

File High-Speed Transmission Solutions for Enterprises

Transmission around the world with a thunder-like speed



www.raysync.io

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01 | **About RaySync Software**

Raysync is a professional service provider for enterprise file transfer and the first enterprise in China to provide commercial high-performance file transfer products. RaySync provides high-performance, stable and secure data transmission services for customers in IT, film and television, bio-gene, and manufacturing industry.

As a professional software platform, RaySync is designed to provide customers with reliable and secure acceleration and management services of files. RaySync Cloud Transmission is not affected by traditional file transfer methods (such as FTP, HTTP or CIFS), which can reduce latency and data packet loss rate maximumly, and make full use of network bandwidth resources to meet customer file acceleration transmission requirements.



- High-speed and stable transmission: Transmission speed is hundreds of times faster than FTP and HTTP, and transmission is not affected by network conditions.
- Cross-border transmission: file transmission is not affected by transmission distance; long-distance transmission can also guarantee ultra-high-speed transmission.
- Large file transmission: RaySync Cloud Transmission supports the high-speed transmission of the large files at TB level, which greatly reduces the transmission time.

»» Fields of Application



Film production and distribution



Government agencies and schools



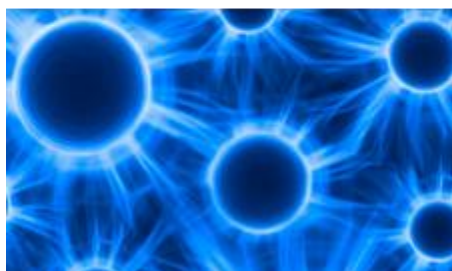
IT Internet enterprises



Automobile manufacturing industry



Media & TV station



Bioscience and gene science



New energy industry



Audio and video processing



Legal and electronic data files



Banking and financial industry

»» Enterprise Team

Combined with Raysync transmission engine and traditional network resources, we have experienced technical and service teams in the industry to provide customers with high-speed, stable and safe network optimization services, greatly saving investment in enterprise network resources, improving efficiency and improving network use experience.



02 | **Present Situation of Enterprise Document Transmission**

Background

With the continuing growing of file sizes, managing and delivering large files has become a problem for many companies. Many companies have abandoned the traditional output mode based on the FTP/TCP protocol and gradually switched to a faster, more reliable, stable and secure alternative file transfer solution.

Finding more efficient file acceleration transmission methods are not limited to high-tech fields, many traditional industries such as news media, energy, automobile manufacturing, mobile communications, government agencies, etc. also expect to obtain more efficient file transmission services.

Traditional file transmission based on TCP protocol may experience slow transmission speed, transmission failure and even file corruption when a huge amount of enterprise transmission data are dealt with. This situation can be a great hidden danger for companies or organizations that transmit data at regular intervals. This is not only a waste of valuable time, but it also can not effectively protect the security and stability of the data, in addition, this traditional file transmission mode can increase enterprise cost, and reduce the overall operational efficiency.

Core problem points at the present

I. Slow Transmission Speed

There are many transmission problems during the transmission of large files, such as low transmission speed and high latency.



II. Security Flaws

There are too many open transmission ports with the FTP transmission mode, and the firewall is vulnerable to attacks such as hackers and viruses.

III. Lack of Stability

Large files cannot be completely transmitted, and packet loss is likely to occur during transmission, as a result, data integrity cannot be guaranteed.



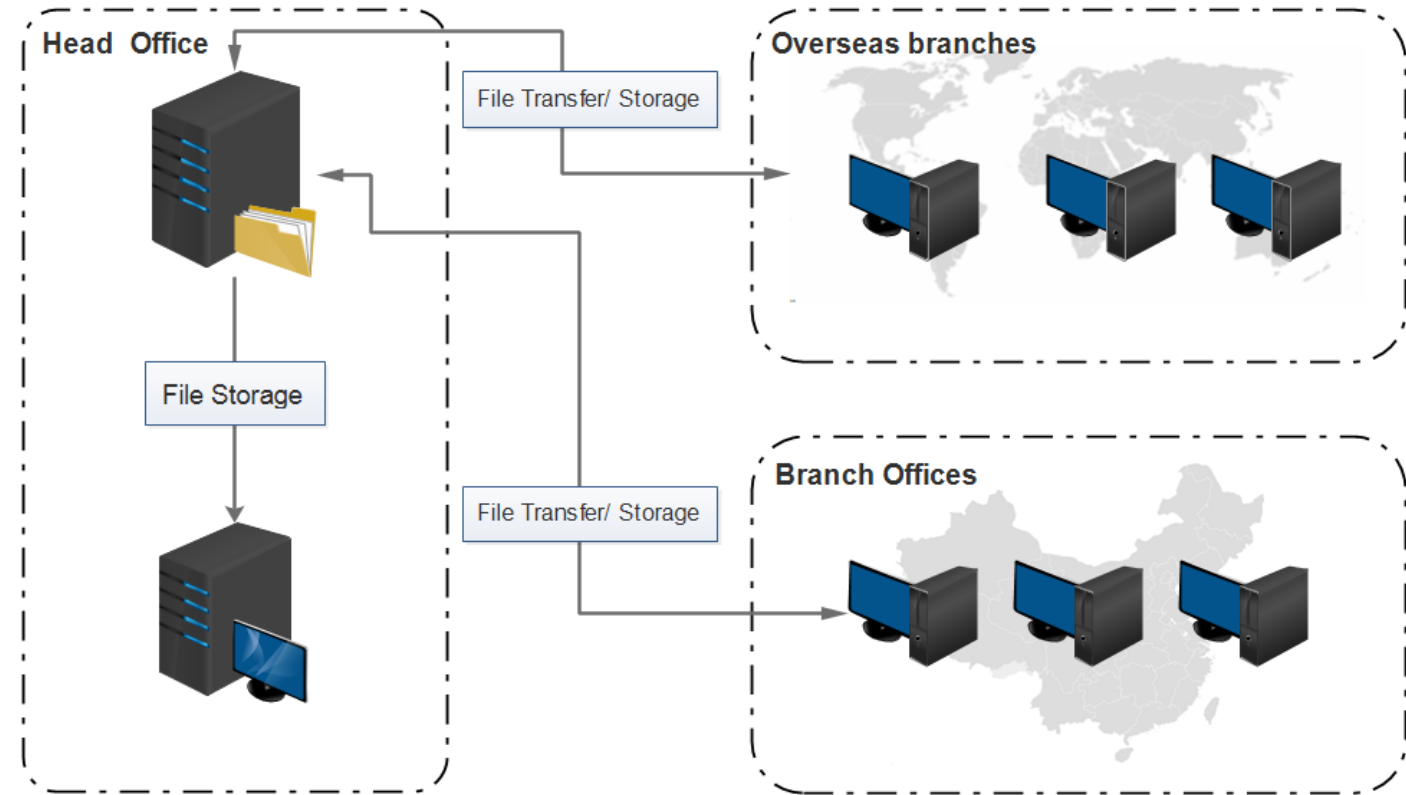
Present Situation of Enterprise Document Transmission Speed

I. Slow Transmission Speed

| Low Bandwidth Utilization

Low bandwidth utilization and slow uploading and downloading speed can reduce the work efficiency of enterprises.

For example, cross-regional employee file transmission of enterprises, cross-regional customer file transmission of enterprises, and cross-regional IT system file transmission of enterprises.





Present Situation of Enterprise Document Transmission Speed

I. Slow Transmission Speed

| High Latency and Packet Loss Rate

latency and packet loss rate situations of domestic and international networks across regions.

region	Place transmission is initiated	Transmission destination	latency (ms)	Packet loss rate(%)
Domestic	Shenzhen	Beijing	50~60	0.1%~0.5% (within the same operator)
Overseas	Domestic	Asia - Singapore	60~80	1%~5%
	Domestic	Asia - India	120~200	3~10%
	Domestic	West Coast of North America - Los Angeles	120~150	1~10%
	Domestic	East Coast of North America - New York	180~250	3~15%
	Domestic	Europe - Frankfurt, Germany	150~300	3~15%
	Domestic	Southern Hemisphere - Sydney, Australia	200~350	5~20%
	Domestic	Southern Hemisphere - South America, St. Paulo,Brazil	200~400	5~20%

What to do if the latency and packet loss of files are too serious in the network transmission across regions?



Present Situation of Enterprise Document Transmission Speed

I. Slow Transmission Speed

| High latency and Packet Loss Rate

High latency, severe packet loss, and low rate when transmitting files across regions



FTP transfer rate test data

Starting location	Destination	Network bandwidth	FTP	Bandwidth utilization
Tokyo, Japan	Shanghai	200Mbps	3.8Mbps	1.9%
San Francisco, U.S.	Shenzhen	100Mbps	2.2 Mbps	2.2%
Paris, France	Shenzhen	100Mbps	2.4Mbps	2.4%
Mumbai, India	Shenzhen	50Mbps	0.9Mbps	1.8%

What to do if the latency and packet loss of files are too serious in the network transmission across regions?

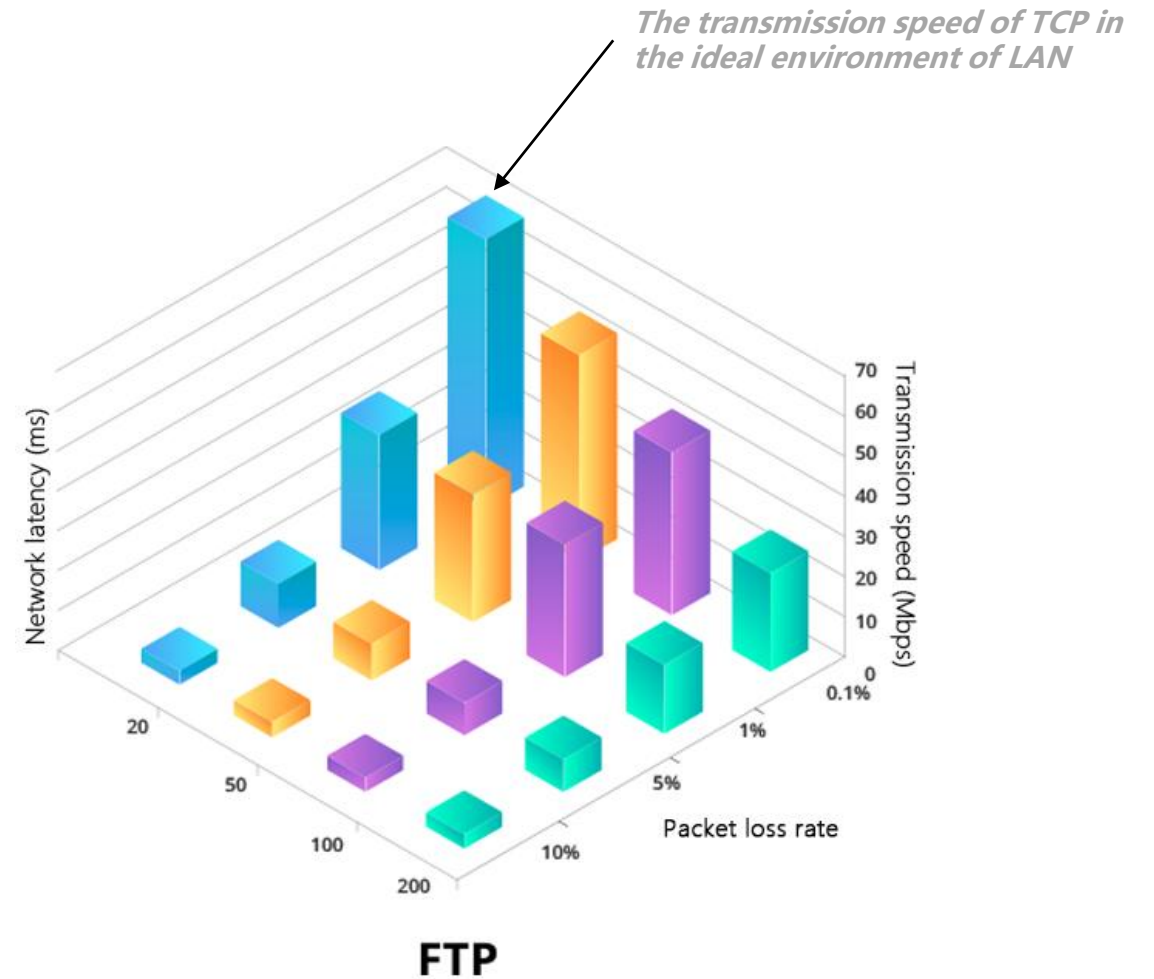


Present Situation of Enterprise Document Transmission Speed

I. Slow Transmission Speed

Problems with the TCP transport protocol:

- When the latency and packet loss of files increase, the network transmission throughput will drop sharply;
- In a transnational network environment with a latency of 200 milliseconds and a packet loss rate of 10%, the TCP transmission speed is only 50 KB-100 KB/sec;
- It can not meet the needs of remote transmission of data across provinces, countries, etc.



Comparison diagram for the network file transmission latency and packet loss under the TCP environment



Present Situation of Enterprise Document Transmission Speed

I. Slow Transmission Speed

| FTP transfer status across regions

Case: FTP transmission live diagram From the USA to China

Transmission environment:

- Server A : Alibaba Cloud, USA Bandwidth 100Mbps
- Server B : Alibaba Cloud, Shenzhen Bandwidth 100Mbps

Transmission system:

- FileZilla FTP (a popular open source FTP software system with millions of software downloads per year)

服务器/本地文件	方向	远程文件	大小	优先级	状态	
ftp://test@47.89.1...						
C:\Users\Administ...	-->>	/2G.txt	2,147,4...	正常	正在传输	
已耗时 00:05:58	剩余 10:37:10	0.9%	20,709,376 字节 (54.4 KiB/秒)			

Present Situation of Enterprise Document Transmission Speed

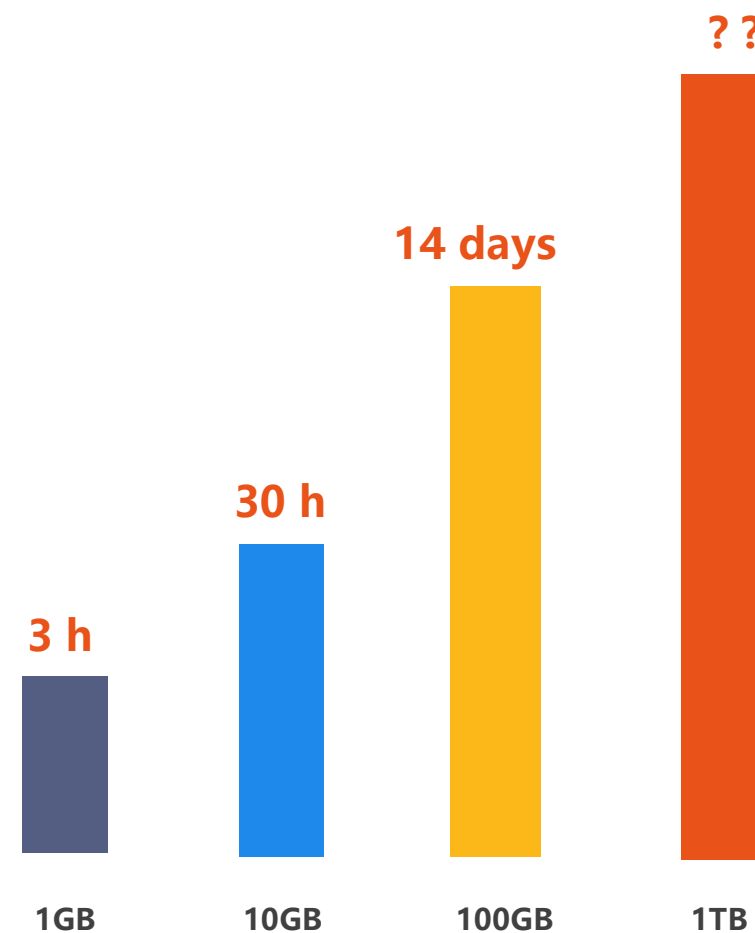
I. Slow Transmission Speed

| High Transmission Time Cost

Enterprise file transmission speed based on the statistics in the FTP transmission:

- 1KB=30s
- 1GB=3h
- 10GB=30h
- 100GB=300h=14 days

So what is the 1TB file transfer time?





Present Situation of Enterprise Document Transmission Security

II. Security Flaws

| Transmission security can not be guaranteed

The transmission latency of mass data can cause errors, and manual troubleshooting is too hard.

File data error

If mass data are sent by the form of hard disk, the consequence is unimaginable once the hard disk is lost.

Hard disk lost

Information leakage

Too frequent FTP transmission can cause firewall to be attacked and information leakage.

File loss

Transmission of a number of files cannot be completely transferred at one time, and files loss may occur.

| Data security risks

Data leakage? ?

Business information is eavesdropped? ?

System information resources are stolen? ? ?





| 2018 Information Security Events at Home and Abroad

Supply chain event of the Driving The Life software

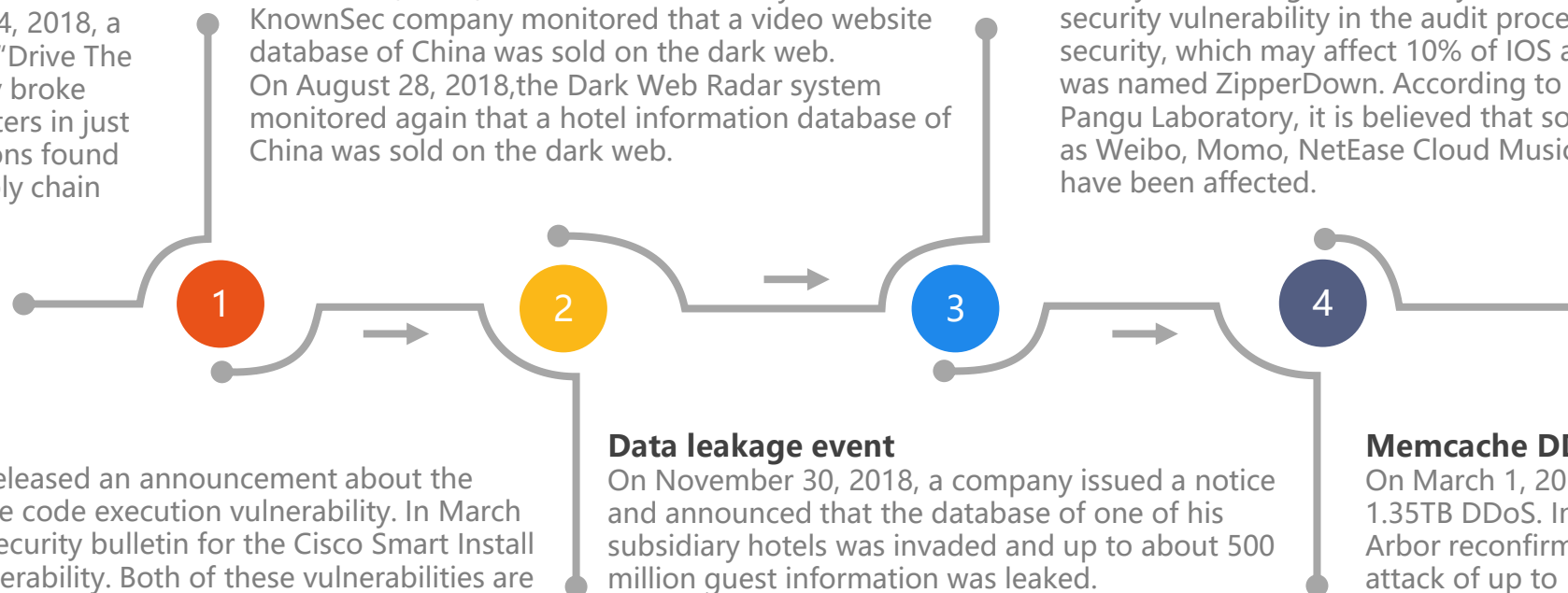
On the afternoon of December 14, 2018, a Trojan that spread through the "Drive The Life" upgrade function suddenly broke out and infected 100,000 computers in just two hours. Follow-up investigations found that this was a well planned supply chain intrusion event.

Data leakage event

On June 12, 2018, the Dark Web Radar system of KnownSec company monitored that a video website database of China was sold on the dark web. On August 28, 2018, the Dark Web Radar system monitored again that a hotel information database of China was sold on the dark web.

ZipperDown common vulnerability

In May 2018, Pangu Laboratory discovered a kind of common security vulnerability in the audit process for the IOS application security, which may affect 10% of IOS applications. The vulnerability was named ZipperDown. According to the information disclosed by Pangu Laboratory, it is believed that some popular applications such as Weibo, Momo, NetEase Cloud Music, QQ Music, and Kuaishou have been affected.



Cisco router attacked event

In January 2018, Cisco officially released an announcement about the Cisco ASA firewall webvpn remote code execution vulnerability. In March 2018, Cisco officially released a security bulletin for the Cisco Smart Install remote command execution vulnerability. Both of these vulnerabilities are unauthorized remote command execution vulnerabilities, and attackers can successfully implement their attacks without logging in credentials.

Data leakage event

On November 30, 2018, a company issued a notice and announced that the database of one of his subsidiary hotels was invaded and up to about 500 million guest information was leaked.

In December 2018, a Twitter user wrote that the resume information of over 200 million users in China was leaked.

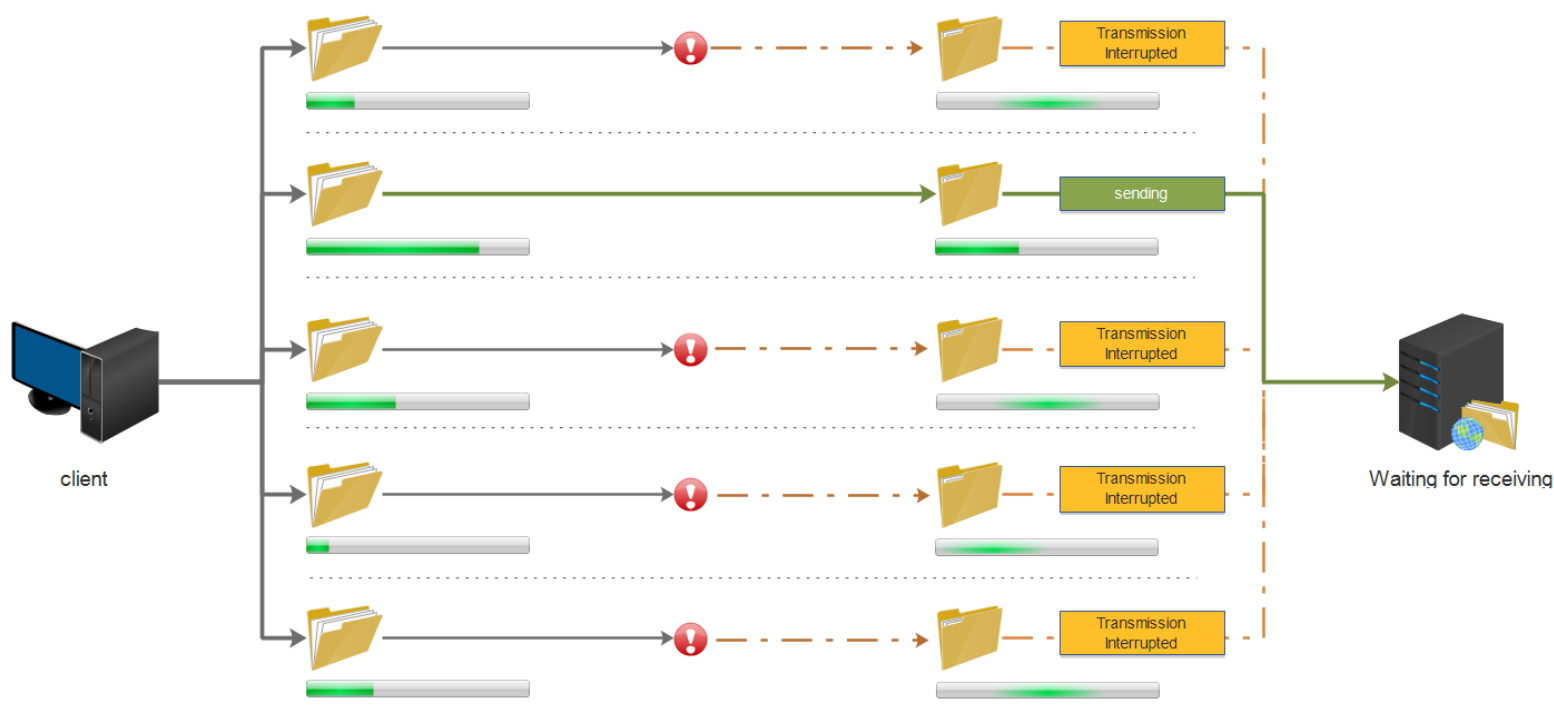
Memcache DDoS attack

On March 1, 2018, Github was attacked by a 1.35TB DDoS. In the following days, NETSCOUT Arbor reconfirmed an amplified reflection DDoS attack of up to 1.7 Tbps caused by Memcache DDoS.

Present Situation of Enterprise Document Transmission Speed

III. Lack of Stability

| File transmission stability can not be guaranteed



If a user transmits a large number of files to the branch of a multinational company from a client, the transmission will be easy to interrupt due to problems such as packet loss and latency.

It is necessary to manually check the interruption file and transmit it again, as a result, the transmission stability cannot be guaranteed.

03 | RaySync Functional Characteristics

RaySync Transmission

With the industry-leading transmission engine core technology, RaySync can solve perfectly the problems of long-distance large files transmission and massive small files transmission, and its transmission speed is more than 100 times that of traditional FTP!

At the same time, RaySync has a professional technical and service team to ensure the best quality experience for customers.



**High-speed
transmission**



**Massive small files
transmission**



Rapid deployment



High data security



Easy to integrate



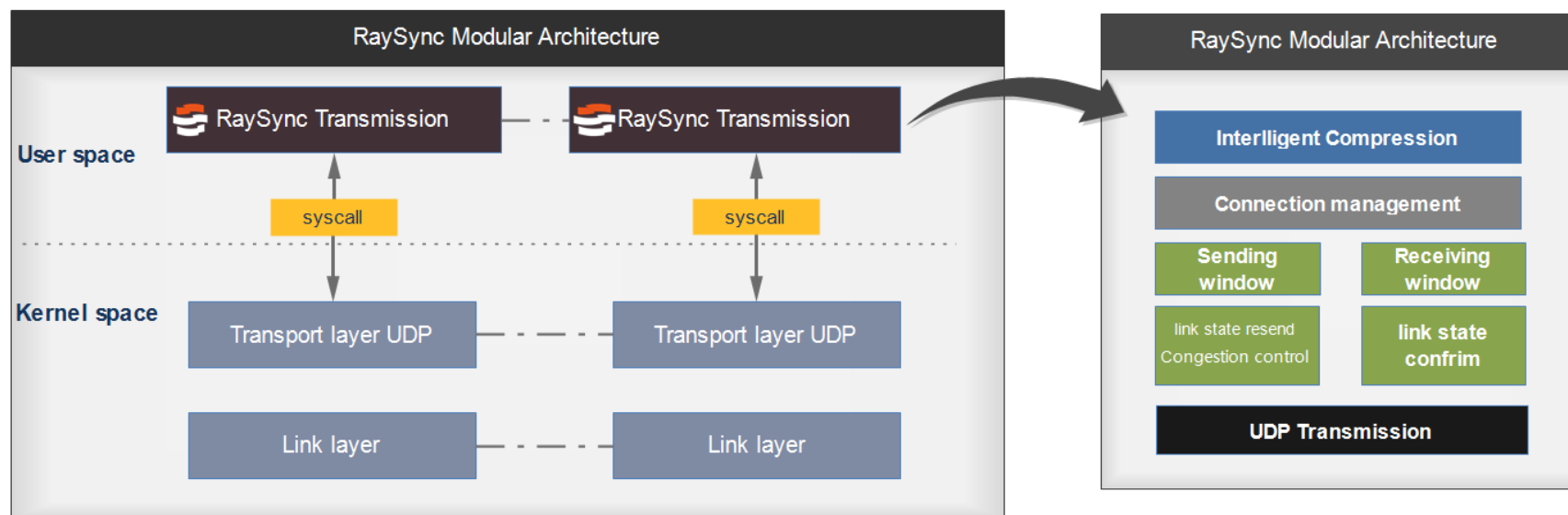
Stable and reliable

Brand new transmission protocol and breakthrough of speed limit

With the explosive growth of unstructured data, the rapid and reliable transmission of large amounts of digital information on a global scale has become a key factor for business success in the transmission industry, data transmission involves a wide range of industries, including digital media, entertainment, and genomic sequence, etc..

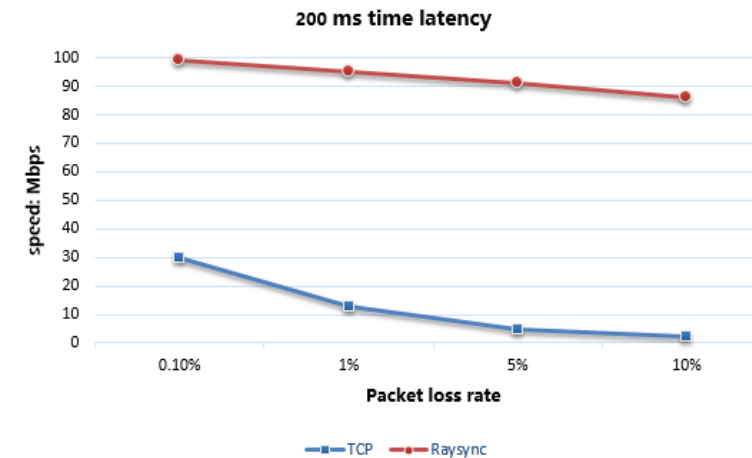
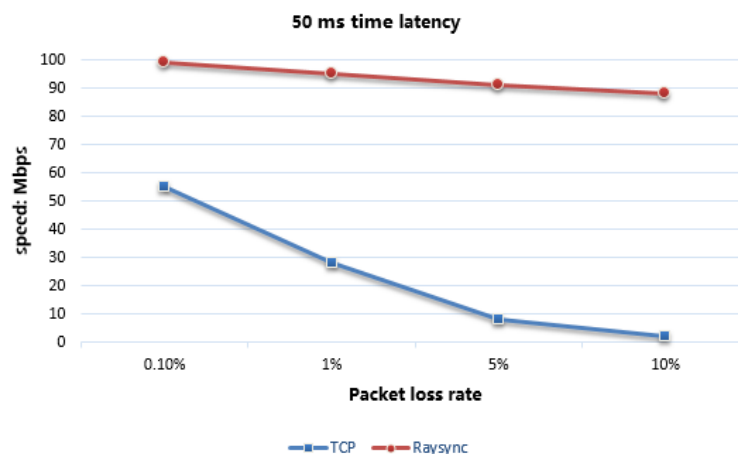
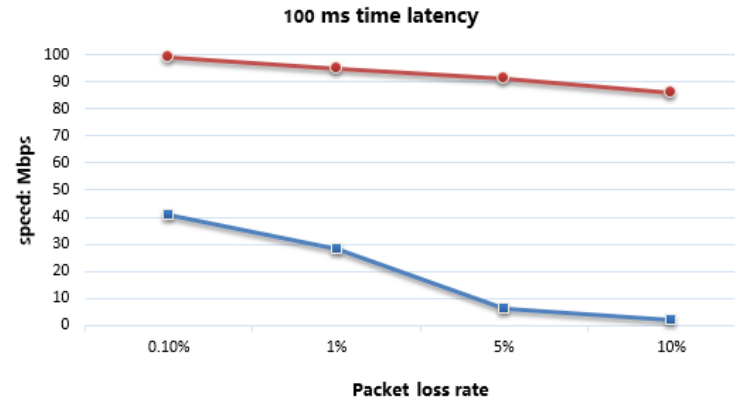
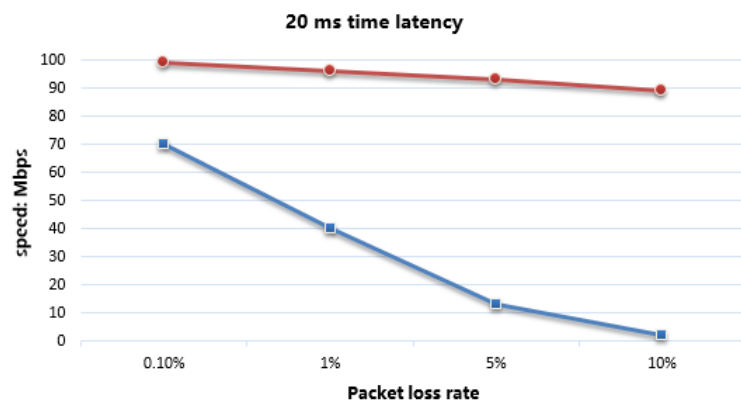
Enterprise teams need to collaborate remotely across the world for terabytes of data file distribution, sharing, and exchange, which require that data can be transmitted globally at a high speed.

RaySync's UDP optimization transmission technology is an innovative software that eliminates the fundamental shortcomings of traditional TCP-based file transmission technologies such as FTP and HTTP. Therefore, the transmission speed of RaySync is hundreds of times faster than FTP/HTTP, saving transmission time, no limits of file size, transmission distance or network condition, including through satellite, wireless and exiting long-distance and unreliable intercontinental links transmission.



Compared with TCP protocol transmission

The TCP transmission control protocol can provide reliable data transfer under ideal conditions, but it has an inherent throughput bottleneck. As the packet loss and latency increase on the long-distance WAN, the bottleneck becomes more prominent and serious. RaySync is a new-type large data transmission protocol that has the advantage of reliability at the application layer in an innovative way, eliminating TCP error of packet loss, which can result in a low efficiency and transmission rate fluctuation. To ensure 100% reliability, RaySync implements its own theoretically proven best mechanism that can accurately identify and forward the information of real lost packets on the transmission channel.

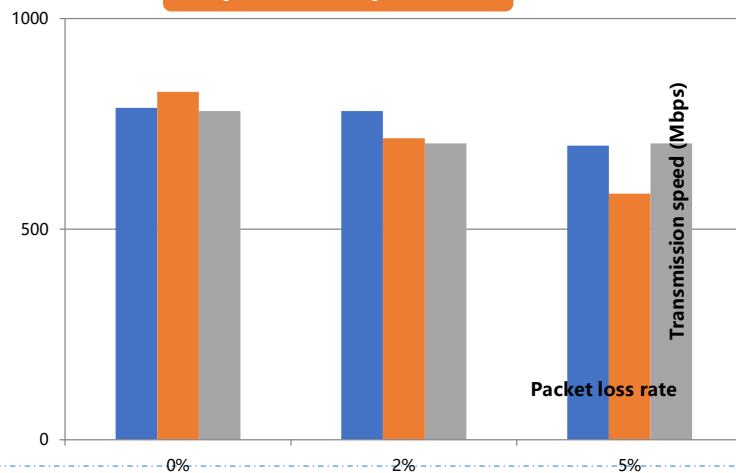


Compared with Aspera

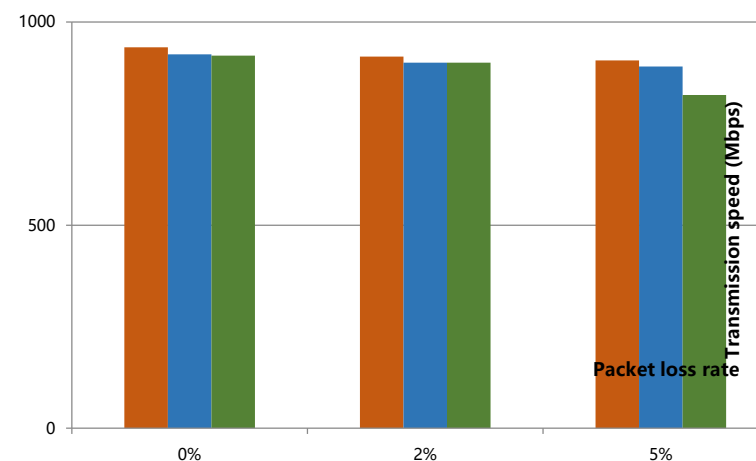
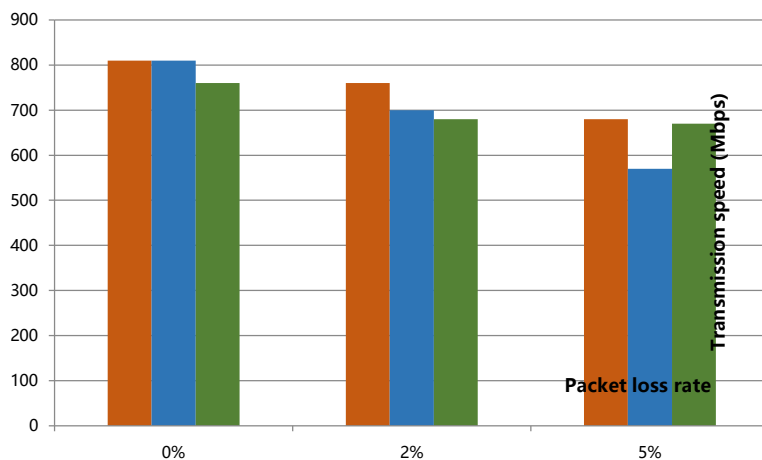
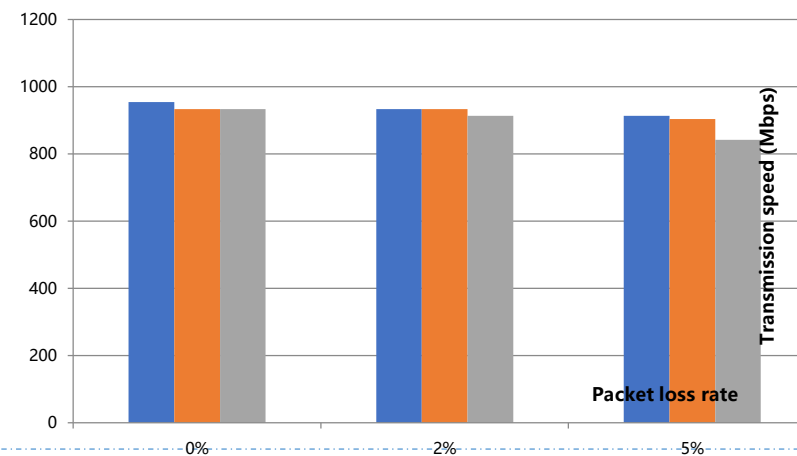
Test environment: server host is in Shenzhen Alibaba Cloud Linux environment, Centos7.4 system; client host is in Shenzhen Alibaba Cloud Window environment, WIN2008 R2 system; both internal network bandwidths are 1Gbps. Products are installed on the same server host and client host respectively.



Upload comparison

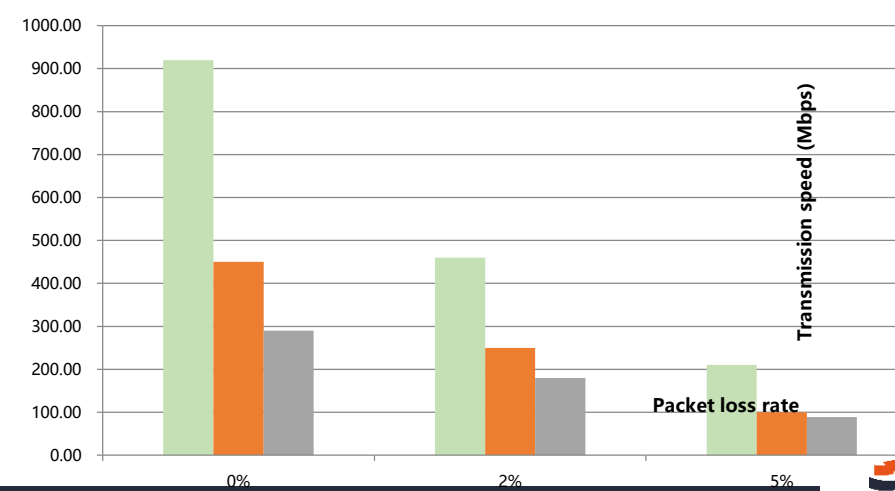
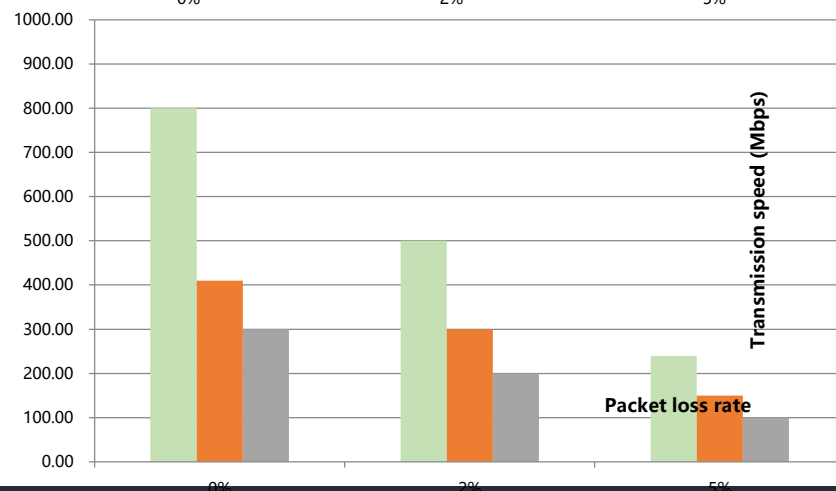
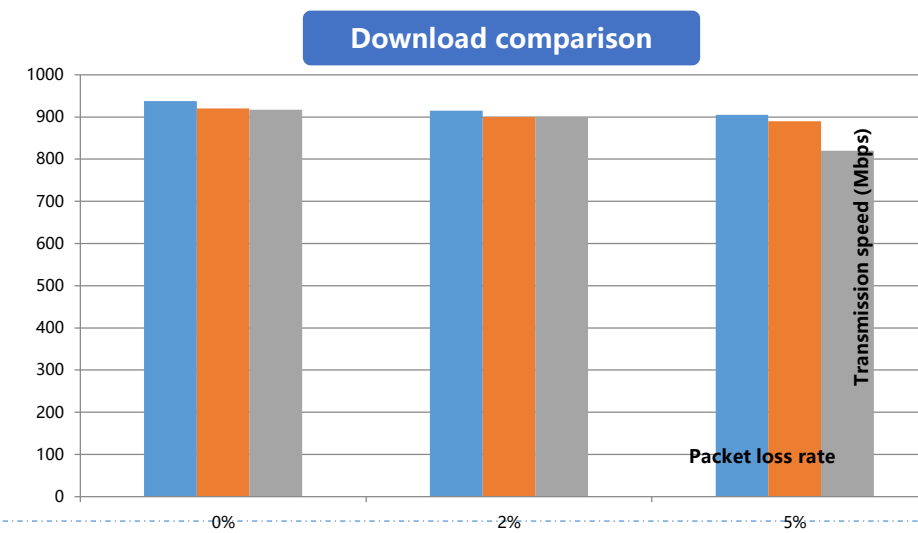
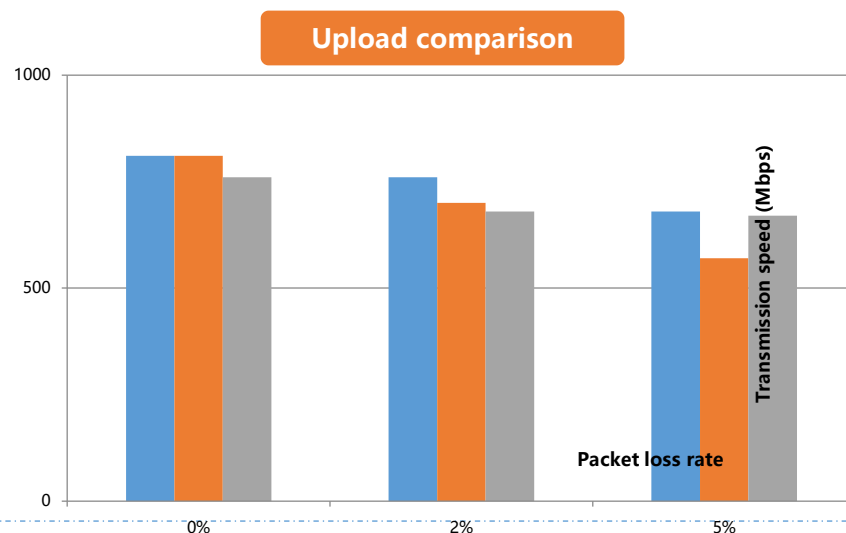


Download comparison



Compared with FTP transmission

Test environment: server host is in Shenzhen Alibaba Cloud Linux environment, Centos7.4 system; client host is in Shenzhen Alibaba Cloud Window environment, WIN2008 R2 system; both internal network bandwidths are 1Gbps. Products are installed on the same server host and client host respectively.



Comparison of cross-border remote instances

Transmission environment:

- Server A : Alibaba Cloud, USA Bandwidth 100Mbps
- Server B : Alibaba Cloud, Shenzhen Bandwidth 100Mbps
- Transmission method: the USA - China

服务器/本地文件	方向	远程文件	大小	优先级	状态
ftp://test@127.0.0.1:2121					
<input type="checkbox"/> F:\Workspace\golang\s...	-->>	/admin/integration/angular...	363	正常	正在传输
已耗时 00:00:00 剩下 --:--:--		100.0%	1,592 字节 (? B/秒)		
<input type="checkbox"/> F:\Workspace\golang\s...	-->>	/admin/integration/rollup/...	1,933	正常	正在传输
已耗时 00:00:00 剩下 --:--:--		100.0%	1,294 字节 (? B/秒)		
<input type="checkbox"/> F:\Workspace\golang\s...	-->>	/admin/integration/rollup/r...	1,076	正常	
<input type="checkbox"/> F:\Workspace\golang\s...	-->>	/admin/integration/rollup/t...		正常	
<input type="checkbox"/> F:\Workspace\golang\s...	-->>	/admin/integration/rollup/r...	1,076	正常	
<input type="checkbox"/> F:\Workspace\golang\s...	-->>	/admin/integration/rollup/t...	363	正常	
<input type="checkbox"/> F:\Workspace\golang\s...	-->>	/admin/integration/webpac...	1,490	正常	
<input type="checkbox"/> F:\Workspace\golang\s...	-->>	/admin/integration/webpac...	363	正常	
<input type="checkbox"/> F:\Workspace\golang\s...	-->>	/admin/integration/webpac...	1,518	正常	
<input type="checkbox"/> F:\Workspace\golang\s...	-->>	/admin/node_modules/.bin...	301	正常	
<input type="checkbox"/> F:\Workspace\golang\s...	-->>	/admin/node_modules/.bin...	178	正常	
<input type="checkbox"/> F:\Workspace\golang\s...	-->>	/admin/node_modules/.bin...	317	正常	
<input type="checkbox"/> F:\Workspace\golang\s...	-->>	/admin/node_modules/.bin...	194	正常	
<input type="checkbox"/> F:\Workspace\golang\s...	-->>	/admin/node_modules/.bin...	303	正常	
<input type="checkbox"/> F:\Workspace\golang\s...	-->>	/admin/node_modules/.bin...	180	正常	
<input type="checkbox"/> F:\Workspace\golang\s...	-->>	/admin/node_modules/.bin...	315	正常	
<input type="checkbox"/> F:\Workspace\golang\s...	-->>	/admin/node_modules/.bin...	192	正常	

FileZilla FTP

传输列表	
admin 等1个文件(夹)	5.61Mbps 111.49M/151.52M 已上传6,859个/共16,487个文件
static 等1个文件(夹)	已完成 1.17M 已上传5个/共5个文件

RaySync Transmission

In the same transmission environment, the RaySync transmission rate is about 200 times higher than the FileZilla FTP transmission rate.

Comparison of remote transmission instances

Comparison of actual transmission speed between FTP transmission and RaySync transmission in the same transmission environment

Region	Place transmission is initiated	Transmission destination	latency (ms)	Packet loss rate(%)	FTP transfer speed (Mbps)	RaySync transmission speed (Mbps)
Domestic	Shenzhen	China	50~60	0.1%~0.5% (within the same operator)	20~40	98~100
Overseas	Domestic	Asia - Singapore	60~80	1%~5%	5	90~95
	Domestic	Asia - India	120~200	3~10%	1.8	85~95
	Domestic	West Coast of North America - Los Angeles	120~150	1~10%	2.2	85~95
	Domestic	East Coast of North America - New York	180~250	3~15%	1.2	80~90
	Domestic	Europe - Frankfurt, Germany	150~300	3~15%	0.8	75~85
	Domestic	Southern Hemisphere - Sydney, Australia	200~350	5~20%	Almost impossible to transmit	65~75
	Domestic	Southern Hemisphere - South America, St. Paulo,Brazil	200~400	5~20%	Almost impossible to transmit	65~75

Transmission speed comparison

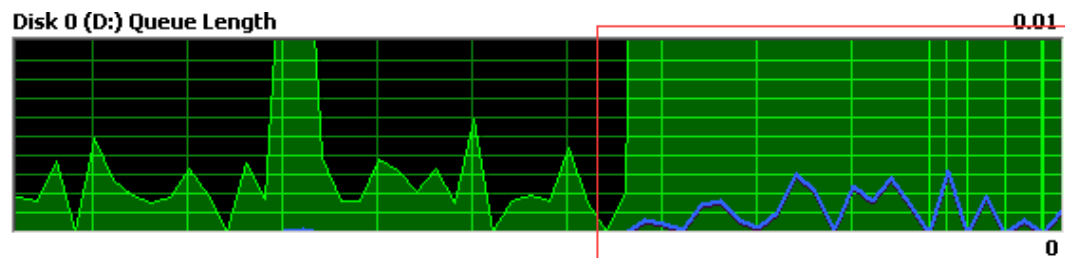
The actual rate of file transmission of RaySync Transmission in the cross-border transmission environment.



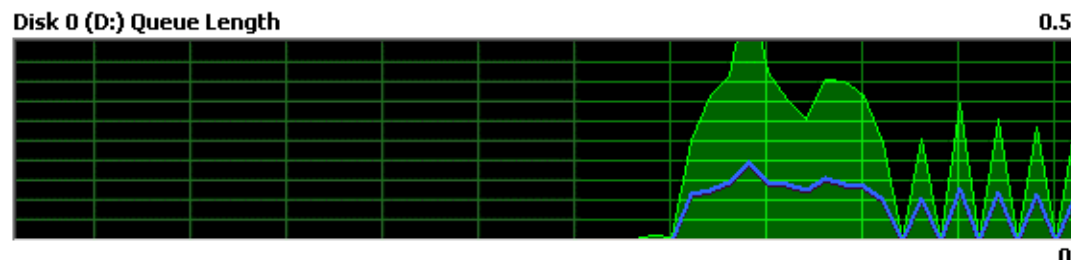
Massive small files can be transmitted at a very fast speed;

Small file transmission based on RaySync Software, transmitted from China to the United States, is faster than the transmission between two machines in the same area within the company.

(SSD)	Upload	Download
Transnational transmission speed of small files with RaySync software	4981 / sec	5293 / sec
Copying files in the same area	1532 / sec	1486 / sec

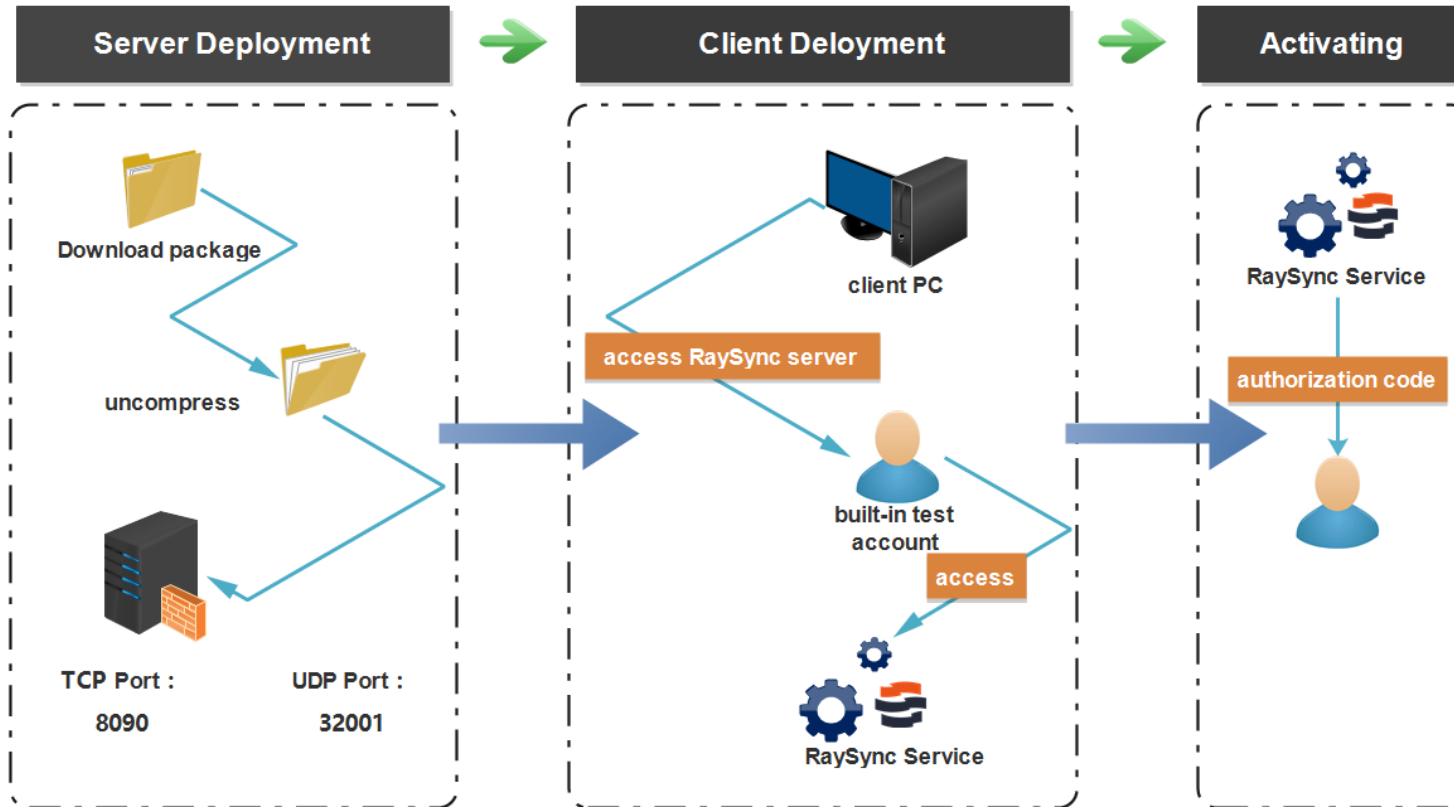


RaySync



Disk queue length (SSD)

| 30 minutes to complete deployment



1. Server deployment: download the RaySync software package, uncompress and start on the server, open the firewall TCP port 8090 and UDP port 32001
2. Client deployment: access RaySync server on the user's computer webpage, download and install the RaySync client, use the built-in test user to access the RaySync service
3. Activating authorization: apply for authorization code to RaySync Technical Support

| Security protection of data

TLS algorithm encryption

AES-256 financial level encryption strength to protect the privacy security of users

FTPS encryption technology

Add SSL security features for FTP protocol and data channel.

Firewall friendly

The Raysync protocol only needs to open a UDP port to complete the communication, which is more secure compared with the lots of firewall network opening ports.

Encryption certificate configuration

Support for configuring confidential certificates to make service access more secure.

| Security Mechanism



Regularly conduct CVE vulnerability risk library scanning to resolve risky code vulnerabilities.



Use valgrind/Purify for internal storage leak troubleshooting during development.



High-performance SSL VPN encryption is adopted and , provides multiple scenarios users security access services.



| Security protection of accounts



1

It adopts two-factor strong authentication system, supports USBKey, terminal hardware ID binding and other forms of password authentication.

2

The passwords saved by users in the data are encrypted based on the AES-256+ random salt high-intensity encryption algorithm, even the developer cannot recover the source password through the saved ciphertext.

High integration

1) User system integration

- Support LDAP/AD domain;
- Support email system;
- Support customized docking with our customers' existing user systems.

2) Storage system

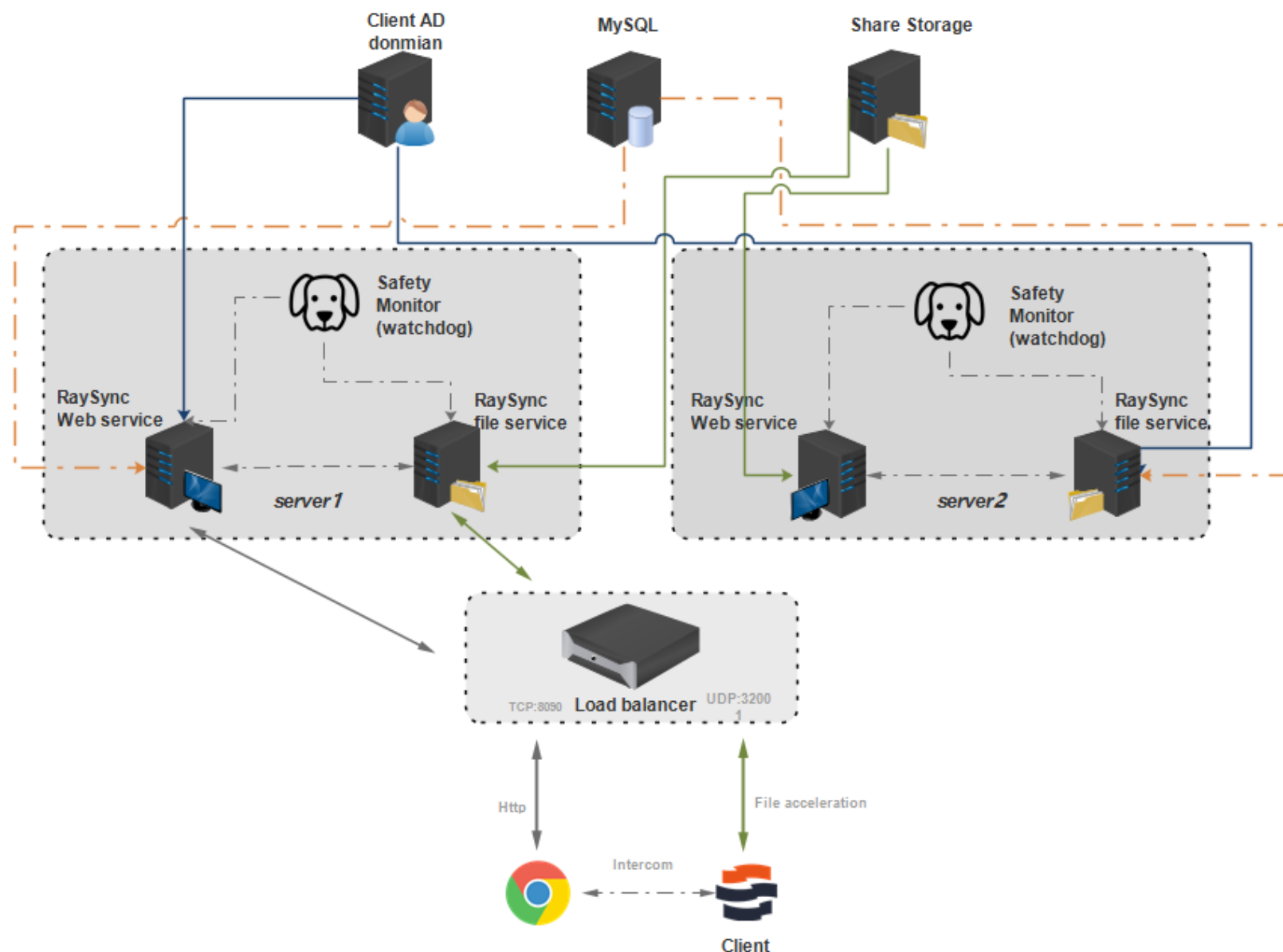
- Support for file systems (local file system and NAS network file system);
- Support for object storage.

3) Transmission capability integration

- Support for command line program integration;
- Support SDK program integration;
- Support network proxy mode integration.

4) Firewall integration

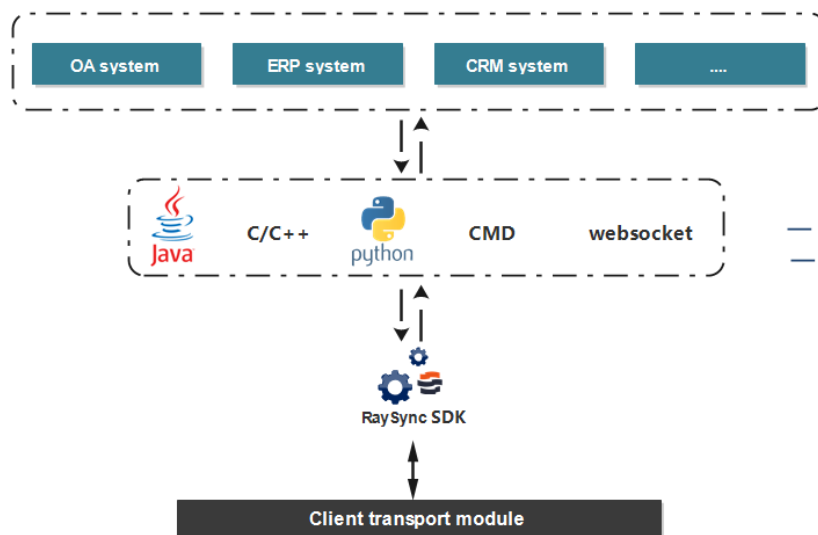
- Open 1 TCP port and 1 UDP port.



Multiple SDK integrations to improve the efficiency of assistance

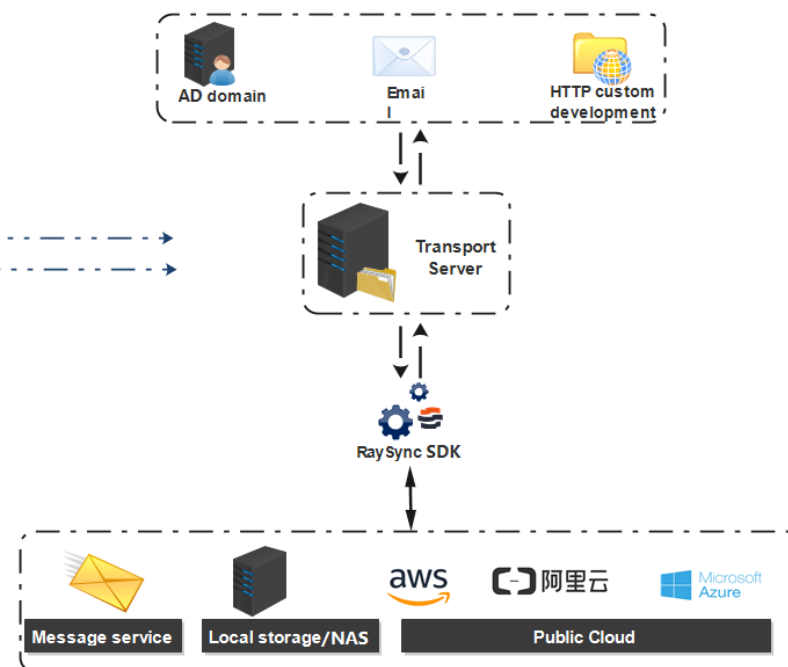
Transmission task level integration:

- Web page JS SDK;
- C/C++ SDK;
- Command line program.

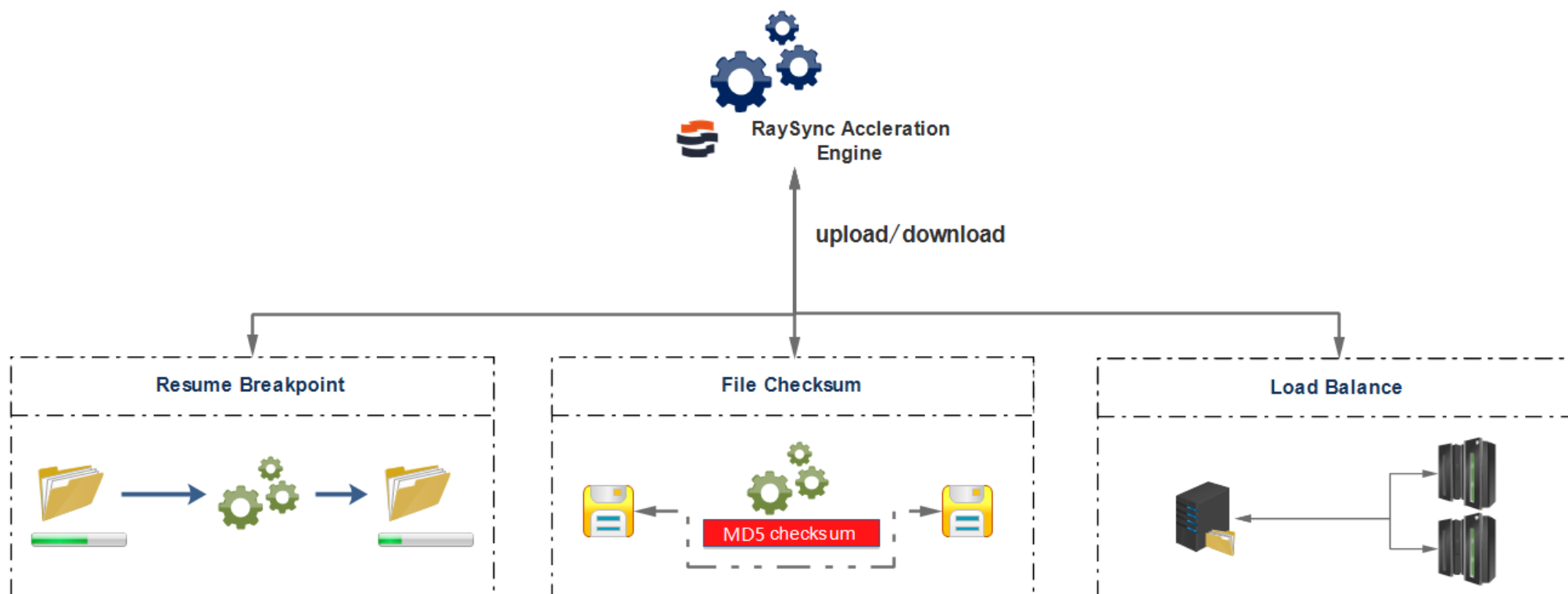


Network level integration:

- Network proxy – socks4/socks5/https/transparent proxy.



| Multiple guarantee mechanisms for data transmission



| Multi-platform support and high performance indicator

Support systems



Performance indicator

- 1) The transport connection between a single client and server supports **1Gbps**.
- 2) A single server supports **10Gbps**.
- 3) With load balancing, it can support up to **10Gbps**.

Functional characteristics of Sync Folder

Full automatic update

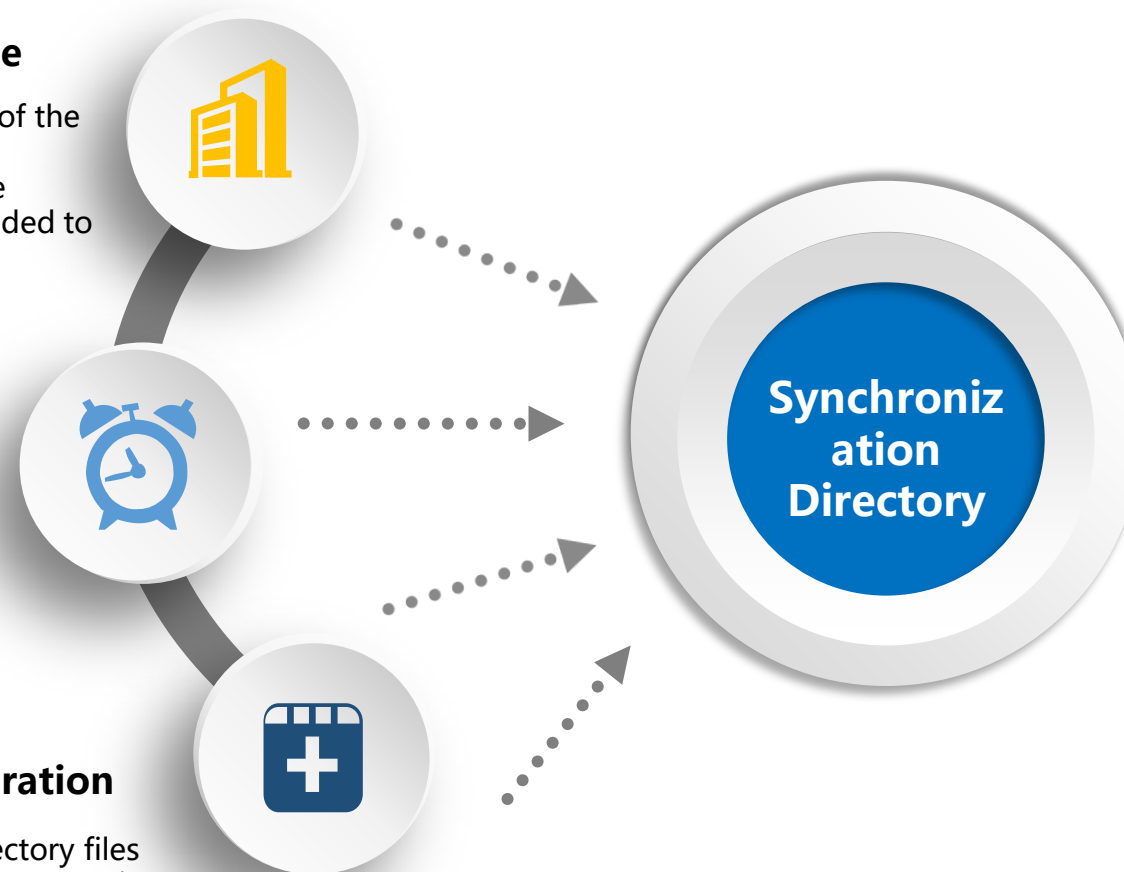
- The local directory is synchronized to the RaySync server; the content of the local directory file is automatically uploaded to the RaySync server.
- The RaySync server directory is synchronized to the local directory; the renewed directory content of RaySync server is automatically downloaded to the local directory.

User-defined time

- Users can set the synchronization time, when setting synchronization directory, users can define the synchronization time interval, after the defined time is reached, the synchronization directory automatically uploads and downloads the update operation.

Security configuration

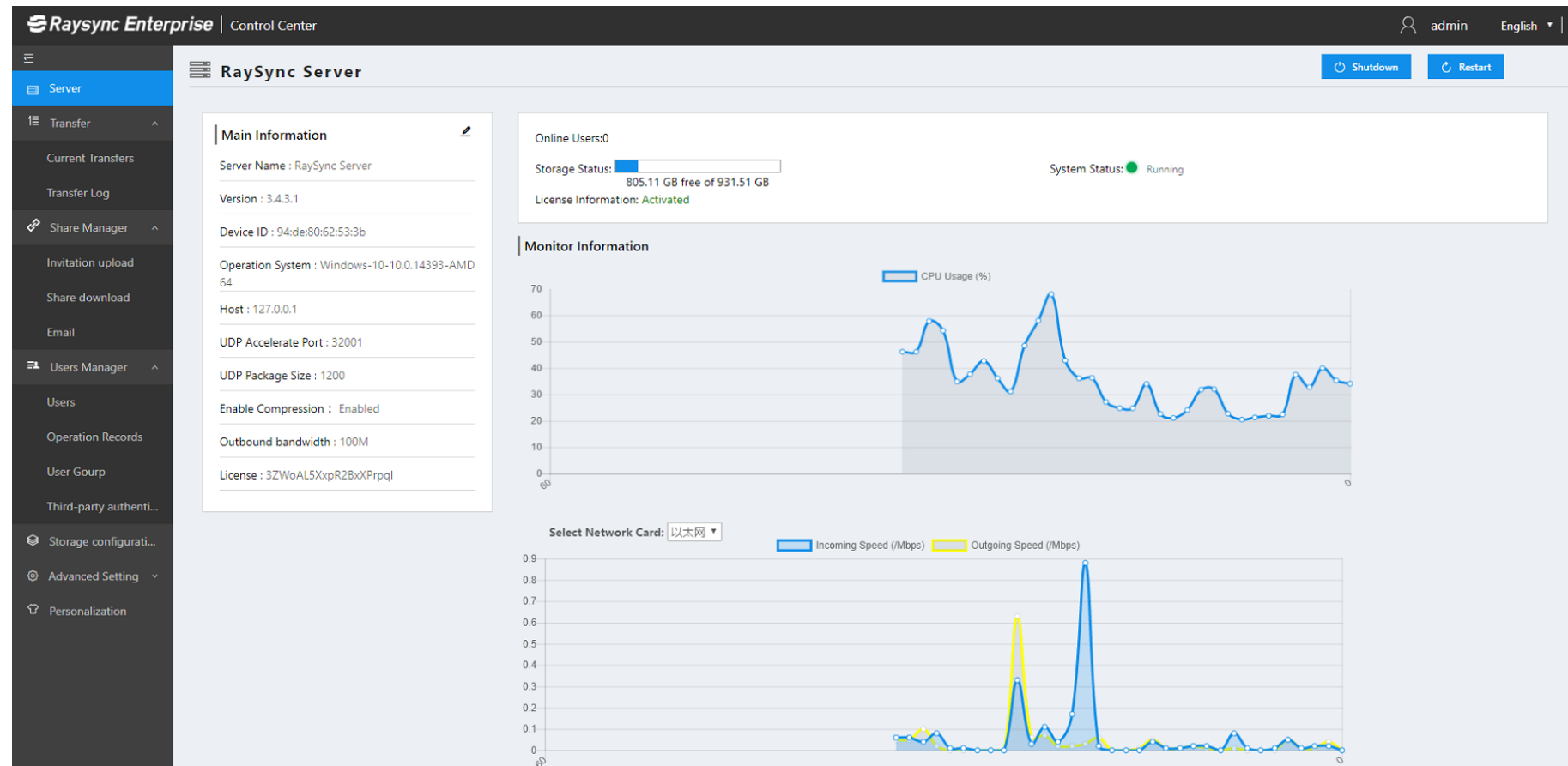
- Provide "Enable Encryption Transmission" operation setting for the directory files that need to be synchronized; enable the encryption setting to conduct encryption transmission for the contents that need to be synchronized.



Simple and efficient operation interface

Online transmission of live monitoring, transmission log traceability, full recording data transmission information; the advanced setting function of client system can adapt to different enterprises server equipment.

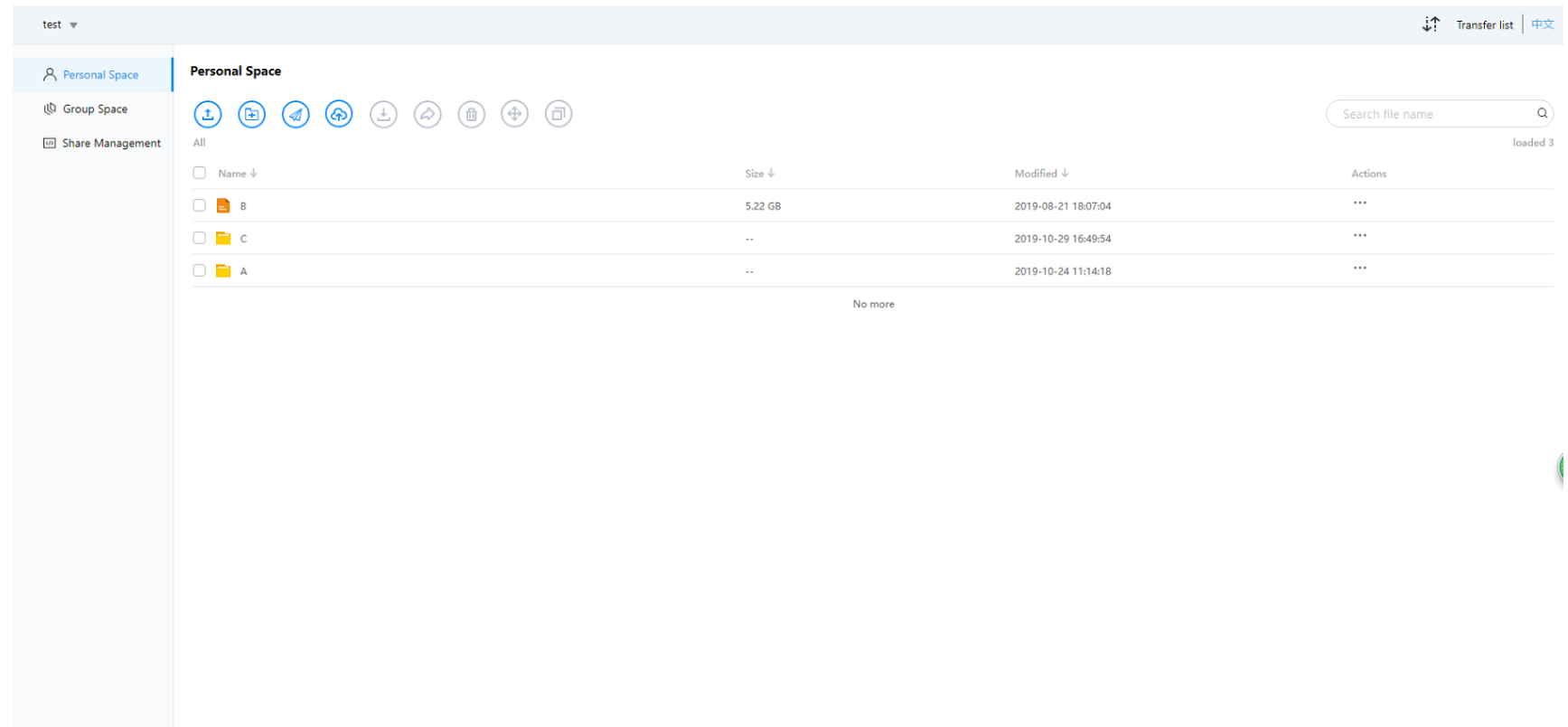
Website: <http://raysync.cloud/>



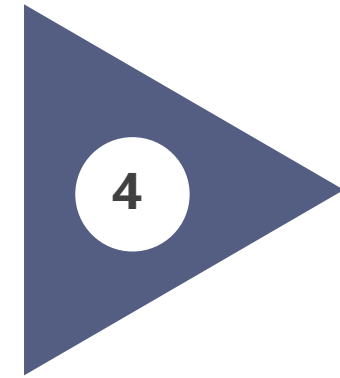
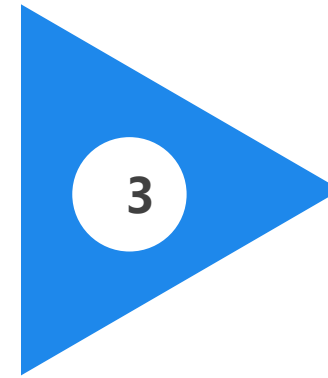
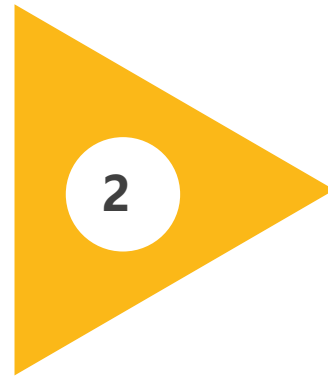
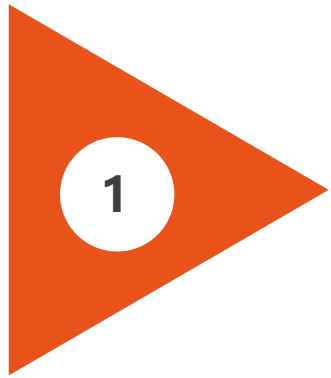
The client interface is clear and convenient

The operation interface is convenient and concise, and has complete functions;

Support for external link sharing function to rapidly distribute.



| Professional technical support



After-sales function training

- Learn about the operating function of RaySync server
- Learn about the operating function of RaySync web client

After-sales training content

- RaySync product introduction, function classification, and instructions for use
- Installation and deployment of RaySync protocol.

After-sales technical service

- Provide pre-sales technical engineer support
- Provide after-sales technical engineer support

Delivered after-sales contents

- RaySync Software Function Specification
- Server Management Manual for RaySync Transmission
- User Operation Manual for RaySync Transmission

04 | Industry Solutions

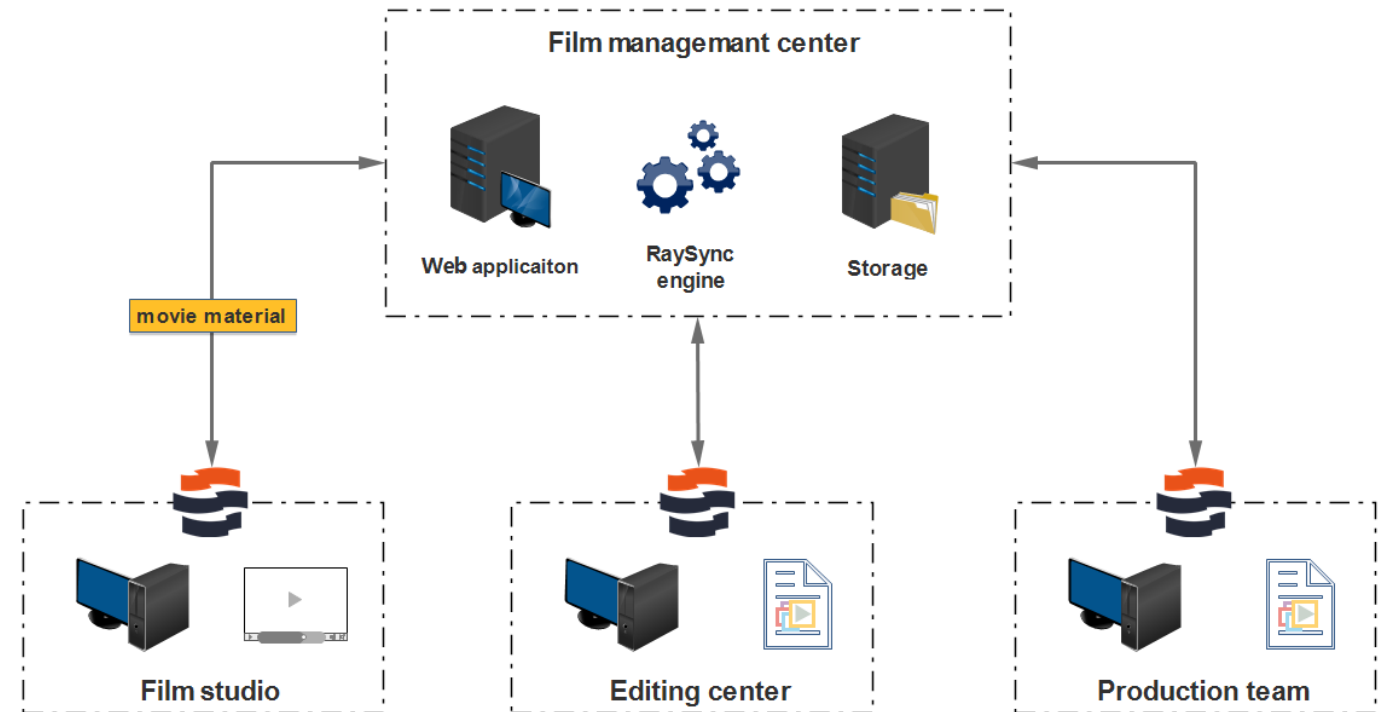
Film and television production is an industry that strictly demands post production and materials interaction, it pursues superior post production of film and television products, and high-speed interaction of video material contents. Film and television production teams need to achieve rapid return of materials and safe and reliable transmission while ensuring team cooperation.

Business challenges:

1. The transmission period of film and television materials is long, which can affect the efficiency of production of the industry.
2. The transmission stability is low, and the materials transmission is easy to make mistakes.
3. Film and television production teams have a wide distribution and it is difficult for them to collaborate efficiently.

Solution:

- In response to the needs of the film and television production industry, an ultra-high-speed transmission protocol - RaySync Proxy film and television production industry solution was developed.
- RaySync transmission mode is not affected by the traditional file transmission modes and can meet the business needs of video material uploading industry. It abandoned the traditional FTP and HTTP transmission modes, and launched a content interaction service for downloading and returning, providing film and television industry ultra-high speed transmission that is not affected by network conditions and transmission distances.



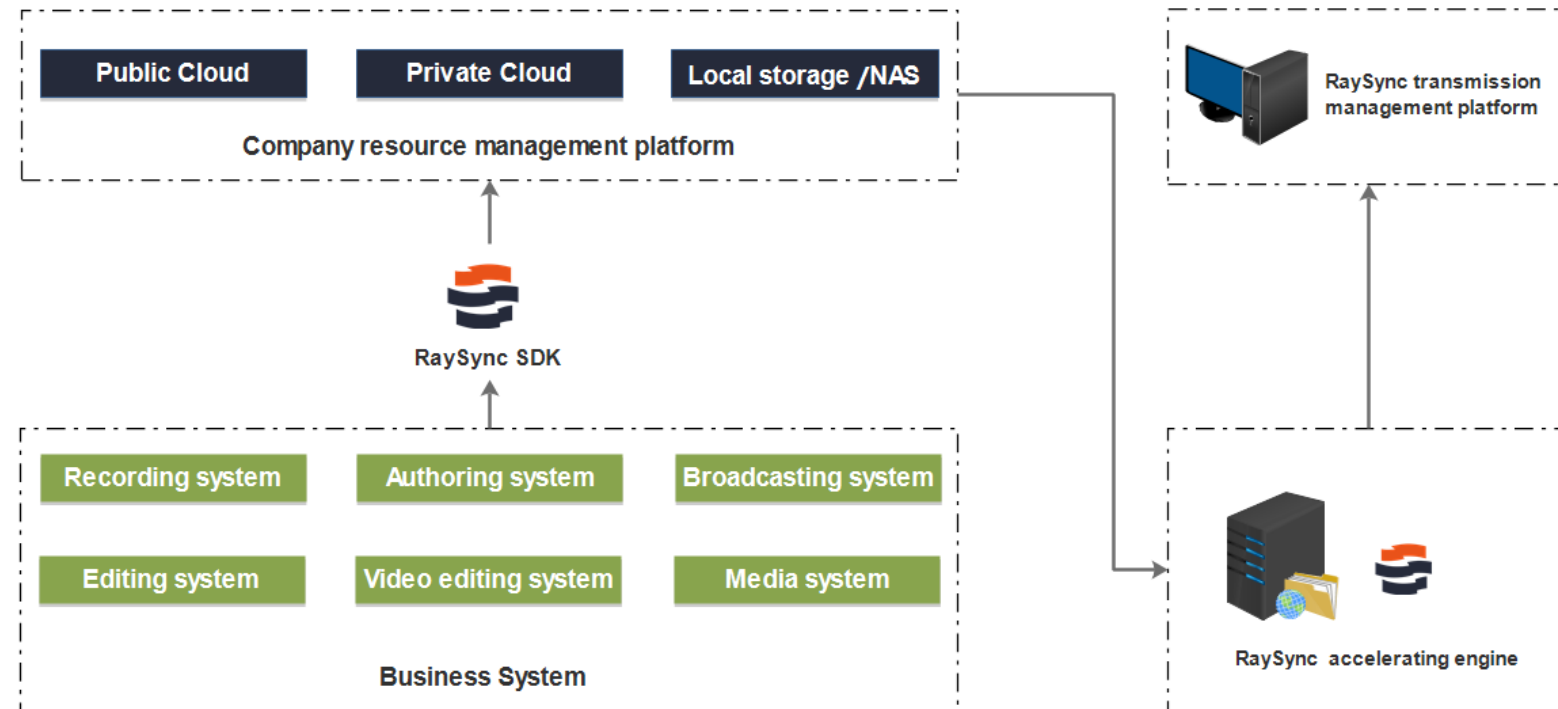
The media industry pays attention to the production, processing and dissemination of information. A large number of images, audio and texts need to ensure timely communication within the enterprise-type media organization, and realize secure and reliable content exchange and sharing between the media and external organizations.

Business challenges:

1. Latency transmission, media information cannot be broadcast in real time.
2. The content resources are too scattered, as a result, the communication is not in time.
3. Require a higher information security level to prevent leakage.

Solution:

- In response to the needs of the media production industry, RaySync used a high-safety RaySync Proxy transmission protocol to ensure information security and real-time communication of media contents.
- Ensured timely communication between media organizations, and head office and overseas branches, and improved safety.



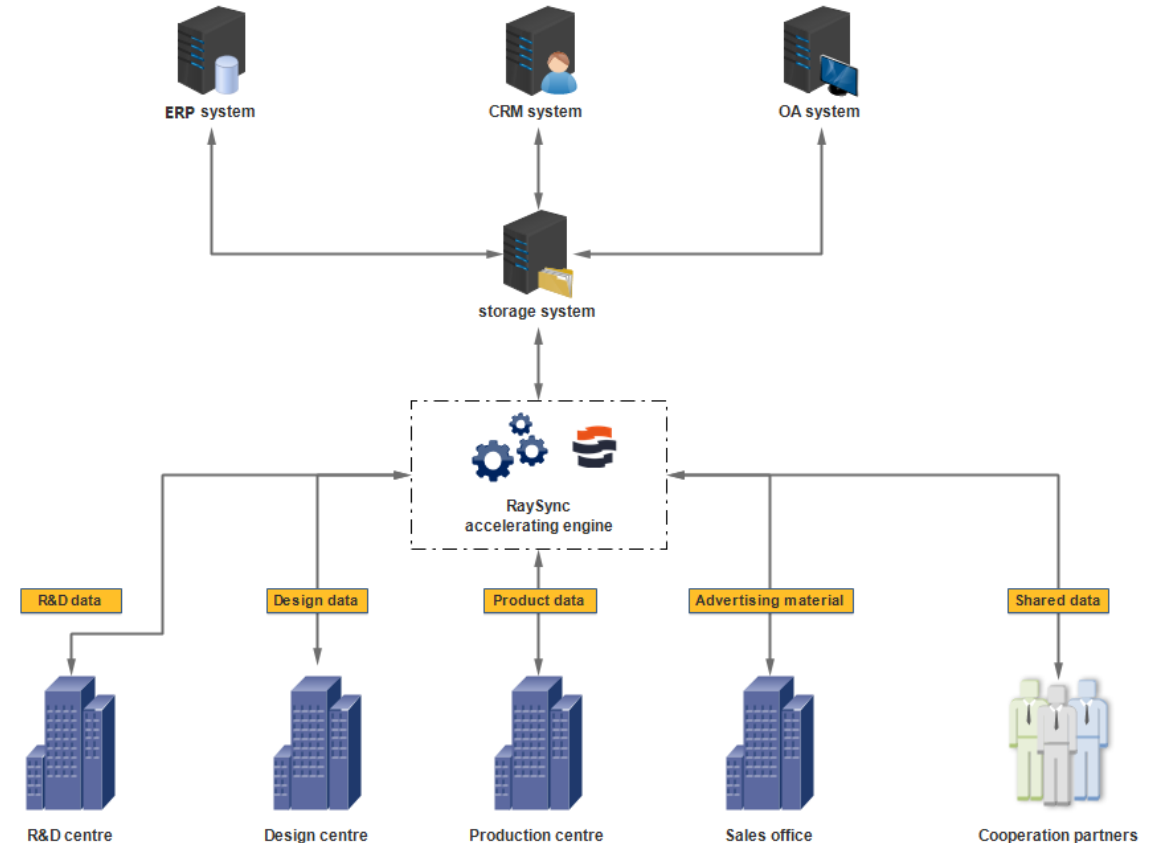
Manufacturing enterprises have high confidentiality requirements for all aspects of resources, technology, information and manpower. The data exchange of design drawings, design samples, production orders, etc. with partners is required in real time, and it is necessary to ensure safe and stable information circulation.

Business challenge:

1. Business processes are complex and affect the efficiency of production collaboration.
2. Upstream and downstream data transmission latency and low cooperation efficiency.
3. The transmission speed is slow, and the circulation of transnational business is blocked.

Solution:

- In response to the needs of the manufacturing industry, RaySync used a high-safety RaySync Proxy transmission protocol to realize data circulation and information sharing between business partners in the manufacturing industry.
- Improved the transmission rate of resource contents and ensured the normal circulation of information resources of transnational business.



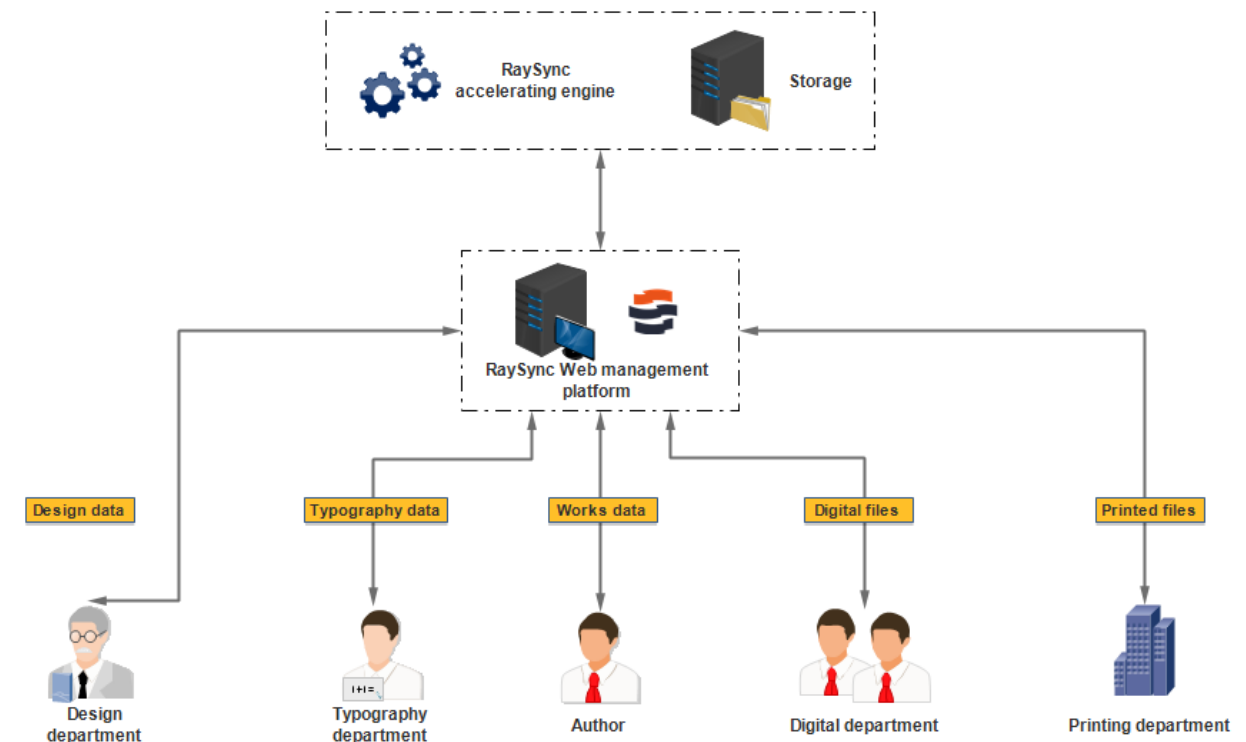
The publishing market is unpredictable, the efficiency of resource allocation in the industry is insufficient, and the resource mobility between publishers, and regions is weak. It is crucial to improve the internal allocation efficiency of manuscript transmission, content distribution, and real-time printing.

Business challenges:

1. Delay feedback bias can result in the increase of industry market risk.
2. High circulation to increase market reading needs.
3. Require a higher information security level to prevent leakage.

Solution:

- In response to the needs and challenges of the publishing industry, RaySync has abandoned the traditional FTP and HTTP transmission modes and launched an ultra-high-speed transmission protocol - RaySync Proxy as the solution of the publishing industry.
- Reduced the latency feedback bias caused by the lack of timely information interaction, highly circulated the manuscript contents, updated the market reading requirements in real time, and ensured information security.



05 | Customer Cases



finewave

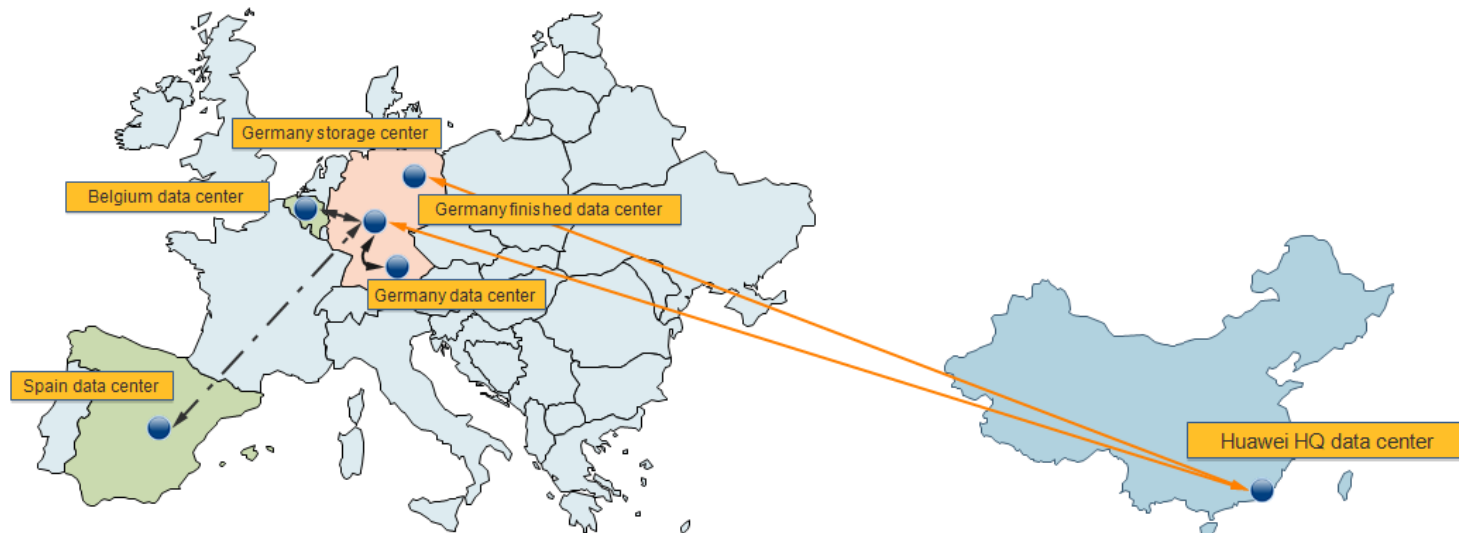


Customer requirements:

ChinaSoft International, Huawei's partner in Shenzhen, needs to download videos from the German source video storage center of Huawei, and transcode and re-process the videos, and then transmit the completed files to the German finished video storage center.

Solution:

The RaySync server was deployed in the German finished video storage center, and the RaySync webpage clients were deployed in the ChinaSoft International Shenzhen center to accelerate the transnational transmission through the transmission protocol independently developed by RaySync.



"RaySync has saved a lot of time for the transmission of our project. The services of its technical teams are also timely, its responses are very fast, adjustments can be made quickly if need, its team follow-up efficiency is also very high, and the overall cooperation is very good. I hope that it can provide more stable technical support in future cooperation and continue to support our project transmission."

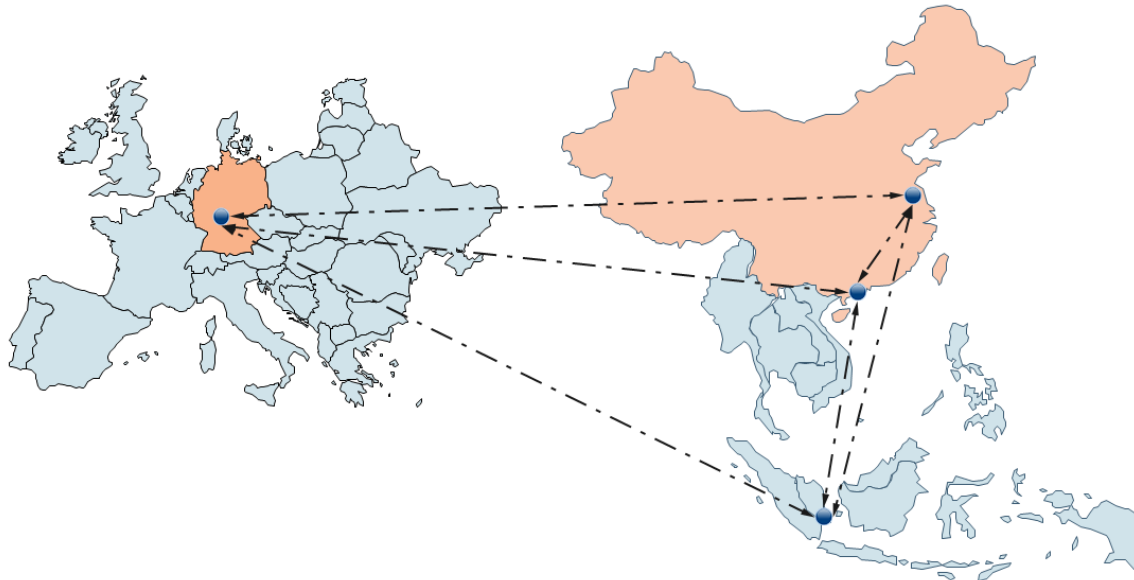
--- Huawei mobile phone

Customer requirements:

After purchasing the copyright of songs from different music libraries, the music files need to be sent back to the Huawei databases of all branches, and the files between the databases need to be transmitted to each other. For example, during the release of Mate20, Huawei needed to transmit some of the foreign music library files to the database near the news conference. RaySync helped Huawei to quickly complete the data migration within the specified time.

Solution:

In response to the needs of Huawei music projects, RaySync set up a server and implemented multi-point transnational transmission, deployed RaySync webpage clients in Huawei's Big Data Center, and used the RaySync transmission protocol to achieve high-speed transnational transmission and data migration.



Customer requirements:

As the largest IT company in China, Huawei has established several data centers in China and overseas. Different data centers used private networks for transmission. These networks were far apart with high packet loss and latency.

Solution:

RaySync helped Huawei to establish multiple high-speed data channels in the internal network, assisted Huawei transmit daily software update package and other high-speed data, and accelerate transnational transmission of files through the transmission protocol independently developed by RaySync.

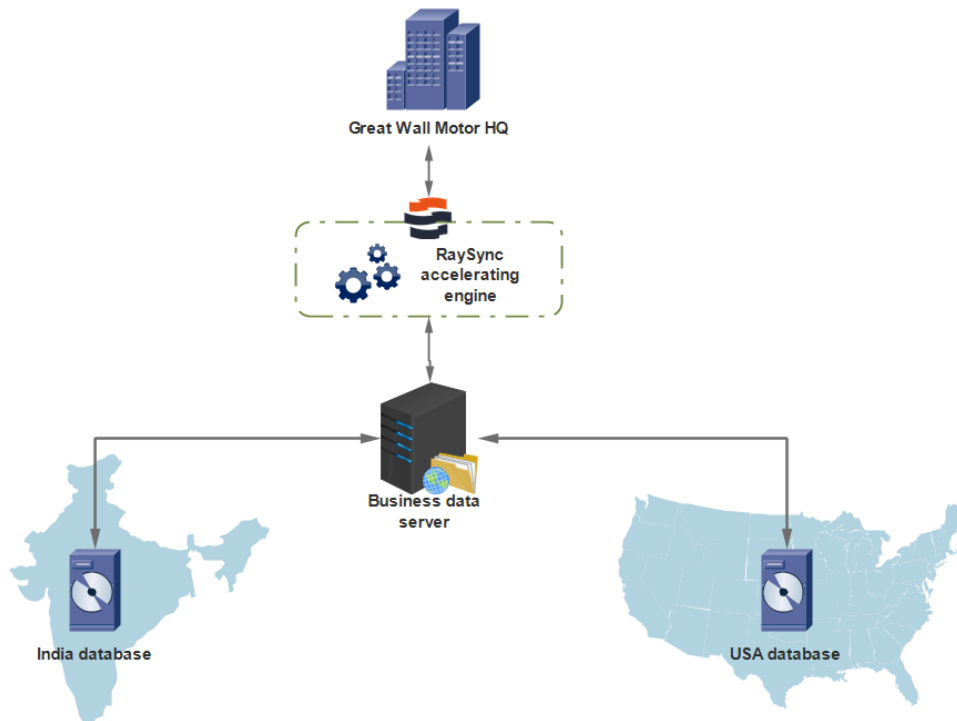


Customer requirements:

The scope of business of Great Wall Motor spans the whole world. The head office of Great Wall Motor often needs to transmit a large amount of business analysis data to multinational branches. The long latency in transnational file transmission increases the direct communication time cost of head office and branches.

Solution:

RaySync deployed a RaySync transmission engine at the Baoding head office of Great Wall Motor Co., Ltd. to achieve multi-point transnational transmission, helping Great Wall Motor transmit business analysis data at a very high speed between Baoding head office and India or the United States branches.

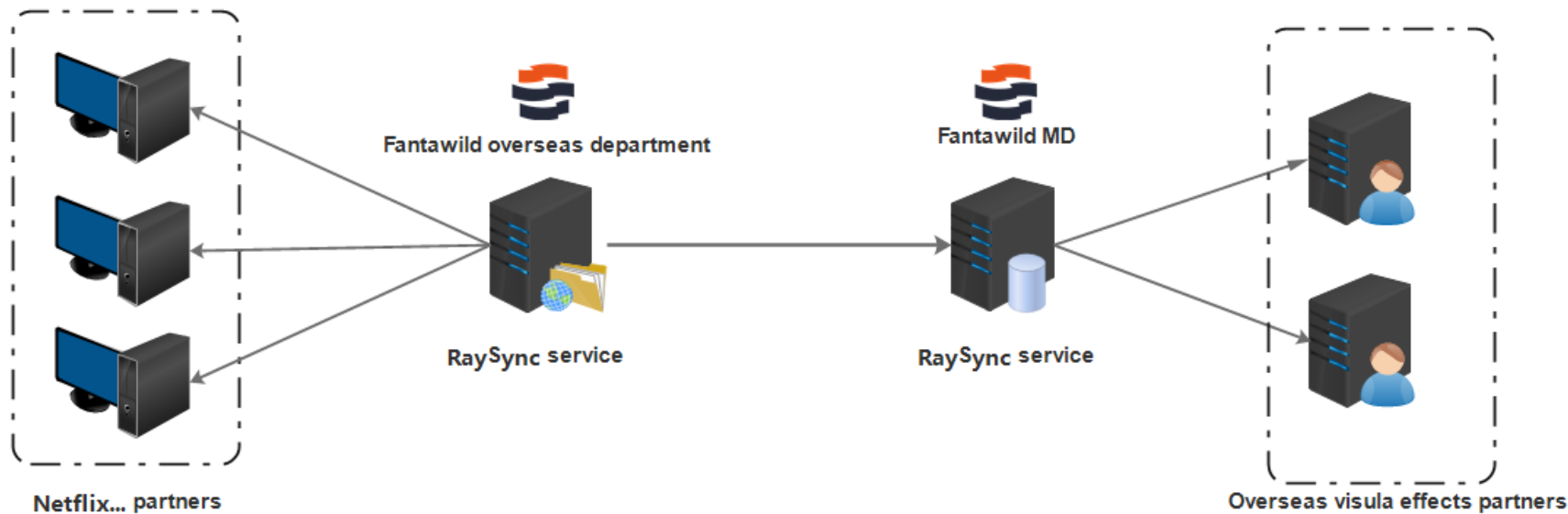


Customer requirements:

The special film system independently developed by Huaqiang Fantawild is exported to more than 40 countries and regions such as the United States, Canada, Italy, etc. Huaqiang Fantawild needs to realize the exchange of video materials between its Animation Production Department and the outsourcers, and the Distribution Department of Huaqiang Fantawild needs to distribute the finished products related with the Boonie Bears to the content providers around the world.

Solution:

In response to the needs of Huaqiang Fantawild project: multinational collaborative production and product issuances around the world, RaySync deployed a server at the head office of Huaqiang Fantawild, and deployed webpage clients on the computers of overseas special effects partners and major content providers to achieve rapid interaction transmission of transnational files.



National Supercomputer Centre in Guangzhou (NSCC-GZ)

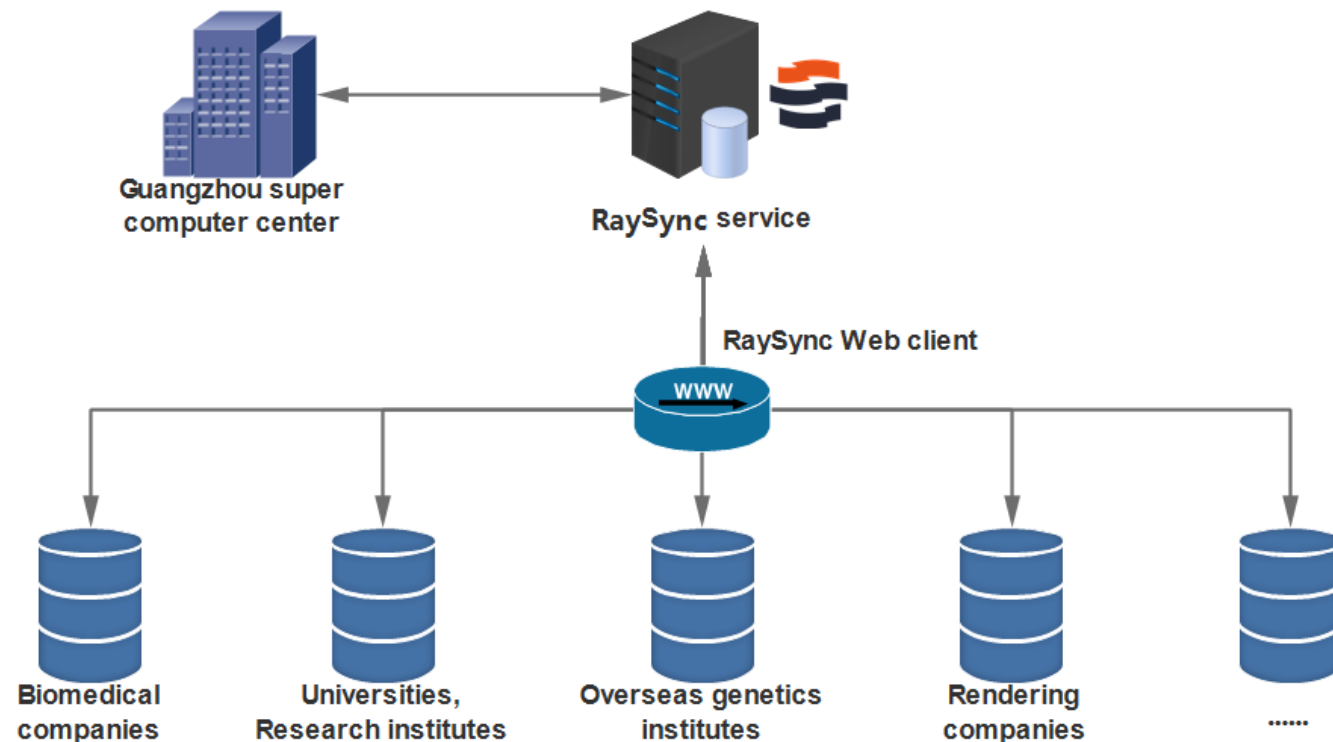


Customer requirements:

National Supercomputer Centre in Guangzhou (NSCC-GZ) needs to distribute data to various related industries.

Solution:

RaySync set up a server on a host computer of the National Supercomputer Centre in Guangzhou (NSCC-GZ), and set the webpage clients on the computers of biomedical customers, major university research institutes, animation rendering companies and foreign genetic organizations, then huge amount of data to be calculated were transmitted to the RaySync server from clients, and the calculated data were downloaded back to the clients from the server.

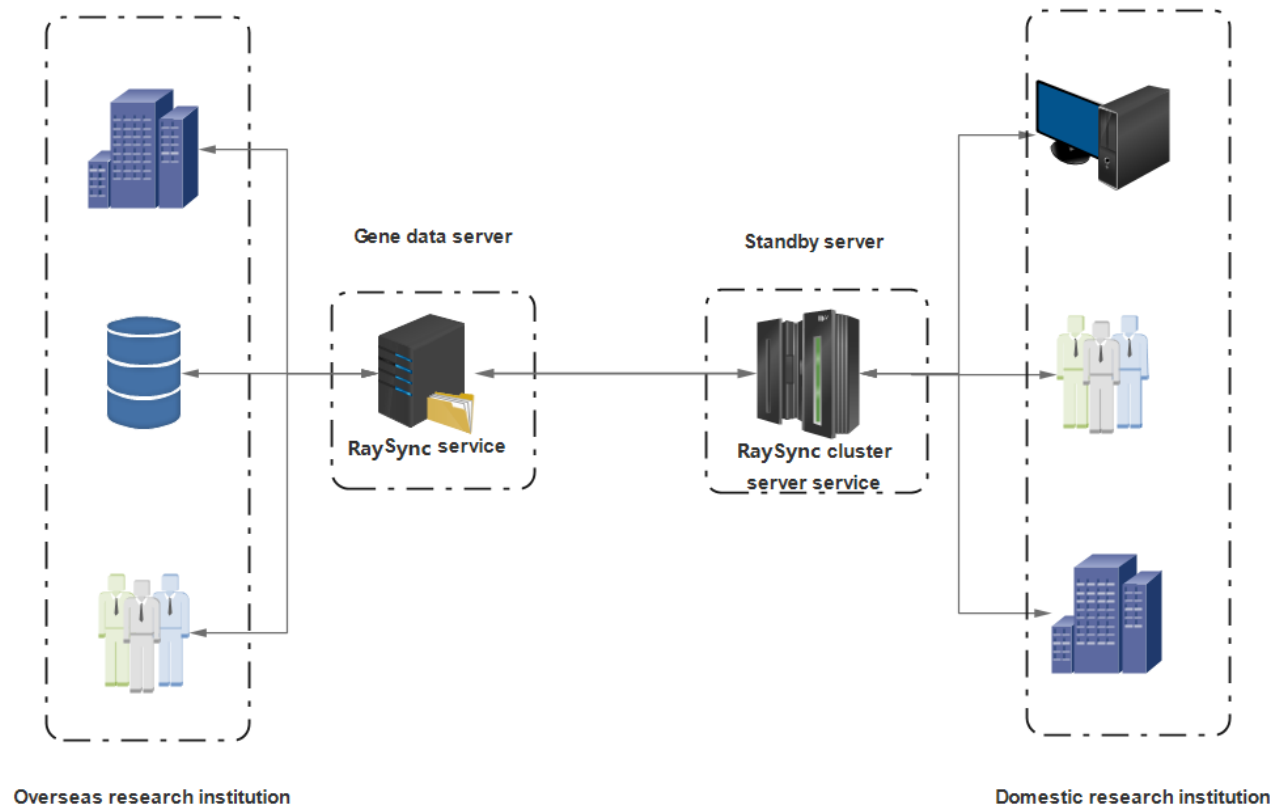


Customer requirements:

Realize the reception and transmission of genetic research data of BIG Forum.

Solution:

RaySync servers were deployed in the main server and the standby server of the genomic data archive library. The research institutes at home and abroad realized accelerated transnational data transmission through the webpage clients that integrated RaySync transmission technology.

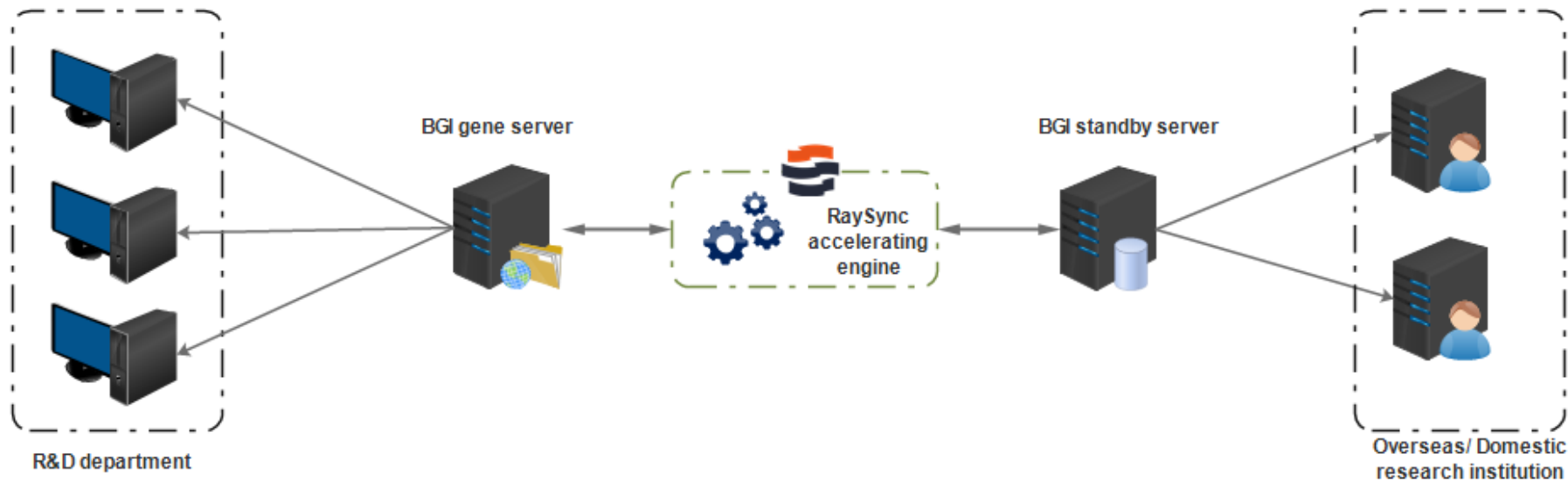


Customer requirements:

Dock the data from Beijing Institute of Genomics (BIG), Chinese Academy of Sciences (CAS), realize the reception and transmission of genetic research data of the BGI Research Group, and promote the cooperation between BGI and various industries.

Solution:

RaySync servers were deployed in the main server and the standby server of the BGI genomic data archive library. Various research institutes and internal teams realized accelerated data transmission through the webpage clients that integrated RaySync transmission protocol independently developed by RaySync. Fast data interaction.



RAYVISION



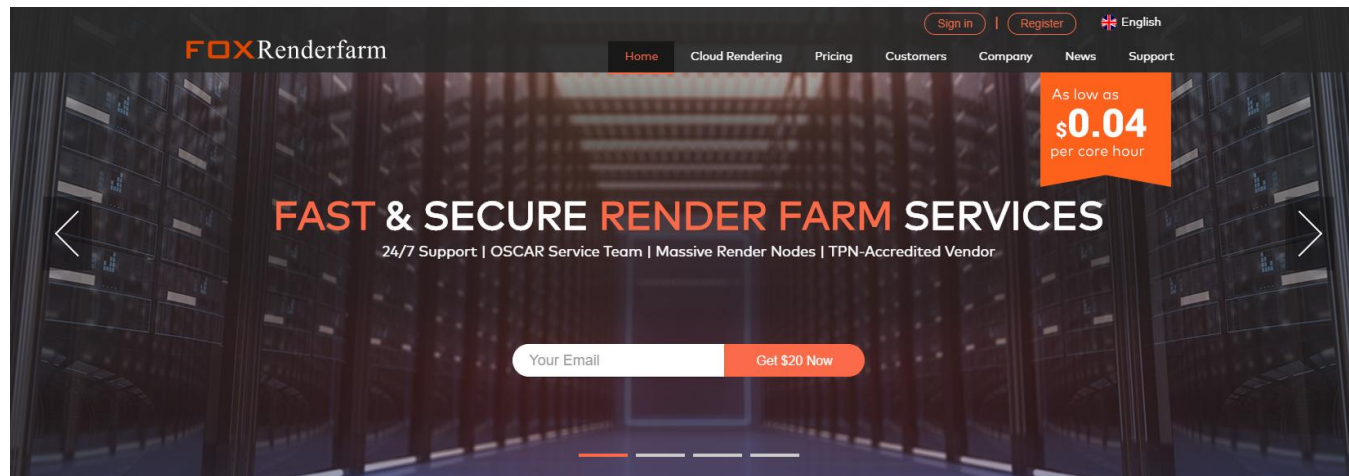
Customer requirements:

RAYVISION cloud computer service platform has a global business scope. RAYVISION needs to realize many kinds of materials information interaction, such as film and television materials and architectural design materials, and upload the materials to the Renderbus rendering platform at a high speed.

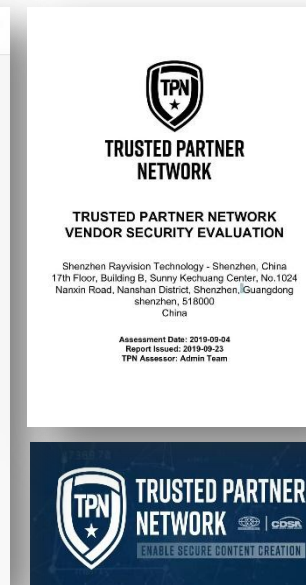
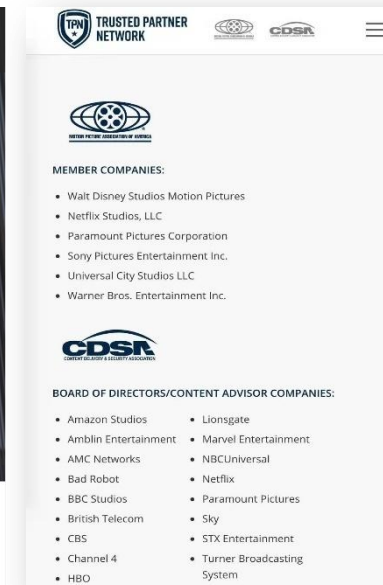
Solution:

In response to the needs of RAYVISION projects, RaySync used a SDK integration solution to make the use realize high speed uploading of video materials to the Renderbus rendering platform and multi-point interaction, and accelerated transmission of video materials.

Benefited from the support of RaySync technology, RAYVISION successfully passed the security audit of TPN, which is owned by MPAA and CDSA, and will provide technical support services for international users.



Why Choose Fox Renderfarm?
Get to Production Faster With On-Demand Rendering



Thanks !

Looking forward to cooperating with you.