Fast, Secure, and Reliable
BaishanCloud Dynamic Acceleration

Overview
How people interact with online content has changed drastically over the last decades. From social media to online shopping, users expect a fast, interactive, and personalized experience everywhere they go and on any device they are using. However, the transformation that makes the content interactive and instant often makes the application slower. Industry surveys show that if a page takes more than 3 seconds to load, over 50% of users will terminate the visit. Accelerating dynamically generated content requires an end-to-end solution that overcomes the network congestion delay, cross-country bottlenecks, and packet loss along the way in order to deliver the content to the end-users. BaishanCloud’s Dynamic Acceleration platform is designed to solve this issue by deploying edge servers globally close to the end users with the advanced TCP optimizations and network optimization allows content owners to focus on creating content for their users and rely on BaishanCloud to guarantee the performance.

Product Highlights
- Optimized network routes between continents
- SD-WAN based technology
- Dynamic route selection
- Advanced analytics

Features
Intelligent Route Optimization
BaishanCloud’s intelligent network route optimization technology is based on Open Shortest Path First (OSPF) routing protocol, through multi-tiered delivery architecture, to send the request from end-users to customer’s origin. It detects the health status of routes in real-time to achieve zero delay failover and high availability. It establishes connection on Layer 2 (Data Link Layer) for better efficiency and utilizes IPSec to authenticate and secure the data in transit for security purposes.

Intelligent Network Monitoring
BaishanCloud employs comprehensive monitoring on its delivery platform including performance metrics of single-machine bandwidth, data center bandwidth, machine loading, CPU, and I/O. A monitoring agent is deployed on each POP to route requests between servers based on real-time metrics to achieve high service availability.

It Benefits
- E-commerce platform
- Mobile gaming
- Online education platform
- Instant messaging APP
- Online financial services
- and more...
Advanced TCP Optimizations

BaishanCloud’s advanced TCP optimization technology helps avoid Internet congestion, timely and accurately recovers packet loss, and selects optimized paths to deliver dynamic content to users. Its congestion control algorithm adapts to each user to improve download speed and stability. The self-adaptive window adjustment mechanism accurately determines network congestion and packet loss to avoid sharp drops in transmission rate. It is tested to be 10 to 100 times faster than the standard TCP protocol. The technology can be applied to all transport layers that use the TCP protocol including software, kernel, and hardware server.

Security

BaishanCloud’s dynamic acceleration platform is built with security in mind. Transport Layer Security (TLS) is 100% enabled and supported with options for customer to either use BaishanCloud’s TLS certificate or bring their own certificates. Customer also has the option to enable BaishanCloud’s Advanced Threat Detection (ATD) with dynamic acceleration. ATD is a highly advanced AI-based cloud security product that utilizes machine learning algorithms to learn behavioral patterns of legitimate users to recognize abnormalities and react in real time.

HTTP/2 and IPv6

BaishanCloud’s dynamic acceleration platform is tailored to serve modern Internet content and devices (such as IoT) and mobile phones. It supports HTTP/1.0, HTTP/1.1, and HTTP/2 with both IPv4 and IPv6 enabled. The platform will serve the compatible protocol and version based on the devices or clients end users are using without the need for customer to modify the origin.