



腾讯云TStack

Tencent Private Fullstack

1 Introduction

Combining IaaS、PaaS、SaaS





Cloud Self Service Platform

Provides various PaaS and SaaS cloud service including computing, storage, network, database, load balancing, images, snapshot, application market, and the entire solution.

- ◆ Resource Management
- ◆ Process Management
- ◆ Application Market
- ◆ Management Capability for the heterogenous cloud, genuine platform for the hybrid cloud

Cloud Monitoring Platform

A one-stop monitoring and alarm solution for monitoring Tencent cloud TStack resources and service applications, covering the health and operation of resources, networks, equipment, services, and services of cloud platforms.

- ◆ Wide Screen Visualization Support
- ◆ Refined chart analysis
- ◆ Custom monitoring
- ◆ Comprehensive business monitoring
- ◆ Flexible alarm

Cloud Operation Platform

Provide a scenario oriented, full-featured OAM platform for frontline administrators:

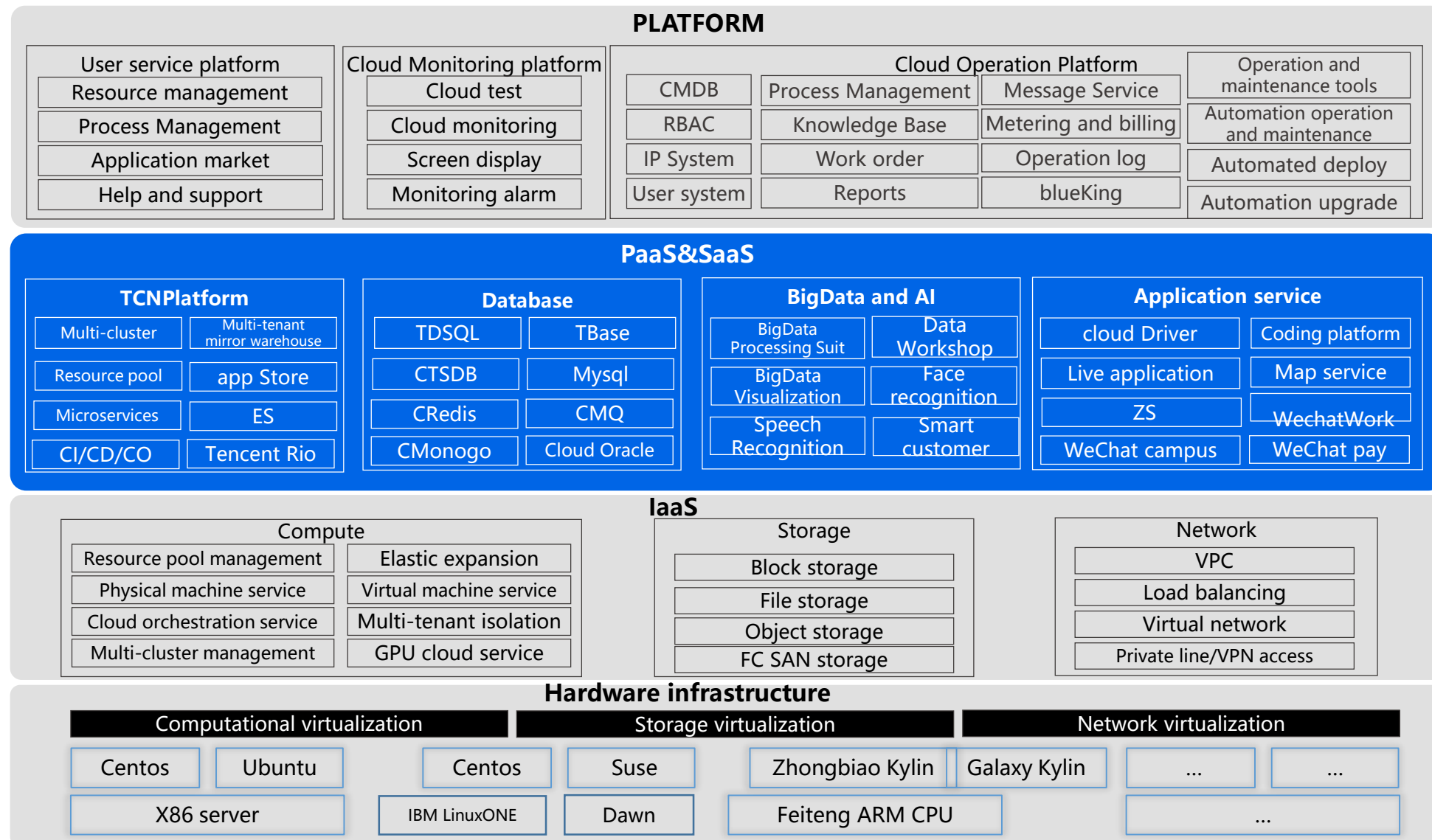
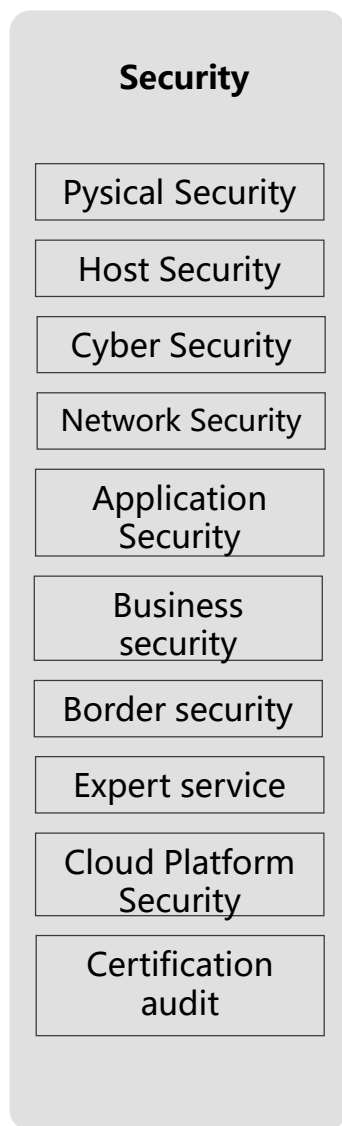
- ◆ Open Source Cloud Platform
Architecture based on OpenStack
- ◆ Uniform resource scheduling
- ◆ Resource Health View
- ◆ Fast positioning faults
- ◆ Professional OAM tools
- ◆ Based on the Blue Whale standard

TCNPlatform

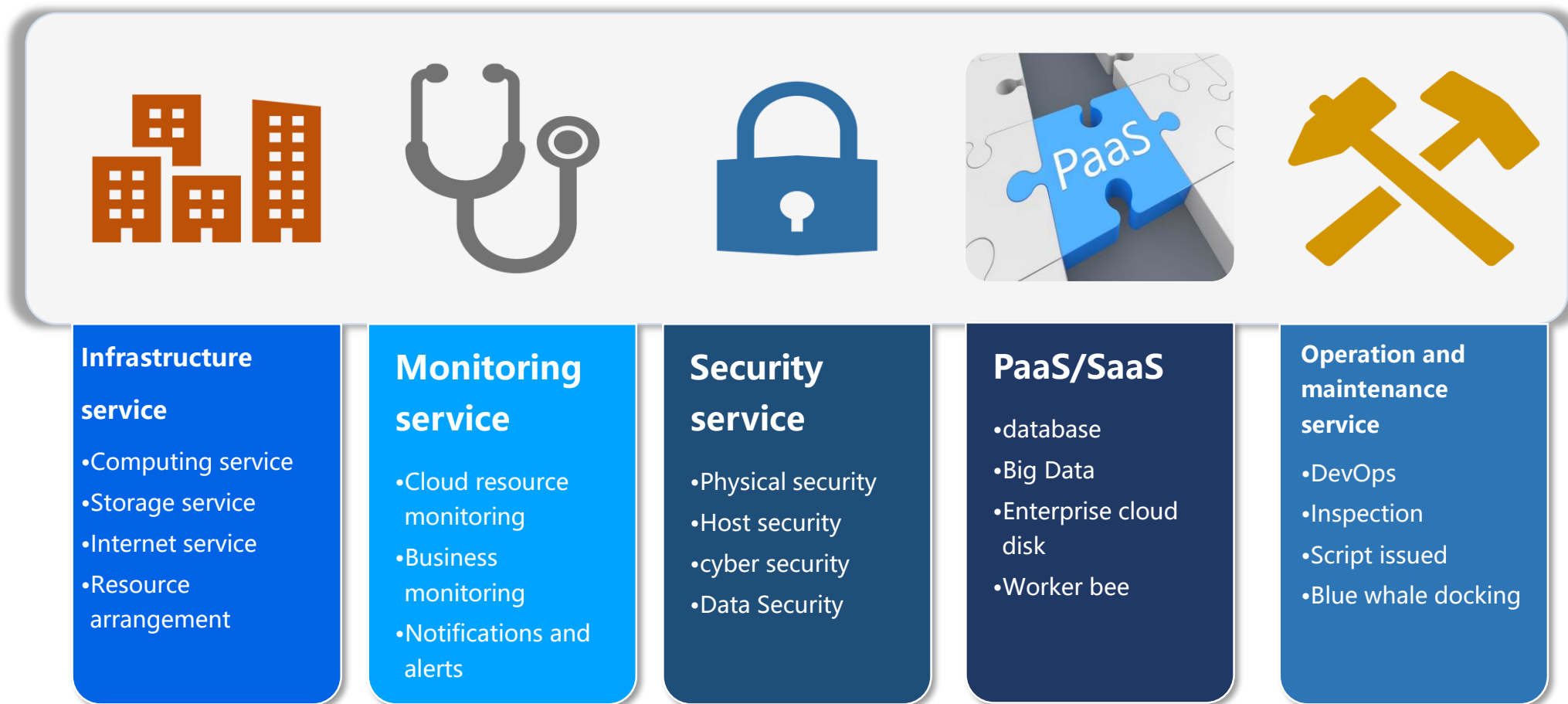
Provide multi-cluster management, container services, micro-service framework, etc.

- ◆ Based on k8s, isio architecture
- ◆ Multi-cluster
- ◆ app Store
- ◆ Intelligent gateway
- ◆ Cloud original application
- ◆ Multi-tenant mirror warehouse

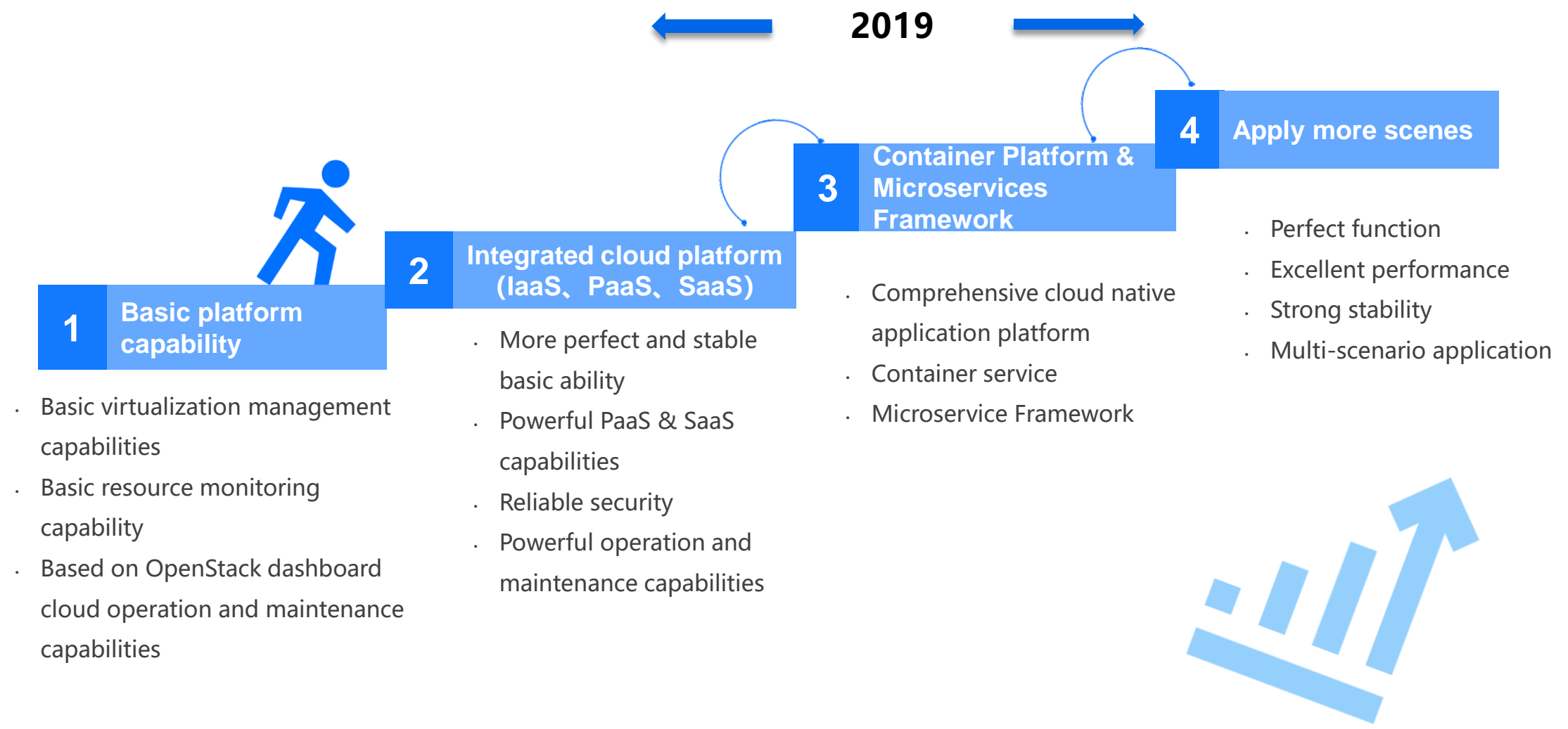
Connect Infra Capability of Tencent



Main ability of Tencent Cloud TStack



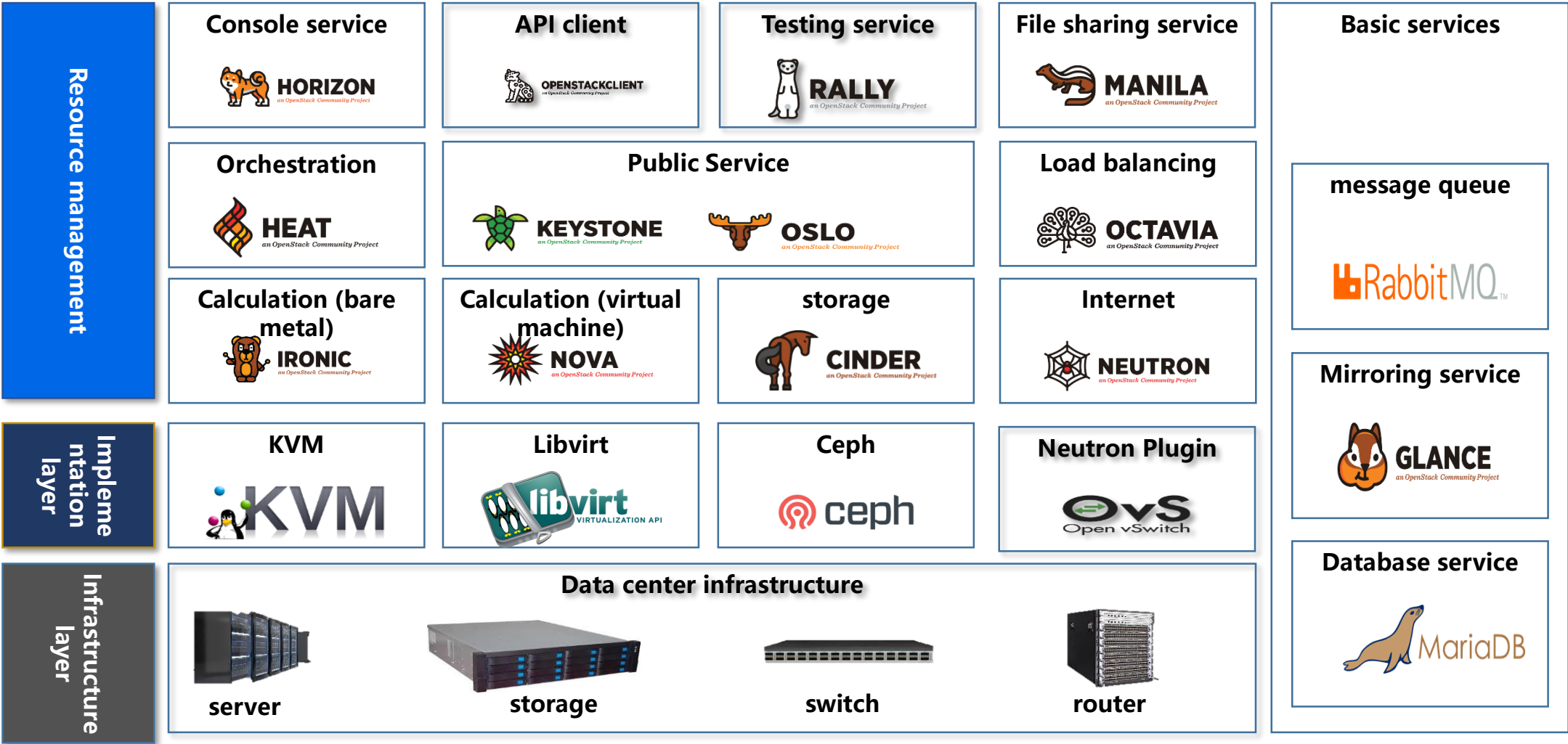
Product Roadmap



Introduction ---Main ability

Based on OpenStack

main components of Basic cloud



Introduction --- PaaS(TCNPlatform)

Container, microservice framework, smart gateway, cloud native application

Container & Microservice



Containerized package

Based on the container, improve the overall development level, form code and component reuse, and simplify the maintenance of cloud native applications. Run applications and processes in a container and act as a separate unit for application deployment for high-level resource isolation



Microservice-oriented

Improve the overall agility and maintainability of your application with a loosely coupled approach.

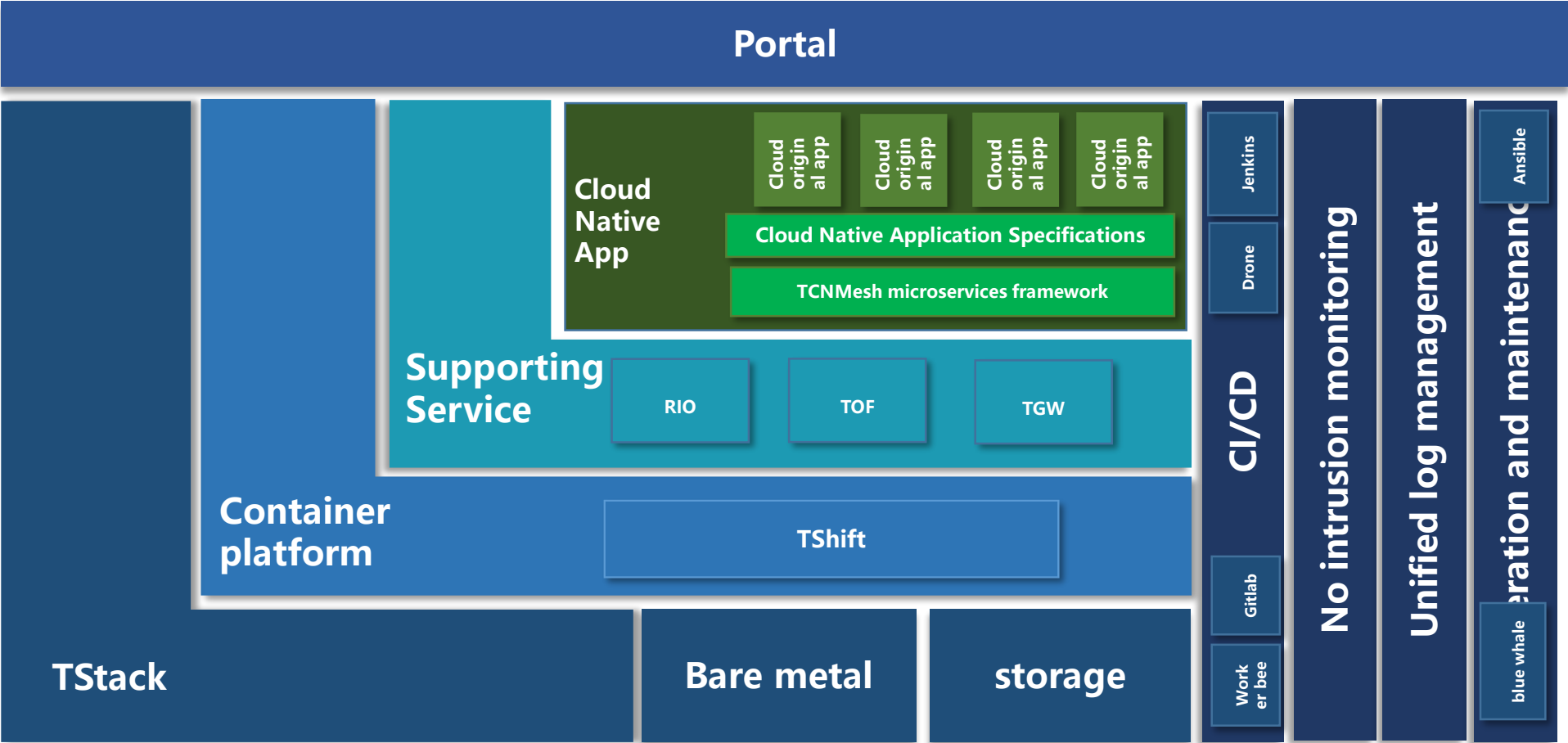


Automated orchestration

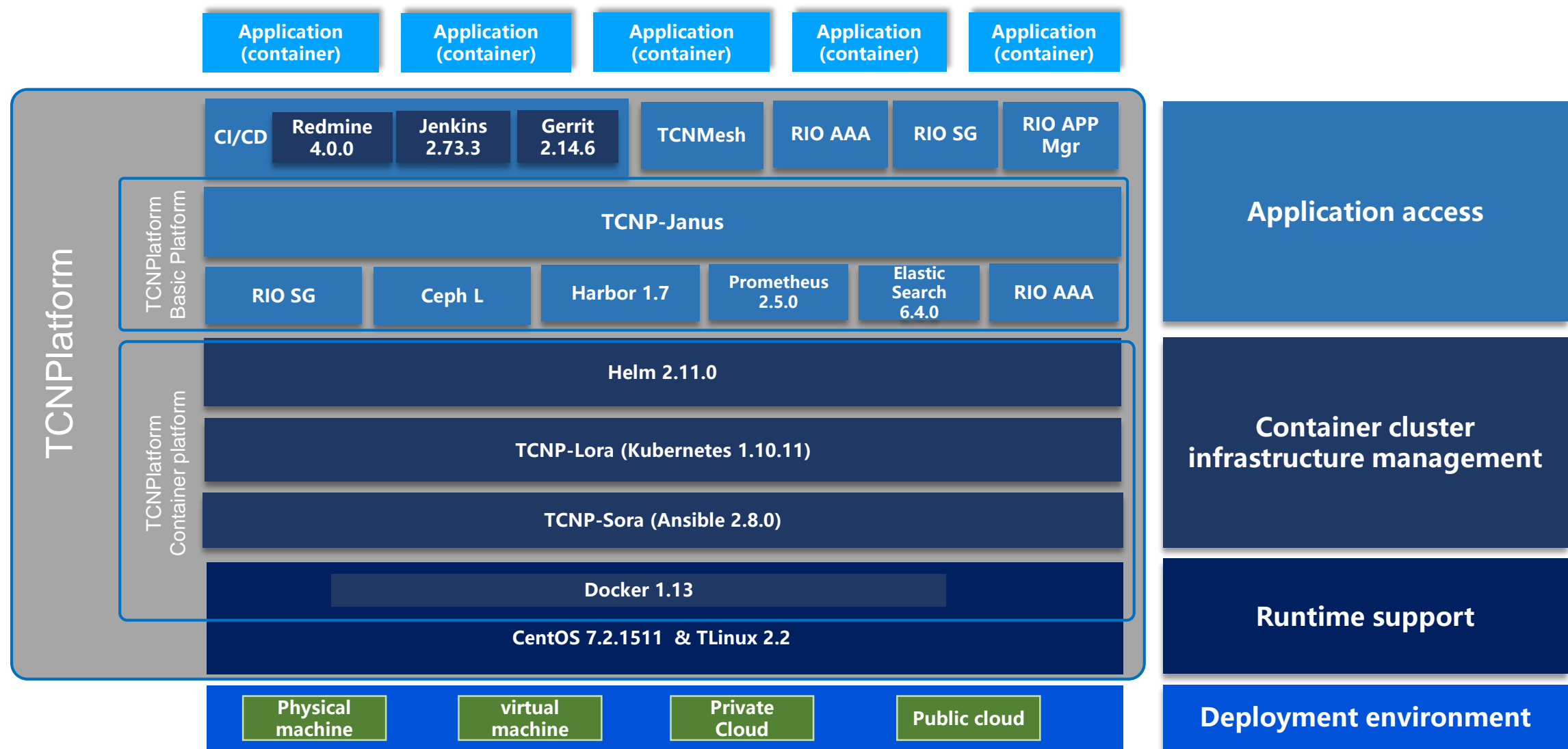
Unified scheduling and management center to fundamentally improve system and resource utilization while reducing operation costs



TCNPlatform Architecture



TCNPlatform Main Components

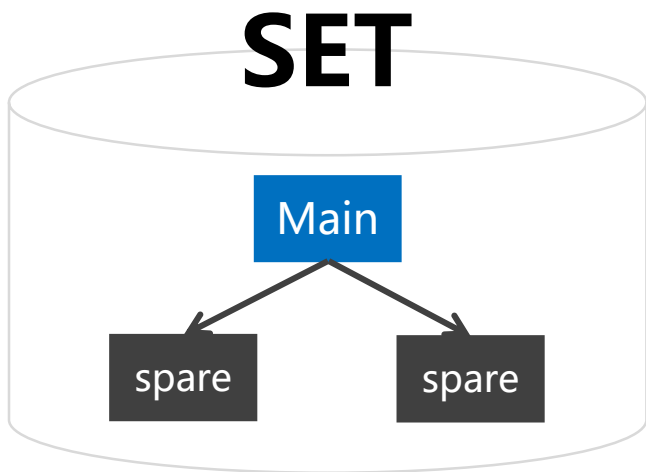


Introduction --- PaaS & SaaS

Database, middleware, applicative services

TDSQL has features like multi-master, cross-IDC, distributed disaster recovery, 99.999%+ availability and etc.

SET model - never stop service unit



- Deploy across **IDC**
- At least **3 nodes** per subcluster
- **independent** generated Gateway and SET
- (financial level) **physical isolation**
- Long-lasting data, reliability **99.999999%**

Product capability

Engine version:

MySQL 5.5/5.6/5.7

MariaDB 10.0.10/10.1.9

Partition type support:

- Zone partition/Hash partition
- Compatible with MySQL protocol/grammar
- High availability based on strong data consistency
- Flexible deployment without downtime
- Easy using deployment



Application scenario

- Financial business is highly reliable
- E-commerce trading system
- Big data business system
- Public service system

CmongoDB

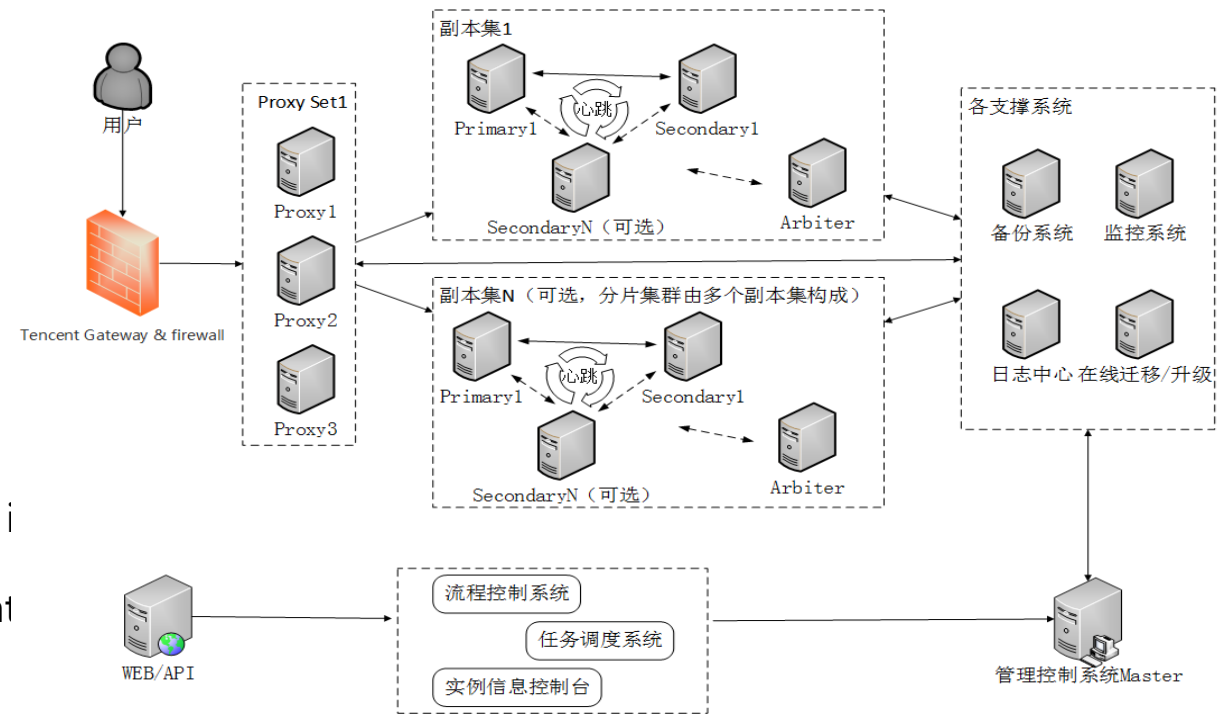


Product capability

- High-performance NoSQL database
- MongoDB protocol
- Support for backup and backfiles
- monitoring management
- Flexible extension
- Automatic disaster tolerance

Application scenario

- Storage monitoring data
- Two-dimensional spatial i
- Store large, low-value dat
- Highly scalable scene
- Read and write separation



PaaS Product core competence—TBase

TBase is a new generation of distributed NewSQL domestic database independently developed by Tencent. It has the industry-leading HTAP capability, and provides NewSQL convenience while fully supporting transactions and maintaining SQL compatibility.

○ Friendly Interface

Fully compatible with SQL2003, supporting partial ORACLE syntax

○ HTAP capability

OLTP and OLAP services are supported within a single group

○ Financial level data security

Financial-grade disaster recovery solutions provide the highest level of data failure protection



○ High data security

Based on the separation of three powers, the industry's leading matrix access control, transparent data encryption desensitization

○ Row and column hybrid storage

Supports both row tables and lists in the same database, and provides row and column hybrid query capabilities

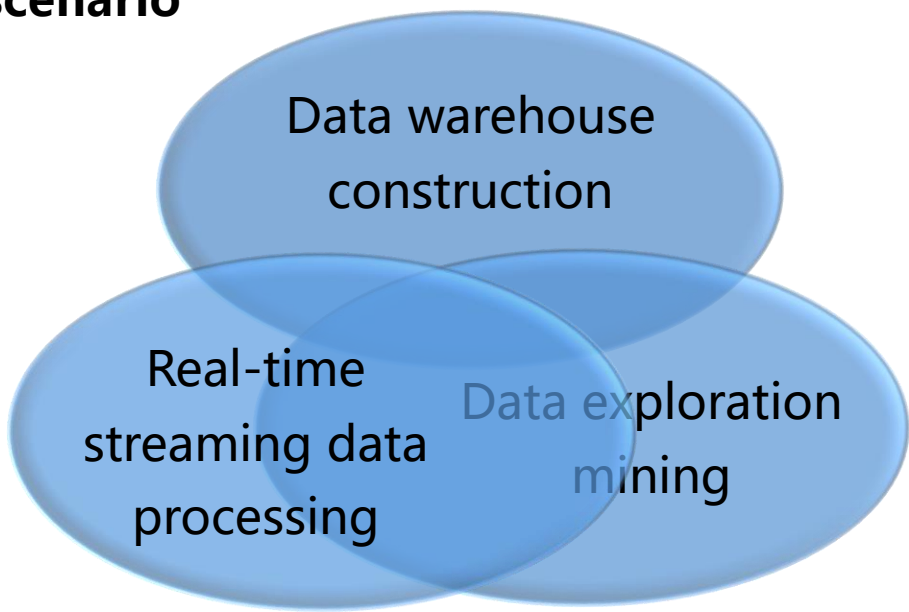
○ Cloud multi-tenant capacity

Provide DAAS service capabilities, TBase autonomous resource management and database scheduling, deeply isolate user requests

PaaS Product core competence—Big Data Suite TBDS

Tencent Big Data Suite (TBDS) is a reliable, secure and easy-to-use big data processing platform based on Tencent's years of experience in massive data processing. TBDS supports tera-scale data access, million-level job scheduling, global sorting of 100 terabytes of data takes only 98s, and full analysis of two trillions of data is only about 8 seconds, thus achieving massive data management and application.

Application scenario

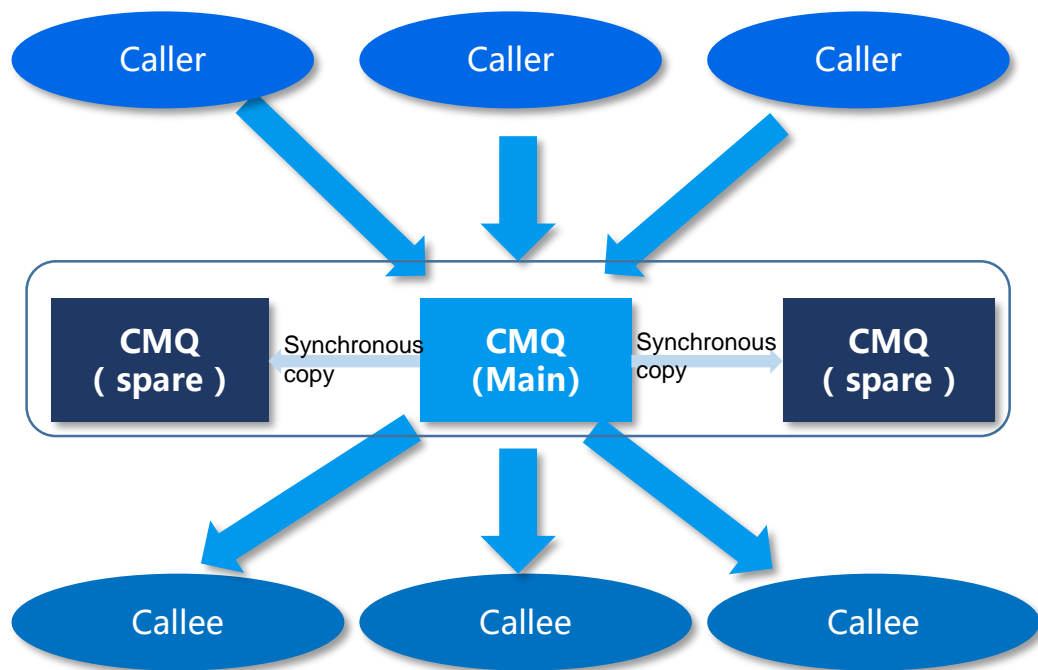


大数据套件

Big Data Suite

PaaS Product core competence—Middleware

CMQ is a message middleware product independently developed by Tencent, providing message queue service for internal and external business such as **WeChat red envelope** and **Swiftpass**.



Application scenario

- System decoupling
- Balancing
- Message push

Features

- High reliability
- Strong consistency
- Elastic expansion
- Unlimited accumulation
- Delayed consumption
- Message tracking

Bottom engine

- Multiple copies
- Raft algorithm
- Synchronous brush

SaaS product core capability - Tencent Enterprise Cloud Driver

Tencent Enterprise Cloud Driver is the solution for enterprise file storage. Help companies improve employee productivity and productivity, help companies securely manage document assets, and effectively protect corporate data.



01

Efficient collaborative office
Improve employee productivity

02

Security management file asset
Effectively protect corporate data



solution

Efficient office tool

- ✓ Network hard drive replaces PC hard drive
- ✓ Integrated Enterprise WeChat
- ✓ Transfer multiple application scenarios such as WeChat files
- ✓ Notes, record work information

Deep combination and fast landing

- ✓ Multiple authentication docking
- ✓ Multiple storage docking
- ✓ Multiple deployment methods

Safety management and visualization

- ✓ Display operational data in real time
- ✓ Full operation log audit backtracking
- ✓ Abnormal behavior automatic alarm
- ✓ Responding to the attack of ransomware - time machine

Leading technology architecture and storage services

- ✓ Highly available, stable distributed deployment architecture
- ✓ Disaster recovery plan
- ✓ Scalability

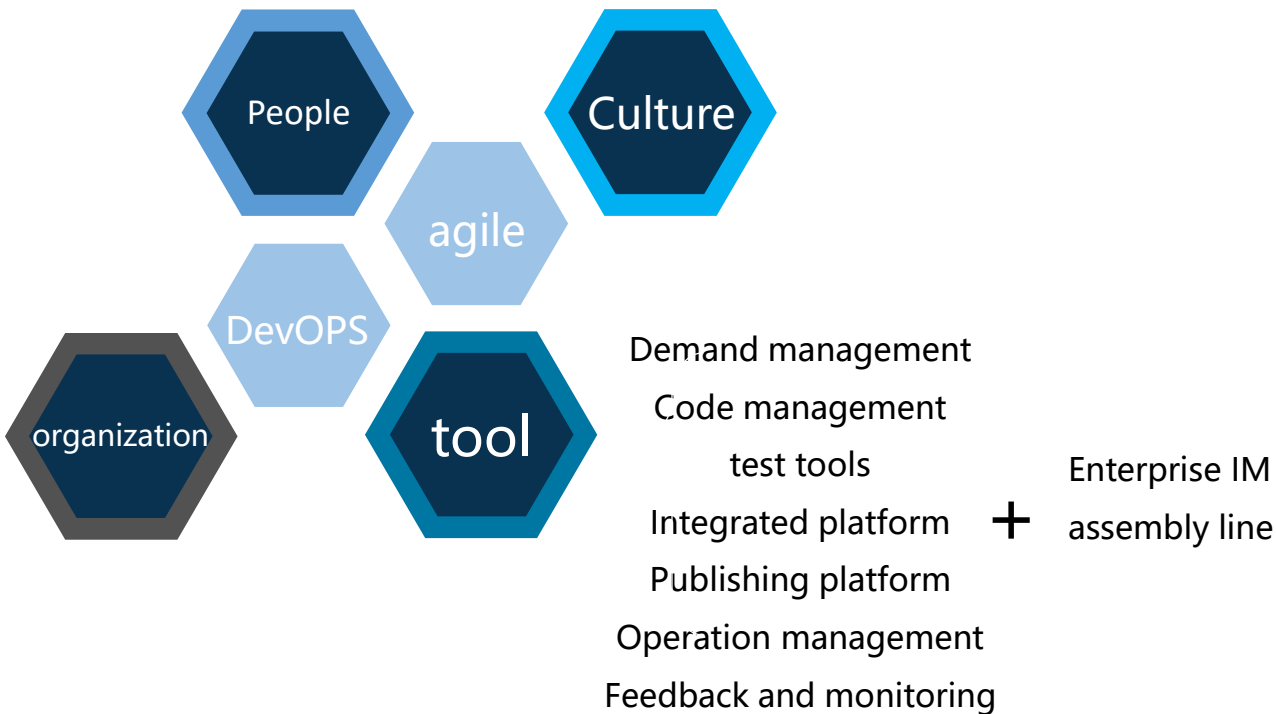


Tencent's collaboration platform for managing important assets of source code

Solve the problem of enterprise code hosting

Features

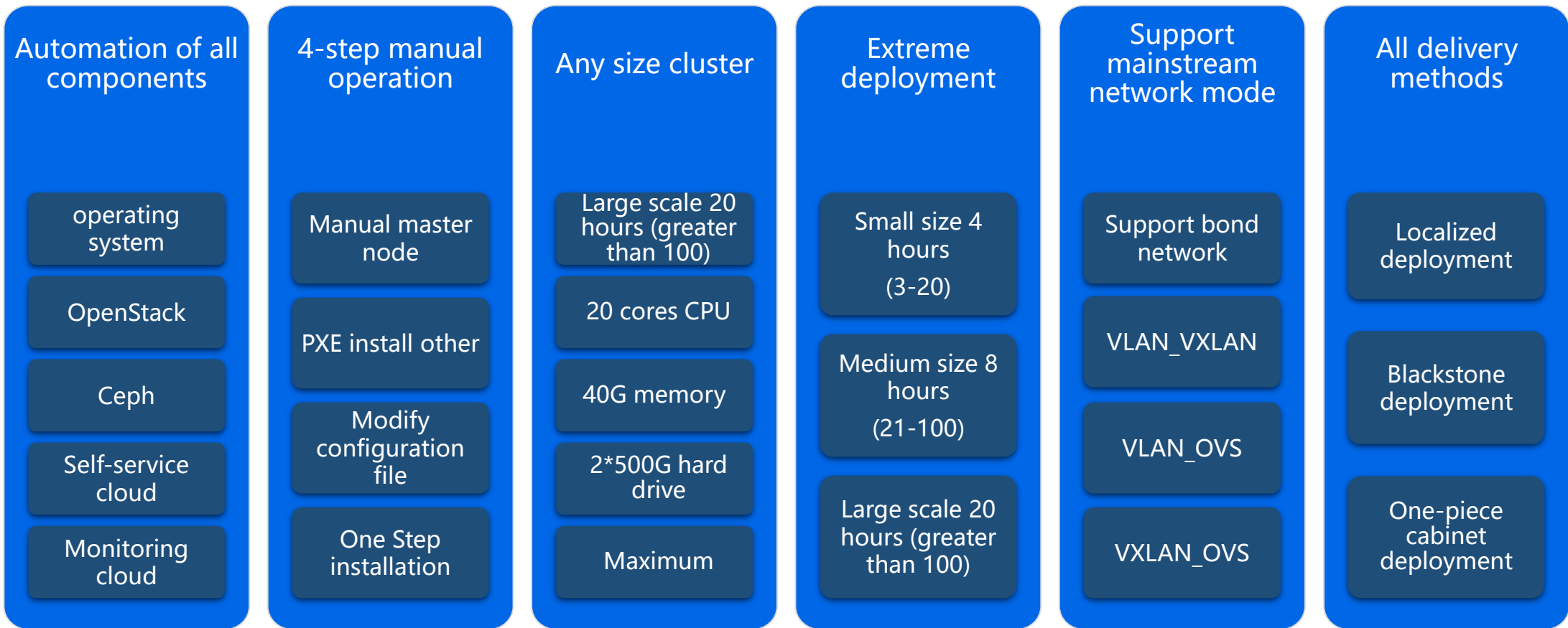
- ◆ Built-in distributed architecture for both app and storage layer, unlimited capacity of users and code repositories theoretically
- ◆ Support the deployment of multi-site repositories, adapting to the network structure of MNG and MNC
- ◆ Support real-time offsite backup of the repository to ensure data security under the extreme situation (earthquake, fire, etc.)



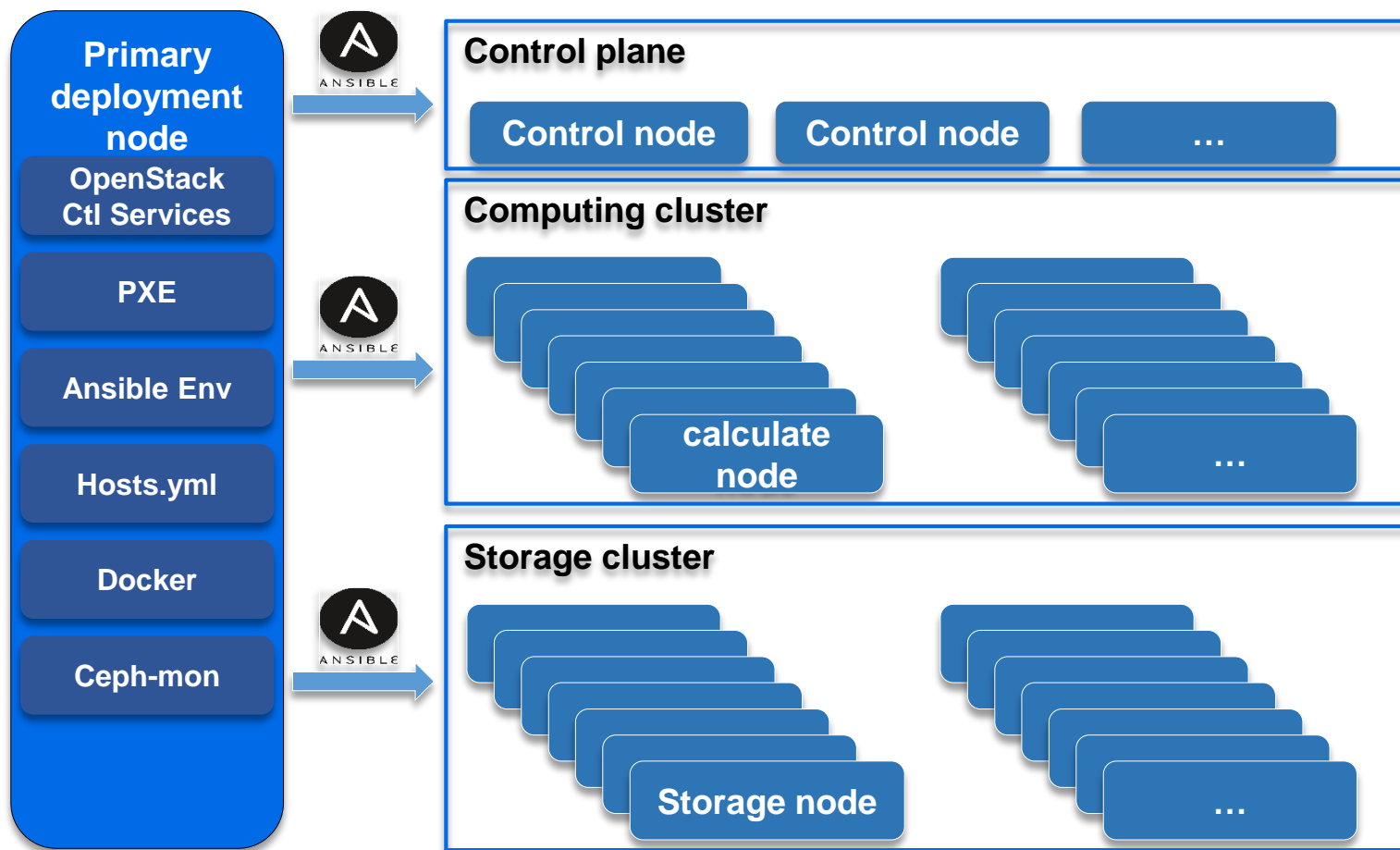
Introduction ---Key technology

Technical advantages

Automated deployment



Automated deployment architecture diagram



Main deployment node completed

- Deploy the base operating system
- Deployment control node
- Deploy compute nodes
- Deploy storage nodes

Training and certification

Perfect training system , cultivating professional partners

Perfect original training and certification system

Training objectives

-- Ability to independently deliver TStack products

training content

-- Teaching (3 days)

Theory + demonstration + practical operation

-- Assessment (2 days)

Environment deployment + platform operation and maintenance management



