Your Guide to Choosing the Right Voice API

How to find the voice API with the best developer experience, network performance, and communications reliability.

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What's inside

Choosing a voice API is a two-pronged task.

On one hand, you need a voice API that makes life easy for developers. Developing applications is challenging enough without having to wrangle a bunch of third-party code to get your app connected.

On the other hand, you need a voice API that connects your app to a secure, high-performance and high-reliability network. This is especially important because your voice app just doesn't work if your carrier network doesn't work (even if your code is outstanding).

So choosing the best voice API is a matter of evaluating the API itself to make sure that it's easy to use and that your development team gets support from the API provider, whenever your developers need it.

But, even if the API and developer support are good, you must also evaluate the carrier network that the API connects to.

With those two evaluation criteria in mind, this is what you need to look at when choosing your voice API.

Why is choosing the right voice API so important?

35% of API developers say their organization's API documentation is above average.

Source

35% of API developers say their organization's API documentation is poor or below average.

Source

55% of businesses say API integration is critical to their business strategy.

Source

Voice API connectivity is important. But, as you can see from the numbers (and as you probably already know), you can't use just any API.

Some API developers make shoddy APIs or support their APIs with shoddy developer documentation.

Your voice API provides a critical function for your apps. So it pays to take the time to find an API with solid developer support, a powerful network, and the integrations you need to create the app you want.

What is a voice API and why do you need one?

Your voice API not only enables your app to connect to your carrier network, it also enables your app to control your carrier service and perform various voice operations, like answering machine detection and live agent coaching.

And a voice API enables you to connect and control your carrier service with just a few lines of code. It's essentially a developer's shortcut to controlling your carrier network.

This is also why you need one. A voice API establishes a reliable connection between your app and your voice carrier. And it gives your app precise control over your carrier network. So you can implement any advanced functionality your clients demand.

Without a voice API, you'd have to write a lot more code. And you'd have to do a lot more troubleshooting to smooth out interactions with your voice carrier's systems.

Those are the basics. But how do you know if you're getting a quality API?

Again, there are two sides to this coin: the API itself and the API provider.

What makes a good voice API?

On the API side, the primary concern is usability. An API that's hard to use, or that lacks adequate developer documentation, will extend your development cycles and eat up ROI.

Here's what to look for in your voice API:

- ## Excellent developer experience

  Your developers are the ones that are going to work with the API. It's vital that your API is built by developers, for developers.

  Your voice API also needs rock solid developer support. For instance, Telnyx has a slack channel where your developers can get help from on-call Telnyx telecom applications engineers (the ones who designed the API in the first place).

  Ultimately, if you've hit a development snag with your voice API, your voice API provider should be there to help you get through it.

- ## Development tools

  The whole point of an API is to minimize the code you need and your development workload. So your API provider should offer tools to help your development teams get integrations done faster.

  For instance, say you've already got programmable voice code written. Telnyx offers a tool that converts XML code—our TeXML translator—that eliminates the hassle of writing new code from scratch.

  APIs are designed to improve efficiency. But it takes more than just an API to address the needs of development teams.

SDKs and extensive developer documentation

If an API provider doesn't offer any software development kit (SDK), that's a red flag. If an API developer only offers SDKs in one or two languages, that's another red flag. API providers need to deliver SDKs that any development team can use, no matter what language they work in.

The same goes for developer documentation. If the development resources aren't available for development teams to get the information they need, it makes your voice API very hard to use.

At the end of the day, inadequate developer support is going to cost you time and money in development, and potentially lead to bugs and issues in the end user experience.

So examine any voice API and the supporting documentation carefully. Or, better yet, have your development team (that might also be you) check out the API and developer docs, and see what they say about it. After all, the developers are the ones that have to get hands-on with the API.

What should you look for in a voice API provider?

The second stage of voice API evaluation is checking out the API provider. This is critical in choosing a voice API because not all API providers own the necessary telecom infrastructure that supports their API.

So, even if the API itself is good, the API provider might outsource their voice connection to third-parties. That means that your voice app reliability is at the mercy of third-party network operators that the API provider has very little control over.

That brings us to the first thing to look for in a voice API provider.

A licensed carrier, not just an API developer

Many API developers are just that: API developers. They simply build the link between you—the customer—and someone else's network. They're middle-men, in the truest sense.

A true, licensed carrier connects you to their own network. This gives you more control over the service you get from your API developer (because they can pass the network control on to you). But it also means that your API provider has access to exclusive telecom databases for looking up numbers, a much deeper phone number inventory, and has a say in telephony policy negotiations.

A true carrier simply has the best leverage to provide you with excellent telecom service and go to bat for you in developing telecom policies, in addition to developing an API.

It's all about the network

No matter how well-optimized your code, or how solid the API, your voice application is going to suffer if it's not connected to a strong network.

Many API providers (especially those who don't operate their own network) rely on the public internet and third-party network operators to connect your voice calls.

This is terrible for call quality and connection reliability.

The public internet was never meant for real-time communications. So routing calls over the public internet causes latency issues like lag and jitter, packet loss, and exposes your voice data to potential cyber attacks.

Third-party networks can be better than using the open internet. But they aren't always better. And an API developer who uses third-party networks has very little—if any—power to fix connection issues when they arise, because they don't control the third-party networks.

The best solution to this problem is to work with an API provider who owns and operates their own network, and never connects calls through the public internet or third-party operators.

That's how Telnyx addresses the issues that most API providers have. Telnyx built a private network on a fiber optic backbone, with tier 1 interconnects around the world.

That way, call data can be encrypted from end to end. Calls are routed over our private network, minimizing hops on the public internet.

This eliminates the lag, jitter, and connectivity issues you often experience with other voice APIs. So your app delivers the clearest and most reliable voice calls.

24/7/365 support

If you have a problem, you need it solved now. You can't wait until the next morning or the next business day if there's an issue with your voice API. Otherwise, your app could be out of commission for hours or days.

Your API provider needs to deliver around-the-clock support, so you can keep your application running around the clock. It's basically a no-go if your API developer doesn't offer support at all hours. You simply can't afford to risk having your voice app shut down until your API provider comes in on Monday.

And that's it. If you check these six points as you evaluate API providers, you'll make the best choice and get the best results.

Making the decision

A voice API can unlock unrivaled agility in your business. It gives you far more options for connecting voice calls. And there's simply no substitute for being able to build voice connectivity into any app or technology stack.

But you only get this power and agility if you choose the right voice API. So check your voice API provider. And see if they meet these standards before you start building on their API.

Build your voice apps with the Telnyx voice API

Telnyx is a company of engineers and developers who've built a voice API that puts the developer experience first. The Telnyx API is truly built by developers, for developers.

Build and scale configurable voice apps in minutes

And that means any type of voice app: managed services software, contact center apps, call tracking and call recording software, and anything else that requires voice connectivity.

Work with a licensed carrier

Telnyx is a true, licensed carrier with a private, global IP network that delivers unmatched call quality and reliability. So you can build ultra-stable apps that users and businesses can depend on.

Get support, whenever you need it

Telnyx operates network operations support centers in Chicago and Dublin. So there's an engineer on call to help you troubleshoot and solve problems, at any time, on any day.

Since we own and operate our own network, if the problem is on our end, our support engineers can fix it.

And this support comes with the Telnyx voice API, free of charge.

Switch to Telnyx quickly and easily

Use your existing XML code with the Telnyx API. Our TeXML translator will take care of the heavy lifting for you. And FastPort makes it fast and easy to port phone numbers from your old carrier (really, we've reduced porting times by literally weeks).

Contact our customer success team to learn more about using the Telnyx voice API. Or check out our developer documentation to see how it works.

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