

Difference between VoLTE and VoIP

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Nowadays, there are many ways to make phone calls. Sure, you can go the traditional route or choose alternative methods, like VoIP and VoLTE. These two communication protocols may work well for you, but they are not one and the same. There are key differences between VoIP and VoLTE that you need to consider before trying them out.

Quick comparison between VoIP and VoLTE

Before diving into the specifics of VoIP and VoLTE, let's quickly compare the key points to get an overview of how they work.

	VoIP	VoLTE
Communication Methods	WIFI	4G LTE
Speed	Depends on WiFi connection quality.	Depends on 4G LTE connection quality.
Network coverage	Only when connected to a WiFi network.	Go anywhere, as long as there is 4G LTE.
Possibility	Available on smartphones, computers, tablets and smartwatches.	Available only on smartphones and smartwatches.
Communication	WhatsApp, Discord, Zoom, Vonage, RingCentral, Teamspeak, etc.	No application required. Sourced from supported device operating system.
International Calling	Yes - at no extra charge.	Yes - there are additional fees.

The basics have been covered. Next, let's explore VoIP and VoLTE in more depth.

What is VoIP?



VoIP (short for Voice over Internet Protocol) is a method of communication that uses WiFi instead of cell tower signals. Your regular phone calls require the Public Switched Telephone Network (PSTN), which facilitates landline and cell phone calls. On the other hand, VoIP can use the Internet independently.

Many of us now use the Internet to make voice calls. Instagram, Messenger, and Snapchat all have online calling options, but VoIP isn't quite the same. You can use VoIP with your phone number, while most online calling tools require you to log in and create an account without a contact number.

Using an Internet connection, VoIP delivers your voice to the receiving phone using data packets.

Anyone can use VoIP, but it is most popular with businesses looking for a more affordable way to make many daily phone calls. Of course, running a WiFi network costs money, but calling a wired phone will usually be more expensive. In general, businesses can save more by using VoIP. According to Vonage, a business can save an average of 50 to 70 percent on phone fees and 40 percent on calling fees when switching to VoIP, which can help cut overall costs.

Using VoIP also eliminates the need to use multiple phone lines, which can be a logistical nightmare depending on your office environment. With VoIP, just one line can connect multiple phones, making installation much easier. However, if you are looking to use VoIP on your smartphone, it can also be connected to a smartwatch for more convenient use on the go.

If you are using VoIP as an individual, you will also benefit. Some VoIP services are completely free, meaning you can cut down on your monthly calling minutes and avoid going over your limit.

But VoIP is not without its drawbacks. For example, if your WiFi network fails or there's a problem with your broadband provider, you won't be able to make VoIP calls until everything is working again.

Furthermore, because VoIP relies on an Internet connection, it is vulnerable to hackers. If your VoIP network is not secure, cybercriminals can access phone conversations and steal sensitive data. This could put employees or customers at risk and could damage the company's reputation if the hack becomes public.

In addition to the risk of hacking, companies that rely on VoIP and VoIP providers may also face denial of service attacks. In 2021, VoIP provider VoIP.ms suffered a denial of service attack, leaving its network offline and customers unable to make VoIP calls. As VoIP becomes more and more popular among individuals or businesses, the opportunities for them to exploit also increase.

What is VoLTE?



VoLTE (short for Voice over Long Term Evolution) is a communication protocol different from the normal calling protocol. You may have heard about LTE or 4G LTE. Some smartphones display an "LTE" symbol in the top icon bar, but many people don't know what this actually means.

LTE is the transition point between the development of 3G and 4G mobile networks but is mainly associated with the latter. First released in 2008 (before 4G), LTE solved latency in data transmission, providing much faster connection speeds than its predecessor, 3G. With these improved speeds came the idea of ??making voice calls over LTE networks.

In 2009, 12 major telecommunications companies collaborated on a project called "One Voice". At that time, VoIP already existed, but these telecommunications brands felt VoLTE could solve many VoIP problems, such as poor voice quality and limited bandwidth. So how does VoLTE work?

While VoIP uses WiFi to make calls, VoLTE uses 4G LTE to transmit your voice over data packets. But that's just making voice calls over the Internet, right?

Not necessarily. Like VoIP, VoLTE allows you to make calls using the Internet while still using your phone number. This means that the VoLTE calls you make will be counted as calling minutes by your mobile carrier. Your cell phone provider must support VoLTE, as most major carriers do.

The great thing about VoLTE is that it doesn't rely on the WiFi network to maintain a connection. If the area's data signal is strong, you can continue and not worry about the router. You can get better coverage with VoLTE and use it on the go when a WiFi network is not available.

Unlike VoIP, VoLTE does not require an app to use. You can turn VoLTE on and off in your phone settings. Once VoLTE is enabled, you will be able to use it, as long as you are connected to a 4G network. It's possible

that VoLTE is already enabled on your smartphone and you may have been using it without realizing it! You can also use VoLTE on other devices, such as smartwatches.

However, VoLTE is not perfect. This communication protocol has some disadvantages to be aware of, starting with limited device compatibility. Because VoLTE doesn't require any kind of physical line, it's typically less reliable for consistently strong connections.

Should I use VoIP or VoLTE?

Deciding whether to use VoIP or VoLTE often depends on the device you are using. If your device is not compatible with 4G LTE, you will have to use VoIP or traditional calling. Even if your phone supports 4G connectivity, you may not be able to use VoLTE.

When it comes to VoIP, you should ideally use an IP phone, but this can be very limited because VoIP phones are not smartphones. For example, let's say your job requires you to make a lot of calls. Maybe you want to use VoIP on your smartphone as an individual, not as an employee, and don't want the hassle of using two separate devices.

But don't worry; VoIP is still available on regular smartphones. You'll need to connect to a VoIP service, which usually comes as an app. Zoom, Ring Central, and Teamspeak are just a few examples of popular VoIP applications. There are also services you may have subscribed to, such as WhatsApp and Discord, that also support VoIP.

Both VoIP and VoLTE can be great replacements for traditional calling in business environments. VoIP is the best choice if your business involves a lot of international calls, as there's no need for a mobile network, meaning you can avoid pesky overseas charges. If you have many friends and relatives abroad, VoIP can save you money.

On the other hand, if you or your business primarily makes domestic phone calls, you may prefer VoLTE because this method offers faster setup times and higher voice quality. If your router is working, VoLTE also provides an easy alternative to VoIP until things are working again. You can easily switch between these two technologies if that better suits your lifestyle as most modern devices support both technologies.

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