

White Paper

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# Tencent Cloud: A Guide



Multinational corporations considering expansion into Chinese markets need a strong local cloud provider to guide them through the process. There are only a few native cloud providers in China that have the technical sophistication, sweeping infrastructure, advanced service offering and international expertise needed to help foreign enterprises navigate the complexities of the Chinese internet landscape. Tencent Cloud stands out as one of the foremost of these providers.

Since its founding in 1998, Tencent Cloud's parent company, Tencent Holdings, has quickly grown to become one of the most profitable companies on the planet, exceeding a \$500 billion market cap in 2017 – the first Asia-based corporation to do so. It is perhaps best known for being the largest video game publisher in the world by revenue (for six years in a row as of 2019), and for its multi-purpose messaging app, WeChat, which is ubiquitous across China and boasts over a billion users worldwide. However, its leadership across various industry verticals doesn't end there. In China, Tencent's influence is pervasive,

permeating everything from media and entertainment to software and tools, fintech to venture capital, and continues to grow. Tencent is also developing cutting-edge solutions in artificial intelligence, machine learning, facial recognition and big data analytics for adoption across a wide range of industries.

This vast and diverse ecosystem has given Tencent extensive experience in technologically demanding markets and allowed its cloud division to develop considerable advantages over competitors. Tencent Cloud's footprint is expansive and its network and



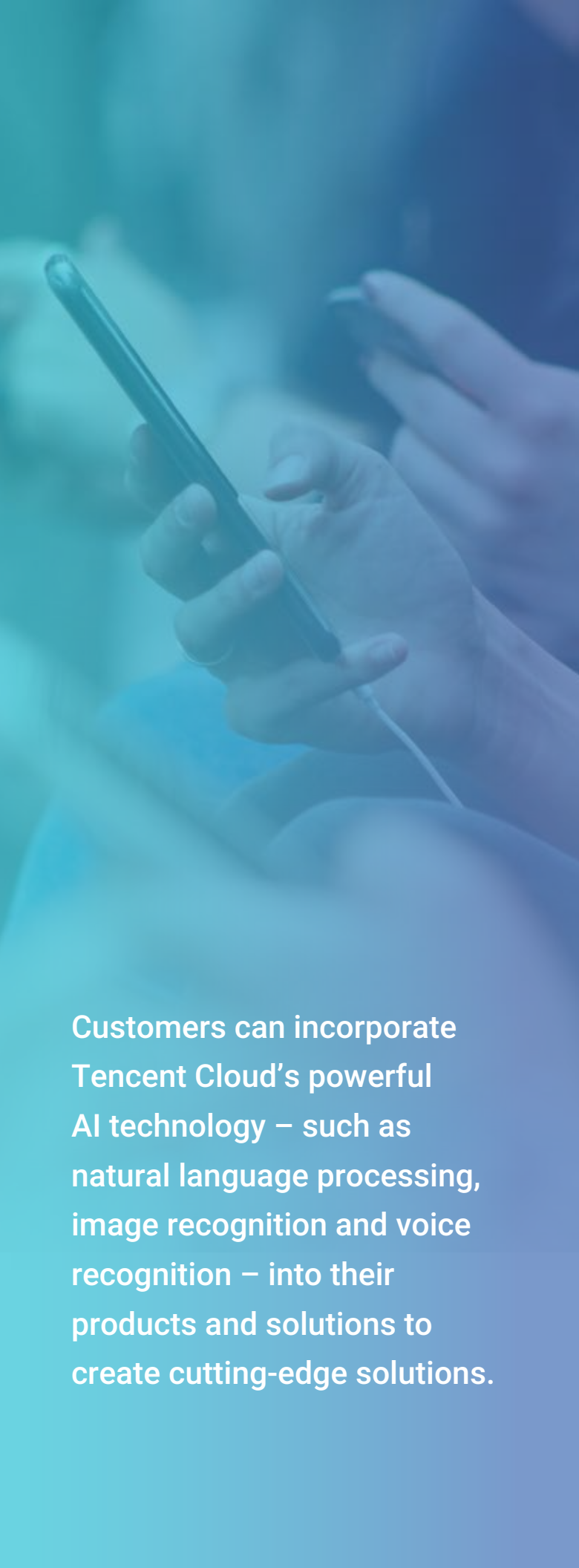
hosting infrastructure has been designed from the ground up to support the most intensive workloads and scalability requirements. This potent combination of resource availability, robust network functionality, cutting edge technology and market penetration makes Tencent Cloud the ideal partner for any international business eyeing China expansion.

## **Tencent Cloud oversees both China-based and international infrastructure**

Tencent Cloud's hosting infrastructure is designed to support the most data-intensive workloads and facilitate multinationals' Chinese operations across the mainland. Tencent Cloud's technological ecosystem includes more than 400,000 servers that extend across 25 availability zones across China.

Across the globe, Tencent Cloud's footprint extends into 25 regions and 58 availability zones, and its presence reaches multiple continents, including the Americas, EMEA and Australia/Oceania. With more than 1,300 points of presence spread around the world, Tencent Cloud's infrastructure is directly connected to leading internet service providers both in China and abroad. This global connectivity allows Tencent Cloud partners to access their China clouds as quickly as possible.

**Tencent Cloud's footprint extends into 25 regions and 58 availability zones, with more than 1,300 points of presence spread around the world.**



## Tencent Cloud provides cutting-edge services

In addition to China-based cloud hosting, Tencent Cloud offers a number of technologically advanced services to support customers' Chinese operations, enhance their offerings and develop new solutions of their own.

For example, Tencent Cloud's artificial intelligence platform services include natural language processing, image recognition and voice recognition, allowing customers to incorporate this powerful technology into their products and services to create cutting-edge solutions. This technology has limitless applications, from education to healthcare.

The big data services offered by Tencent Cloud have a distinct edge over the competition, as Tencent's massive presence in the social media and gaming spaces gives the company access to large quantities of valuable user data and that information can be leveraged to better understand consumer behavior, analyze emerging market trends, execute business intelligence initiatives and much more.

Tencent's core technologies include:

- Big Data Analytics
- Face Recognition
- Interactive Live Streaming
- Artificial Intelligence
- Content Delivery Network
- Cloud Virtual Machines
- Blackstone Hybrid Cloud
- Cloud Security
- and more...

Customers can incorporate Tencent Cloud's powerful AI technology – such as natural language processing, image recognition and voice recognition – into their products and solutions to create cutting-edge solutions.


With a wide range of application across industries such as:

- Gaming
- Video
- Finance
- e-Commerce
- O2O
- Healthcare
- Travel and Hospitality
- Enterprise
- WeChat
- and more...

Leveraging sturdy security solutions, Tencent Cloud partners are better able to safeguard their China cloud environments and prevent malicious actors from accessing sensitive data or compromising hosted platforms. Tencent Cloud defends against the latest, most advanced and most harmful threats in existence today, with sophisticated cloud security products like:

- Anti-DDoS
- AI detection
- Anti-fraud
- Anti-spamming
- Host security
- WAF

Tencent Cloud holds several data privacy, management and security certifications and is compliant with numerous regulatory bodies, both in China and abroad, further extending its security capabilities.



**Tencent Cloud provides some of the fastest connection speeds in the world due to its network backbone stretching into every corner of the nation.**





## Tencent Cloud has an extensive, robust network

The Tencent Cloud network backbone stretches into every corner of the nation, providing some of the fastest connection speeds in the world. Tencent Cloud's border gateway protocol supports speeds exceeding 2 terabytes per second, while its DCI backbone surpasses 1 terabyte per second.

Due to Tencent's extensive research funding and expert development teams, the company's network architecture is constantly improving, and its network footprint continues to expand. Every day, Tencent's technological capabilities take a step forward and push the limits of what its network, cloud and computing infrastructure can accomplish. For example, in 2016, Tencent set a record for computing efficiency, sorting one trillion unordered 100-byte records at a rate of 60.7 terabytes per minute.

To address the issue of peer pointing bottlenecks, Tencent Cloud has established dedicated private lines that circumvent congested connection points, thereby reducing latency and improving network performance.

Tencent Cloud's network environment is also highly flexible, with advanced load balancing to manage traffic spikes and guide data from one connection point to another as quickly and efficiently as possible. Tencent's long history supporting its massively popular consumer applications such as WeChat and QQ has steadily reinforced the importance of high uptime and low latency to the user experience. As such, Tencent Cloud's load balancing capabilities have evolved considerably over the years.

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The combination of sophisticated network technology and advanced analytics tools allows Tencent Cloud team members to closely monitor network activity and identify potential bottlenecks before they hamper data speeds and overall performance. Leveraging real-time metrics, Tencent Cloud can manage traffic requests to optimize network speed and minimize latency.

As such, Tencent Cloud maintains 99.95 percent availability across its entire network footprint. Moreover, its robust network infrastructure has held latency to a bare minimum even when exchanging data across the entire Chinese landscape.

Tencent Cloud's availability and uptime capabilities were put to the test during the 2017 Chinese New Year, when payment transactions across supported platforms surged, reaching a peak of 14 million requests per second and 14.2 billion altogether. Tencent Cloud's load balancing capabilities seamlessly supported the significant increase in application activity and bandwidth without noticeable impact to user experience.

Tencent Cloud's content delivery network is equally robust, with more than 1,300 dedicated nodes spread throughout China. This CDN coverage has an egress capacity exceeding 100 terabytes per second. In addition, Tencent Cloud operates a 2 Tbps private CDN backbone across four core regions, enabling it to avoid performance bottlenecks that stymie normal Chinese internet traffic.

Tencent Cloud's powerful network capabilities allow for optimal performance, maintaining fast connection speeds and reducing latency across all regions.



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## Consultative services support international companies' Chinese market aspiration

From network architecture to cultural differences, entering Chinese markets presents a number of challenges for international companies. Tencent Cloud's team works with their business partners to remove entry barriers and ensure that Chinese cloud migration occurs as seamlessly and effortlessly as possible.

Tencent Cloud helps multinational corporations navigate regulatory requirements and obtain the proper licenses to manage a cloud environment in China. Team members can also support China-native clouds whether a company wishes to use an entirely localized IT team or maintain those operations in a centralized position outside of the mainland. The logistical support provided by Tencent Cloud in these circumstances enable international businesses to successfully maintain a strong presence in China, regardless of which IT model they wish to follow.

The level of support that Tencent Cloud provides encompasses all aspects of cloud operations, enabling corporations to pursue their China market goals without getting derailed by potential obstacles.

## Tencent ecosystem provides endless opportunities

Tencent Cloud's technological benchmarks are among the very best in the industry, but one of its most compelling differentiators is its access to Tencent's broader solution ecosystem. Companies that partner with Tencent Cloud are able to integrate

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with Tencent's vast portfolio of consumer-facing applications as well as leverage its highly advanced technological assets.

For example, Tencent has access to Chinese consumer data at a truly massive scale, due to its extremely popular applications such as QQ and WeChat. Those platforms generate valuable data from approximately 2 billion unique users, which feed into its sophisticated big data solutions.

This extensive pool of data provides ample opportunities for businesses to better understand Chinese consumers and industries, and adapt their market strategies and engagement efforts accordingly.

When companies partner with Tencent Cloud, they don't just receive the benefit of one of the most advanced hosting solutions in the world, but exclusive access to powerful technological tools and heavily used consumer platforms.

## **Tencent Cloud solutions are China-native**

Tencent Cloud's infrastructure and platforms have designed to specifically address the challenges and nuances of operating in China. The Chinese cloud market is unique, introducing many obstacles that are difficult for multinational corporations to overcome without the assistance of a consultative, China-native cloud partner.

Those challenges can range from the inherent technological concerns presented by China's internet to cultural differences and language barriers that



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prevent global enterprises from carrying over successful strategies from other regions to their China-focused operations.

Tencent Cloud offers the best of both worlds. Its robust and expansive network footprint allows it to circumvent the infrastructure issues that plague many other cloud providers, achieving optimal traffic speeds, minimal latency and high platform availability.

Tencent Cloud's consultative approach provides multinational corporations with the flexibility to manage their China cloud operations in the manner that best fits their organization. Whether a company wishes to centralize their IT operations outside of China or devote a dedicated, localized team to their China cloud, Tencent Cloud will work to make their hosted solution as streamlined and easy to use as possible.

Tencent Cloud provides the full range of solutions needed to successfully launch cloud-based services in Chinese markets, including a powerful, sprawling network, advanced technological capabilities, a vast software environment and hands-on consultative services. Tencent Cloud can make any organization's dreams of Chinese expansion a reality.



Tencent Cloud International helps global enterprises navigate the uncertainties and challenges of deploying a complete and native cloud solution in China.

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