



How to get the most out of BT Cloud Voice

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There's a number of things you need to think about to get the best from your Cloud Voice and Cloud Voice SIP service. In this guide we'll give you some handy hints to make sure you get the best possible quality on all of your Cloud Voice calls.

Firstly, you need to make sure your data network and equipment meet and support the specifications that Cloud Voice needs. This could include reconfiguring your data network and upgrading your software - like LAN hardware or software and your internet access.

Thanks for choosing BT Cloud Voice and Cloud Voice SIP

You've already made a great choice.

1. With us you'll get more value out of your internet connection by using it for calls as well. Our Cloud Voice service also includes free calls between internal users and an unlimited UK calls option.
2. You can easily manage your account online. Access all the company's communications through the online portal from wherever you are to manage any changes.
3. It works for businesses of all sizes because you can connect different sites, new offices and remote workers on one cloud-based system.

Access to the internet

An important factor to help you get good quality calls is having the right internet access to support your voice and data needs.

Unsurprisingly we'd always recommend [getting your internet from us](#). And here's some good reasons why.

- For starters, everything you need you can get directly from us, making the whole process easy. We'll check your requirements and suggest the most suitable internet connection for you. All the equipment and the internet connections we supply are designed to work together to give you the highest quality of service.
- We've enhanced our network to make sure your voice calls take priority. By managing your access, we can be certain that we're providing the best possible business grade service for voice calls.
- We take security very seriously. All our Voice over IP solutions come with integrated security measures and we proactively monitor the services we provide to customers 24/7/365. We can provide the highest levels of security as all our voice traffic traverses a single core network that we own.
- With critical voice applications, every millisecond counts and lag can be a problem. Our service level agreement includes guarantees around network latency so you can have confidence in the service. This includes guarantees for UK network performance of less than 20ms (measured UK access node to access node).

- You'll get a Business Smart Hub with our broadband. Clever web traffic prioritisation in the hub boosts the strength of your voice calls over the internet. So your business can communicate more clearly. Our Smart Scan technology monitors your connection and makes sure you rely on the most efficient signal. You'll get great wi-fi coverage and speed, as well as a business-grade firewall.
- With BTnet, you don't share your bandwidth with anyone else. So you get exceptional speeds, with ultra-low latency – backed up by our market-leading 100% target availability service level agreement. You can rely on your internet connection because it's dedicated to you.
- We'll give you peace of mind and simplicity. With us providing your access, you'll only have one supplier to deal with for all of your voice and data needs.

If you'd like to find out more about the best solution for your business, please visit our [website](#).

How to use Cloud Voice without our internet access

Our Cloud Voice service is designed to work over broadband, fibre broadband, leased lines (that's a dedicated internet connection), and via a softphone application that can work over mobile. It's not intended to be supported over any other type of access.

You need to make sure you have the right access service with enough bandwidth to support the voice services and data you use. You'll need the right service level requirements and you should make sure that the access service, routers, firewalls and set up are compatible with the Cloud Voice and Cloud Voice SIP-T service.

To make sure you get the highest quality of voice service possible there are several important factors to know about when you're not using an internet connection from us.

1. How much bandwidth can you get?

Bandwidth is a measure of how much data your connection can transfer at one time. A lack of bandwidth can negatively affect the quality of your calls. Here's a few things you should know.

- The more computers and other devices you have connected to the internet, the less bandwidth you'll have available
- Streaming and downloading both use lots of bandwidth which could affect the quality of the voice service
- As a rule of thumb, we recommend that you have at least 120 kbps upload speed up for each call you're likely to make. So, for example, if you make two calls at the same time you'll need 240 kbps (extra to what you need for your data traffic). It's also recommended to use no more than 80% of the bandwidth for your voice and data to maintain the quality of both.

We've got a Network Assessment tool to help you assess whether you'll have enough bandwidth to support your business. It'll simulate a call from your computer to the Cloud Voice service, providing key quality metrics on the internet connection, including bandwidth and the number of concurrent calls that can be supported.

2. Your router

You'll often get a router from your internet supplier, or you might have chosen to buy your own. It performs the IP routing for voice and data, and can support other functions too. There's a few critical settings that need to be in place for Cloud Voice to work through a router that isn't from BT.

- Voice prioritisation – giving priority to voice over your data traffic to make sure you get the best quality calls.
- SIP ALG – this setting on your router needs to be turned off so it can support more than one user at a time. The connectivity check will let you know if this setting is on or off.

3. PBX – your telephone system

Our Cloud Voice SIP-T provides Voice over IP (VoIP) directly to an approved IP PBX or a traditional ISDN PBX using our SIP gateway. You'll need to make sure your PBX will work with our solution.

4. Firewalls and LAN

You need to make sure that your Cloud Voice service connects to our network across your internal data network so the calls you make and receive are always high quality.

Here's some key points to remember.

- Any problems with your internal network could impact the quality of the voice service, so make sure you sort them out.
- As there are so many different types of firewalls, you should contact your firewall provider to find out how to configure yours to work best with Cloud Voice.
- Depending on the type of firewall you've got, you may not need to open any ports. If your firewall is running 'inside-to-outside' rules, then you'll need to open the ports. There shouldn't be any reason to open ports that are inbound on the firewall.
- If you want to use **address translation** you'll need access to the protocols and ports detailed in the Firewall and LAN guide.
 - [BT Cloud Voice – Firewall and LAN guide](#)
 - [BT Cloud Voice SIP-T – Firewall and LAN guide](#)

All the information in this guide is general guidance. We recommend you contact the company who handle your firewall and switch. Or an IT consultant for anything to do with configuring your LAN or firewall. Changes to your firewall need to be made before we install Cloud Voice and Cloud Voice SIP otherwise it'll impact your service. If an engineer is installing it, it's a good idea to have your LAN/firewall provider available on the phone for any issues.

5. Number porting

We can usually port your phone numbers to Cloud Voice. But if the number is on the PSTN line that your internet access is running over, then we are not be able to. Porting this number would stop your PSTN line and broadband service. Before you order Cloud Voice or Cloud Voice SIP:

- you could move the access service to a different PSTN line to free up the number for porting. This'll need to happen before Cloud Voice is installed as when the number is ported the line will stop working.
- or you could put a call divert on the number to forward calls to your Cloud Voice service.

You might be charged more if you need to go with one of these options and you'd need to manage it with your internet provider.

Or ask us about our internet services as this would enable your numbers to be ported.

Here's what you need to do to get ready for Cloud Voice

Before we set up your service, we'll give you a call to talk about your order and confirm your requirements.

You're responsible for all the things we've talked about in this guide - including internet access, routers, all equipment (except those being installed by our BT engineer), software and firewalls are connected, and set up to work with the Cloud Voice service. That includes all the consents, permissions and authorisations we need to provide the services for you. They all need to be up and running before we install anything.

With Cloud Voice you have the choice to set up the service yourself or have one of our engineers do it for you. If you choose not to have an engineer, it's your responsibility to install and connect the phones to your network. For Cloud Voice SIPT an engineer will always set the service up for you. Our engineer will not configure any of your equipment and this non-BT business access equipment is your responsibility. Our engineers will then, with your permission, connect the Cloud Voice or Cloud Voice SIPT equipment to your existing network service.

You'll need to prepare and maintain the site to make sure you have suitable and safe operational environment. Remember that for Cloud Voice SIP, the access routers need to be located within two meters of where you want your phone system to be installed or have sufficiently structured cabling in place to connect the PBX to your LAN infrastructure.

You're responsible for monitoring and maintaining the equipment you use for your Cloud Voice service. You need to make sure it's protected against breaches of security, it's technically compatible with the service and won't harm our network or any of our suppliers' network or equipment.

Full details of our terms and conditions can be found [here](#).

When you're up and running

There's lots of help and advice online, including video tutorials, user guides and FAQs. Please visit [Cloud Voice Help & Support](#). We also have a range of training packages – just ask us if you would like more details.

If we don't provide your access, any changes you or your access provider make may impact your Cloud Voice service. If you choose to change your access provider please make sure the new access is suitable and working before you switch to it and stop your current service. Your Cloud Voice service needs an active internet access service to continue to work.

Before you make any changes to your access, router or firewall, please refer back to this best practice guide and make sure everything's set up and configured correctly to support Cloud Voice.

Get in touch with us if you want to add users, or make other changes that use bandwidth, so we can check that you still have the best internet connection for your voice and data needs.

Please let us know if you change your access, for example from fibre broadband to leased line. It's also essential you let us know if you plan to move premises. It is critical for emergency service support that we have your correct address.

If you have any problems with call quality, please check that your non-BT access services (including routers, firewalls and LAN) are running correctly before contacting us. If they're not working correctly, they could be impacting your voice service and we won't be able to help fix the problem.

If you still have a problem once you've confirmed all your equipment is working, then please contact us and we'll fix the problem as quickly as we can.

If you report a fault to us and we find your equipment (that's not part of our network and which is owned or controlled by you) is causing it, then we might have to charge you.

[Want to know more? Please visit Cloud Voice Help & Support.](#)

The information in this document is designed to help you. We recommend that you discuss anything associated with your communications network, including your LAN infrastructure (wiring and components), and LAN and firewall configuration, with the person who looks after your firewall or an IT consultant. This is particularly important in connection with any problems that impact on your network security or local IT policies. Also, any customer data that you keep (for example, the downloading and storing Cloud Voice call recordings) is your responsibility.

Offices worldwide

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