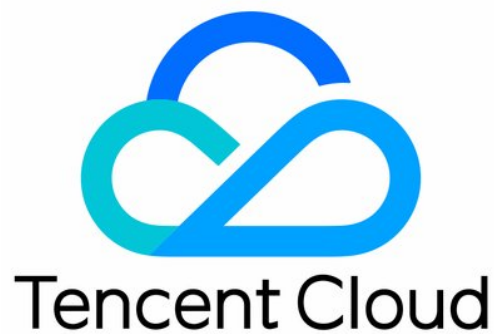


# Tencent Cloud EdgeOne

## Product Introduction

## Product Documentation



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# Product Introduction

## Overview

Last updated : 2025-04-01 10:45:29

### What Is Tencent Cloud EdgeOne?

Tencent Cloud EdgeOne (hereinafter referred to as EdgeOne) is the first truly integrated edge security acceleration platform in China based on a new architecture. It provides comprehensive security protection, network and application performance acceleration, leading edge computing, and comprehensive monitoring and operational analysis capabilities. Currently, the four major components of EdgeOne have gradually matured, offering developers diversified technical solutions:

Edge Acceleration	By optimizing HTTP/HTTPS, TCP/UDP network transmission, and combining dynamic and static content, it provides efficient acceleration service for customers' diversified business content in a one-stop and simplified manner.
Edge Security	Through a distributed architecture, it provides comprehensive security protection capabilities such as DDoS/WAF/Bot/rate limiting for businesses, further opening up security capabilities for regular protection for users.
Edge Media	Relying on Tencent's deep accumulation in network and audio-video technology over the past 20 years, media capabilities are further extended to edge nodes to improve quality and efficiency for multimedia services.
Edge Development	Flexible programming based on business development needs, combined with AI to provide developers with rich and easy-to-use tools, supporting rapid development, deployment, and management of edge applications.

### Product Architecture

EdgeOne mainly provides users with Anti-DDoS, cc attack protection, web protection, bot management, CDN static content acceleration, dynamic and static hybrid intelligent acceleration, edge functions, layer 4 proxy, dns resolution, etc. The product architecture is shown below:

### Product Features

## Edge Acceleration

### Accelerating dynamic and static content intelligently

Based on Tencent Cloud's globally distributed AZ edge nodes, EdgeOne can route requests to the nearest service node when an endpoint initiates a request. Static cacheable files are quickly responded to according to caching rules, while dynamic files are accessed via the best origin path selected through self-developed protocol optimization and origin link detection. This effectively reduces user access latency and improves response speed.

### Flexible DNS record management

EdgeOne provides authoritative DNS record resolution capability. Users can use the ns access method to one-stop host DNS records within the EdgeOne product, offering dns resolution, DNSSEC, custom ns, weighted resolution, line-based resolution, and other rich DNS capabilities. It also helps to directly output IP after accessing EdgeOne acceleration, further enhancing DNS resolution performance after accessing content distribution acceleration services.

### The full-chain HTTPS certificate

EdgeOne supports providing you with full-chain https certificate management capability, offering edge https certificate configuration, free https certificate automatic application/deployment/renewal capability, edge bi-directional authentication, origin mutual authentication, and other advanced https capabilities, helping your business achieve https encryption in full-chain access based on actual business needs.

### One-click global site configuration

Through one-click global site configuration, users can quickly and conveniently complete comprehensive site configuration management, significantly simplifying the complexity of configuring similar domain name services and reducing operation and maintenance pressure.

### Customizable rule engine capability

EdgeOne allows users to customize request configuration matching conditions and perform operations within the rules engine through a rich rule language, enabling users to flexibly customize business caching rules, network protocols, http headers, and response content within EdgeOne, providing a highly customizable edge acceleration service.

### High availability origin server load balancing

Cloud Load Balancer supports multi-level backup sources to achieve high availability of business, can actively detect the health status of origin servers, help users preemptively shield faulty origin servers, and schedule business traffic to healthy origin servers, effectively providing business stability and availability.

### Managing multiple business configurations

EdgeOne supports controlling and managing the current site configuration versions, allowing safe testing of new business capabilities in version management, and enabling quick deployment and rollback. This facilitates rapid

business iteration while further enhancing business operation stability and continuous availability through version management.

### Layer 4 proxy forwarding for TCP/UDP

Layer 4 proxy is an acceleration service based on the TCP/UDP protocol provided by EdgeOne. By leveraging EdgeOne's widely distributed Layer 4 proxy nodes, unique Anti-DDoS module and intelligent routing technology, it implements proximity access for end users, edge traffic cleaning, and port listening and forwarding. It offers high availability, low latency Anti-DDoS and Layer 4 acceleration services for Layer 4 applications.

## Edge Security

### T-level Anti-DDoS capability

EdgeOne, based on a powerful ddos traffic cleaning center, provides platform-level default DDoS protection and resources for all users by default. It meets the daily protection needs of most site businesses and supports independent DDoS protection, offering automatic cleaning capability for high-volume DDoS attacks, ensuring the security of user businesses.

### Out-of-the-box web protection

EdgeOne integrates web protection capability at the edge, helping user businesses filter and block malicious traffic at the edge. It provides managed rules, rate limiting, custom protection rules, and cc protection, effectively ensuring the security and reliability of your business.

### Intelligent bot management

EdgeOne provides client profiling and intelligent analysis through rich bot feature control combined with Tencent Cloud's own security database, effectively mitigating bot crawler risks on user websites and enhancing website security.

## Edge Media

### Instant video processing

Through edge instant video processing, after users upload videos to the VOD origin server, they can watch multi-bitrate videos with instant transcoding processing within seconds without waiting for video transcoding processing at the origin server, reducing the storage cost of transcoded videos and more flexibly adapting to the playback requirements of different terminals and network environments for transcoding formats and bitrates.

### Instant image processing

Users can directly process, cache, and respond to images through EdgeOne edge servers. The origin server only needs to store the original image, and the image format and size can be adaptively adjusted according to the request

terminal, effectively reducing image storage management costs and improving page load speed and performance.

## Edge Development

### Flexible edge functions

Based on edge nodes within EdgeOne global AZs, a serverless code execution environment is provided for users. Users only need to write function code and corresponding trigger rules within edge functions, without configuring and managing infrastructure like servers, to elastically and securely run code at edge nodes close to users, responding to user requests.

### EdgeOne Pages

Users can complete web page development at edge nodes, allowing developers to quickly build and deploy static sites and serverless applications, simplifying service deployment processes and server management costs, providing an excellent website experience.

### Custom image generation

Image generation leverages EdgeOne's powerful edge computing capabilities to ultra-rapidly complete image rendering based on your business needs, custom generate required image content, and use reusable templates and rich API interfaces to help you quickly mass produce required images, reducing the difficulty of image business processing.

## Why Choose EO

EdgeOne serves multiple industries such as finance, gaming, social entertainment, e-commerce/new retail, and traditional enterprises (logistics/ticketing/aviation/hotels), mainly applied to enterprise websites or APP businesses with acceleration or security protection needs, addressing the following issues:

**Business Network Issues:** In cross-ISP/cross-region scenarios, slow response to user client resource requests and high packet loss rate. EdgeOne provides users with nearby node services through globally distributed edge nodes and bandwidth reserve, caching static resources at edge nodes for quick response to users, and dynamic resources achieve best origin path access through private protocol optimized link, reducing latency.

**Business Security Issues:** User businesses may encounter high-volume DDoS attacks, vulnerability attacks, bot crawlers, and other malicious requests. Traditional solutions require multiple security products stacked, and DDoS protection and CDN products usually cannot be shared. EdgeOne provides one-stop security protection capability, intercepting malicious requests at edge nodes through intelligent security policies and user-defined security policies, avoiding centralized transmission to the origin server firewall, comprehensively addressing security challenges in digital business.

**High Operation and Maintenance Complexity:** Traditional products require multiple products stacked to achieve network acceleration service and reliable security protection, usually requiring the maintenance of multiple products

and complex access configurations, resulting in high workload for business troubleshooting and monitoring. As a one-stop platform, EdgeOne highly integrates security and acceleration capabilities, allowing users to solve all network performance and security protection issues in one place, effectively simplifying the operation and maintenance complexity of the business.

## Quick Start

[Quickly integrate EdgeOne from scratch](#)

[Quickly enable layer 4 proxy service](#)



# Strengths

Last updated : 2025-01-15 09:59:19

## Innovative Integrated Protection Architecture Significantly Enhancing Performance

EdgeOne is a truly integrated edge security and acceleration platform based on a new architecture, offering comprehensive security protection, network and application performance acceleration, leading edge computing, and comprehensive monitoring and operational analysis capabilities to fully meet network security and acceleration needs. In the face of sudden large traffic, the system uses DNS+BGP hybrid intelligent resolution to precisely schedule traffic to Unicast edge nodes, avoiding network congestion and ensuring high-quality user experience, leading the industry in performance.

## One-Stop Management Reducing Operation and Maintenance Costs

Offering a variety of features including DNS records, dynamic and static content delivery acceleration, Anti-DDoS, web protection, bot management, layer 4 proxy, Media Processing Service (MPS), and edge functions, EdgeOne's one-stop service can greatly improve operation and maintenance efficiency, enabling quick troubleshooting and resolution, making business more stable and reliable. Compared to purchasing separate product combinations, the product price is more cost-effective and the operation and maintenance service is more worry-free.

## Worry-Free Clean Traffic Billing

Most security products on the market adopt a (base + elastic) billing model, where traffic includes both business traffic and attack traffic. Tencent Cloud EdgeOne (EdgeOne) uses a "clean traffic" billing model, meaning that requests intercepted by security features are not billed, and only the traffic and request volume processed by security features are billed. This billing model helps users better manage budget and reduce unexpected bills caused by large-scale attacks.

## Rich and flexible console capabilities

The console provides an integrated management console with over ten capabilities, including integrated domain name resolution, site acceleration, security protection, rule engine, layer 4 proxy, edge functions, Cloud Log Service (CLS),

and data analysis. This helps you achieve one-stop security protection and content acceleration at the edge. With flexible rule configuration and edge functions, you can flexibly configure business response and origin pull rules according to your needs, achieving flexible edge business processing.

## Massive Nodes and Bandwidth Resource Reservation

Tencent Cloud EdgeOne (EdgeOne) resources are distributed across 70+ countries and regions, with a whole network bandwidth of 200Tbps+, covering 3200+ acceleration nodes in global AZs and 50+ small and medium ISPs. Among them, there are 2300+ domestic nodes and 900+ overseas nodes, with single-node storage capacity reaching 40 TB to 1.5 PB and bandwidth load reaching 40 Gbps to over 200 Gbps. This effectively improves access quality across regions and ISPs and handles traffic surge scenarios.

### Domestic Node Distribution

Region	Specific area
East China	Shanghai City, Jiangsu Province, Zhejiang Province, Anhui Province, Jiangxi Province, Shandong Province, Fujian Province
North China	Beijing City, Tianjin City, Shanxi Province, Hebei Province, Central Inner Mongolia Autonomous Region
Central China	Henan Province, Hubei Province, Hunan Province
Northwest China	Shaanxi Province, Gansu Province, Qinghai Province, Ningxia Hui Autonomous Region, Xinjiang Uygur Autonomous Region, Western Inner Mongolia Autonomous Region
South China	Guangdong Province, Hainan Province, Guangxi Zhuang Autonomous Region
Southwest China	Chongqing, Sichuan Province, Guizhou Province, Yunnan Province, Tibet Autonomous Region
Northeast China	Heilongjiang Province, Jilin Province, Liaoning Province, Eastern Inner Mongolia Autonomous Region

### International Node Distribution

Region	Specific area
North America	USA, Mexico, Canada
South	Brazil, Colombia, Peru, Ecuador, Chile, Argentina

America	
Asia	Hong Kong (China), Macau (China), Taiwan (China), Japan, South Korea, Mongolia, Vietnam, Laos, Singapore, Thailand, Philippines, Myanmar, Cambodia, Malaysia, Indonesia, India, Bangladesh, Nepal, Pakistan, Kuwait, Kyrgyzstan, Qatar, Israel, Turkey, Iraq, Saudi Arabia, Oman, United Arab Emirates, Bahrain, Lebanon, Jordan, Kazakhstan, Uzbekistan, Azerbaijan, Brunei
Africa	Djibouti, Kenya, Madagascar, Mauritius, Egypt, South Africa, Algeria
Oceania	Australia, New Zealand
Europe	Italy, Austria, Poland, Finland, Denmark, Belgium, Sweden, Spain, France, Netherlands, Germany, United Kingdom, Norway, Romania, Latvia, Bulgaria, Czech Republic, Switzerland, Hungary, Portugal, Greece

## A Simple and Easy Access Experience

EdgeOne provides users with a simpler access experience compared to traditional CDN and security products, offering free HTTPS certificates, configuration templates, one-click global site configuration, and preset security rules. This makes it easier for users to get started with EdgeOne and lowers the usage threshold.

## Rich Professional Service Experience

The EdgeOne team has extensive experience in business migration, major project assurance, and daily operations, with abundant resources for large-scale business cutover and major project assurance. They provide 24/7 monitoring, proactively detect and respond, and effectively shorten response time.

# Use Cases

Last updated : 2025-01-24 16:27:26

Business Requirements		Common Scenes	Applicable Industries	Scenarios
Poor User Access Quality	Due to the wide distribution of users, cross-regional and cross-ISP access may result in <b>slow loading speed, lag, or even access failure.</b>	Loading static files for websites, such as portals/personal blogs/forums Various download scenarios for games/apps/videos	Suitable for all industries, more prominent in gaming/ecommerce/social entertainment industries	Ec gl di nc ne ac us im ac
		Payment/login APIs are unstable, e.g., ecommerce platform access load/transactions.		
Business Traffic Burst	The server bandwidth resources and performance of the site are limited. When there is a <b>large number of users accessing simultaneously</b> , it will cause the <b>origin server to be unable to handle</b> , resulting in <b>unavailability of user access.</b>	Game Publish/Update Sports Events live stream Popular series release	Suitable for all industries, more prominent in gaming/ecommerce industries	Ut Ec de sc sy fle tra er bu
		Ecommerce major promotion OTA Upgrade		
Encounter a Network Attack	After the site's server is directly exposed to the public network, it is prone to traffic-based and HTTP DDoS attacks,	Sites and applications that provide services to the Internet directly through Public IP addresses	Gaming/Finance/Ecommerce/Social Entertainment/SaaS Services, etc.	Ec a pr se se ca cc

	<p>resulting in <b>service being unable to access.</b></p>			<p>dc ur ex or lo ris pr ca tr; <b>DI</b> <b>ar</b> <b>at</b></p>
<p>Exploit Web Security Vulnerabilities To Gain Data and System Permissions</p>	<p>Hackers can exploit known or 0-Day web vulnerabilities to intrude into site service components or systems, steal key data or gain advanced system permissions, leading to issues such as <b>data leakage, data tampering, and malicious extortion.</b></p>	<p>Sites or applications that store customer data or commercial data</p>	<p>Online Payment/Retail/Ecommerce/Finance/Social Industry</p>	<p>Ec cc <b>vu</b> <b>at</b> ca ec us <b>ru</b> <b>se</b> <b>ar</b> <b>re</b> <b>ex</b> <b>ac</b> ar <b>au</b> <b>up</b> <b>au</b> <b>de</b> efl sil re ex sti de pe</p>
<p>Use Crawler Tool To Forge Human Access and Abuse Services</p>	<p>Arbitrary access by Crawler Tool may cause <b>abnormal website traffic and increased backend load,</b></p>	<p>Sites or applications that provide transactional services (e.g., login, registration, payment, query) or</p>	<p>Retail/Ecommerce/Finance/Education/SaaS Services, etc.</p>	<p>Ec a ' <b>M</b> <b>st</b> ca ris ac</p>

	<p><b>affecting the access experience of legitimate users.</b></p> <p>Meanwhile, malicious crawlers can <b>crawl commercial information for unfair competition or service abuse</b> (e.g., automatic registration of numerous accounts to obtain coupons and free trial qualifications), and <b>further steal valuable account permissions</b> (e.g., credential stuffing, brute force cracking of accounts).</p>	<p>SaaS Services (e.g., information query, price query, large model dialogue services).</p>		<p>in ar te Te bi cr vis pr di cc to ac re as cr</p>
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# Comparison Between EdgeOne and CDN Products

Last updated : 2024-08-26 16:51:34

Tencent Cloud EdgeOne (referred to as EdgeOne below for short) is a comprehensively upgraded product of [Content Delivery Network \(CDN\)](#), offering richer features, more flexible configuration methods, and more convenient operations. Compared to the CDN product, EdgeOne not only has the original acceleration capabilities of CDN, but also provides security protection, edge functions, L4 proxy, and DNS resolution features. Through one-stop services, EdgeOne can address such problems as poor access quality, unstable access, and high attack risks in gaming, e-commerce, retail, and finance industries.

## Note:

1. EdgeOne and CDN are two different products. The EdgeOne plans and extra packages you purchase are not applicable to the CDN product. Similarly, the resource packages purchased within CDN are also not applicable to EdgeOne.
2. EdgeOne provides different platform capabilities based on the plan you purchase. For details, see [Comparison of EdgeOne Plans](#).
3. For the billing overview only about clean traffic, see [About "clean traffic" billing instructions](#).

The following table introduces the major upgrades of EdgeOne:

Strengths		EdgeOne	Content Delivery Network (CDN)	Enterprise Content Delivery Network (ECDN)	Secure Content Delivery Network (SCDN)
Richer features	Static content delivery acceleration	✓	✓	✓	×
	Smart acceleration for dynamic content	✓	×	✓	×
	DDoS/CC protection	✓	×	×	✓
	Bot protection	✓	×	×	✓
	Web protection	✓	×	×	✓

	Traffic scheduling	✓	×	×	×
	Custom fields for real-time log push	✓	×	×	×
	Edge functions	✓	×	×	×
	Rule engines	✓	×	×	×
	L4 proxy	✓	×	×	×
	DNS record hosting	✓	×	×	×
More convenient billing modes	Plan mode	✓	×	×	✓
	Resource package deduction	✓	✓	×	×
	Billing only for protected traffic	✓	×	×	×
	Postpaid mode for excess usage	✓	×	×	×
	Billing for "clean traffic"	✓	×	×	×
Simpler and more flexible configuration methods	Quick global configuration of sites	✓	×	×	×
	Scenario-based recommended configurations	✓	×	×	×
	Free certificates	✓	×	×	×



# Use Limits

Last updated : 2025-01-15 10:50:27

## Domain Name Filing

For site domain names accessing Tencent Cloud EdgeOne, if the acceleration region is selected as Chinese mainland or Global availability zone, you must first complete the ICP filing. If your current site domain name has not completed the ICP filing, you can only choose to use the **Global AZ (excluding Chinese mainland)** region for acceleration.

## Credibility Check

When adding a domain name, Tencent Cloud EdgeOne will conduct a **domain name credibility check**. If your domain name has previously engaged in the following activities and is listed in the blocklist due to low credibility, Tencent Cloud EdgeOne will prohibit the account from continuing domain name access:

The site domain name was previously used to publish severely non-compliant content on Tencent Cloud EdgeOne.  
The account associated with the site domain name has accumulated a large amount of unpaid debt on Tencent Cloud.  
The site domain name is identified as malicious domain name by Tencent PC Manager.

## Content Moderation

When you use the Tencent Cloud EdgeOne service in the Chinese mainland, you should comply with the laws, regulations, and policies of the Chinese mainland, and should also ensure that your qualifications, capabilities, and usage behaviors meet the requirements of local laws, regulations, and policies.

If the website at your domain name displays non-compliant content, including but not limited to the following content, we will block the non-compliant content and even terminate the SCDN service in severe cases:

Private servers game versions.

Pirated game/software/video websites.

Unauthorized hospital and pharmaceutical websites.

Pornographic content.

Drug-related content.

Gambling advertisements and games.

## Product Quota and Specification Limits

Type	Limits
Sites and domain names allowed to access	<p>If the site has accessed EdgeOne in NS mode, it cannot access again.</p> <p>If the site has accessed EdgeOne in CNAME mode, multiple CNAME sites are allowed to coexist.</p> <p>Only the English domain names are supported. Converting Chinese and Korean domain names to punycode for access is not supported currently.</p>
Site number limit	<p>The number of sites connected under the same account cannot exceed 1000. Exceeding this limit may result in abnormal queries in modules such as the primary navigation data overview and billing data.</p>
Reserved status codes	<p>499 and 521-599 are reserved status codes for EdgeOne. It is recommended to avoid using these status codes in your business to prevent conflicts.</p>
Edge functions	<p>For use limits related to edge functions, see <a href="#">Edge Functions Overview</a>.</p>
Other quotas	<p>Various features may have different quotas depending on the current package level, such as cache purge, cache pre-warming, and rule engine quantity. For detailed quotas, see <a href="#">Comparison of EdgeOne Plans</a>.</p>