

5 questions you should ask when choosing a CPaaS provider

QUICK FACTS ABOUT TWILIO

- Reliable, Flexible Communication APIs
- Resilient, Elastic Super Network
- 2M+ Developer Network
- 50,000+ Customers
- 99.999% Uptime
- Zero-Planned Maintenance/Downtime
- ISO27001 Certified & GDPR Compliant

The future of business communications is here. The software, tools, and services needed to create exceptional customer experiences and propel enterprises forward all reside—and are easily integrated—in the cloud.

Today's digitally-driven customers have high expectations and demand information and multi-channel support faster than companies can manage. To meet these needs, cloud communication providers are driving digital transformation across the enterprise and creating new ways for businesses to engage with customers.

According to Gartner, the adoption of CPaaS, Communication Platform as a Service, (which is growing at a compound annual growth rate [CAGR] of 50% between 2016 and 2021) signals a shift in the way enterprises implement products and services.¹ By leveraging a cloud-based CPaaS approach, enterprise businesses get direct access to Application Programming Interfaces (APIs), enabling them to utilize features and functionality such as SMS, voice, chat, video, and more. CPaaS offers improved flexibility, scalability, and security while significantly reducing costs and virtually eliminating lengthy deployment schedules.

As you evaluate providers, you'll naturally want to select a platform that offers the popular communication channels your customers are using today and the tools that let you quickly adapt as customer preferences change. Make sure prospective CPaaS providers are anticipating the next wave of digital enhancements: inquire if they are actively integrating data analytics, IoT, and advanced contact routing for managing cross-channel conversations.

The bottom line is to select a provider who will serve as a conduit to bring together the digital experience, analytics, and personalization needed to create a more effective way to monitor, understand, and interact with customers. Look under the hood at software performance and make sure their network security is rock solid.

How will you know? Ask these five key questions as you consider which cloud communications provider is best suited to help you improve customer experience and business sustainability over time.

¹ Source: Gartner, Inc., *Market Trends: Using Communications Platform as a Service to Drive Digital Business Success*, January 2018



1 How flexible and reliable are your APIs?

A significant benefit of a cloud-based CPaaS solution is the ease at which other systems and services can be integrated into the platform. APIs are fast, simple, and well-tested ways for any developer or business to append communication and additional functionality into software applications. They also save companies a lot of time and money, eliminating the need for costly overhauls and time-consuming integrations.

Most communication providers will have voice and messaging APIs, but that's rarely enough. There are a host of communications apps available, so be sure to ask what channels they offer, and inquire if they provide additional functionality, like data analytics and artificial intelligence solutions which could be added as your business dictates and your customers demand.

While ease-of-use and performance are vital, operability is paramount: a strong and consistent uptime is the lifeblood of an API. Be sure that whatever communication application you plan to roll out will remain stable, reliable, and powered 24/7 to ensure a positive customer service experience every time.

Since our inception, Twilio has focused on the creation of simple-to-use communication APIs with a developer-first mentality. Our APIs have been deployed by more than 2 million developers in over 50,000 companies including digital disruptors like Uber and Airbnb, and multinational companies such as Coca-Cola, ING, and Nordstrom. Our communication APIs facilitate embedding voice, messaging, connectivity, video, and authentication capabilities into any SaaS, mobile application, CRM, or WFO solutions. Built-in features include:

- **Unparalleled uptime:** Twilio consistently achieves a 99.999% uptime. Our SLA (Service Level Agreement) promises to ensure our APIs are available 99.95% in any given calendar month.
 - **Built-in redundancy:** Twilio's redundant architecture ensures high availability service in the event of data center outages, loss of power, or a natural or man-made disaster.
 - **Active collaboration:** Twilio offers a solid support infrastructure for developers including how-to-guides, free trials, and a developer community forum. We also participate in and facilitate over 400 developer events each year.
 - **Complete transparency:** We maintain a Service Status page to provide our customers with transparent and accurate real-time information and incident updates on each of the Twilio services. You'll know if an incident is being investigated, has been identified, is being monitored, has been resolved, or is in postmortem.
 - **Global reach:** Our platform is hosted in 22 data centers in seven regions around the world and interconnects to hundreds of carrier partner networks.
- **Cloud-based communications channels:** Beyond voice and SMS, we offer pictures and multimedia (MMS), video (WebRTC), IP messaging, LINE, WhatsApp, authentication services, and more. We support many built-in channels and enhance them with full data analytics, speech recognition, and advanced contact routing.



2 How quickly are you able to detect and protect us from outages?

Service interruptions are a known headache in today's telecom industry. Any outage disrupting the affecting customer experience is bad for business. Communication consistency is entirely dependent on the provider selected and the protocols they put in place. Should there be an outage, you'll want to be notified before hearing about it from a customer, so ask about the support offered. Is it provided 24/7? Is it maintained globally to curtail any issue as soon as possible?

Twilio is focused on circumventing telecom disruptions through ongoing diagnosis, resolving incidents faster, and identifying ways to prevent them from repeating. Our infrastructure was developed with the reliability, resiliency, and scalability software developers require. So, instead of dealing with service disruptions, you can depend on Twilio's Super Network for higher quality performance than can be delivered by single-provider networks. Incident prevention is made possible via:

- **Twilio's global carrier network:** Over the last decade, we've established partnerships with providers worldwide, enabling us to ensure 24/7 customer connectivity by quickly pivoting to the most optimal network during peak traffic.
- **Ongoing monitoring:** We monitor over a billion data points for end-to-end performance daily, so issues and disruptions are identified early, and customer communications are automatically and accurately rerouted.
- **Proactive carrier rerouting:** Twilio makes over one million routing optimizations per year, ensuring that carrier outage and downtime doesn't affect your application.
- **Quality focus:** We run 2.2 million voice quality and connectivity tests annually to ensure the highest performance and optimized routing in real time.
- **Geographically-dispersed teams:** Our Super Network Team works around the clock to provide local, in-region coverage and troubleshooting for all our carrier partners.
- **Unparalleled uptime:** When it comes to uptime, we're recognized for our 'five nines.' Twilio currently holds the highest achievement for uptime at 99.999%.

3 What is your data protection and privacy policy?

It takes just one data slip-up to lose thousands of customers. That's why enterprise data security is crucial. Can you trust your provider to ensure your data will be safe and secure? Consider established standards such as ISO 27001, GDPR, and SOC2. And ask about compliance endorsements and security certifications. If you have a global customer base, consider the provider's ability to scale accordingly. Determine if they have a presence in key countries that have specific IT governance rules. Since standards vary regionally, they'll need to match international law to protect your data everywhere. Make sure they are knowledgeable about—and adhere to—changing global regulations.

Twilio's cloud communication platform is trusted by tens of thousands of companies worldwide. We offer an array of safeguards, including:

- **Security Compliance:** Twilio complies with applicable legal, industry, and regulatory requirements as well as industry best practices. We're committed to mitigating risk and ensuring our services meet regulatory and security compliance obligations.
- **Security Certifications:** Twilio has obtained our ISO/IEC 27001:2013 certification, showing our maturity within the Information Security space. And Two-Factor Authentication by Twilio has completed its SOC2 Type II audit for the Trust Services Principles of Security and Availability.
- **Worldwide Governance:** Twilio is GDPR-compliant and is self-certified under EU-U.S. Privacy Shield Framework as a part of our commitment to comply with EU data protection requirements when transferring personal data from the European Union to the United States.
- **Top-Tier Infrastructure:** Our platform is hosted at Amazon Web Services, which complies with leading security policies, including SSAE 16, SOC framework, ISO 27001 and PCI DSS.
- **Third-party audits:** We hold regular pen testing, third-party audits, and a bug bounty program to build an ecosystem that encourages sharing and transparency.
- **API-driven privacy guidelines:** Our API docs include personal information processing required to build communication applications with a smarter, more privacy-aware approach.



4 What is your fraud prevention strategy?

Each year, tens of billions of dollars are lost to telecom fraud worldwide. In fact, many businesses are turning to cloud providers for improved security to help reduce fraud and its related costs. Employing a sound fraud prevention strategy is critical to protecting your enterprise and your customers. Before you decide on a communications partner, be certain that they take fraud prevention seriously. Look for a provider that rigorously monitors their applications and platform to limit exposure to attacks. Ask about their security policies, and what systems are employed to detect fraudulent use. Be sure they offer developer guidance to ensure your custom integrations are as secure as possible.

At Twilio, we continually look to add fraud protection at critical milestones and functionality within our platform and services. Our Fraud and Security Teams proactively prevent millions of dollars in telco fraud each year by deploying innovative security approaches and staying several steps ahead of potential attack vectors. We've built, and continue to improve, our internal systems to detect fraudulent traffic, protect our communications platform, and secure our applications. And we always share our best practices with the customers we serve. These safety measures include:

- **Infrastructure security:** Creating a safe platform for Twilio applications and customer innovation is the mission of our cloud security program. Twilio's Cloud Security Standard (TCSS) comprises best-in-class security practices. We've open-sourced the security policy framework on which our standard is based.
- **Evolving protection:** As a defense against attempts to circumvent existing safeguards, we proactively add enhanced layers of fraud protection to create a fortress of defense against fraud attacks. For example, we recently released a feature to disable calling to high-risk destinations. Using data science and proprietary third-party data sources, we update this list weekly.
- **Leveraging artificial intelligence:** By applying our expertise in machine learning to these systems, we closely monitor for anomalies occurring within our customers' accounts.
- **Anti-fraud developer guides:** We offer detailed anti-fraud guidelines to our customers to ensure account and application level protection. Our API-driven developer guides showcase the types of fraud that may be encountered—broken out by product—along with specific codes to use for fraud detection and prevention.
- **Navigating global regulations:** Twilio manages a globally distributed network of carriers, and proactively follows each country's telco laws and regulations. Understanding these regulations helps us adapt our security protocols in real-time to create the best first-line of defense for our customers.
- **Two-factor authentication (2FA):** Fraudulent account creation and account takeovers can damage business reputations and ROI. Not only do we offer Authy, a downloadable app for consumers looking to protect themselves with TOTP-based security, we strongly encourage our CPaaS customers to apply the API-based security solution to protect their applications. In fact, we employ the service ourselves to protect Twilio partners and the network.



5 How do you ensure product readiness, launch new services, and handle subsequent downtime?

If you have been working within a legacy environment or a fragmented architecture, you know that rolling out a new product usually requires some planned downtime. When customers reach out to you and find that your service is down, it's not a great experience. With the right provider, you can avoid all that. Ask about specific policies for rolling out new services and features—and what downtime can be expected. You'll want a provider adept at releasing new functionalities as fast as consumers adopt them: be sure their efforts don't disrupt your customers or the projects your developers are working on.

Good news from Twilio: we've designed our infrastructure to be updated and maintained continuously, eliminating the need for any downtime. In 2017 alone, we shipped a new customer-facing feature every three business days without any customer impact or service interruption. We also give our customers 'test-beds' to create and innovate freely until their service is ready for prime time. The key lies within our Operational Maturity Model (OMM). We prioritize service reliability through constant platform updates, consistent uptime SLA, and leading and evolving security practices. Our commitment to our customers includes:

- **Operational excellence:** Twilio has a uniform standard for consistently building the best possible experience for our customers. It includes continuous maintenance of infrastructure, underlying technologies, performance and support activities, documentation, and security.
- **Reliability:** As the leader in cloud communications, Twilio offers a complete software-based communications platform providing resiliency through our Super Network and an uptime SLA of 99.95%.
- **No downtime:** We have no maintenance windows or "planned" downtime and promise to be 'always on' for our customers even as we ship new products, features, and updates.
- **World-class developer documentation:** While maintaining operational excellence is critical to ensure product readiness. We want our customers to focus on building world-class communication experiences rather than having to worry about whether or not the product operates smoothly.



Improve your communications software. Improve your customer experience.

The secret's out: organizations looking to remain competitive understand that the power of a cloud communication platform gives them the ability to swiftly replace existing enterprise communication, collaboration, and customer service functionality at a lower cost with more agile options. The sooner you choose the right provider, the sooner you'll start to realize these savings and improve your customer experience.

The flexibility of CPaaS solutions allows enterprises to develop new digital initiatives that deliver better customer experiences and uncover new market opportunities. But choose wisely: make sure that the services offered not only meet your needs in the short-term but can adapt and grow to meet your long-term needs and goals, too.

As you evaluate software vendors, consider Twilio, recognized by Gartner, Forrester, Ovum, and IDC as an industry leader in cloud communications.

[Talk to us](#)[Learn more](#)

Twilio powers the future of business communications, enabling phones, VoIP, and messaging to be embedded into web, desktop, and mobile software. We take care of the messy telecom hardware and expose a globally available cloud API that developers can interact with to build intelligent and complex communications systems.