Zenlayer
Global Accelerator

Product Overview

Global corporations today face a variety of challenges when connecting distributed users to websites, platforms, and applications. Common issues include poor application performance, slow synchronization across regional cloud servers, and interruptions during cross-border downloads.

Zenlayer Global Accelerator (ZGA) is a network acceleration service built on Zenlayer's massive global private infrastructure. It improves application performance by enabling access to the origin server through a high-speed connection from the nearest node, greatly reducing jitters, latency and packet loss.

ZGA provides stable and secure connectivity to global applications, improves user experience, and reduce operational costs. ZGA makes life easier for network operators, DevOps & IT pros, by automating connectivity to global resources.

Product Highlights

Cross-border Coverage

Zenlayer's network spans six continents, offering high-speed connectivity to global destinations throughout emerging markets. The network features over 280+ global edge points of presence (PoPs), offering 50+ Tbps of bandwidth capacity, and direct internet connections. Zenlayer maintains extensive relationships with local and global telecom operators and guarantees efficient transmissions from any location across more than 230 private lines.

Multiple Acceleration Modes

ZGA supports acceleration through multiple protocols such as TCP, HTTP, HTTPS, UDP, WSS, SSH, FTP and enables MUC & Client access, for maximum flexibility.

Self-serve Deployment

Clients can easily set up, deploy, and manage ZGA through the user-friendly Zenlayer Console.

WOW Service

ZGA comes with full access to Zenlayer's advanced technical team. 24-hour support is available at Zenlayer's network operations center (NOC) for rapid response troubleshooting in both English and Chinese. Zenlayer resolves more than 95% of issues within 4 hours.

Flexible Billing

The platform supports two billing methods, based on actual traffic (metered billing) and bandwidth (bandwidth billing), with additional custom billing methods available for VIP customers.

Use Cases

Gaming

- Global server acceleration
- Multiplayer interaction
- Sending updates

Online Education & Livestreaming

- Interactive audio and video
- Real-time chat

Offices

- Dynamic instruction transfer
- Business platform API calling
- Data collection and processing
- Edge computing

IoT/ Blockchain

- SaaS access (ERP, CRM, Video conference platform, etc.)
- Cloud access
- Enterprise VPN
- FTP access

e-Commerce

- Authentication and end-user access
- Product picture and video uploads
- Managing multiple platforms
- Front-end webpage and backend inventory database synchronization

Features

Connectivity

Extensive coverage: ZGA offers a wide range of direct peer-to-peer connections with global operators, for instant connectivity to almost any destination.

Instant cloud access: Connects to leading cloud providers like AWS, Azure, AliCloud, Ucloud, TencentCloud, IBM, and Huawei using existing lines throughout key regional hotspots.

SLA uptime guarantee: Zenlayer monitors customer networks in real time, backbone guaranteeing 99.9% uptime.

Customization

Protocol support: Supports domain name access, L4-L7 protocols including TCP/UDP, WebSocket, socket 5, HTTPS, FTP, ICMP, TLS 1.3 with backward compatibility, SSH, SPS and additional private protocols.

Protocol optimization: Combines forward error correction (FEC), network optimization, and other technologies to improve internet quality and optimize last mile connectivity. ZGA also supports unilateral acceleration, image compression, and byte stream caching.

Core support: Contains a proprietary congestion control algorithm, core TOA module, core TCP large file download module, and core TCP small file download module.

Dual-direction acceleration: Supports dual-direction acceleration (C2G, G2C), enabling global access regardless of the origin server's location.

Speed

Lowest latency: Provides < 10 ms latency in major cities and < 30 ms latency to all other locations for true real-time data transmissions.

Intelligent routing: Ensures the best routes, using real-line quality awareness, application-level intelligent routing, and advanced switching.

Dynamic acceleration: Optimizes enterprise services like virtual private networks (VPNs), video conferences, and internal workflow applications. ZGA also accelerates game dynamic instruction, improves blockchain data synchronization, and reduces frame loss and lag with video and audio.

Security

Source site protection: Provides source site hiding, source site load balancing, and source site real-time monitoring.

SSL encryption: Protects middle mile transmissions with full SSL encryption.

Access control: Uses last mile detection mechanisms like IP blocklist and allowlist and HTTPS self-service certificates. ZGA also provides IP access control lists (ACL), distributed denial of service (DDoS) protection, and web access firewall (WAF) security.

Architecture Overview

Most global organizations are relying on the public internet for cross-border content sharing and application delivery. Yet, the public internet is slow, insecure, and unreliable. ZGA serves as a fast lane for global connectivity, as an alternative to the public internet.

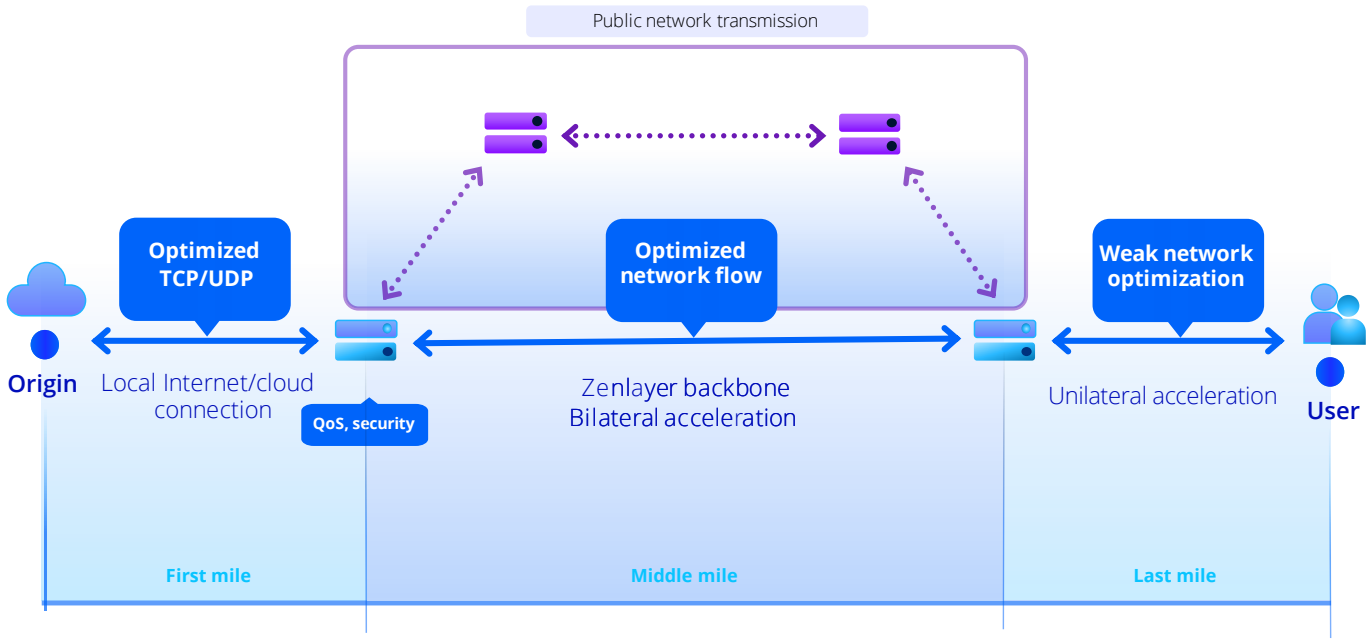
Most companies offering network acceleration today provide middle mile acceleration between two PoPs. ZGA goes a step beyond, providing intelligent end-to-end acceleration, across the first, middle, and last mile for a much more comprehensive level of support.

First Mile : Zenlayer provides cloud direct connections to the public cloud.

Middle Mile : ZGA uses the Zenlayer software defined networking (SDN) backbone and protocol optimization for lightning-fast acceleration between PoP sites.

Last Mile : ZGA detects the user's access area using smart DNS and provides access to the nearest local ZGA PoP.

ZGA Architecture



About Zenlayer

Zenlayer (www.zenlayer.com) offers on-demand edge cloud services in over 280 PoPs around the world, with expertise in fast-growing emerging markets like Southeast Asia, South America, the Middle East, and Africa. Businesses utilize Zenlayer's global edge cloud platform to instantly improve digital experiences for their users with ultra-low latency and worldwide connectivity on demand.