like further information on any of the below, please call us on 0845 241 1008



We mentioned earlier in this paper that copper wire is what is inside your phone cable. Your phone cable is what your broadband signal comes in on. Copper cable is also inside all your mains electrical wiring. You may see where we are going...

Just plug a standard network cable from your router into the bottom of the Ethernet plug, then the Ethernet plug into a mains socket. Now plug another Ethernet plug in to the mains elsewhere in your business, and any network cable you plug into it will get an internet connection. We think it's quite cool.

### Ethernet Sockets

It's a great solution for when you need to establish a LAN connection around an office or home without trailing wires across the floor. It can also avoid costly engineering work too. Sockets start at £35 per pair from most PC stores (Curries / PC World). For serviced buildings, you need to ensure that the mains supply for one socket runs to another – ask your building maintainer



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### Globe Surfer



This is very easy to understand and use. Imagine a normal internet router that you put a mobile sim card in. You may ask yourself "Isn't this just a big dongle?" – Well no. You can't take your normal sim card from your phone and plug it into a dongle. You can with this meaning you save money.

Once the sim is in, you can use a standard network cable to plug this into your PC or laptop to get internet access as normal (it also means multiple people can use the same sim). This is great for business people on the move, or businesses in rural areas where normal broadband connection are a little poor. We advise you check with your mobile provider about data usage first. Call us for a free quote, advice or support 0845 241 1008





## Some Great Business Tech'

### Virtual Desktops



Virtual desktops & networks. These are great for business people on the move, home workers or offices that don't want the cost of setting up their own servers or networks

With a virtual network, you login to a normal Windows desktop via your internet connection. From there you can share files and folders, browse the internet and access webmail. This can be done from anywhere in the world, from any PC in the world.

This gives the added security that any files or folders cannot be lost if you lose or damage your local laptop or PC. Not only that, but all files and folders are backup up every 24 hours. Price for virtual desktops start at around £19.99 per user per month. Call us for details.

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### Premicel

This is a great bit of kit given the right circumstances. This phone accepts a sim card (exactly the same as what you would put in your mobile phone).

It then acts like a normal office or desk phone (accept that you can send text messages from it too).

Saffwood can offer mobile sims which give:

- Unlimited local and national calls
- Unlimited cross network mobile calls
- Unlimited texts
- For just £35 per month.



This means you now have an office phone which can make unlimited anytime calls for a fixed price of only £35 per month. Now there are some points to consider: when calling out, people will see your caller ID as a mobile number. This cannot be changed or hidden. Customer calling your phone will pay a mobile connection fee which they may not like.

The only way round this (for inbound calls) is to get an 0845 number and point it at the mobile number.

If you have any more questions on any of the featured items, please do feel free to call.