Global gaming company uses Zenlayer Bare Metal Cloud to significantly lower latency & costs in Brazil

Summary

A global gaming company based in the Asia-Pacific region wanted to expand in Brazil and give their users both lower latency and more reliable connections to their game servers. Zenlayer's complete solution provided them with 250 bare metal servers, local IP transit with Brazilian carriers, and dedicated connections among their global PoPs – all for 25% lower costs than the Client had previously been paying for comparable services. The 15% reduction in latency during peak hours translated directly into higher customer satisfaction and greater participation on their platform due to positive reviews and word of mouth.

The Problem

Offering gamers quality service in an emerging market

The Client had been expanding in Brazil, but was beginning to run into walls when it came to offering their players the same quality service they had in locations like Hong Kong, Singapore, and South Korea. Brazil is considered an "emerging market," which means its networking infrastructure is not as mature as developed markets such as North America. There are limited providers to work with, and the Client didn't feel that they had many options. Without comparable latency times, however, their Brazilian players literally wouldn't be able to compete with their overseas counterparts.

Gamers and Latency

Gamers are particularly sensitive to even the slightest changes in latency because split-second timing can mean the difference between a win and a loss. If your opponent's actions are recorded more quickly by the server, they will have an advantage in the game. Serious gamers have text overlays on their games that display exactly what their ping time is at every second; these are so common that Steam, UPlay, and Origin all offer them natively on their platforms. Therefore, being able to offer the same, low-latency service globally is crucial to any gaming company with international players.

An example overlay with a close-up showing a gamer's ping time along with frame rate, GPU, and other stats.

Zenlayer's bare metal cloud created low latency and a reliable network

The speed test

We first arranged a latency test for the Client. The Client was already using bare metal servers with another provider and presumed they had the fastest times possible for their users. However, **in a network latency test Zenlayer outperformed the Client's provider by 15%.** Furthermore, we were able to offer both better pricing and greater scalability. Impressed, the Client decided to switch providers to Zenlayer.

The solution

We began putting together a complete, custom solution. It included **over 250 bare metal servers in São Paulo** (Brazil's internet hub); IP transit for local traffic with burstable capabilities; and dedicated connections to Miami, Los Angeles, Hong Kong, and Singapore via Zenlayer's private backbone. The Client was also able to take advantage of our direct connection to ix.br (Brazil's internet exchange). This meant the Client effectively had a direct connection to every ISP in Brazil, further minimizing latency.

Custom bare metal cloud

Bare metal servers are usually offered with pre-determined specs for instant deployment, but the Client requested the latest version of Intel's processor be used for maximum CPU power. We agreed and handled the entire deployment process for them, including procurement, shipping, installation, and configuration. Once the equipment was delivered, **our on-site team was able to deploy all 250 servers in less than a week.**

Redundant and reliable

In addition to deploying servers, we made the Client's network redundant and reliable for maximum uptime. **Every piece of equipment used has at least one redundant backup and dual paths for access in case of an outage.** Servers are kept on reserve for "hot backup" in the event one of the Client's servers needs to be immediately replaced without sacrificing speed and processing power. Dual uplinks are provided to multiple carriers. Furthermore, local support is available 24/7 to keep everything running smoothly.

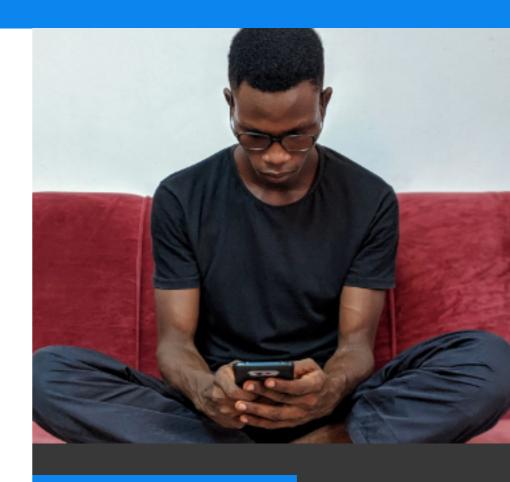**The results**

Happy gamers, happy client

The Client's Brazilian users noticed the greater speeds and responded enthusiastically. After just six weeks, the Client reported an increase in user satisfaction by 33% (measured over two surveys). **Within six months, their users in Brazil increased by 60%.**

That increase in users required rapid scaling. Soon after the initial deployment, the Client asked for a second batch of 150 more custom servers in Brazil, bringing their total to 400 in the country. We are now working with them for similar deployments in India.

Shipping in Brazil: Zenlayer "WOW" service in action

One of the main difficulties when deploying in Brazil is simply getting equipment into the country! It often takes months to receive shipments. Zenlayer works with a local partner to ensure we can order and receive equipment as expected, but even with the best-laid plans things still get caught in customs. That's why we order extra servers to handle delays and ensure our deployments happen on time.

Customers making use of our bare metal cloud, of course, never need to worry about delays due to customs. The servers they're ordering are already in São Paulo data centers, just waiting to be spun up.

By the numbers

400 bare metal servers

250 custom servers deployed in 1 week

10% spare servers always in reserve

25 Gbps daily max bandwidth

15% decrease in latency

33% increased user satisfaction

25% lower costs

0 times the Client needs to visit their Brazilian data