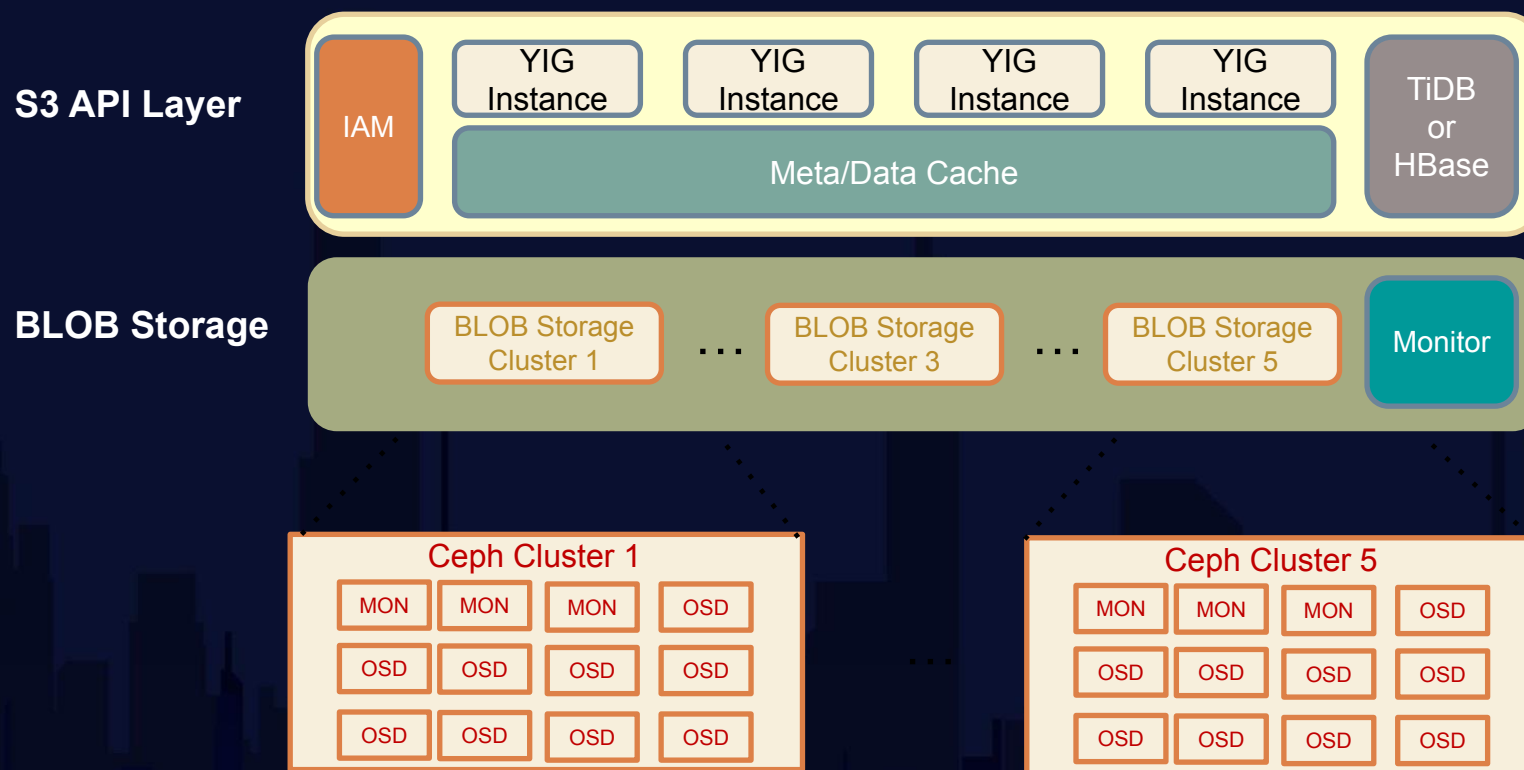# COMPANY/BUSINESS OVERVIEW

- Xin Zhong is the CTO of China Unicom Wo Cloud. China Unicom is the top 3 telecom operator in China. And Wo Cloud provide cloud services for cusotomers like big enterprise and government. Our cloud business make more than 1 billion RMB revenue every year. We have tens of thousands of servers which are running open source software.

- China is a critical and unique market for cloud and storage. Besides the big growth of public cloud, industry cloud and private cloud is still very hot. I think we need to get closer to the requirement and user scenario in china. There is still huge space to grow SODA through open source community..
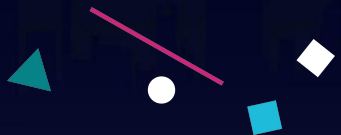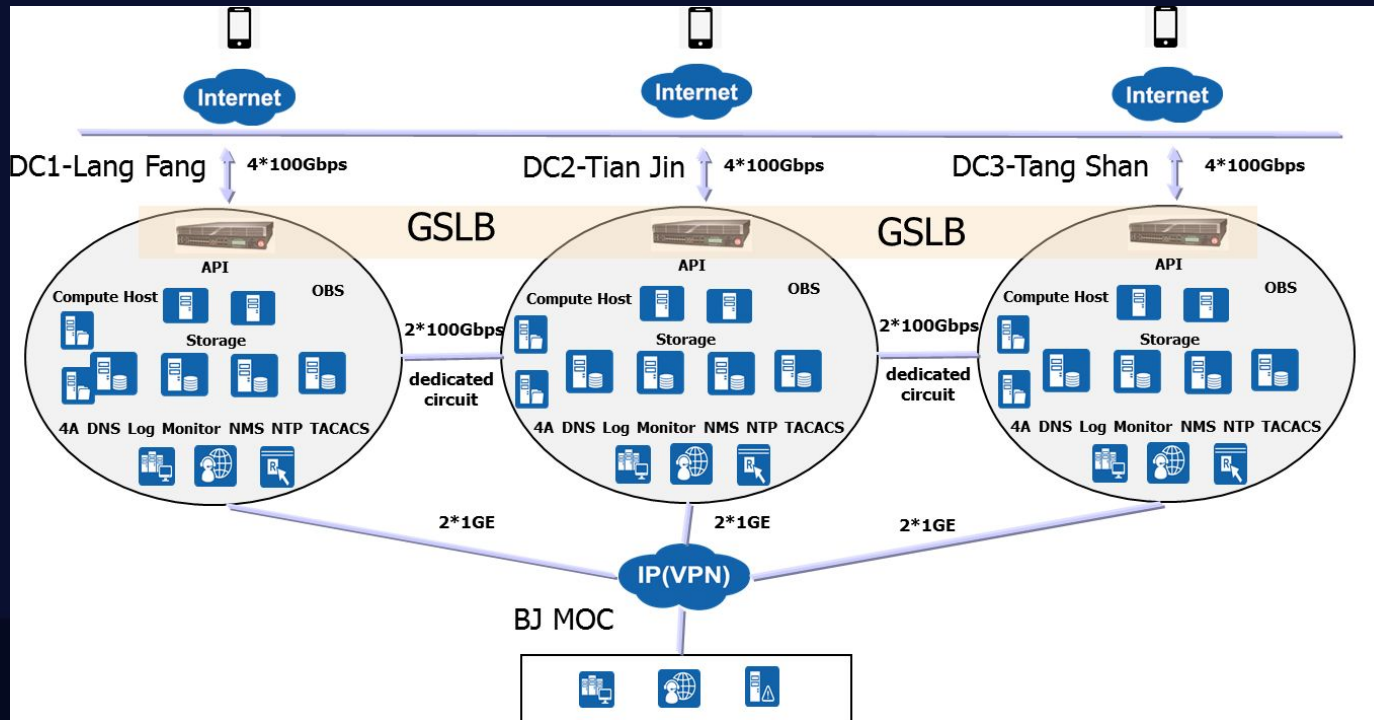
PLATFORM OVERVIEW

YIG Architecture

S3 API Layer

| IAM | YIG Instance | YIG Instance | YIG Instance | YIG Instance | TiDB or HBase |

Meta/Data Cache

BLOB Storage

BLOB Storage Cluster 1 ... BLOB Storage Cluster 3 ... BLOB Storage Cluster 5 | Monitor

Ceph Cluster 1

MON	MON	MON	OSD
OSD	OSD	OSD	OSD
OSD	OSD	OSD	OSD

Ceph Cluster 5

MON	MON	MON	OSD
OSD	OSD	OSD	OSD
OSD	OSD	OSD	OSD

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DATA AND STORAGE USE CASE(S)

Multi-Region Deployment

- **Data Center Settings**
  - The entire system is distributed in three data centers.
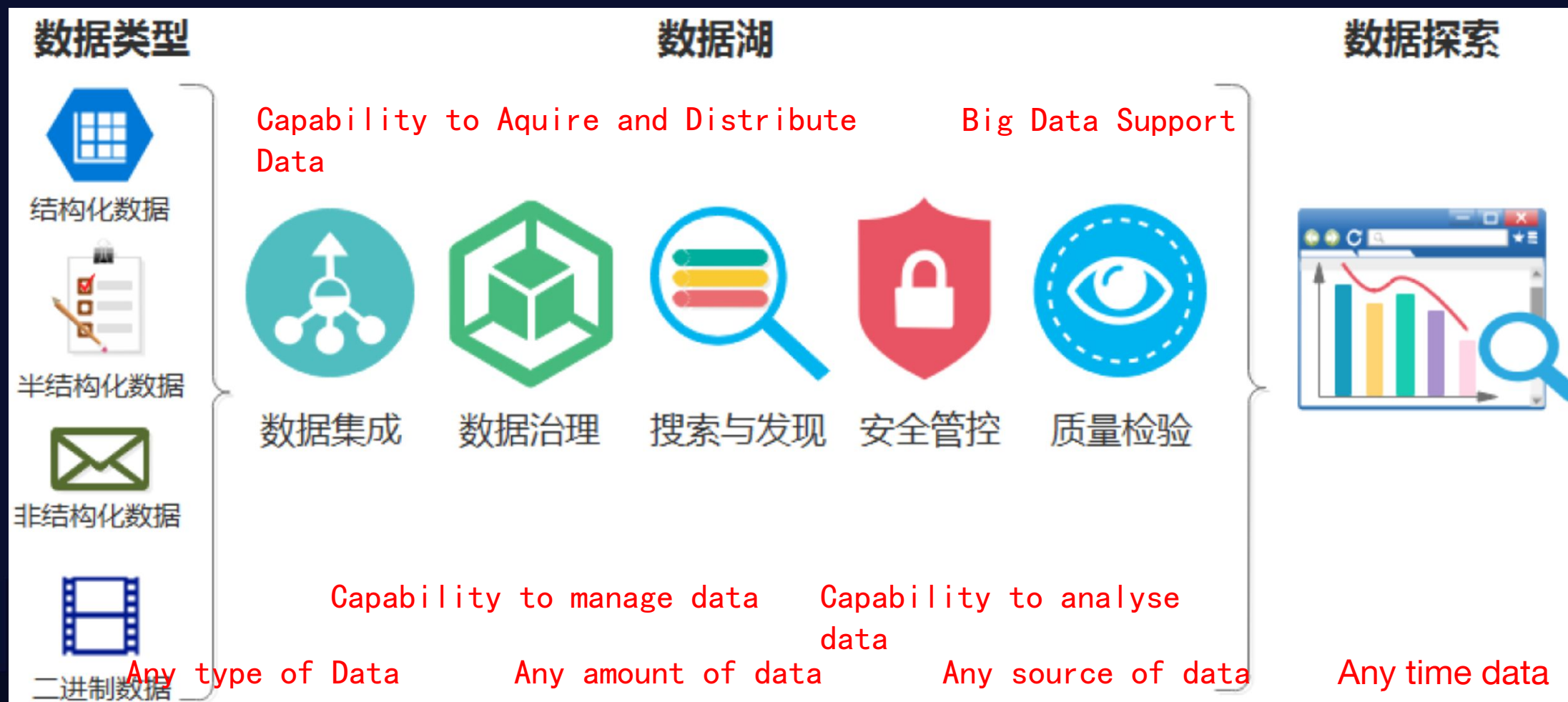 - Three data centers is located Hebei province Lang Fang, Tang Shan , Tian Jin.
- **Link**
  - There are has 4*100G upstream link in each DC.
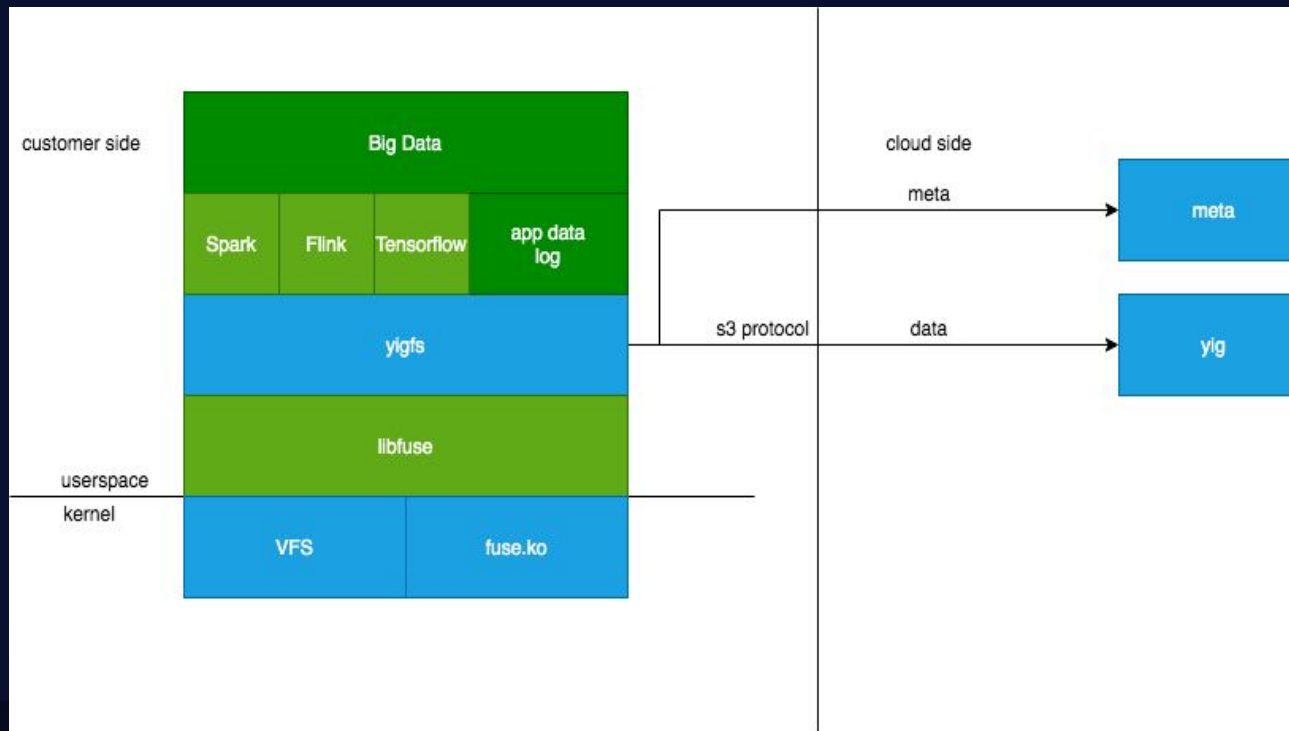 - Three data centers is interconnected 2*100G by dedicated circuit.
- **Load Balance**
  - Three GSLBs is made up of one synchronization group which is responsible for domain name resolution, and forward traffic to virtual servers by ratio method.
  - SLB create virtual servers which is corresponding External NIC of API nodes;
  - ALL API nodes forward traffic to storage nodes by equal ratio.

DATA AND STORAGE CHALLENGES

数据类型

数据湖

数据探索

结构化数据

半结构化数据

非结构化数据

二进制数据

Capability to Aquire and Distribute Data

Big Data Support

数据集成　　数据治理　　搜索与发现　　安全管控　　质量检验

Capability to manage data　　Capability to analyse data

Any type of Data　　Any amount of data　　Any source of data　　Any time data

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NEXT STEP FOR YIG&SODA

YigFS Architecture

- User-space posix-fs based on fuse

- Data stored in YIG or any other S3-compatible object storage

- Metadata stored in KV storage like TiKV with transaction support

- FS gateway for YIG and seamless integration with Spark

THANK YOU

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DATA CONNECTED