China Unicom

Cloudbond

Content

PART 01

Cloudbond Overview

Overview

IoT
Internet of Things

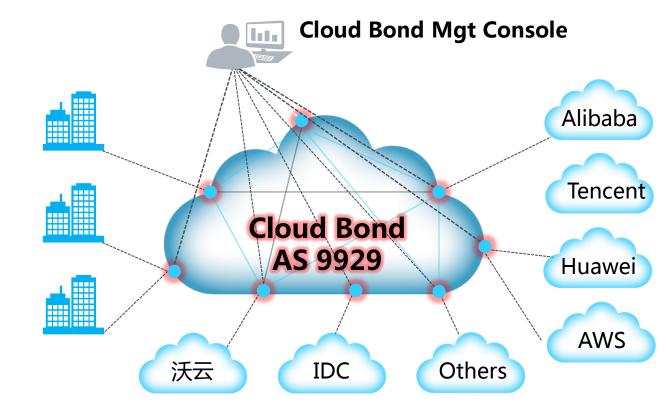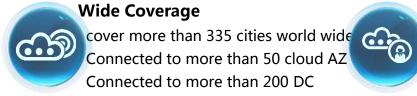## CloudBond
Private Internet of Clouds

China Unicom Cloud Bond

- ☐ SDN based technology ready to provide cloud access and multi-cloud connect service for ISP and cloud customers.

- ☐ Address customer networking requirement between DC, cloud environment and office.

- ☐ Advanced features include on-demand bandwidth, online service, prompt deployment, security and reliability

Cloud Bond Mgt Console

Cloud Bond AS 9929

Alibaba

Tencent

Huawei

AWS

沃云　　IDC　　Others

Smart Network
On-demand Bandwidth
SD-WAN internet access compatible

Wide Coverage
cover more than 335 cities world wide
Connected to more than 50 cloud AZ
Connected to more than 200 DC

Self-service Portal
On-line self deployment
Global united operation & support
Flexible pay-as-you-go billing

Excellent Performance
Secure, reliable, low latency
QoS SLA

PART 02

Advantages

Cloud & Network Integration Connectivity

More than 335 cities world wide

Business Office: connect on-demand

Major Cloud Providers in China and abroad

TOP 10 : 50+
Top 10 Cloud providers AZ: 50+

China Unicom IDC
Tier 3 and Tier 3+ DC: 200+
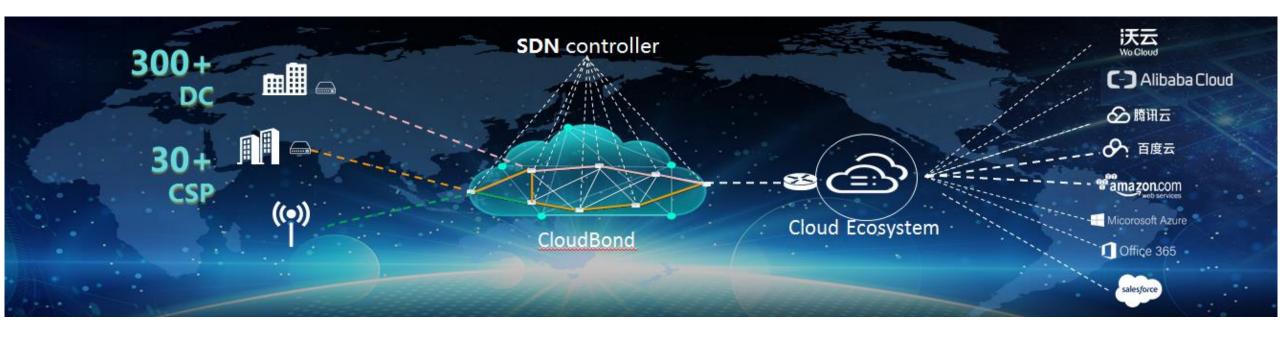
Cloud Bond Cross Border Cloud Interconnect

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Intelligent On-line Self Service

- Intelligent control, self deployment

- Elastic bandwidth, flexible adjustment

- On-line pricing, flexible monthly pay-as-you-go billing

PART 03

Scenario

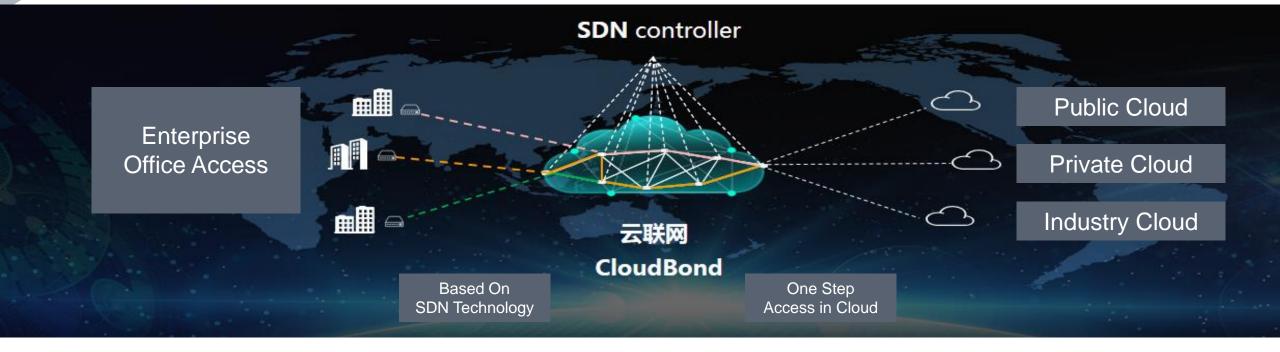# Cloud Bond Scenario – Multi-Cloud Interconnect

➤ **Scenario**

- Multi-Cloud interconnect requirement from enterprise backup consideration and existing multi-cloud deployment circumstance
- Enterprise need to connect different cloud environment in China and abroad
- Enterprise is hosting application in both public cloud and private cloud and need communication between them

Cloud Bond Scenario – Access to Cloud

Scenario

- Enterprise need to establish connection between office and cloud
- Enterprise need to establish connection between office and private cloud co-located in IDC

PART 04

Case Analysis
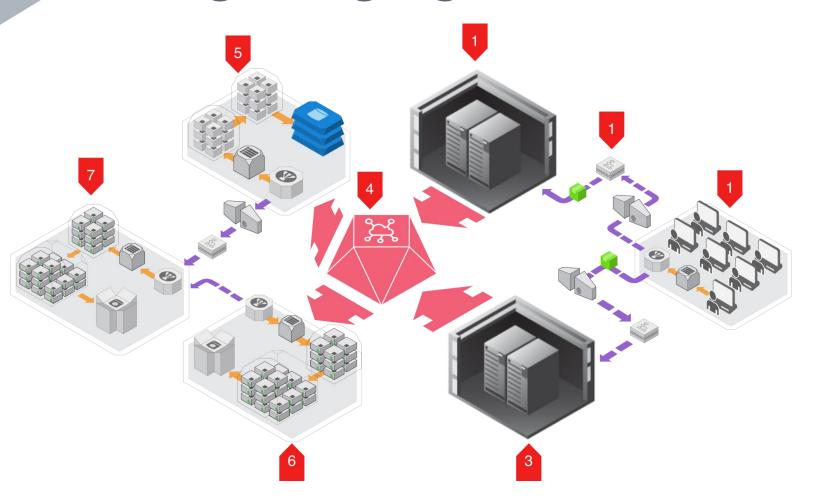
Foreign Language Education Institution

Client Introduction and Demand Analysis:

The client is a mature enterprise engaged in foreign language video education business in China, and online video is used to realize the interaction between foreign teachers and students in China. It occupies a relatively high market share in foreign language teaching.

The client initially used the public network to carry the entire live broadcast data of the teacher and the student. However, due to the rapid growth of the business and the rapid increase in the number of visits in a short time, the real-time video was significantly delayed and stuttered. After explaining the Cloudbond solution, the client finally determined that China Unicom Cloudbond will realize the interconnection between the client's Alibaba Cloud in Tokyo, Alibaba Cloud in Silicon Valley and several public cloud nodes in China, thereby reducing data delay and ensuring that the teaching process is not affected .

Foreign Language Education Institution

Legend :
1. Foreign teacher client, overseas live video source.
2. The Alibaba Cloud resource pool in Silicon Valley of the United States, carrying video data for foreign teachers in the Americas.
3. Alibaba Cloud Resources in Tokyo, Japan, carrying video data of foreign teachers in Southeast Asia and Australia.
4. China Unicom's Cliudbond backbone network.
5. Clients own private cloud in China, carrying application core and core data.
6. Alibaba Cloud in China, carrying video data of domestic students and foreign teachers.
7. Student client, the main domestic video consumption channel.

Since its opening, the client's network bandwidth between China and the United States has expanded from 30M to 600M, and it is expected to exceed 1G in April.
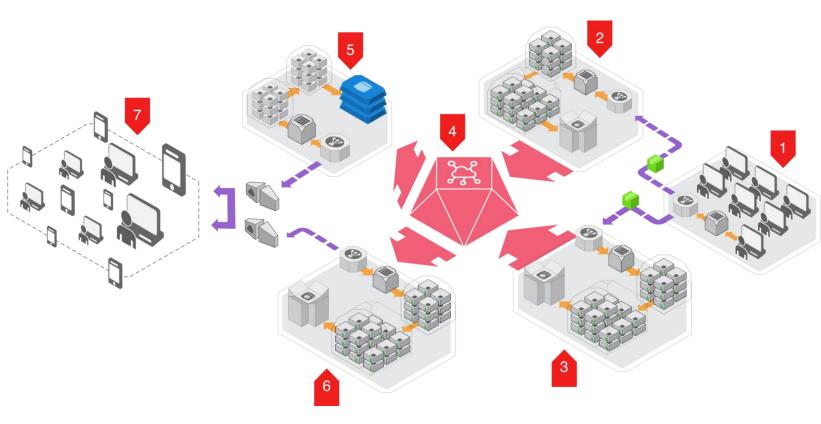
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Industrial production company

Client Introduction and Demand Analysis:

The client is a well-known enterprise in China's private electrical industry, and it occupies a large share in the white goods, industrial appliances, and smart home markets. It is a representative enterprise in China's traditional manufacturing industry that successfully achieved Internet transformation.

Customers have built an IoT platform that provides services for their industrial production by using Alibaba Cloud's domestic resource pools, AWS Hong Kong and Azure Singapore resource pools, and carry part of the video transmission business. However, due to the quality problem of the public network, it has been plagued by problems such as "long interruption of message queue connection" and "data synchronization packet loss". After introducing Cloudbond to users, the final plan was determined based on the interconnection of China Unicom's Cloudbond data center and cloud resource pools, Cloudbond and the original MV network structure networking

Industrial production company

Legend :
1. Overseas IoT equipment and terminal data sources.
2. Azure Singapore resource pool, to undertake overseas data and information processing.
3. AWS Hong Kong resource pool, to undertake overseas data and information processing.
4. China Unicom's Cloudbond backbone network.
5. The user's original data center resources, carrying core business processing and user core network nodes.
6. Alibaba Cloud resource pool in mainland China, undertaking domestic IoT equipment and terminal data sources.
7. The operation & maintenance and supervision departments of the client enterprise management and core IT departments.
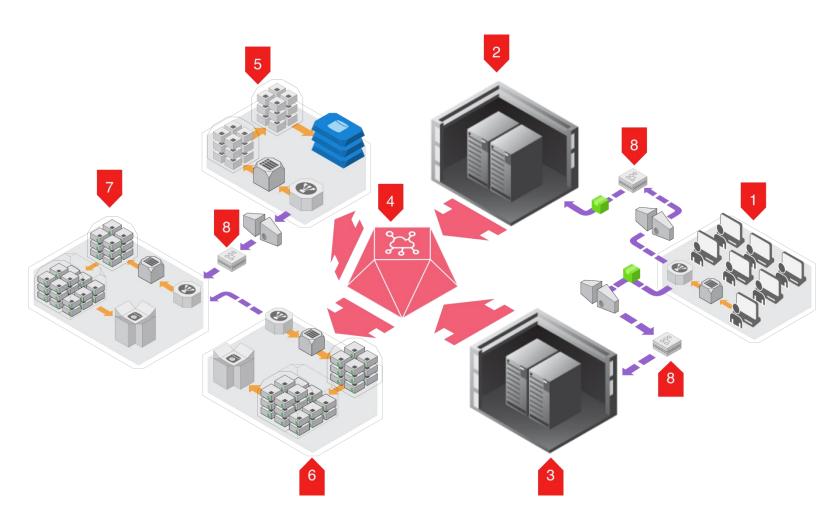
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Pharmaceutical Biotechnology Company

Client Introduction and Demand Analysis:

The client is a private enterprise with a leading position in the Chinese medical, pharmaceutical and biotechnology industry. The client has two research centers in New York and London respectively, and purchases IDC resources to carry the research business locally. The client has multiple branches in mainland China, and carries its data analysis business through public cloud / private cloud.

At present, customers need to construct a real-time imaging system and health monitoring platform for medical treatment through IDC + public cloud + private cloud, which have high requirements on network delay and network structure. After introducing Cloudbond to client, it was finally decided to use China Unicom's hybrid networking + SD-WAN hybrid networking method to complete its requirements for network architecture.

Pharmaceutical Biotechnology Company

Legend :

1. Client's research institutions located in New York and London.

2. Client's data center located in New York.

3. Client's data center located in London.

4. China Unicom's Cloudbond backbone network.

5. Client's private cloud located in mainland China.

6 & 7. Client's Alibaba Cloud located in mainland China.

8. SD-WAN network equipment.

THANK YOU