Infosheet



### Cloud Infrastructure Optimized for Global Businesses



Plivo's cloud communications platform is backed by a robust, reliable, fault-tolerant, and highly available infrastructure.

### Guaranteed Infosheet - Cloud Infrastruc high quality and deliverability

Plivo supports thousands of businesses that rely on our infrastructure to deliver superior customer experiences. Our robust, reliable, fault-tolerant and highly-available network infrastructure has been battle tested to handle the most demanding loads and traffic conditions. This optimized infrastructure of clustered media relays, switches, databases, application servers, and session border controllers powers Plivo's enterprise-grade network and allows us to provide top quality service at very competitive prices.

Plivo's globally-distributed infrastructure delivers a 99.95% guaranteed uptime service level agreement (SLA):

#### **Globally distributed Pops**

Six points of presence (POPs) strategically placed across five continents.

#### 24/7 monitored nocs

Two geographically-distributed NOCs, performance monitoring tools, and alert escalation systems deliver round-the-clock support from trained engineers.

#### Optimized routing for best quality

Plivo's intelligent call and message routing engine ensures that all SMS and voice traffic is sent via the most reliable routes. We optimize for the highest call quality and the best message deliverability.

#### Latency-free connectivity

We deliver a sub 50 millisecond (ms) connection to carriers to allow for the best voice call experience.

#### **Highest SMS deliverability**

We connect directly to local in-country carriers to bring you the highest SMS delivery rates to phones anywhere in the world.

#### Low noise and high voice clarity

Plivo's optimized servers ensure the highest voice quality while reducing noise and latency on all calls.

"Plivo exceeded expectations with our stringent quality requirements. The API was easy to use and it has proven to be very reliable during our usage of the platform over the last two years. As we continue to build out our use cases for Intel's IoT product suite, we clearly see other opportunities for us to expand our usage with Plivo in the future." *James S., Product Manager, Intel* 

## Enterprise-level Infosheet - Cloud Infrastructure security and intelligent routing

#### Globally-distributed PoPs

Each of our POPs is operated by top-tier cloud providers. Our data centers are strategically placed around the world in Virginia, California, Germany, Sao Paulo, Singapore, and Sydney.

#### 24/7 monitored NOCs

We have two geographically distributed NOC locations in Asia and Americas. This NOC redundancy helps us deliver round-the-clock support from trained engineers who proactively monitor network performance. Our systems are also integrated with powerful tools to automatically alert and escalate potential issues to the right team members.



#### **Optimized Call Routing and Uptime**

Plivo's intelligent call routing system ensures that all traffic is sent over the most optimized routes. Our automated routing engine directs calls and SMS through the closest servers to ensure high voice quality, minimize latency, and provide the best deliverability. With multi-carrier connectivity in each country, our routing engine detects carrier stability and automatically reroutes traffic to the best quality carrier in the event of a carrier service degradation incident.

### Significantly Infosheet - Cloud Infosheet - Cloud

#### **Companies Already Using Plivo's Network**

Thousands of businesses of all sizes rely on Plivo's infrastructure. Here's what they have to say.

"From day one, we had Plivo's applications and very clear documentation that made it very easy to set up. The core of our workflow is Plivo's webhook on incoming calls, adding some metadata on our end, and then redirecting. It was just so easy to implement, and made Plivo a clear winner over any other competition."

Piotr Matuszkiewicz, Engineering Manager, Airsorted.

"The reliability of the message delivery has been great," he said. "That's probably the number one thing, and then second is Plivo's responsiveness. If anyone needs an SMS solution, I would definitely recommend Plivo."

Doug Belew, Director of Engineering at Luxer One.

#### Latency-Free Connectivity

A quality communications infrastructure must minimize latency. Unlike resellers and large aggregators, we do not centralize routing. Instead, we practice globally distributed routing where our real-time transport protocol (RTP) media (i.e., voice media) is routed directly from our own servers in the closest geographical region. The advantage of distributed routing is that by utilizing multiple alternate routes, we eliminate single points of failure present in centralized routing strategies. This significantly reduces our latency in most regions to under 50ms per connection to carriers and end phones. We are also able to provide better flexibility and scalability due to multi-vendor interoperability (i.e., system compatibility).

Not only should SMS text messages be delivered instantly, voice calls should also be free from latency. Latency refers to the time it takes for the sound of voice to travel from the speaker's mouth to the receiver's ear. This mouth-to-ear delay should ideally be undetectable to call participants. The human ear will start to notice voice delays when call latency is greater than 300ms. The International Telecommunication Union recommends that most voice applications keep delays below 250ms; we set our standards to deliver sub-150ms connectivity to all of our customers.

# Optimized cloud servers

#### High SMS Deliverability

Our direct carrier partnerships give our customers the ability to send SMS messages to all major carriers in the world. By connecting directly to local carriers, we eliminate hops between aggregators. We bring you high SMS deliverability and quicker call delivery to handsets. This also means that we have direct control over our routes and eliminate the middlemen. The result: no bad practices that can potentially jeopardize service quality, including routing dilution, blending, and least-cost routing.

#### Low Noise and High Voice Clarity

Our voice media runs on highly-optimized cloud servers, not generic machines. Optimizing our servers from the kernel to the operating system gives us control over call quality. Generic machines can cause call degradation because servers are not optimized by default for audio and video processing.

We have also optimized our servers and infrastructure to perform minimum transcoding between codecs to reduce noise and latency on all calls. Plivo adheres to high standards to make sure that our network is always optimized and never diluted. Our servers are always kept under capacity and equipped with algorithms that deploy additional capacity in the event of traffic spikes.



### **About Plivo**

For businesses of all kinds, Plivo offers a simple, fast, and scalable way to modernize customer communications. Thousands of businesses use Plivo to quickly integrate Messaging and Voice calling into their applications to deliver better customer experiences. The Plivo team brings deep communications and modern software development experience to address the needs of today's businesses - quality, scale, speed, and agility. Plivo has direct relationships with over 1600+ carrier networks and connectivity in 190+ countries.

Want to learn more?

**Visit Plivo**