

# Edge Data Center Services

Improve digital experiences. Instantly.

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- Zenlayer Overview
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# Zenlayer at a Glance

Enabling organizations to improve their global user experience by providing edge cloud services

#1

### in Global coverage

- 180+ edge data centers
- 6 continents / 35+ countries
- 15 Tbps backbone / 230+ private lines

<25<sub>ms</sub>

### to 85% of world's internet users

- 1,000+ global peers
- Emerging market expertise



### Support response time

- 24/7 global tech support
- 95%+ TTR < 4 hours (Trouble ticket resolve time)

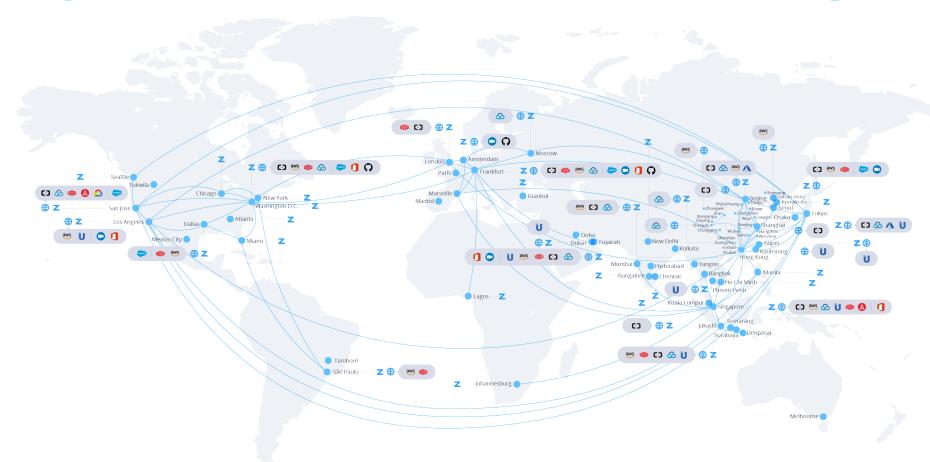
# Zenlayer is #1 in Global Coverage

**180+** edge nodes

**35+** countries

230+ private lines

**1,000+** peers





## Trusted by 300+ Global Customers

#### **Gaming**



















#### Cloud



















#### **Telecom**



















#### **Streaming / Online Education / Real Time Communications**

















#### **E-Commerce / Retail**





JUMEI.COM

#### Mobile





























# Partners & Industry Recognition

















2018 10 Hot SD-WAN Startups

2019 Top 10 SD-WAN Trailblazers



















2019 Trusted Cloud Certification













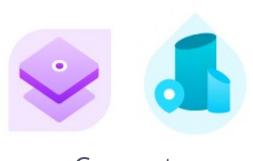








# Integrated Products and Services



Compute

- Bare Metal Cloud
- Edge Data Center Services





### Networking

- Cloud Networking
- IP Transit







**Application** 

- Cloud WAN
- Content Delivery Network
- Global Intelligent Accelerator

# WOW service that exceeds expectations

# Easy of contact

- 24/7 technical support via phone, email
- 24/7 proactive network and device monitoring

# Fast 4 responses

- < 15-minute response time</p>
- On-site technicians at core PoPs

# Quick # resolutions

- 95%+ TTR < 4 hours (Time to resolution)
- 99.99% SLA
   (Built-in redundancy for both circuits & hardware)

# Edge Data Center Services

Consistent standard of service, everywhere in the world



# Edge Data Center Services

Deploy and manage your IT infrastructure anywhere in the world

#### **Consultations & Solutions**

- Site selection based on individual needs
- Strategic and regulatory guidance
- Technical advice on hardware specs and optimal configurations
- Proof of concept (POC) testing

### Procurement & Deployment

- Equipment purchasing
- Transportation and delivery
- Customs clearance assistance
- Equipment installation and system/network configuration
- Network provisioning (Zenlayer's IP transit is a blended network uses best carriers in each region)

### Monitoring & Maintenance

- 24/7 proactive device and network monitoring
- Custom-built tools that utilize best-in-class network monitoring software such as Kentik and Catchpoint to provide real-time network analysis

# Standard Deployment Procedures

Carrier-grade installation standards

Standard Operating Procedure

Execution

On-site engineers perform installation

Closed-loop quality management

**Quality Assurance** 

### Certifications

Certified Zenlayer engineers deliver quality work



















Microsoft Azure

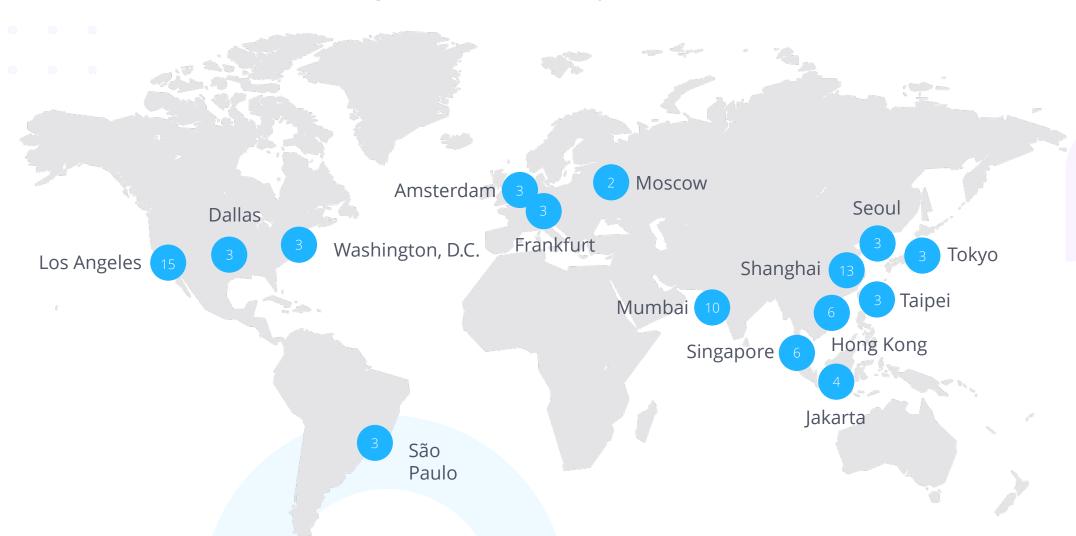


CCNA, CCNP, CCIE

...and more

# **Local Operations Teams**

On-site teams guarantee fast responses on critical issues



### Remote Hands Services

#### • Check target machine information (rack, SN, etc.) Check system version and hardware status • Install rails and trays per client **Equipment Racking** Complete integrated wiring and labeling • Configure RAID, OS, IP per client • Configuration rights turned over to client after completion • Check target machine information (rack, SN, etc.) **Equipment Unracking** Verify machine status • Unracking per client, cable packing, rail deinstall • Check target machine information (migration number, rack, SN, etc.) **IDC** Migration • Unrack, and rack per client requirements Data Center Environment, temp, humidity monitoring • Regular equipment health status inspection Inspection and Monitoring • 24x7 data center IP-DVR video surveillance • Check target machine information (rack, SN, etc.) • Check system version and machine status **OS Reinstall** • Configure RAID, OS, IP per client Configuration rights turned over to client after completion • Check target machine information (rack, SN, etc.) Server Reboot • Check machine status, fault lights, screen information, etc. • Upon confirmation from client, reboot server

## Remote Hands Services

| Server accessories        | <ul> <li>Check target device information (rack, SN, etc.)</li> <li>Check status, fault light, and screen information</li> <li>Replace spare parts</li> <li>Verify device is fault-free</li> </ul>   |
|---------------------------|---|
| Temporary Cabling         | <ul><li>Verify switch port with network administrator</li><li>Perform client's temporary wiring as needed</li></ul>   |
| Equipment Troubleshooting | <ul> <li>Check target device information (rack, SN, etc.)</li> <li>Check status of device</li> <li>On-site troubleshooting per client</li> <li>Locate fault point, repair or replace fault</li> </ul>   |
| IPMI Operation            | <ul> <li>Check target machine information (rack, SN, etc.)</li> <li>Check machine running status and configuration requirements</li> <li>Perform IPMI/iLO configuration</li> <li>Verify client connectivity to IPMI/iLO</li> </ul>  |
| BIOS                      | <ul> <li>Check target machine information (rack, SN, etc.)</li> <li>Check machine running status and set requirements</li> <li>Perform BIOS configuration</li> <li>Verify client request after configuration</li> </ul>   |
| Cable Check               | <ul> <li>Check target machine information (rack, SN, etc.)</li> <li>Check device status, NIC status, and screen information</li> <li>Plug in cable and check switch with network administrator</li> <li>Resolve with temporary wiring or possible hardware fault</li> </ul> |

# Cloud Services

Bare Metal Cloud · Cloud Networking Cloud WAN · Content Delivery Network Global Intelligent Accelerator



### **Bare Metal Cloud**

High-performance computing + cloud-like flexibility

#### Dedicated

- Dedicated servers reduce latency by up to 40% vs.
   virtual machines
- Eliminate "noisy neighbor" effect

#### Interconnected

- Connect all 40+ bare metal PoPs via Zenlayer's private backbone
- Directly connect to public clouds such as AWS, Azure, Google Cloud, Alibaba Cloud, etc.

#### On-demand

- Activate in 10 minutes
- Add bandwidth/IPs as needed



# Cloud Networking

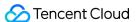
Build a global private network in minutes

















#### Performance

- Reduce latency & jitter by up to 40% during peak periods (vs. public Internet)
- Zero packet loss
- High availability

### Connectivity

- Quickly build hybrid- or multi-cloud environments to meet business needs
- Directly connect to public clouds and SaaS

### **Elasticity**

- Scale up or down depending on demand
- Choose from 1 Mbps to 10 Gbps



## **Cloud WAN**

Improve enterprise productivity through SaaS acceleration













#### Automated

- Automatic deployment of traffic rules through a centralized portal
- Full visibility into real-time network conditions
- Rapidly provision with zero-touch configuration

#### Performance

- Enterprise grade security with private backbone and encrypted IPSec tunnel
- Accelerate applications between offices, data centers, and clouds
- High availability: built-in redundancies ensure
   99.99% uptime

#### Cost-effective

- Optimize bandwidth using QoS (Quality of Service) and flexible terms
- Complement MPLS by using Cloud WAN for backup



## Content Delivery Network

Accelerate delivery of content to users worldwide

### Connectivity

- <10 ms latency in major cities
- <30 ms latency around the world</li>
- Intelligent routing with high network redundancy
- Rich API support

### Security

- HTTPS secure cloud acceleration
- Back-to-source verification
- Referrer anti-theft chain
- Support for TLS 1.3, certificates, black and white lists

### Reliability

- Zero packet loss between nodes
- Multi-server and route redundancy for load optimization
- Real-time monitoring and analytics



## Global Intelligent Accelerator

Reduce application latency and accelerate dynamic content worldwide

### Security

- Edge computing capability with Lua for customizable security logic
- Supports latest security protocols

### Performance

- <10 ms latency in major cities</li>
- <30 ms latency around the world</li>
- Private links between major PoPs guarantees
   0% packet loss for cross-border traffic
- NVMe servers for extreme I/O throughput

### Insight

- Real-time metrics to inform decision making
- APIs to access advanced analytics on your own platform



# Improve digital experiences. Instantly.

### Global offices

Los Angeles (HQ)

Mumbai (HQ)

Shanghai (HQ)

Singapore (HQ)

Beijing

Hangzhou

Hong Kong

**Nantong** 

San Jose

Shenzher

Taipei (coming soon)

### Contact

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