

HUAWEI CLOUD Overview



Foreword

- HUAWEI CLOUD is a leading cloud service provider, which brings Huawei's 30-plus years of expertise together in ICT products and solutions. We are committed to providing reliable, secure, and cost-effective cloud services to empower applications, harness the power of data, and help organizations of all sizes grow in today's intelligent world. HUAWEI CLOUD is also committed to bringing affordable, effective, and reliable AI services.
- In this chapter, we will have a brief overview of HUAWEI CLOUD.

Objectives

- Upon completion of this course, you will:
 - Understand the positioning and application scenarios of HUAWEI CLOUD.
 - Understand the delivery modes, technical support, and ecosystem of HUAWEI CLOUD.
 - Understand concepts related to HUAWEI CLOUD.

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1. HUAWEI CLOUD Overview

2. Application Scenarios

3. Delivery Modes

4. Technical Support

5. Ecosystem

6. Quick Start

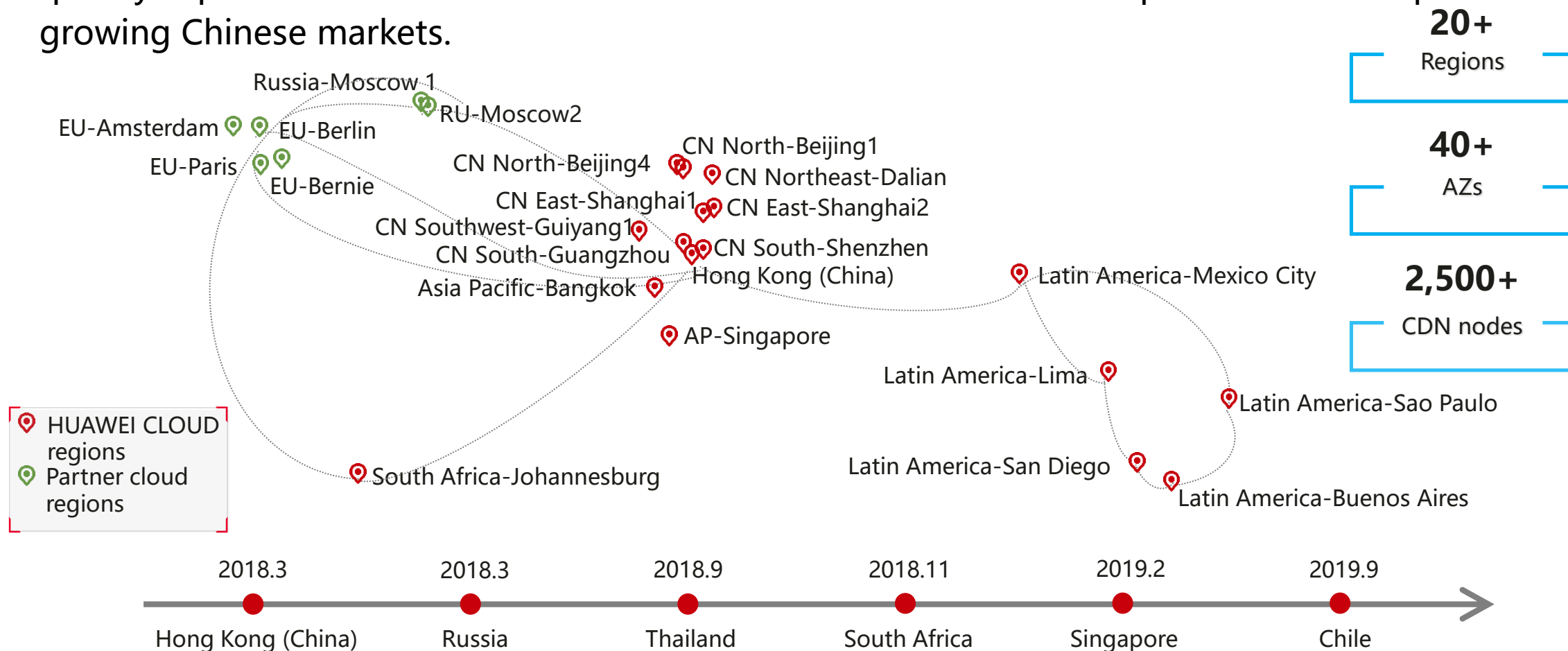
Start a Journey with HUAWEI CLOUD



HUAWEI CLOUD official website: <https://www.huaweicloud.com/intl/en-us>

Global Connectivity and Services

- HUAWEI CLOUD provides global connectivity. With HUAWEI CLOUD, Chinese enterprises can quickly expand into the international markets and international enterprises can also tap into fast-growing Chinese markets.



200+ Cloud Services Are Available and More Are Coming

Compute ECS BMS AS ...	Application services BCS SMN APIG ...	Software development CodeCheck TestMan CloudIDE ...
Network VPC ELB EIP ...	Storage EVS SFS OBS ...	Containers CCE CCI FunctionStage ...
Enterprise intelligence MLS DLS MRS ...	Security WAF DEW HSS ...	Video LSA Live MPC ...
Management CES CTS IAM ...	Cloud meeting Cloud meeting Webinar API/SDK ...	Databases RDS DDS DRS ...
Distributed regions IEF IES Dedicated regions ...	Hybrid cloud HUAWEI CLOUD Stack ...	Internet of Things IoT platform ...

HUAWEI CLOUD Data Centers: Innovation from Chips

AI processors

Ascend Ascend AI processor

- 16 – 512 TOPS series
- Innovative DaVinci architecture
- Optimized AI instruction sets

Smart NICs

Hi1822 Industry-First 100 G iNIC

- Programmable NICs, better performance than standard NICs
- Multi-protocol offloading, including VxLAN/RoCE/OVS
- 15 MPPS, 2.5 times higher than the industry's best

Faster and smarter SSDs

Hi1812E 4th Gen SSD Controller

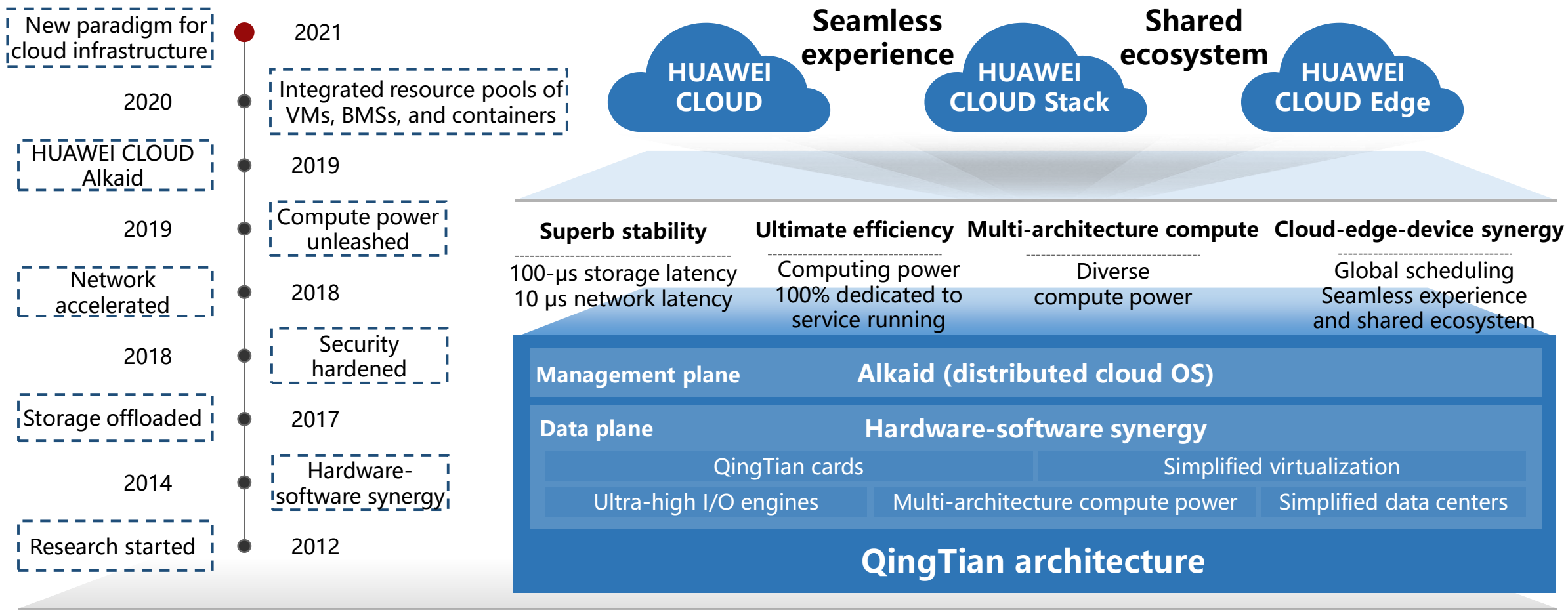
- IOPS: ↑ 75%+
- Bandwidth: ↑ 60%+
- Latency: ↓ about 15% (thanks to the intelligent multi-stream technology)

Chip-based root of trust

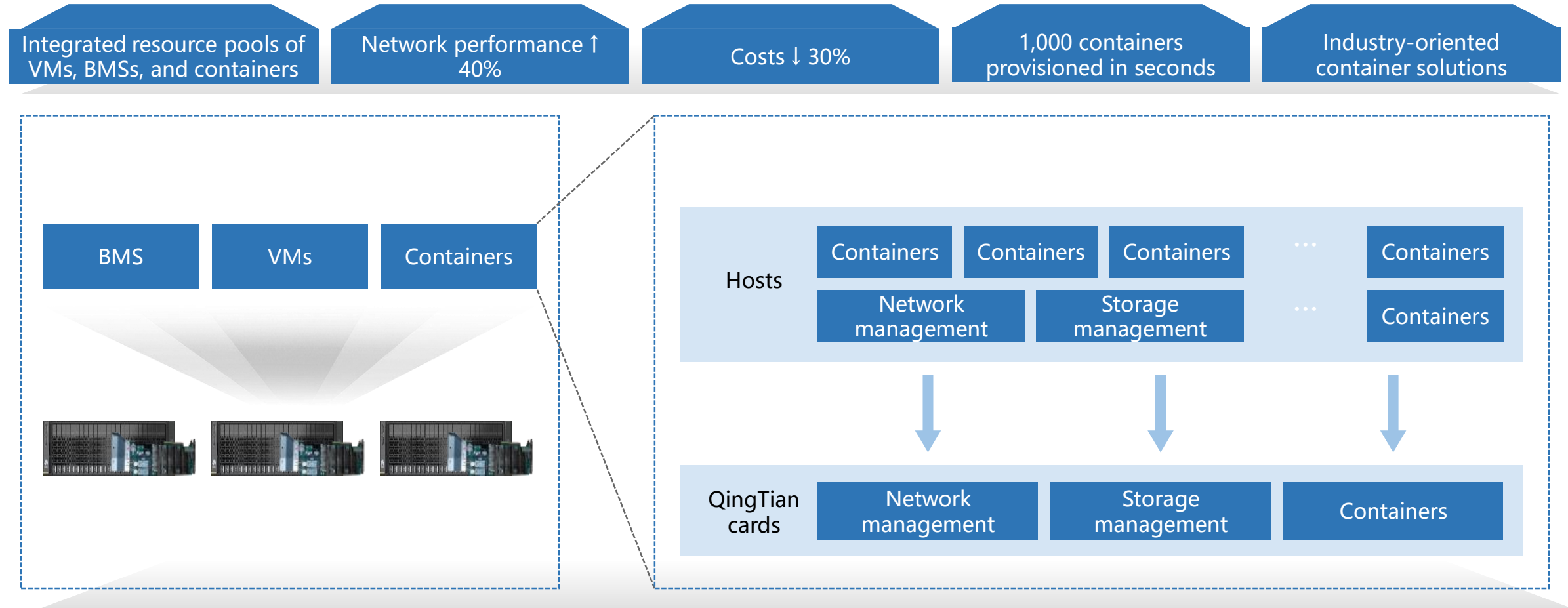
DAEMON Chip-Based Root of Trust

- Firmware security protection
- Strong ID security protection
- Trustworthiness management

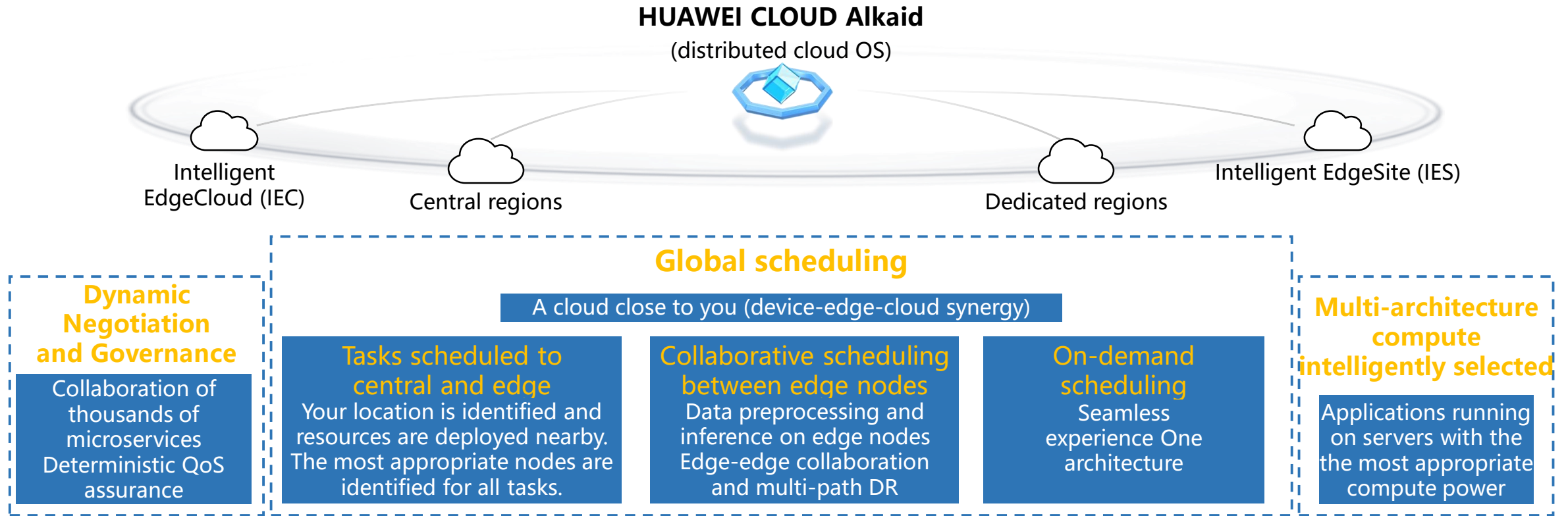
Innovative QingTian Architecture



The Industry's Only BMS with No Loss of Performance



Alkaid Distributed Cloud OS Schedules Tasks Globally



Best records for 51 tasks in the
SINTEF PDPTW problem list
Record holder in China

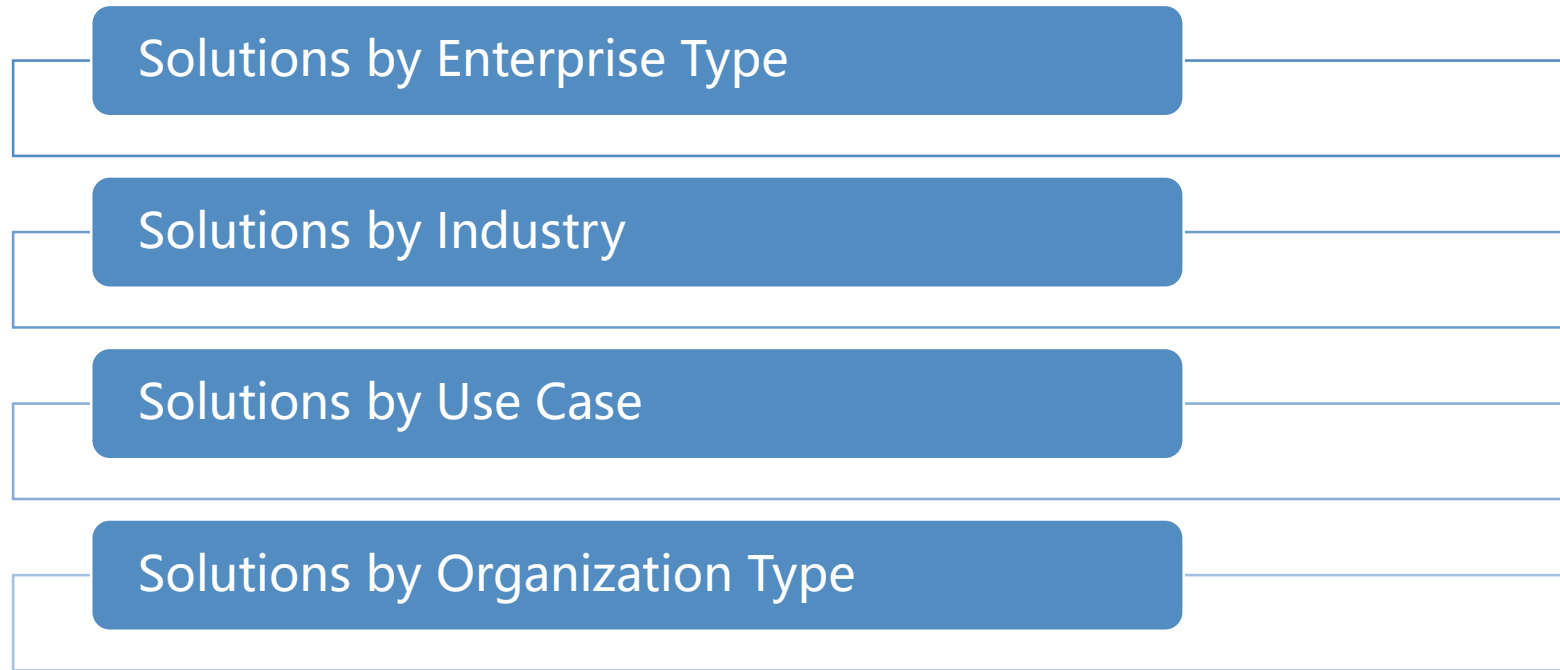
Winner
GECCO 2020 Competition
(OCP and USCP)

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Application Scenarios

- HUAWEI CLOUD provides cloud services and solutions to address your requirements, no matter which industry you are in.



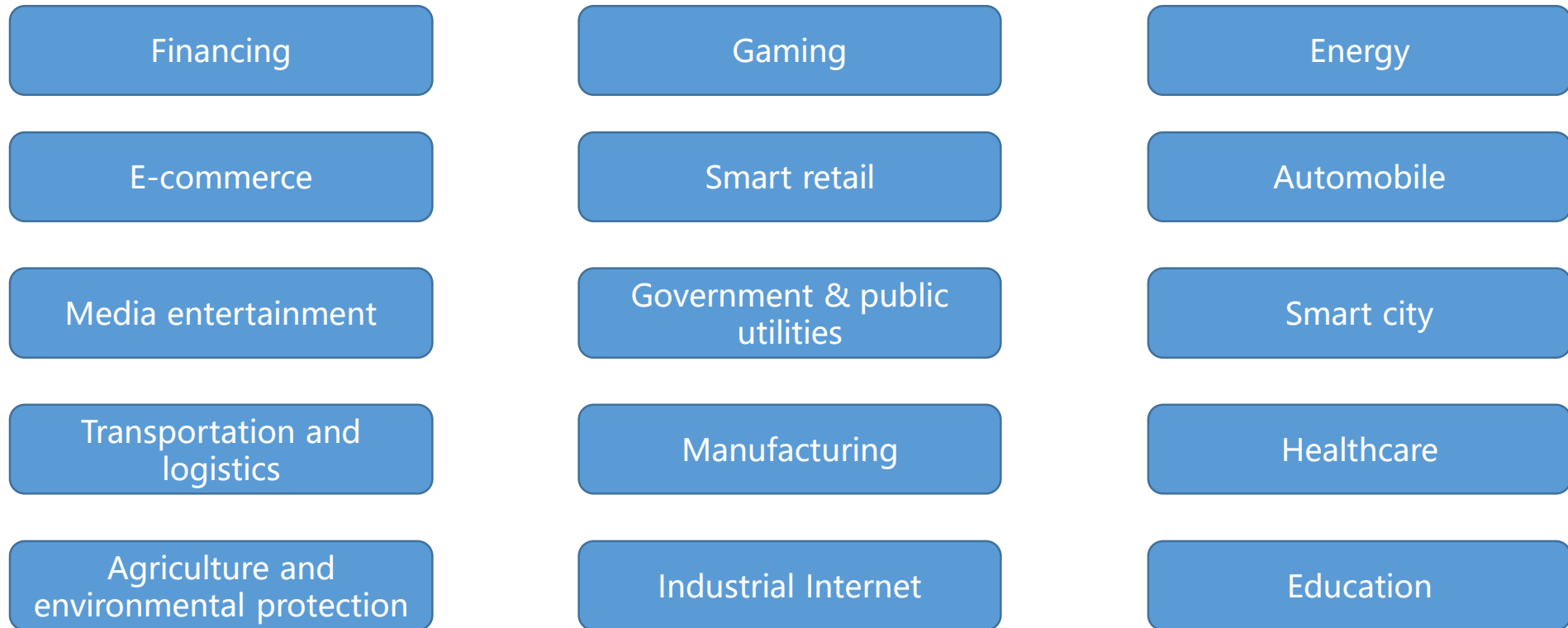
Solutions by Enterprise Type

- HUAWEI CLOUD provides a full portfolio of cloud solutions to empower startups, marketing, management, and business expansion.

Startups	<ul style="list-style-type: none">• Establishment, OA, marketing, intellectual property rights protection, and business expansion
Website building	<ul style="list-style-type: none">• 3,000+ website templates, one-on-one expert advisory, free ICP filing
Enterprise management	<ul style="list-style-type: none">• ERP on cloud
International expansion	<ul style="list-style-type: none">• Solutions for helping Chinese-funded enterprises go international
Cloud migration	<ul style="list-style-type: none">• Web applications on cloud
Transportation management	<ul style="list-style-type: none">• Network freight platform on cloud

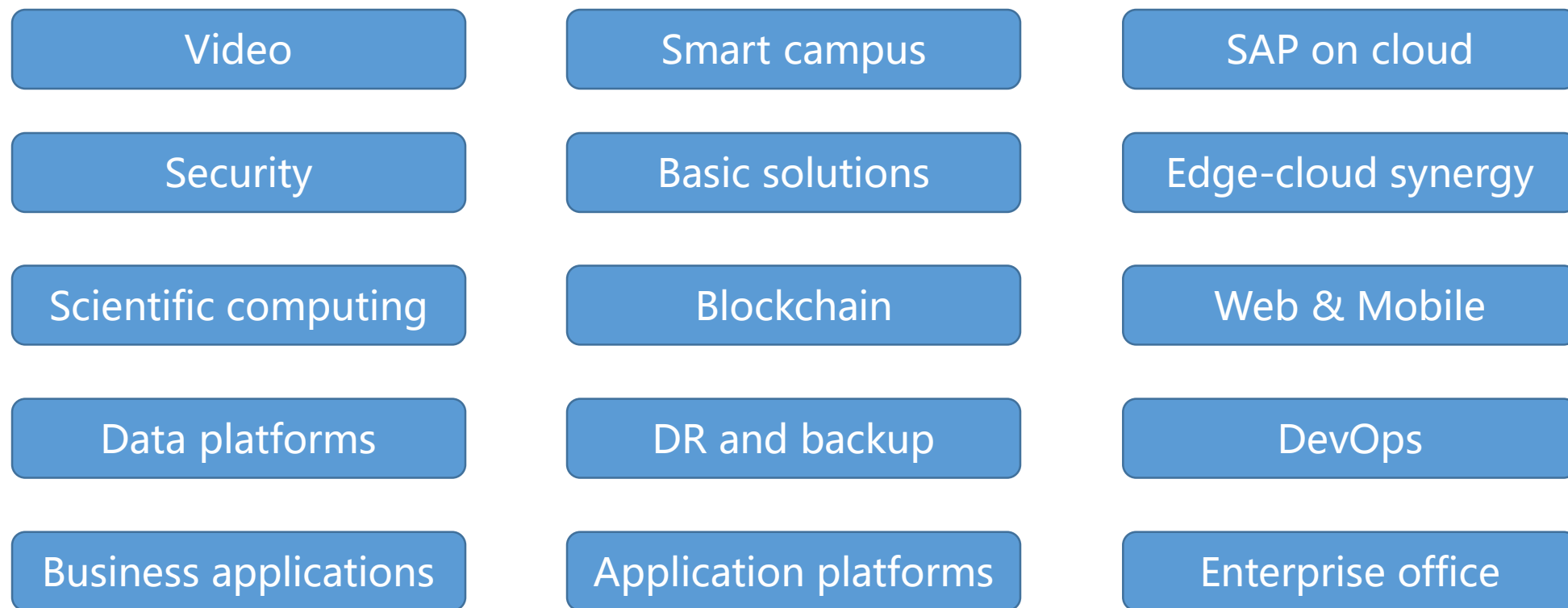
Solutions by Industry

- HUAWEI CLOUD provides solutions for a wide range of industries, so you can always find the cloud services you need.



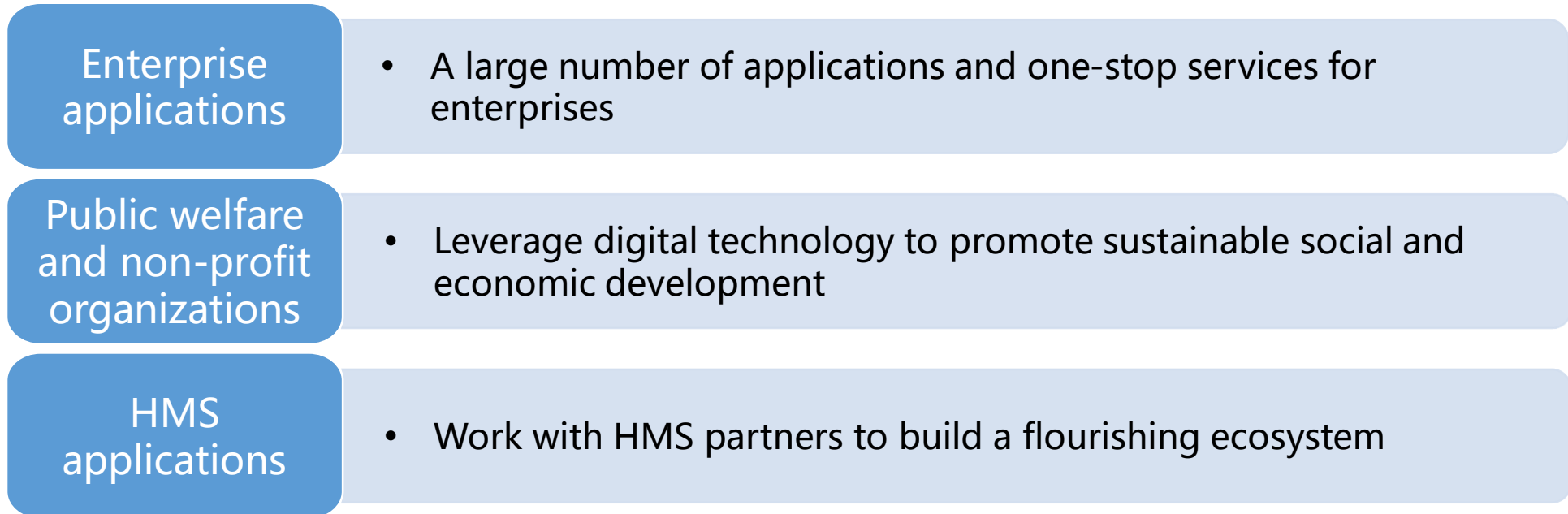
Solutions by Use Case

- HUAWEI CLOUD pre-integrates products and capabilities to meet the requirements of running ICT businesses on the cloud.



Solutions by Organization Type

- HUAWEI CLOUD provides solutions for helping enterprises, public welfare and non-profit organizations, and HMS partners to migrate to the cloud with ease.



HUAWEI CLOUD Is Powering Every Industry

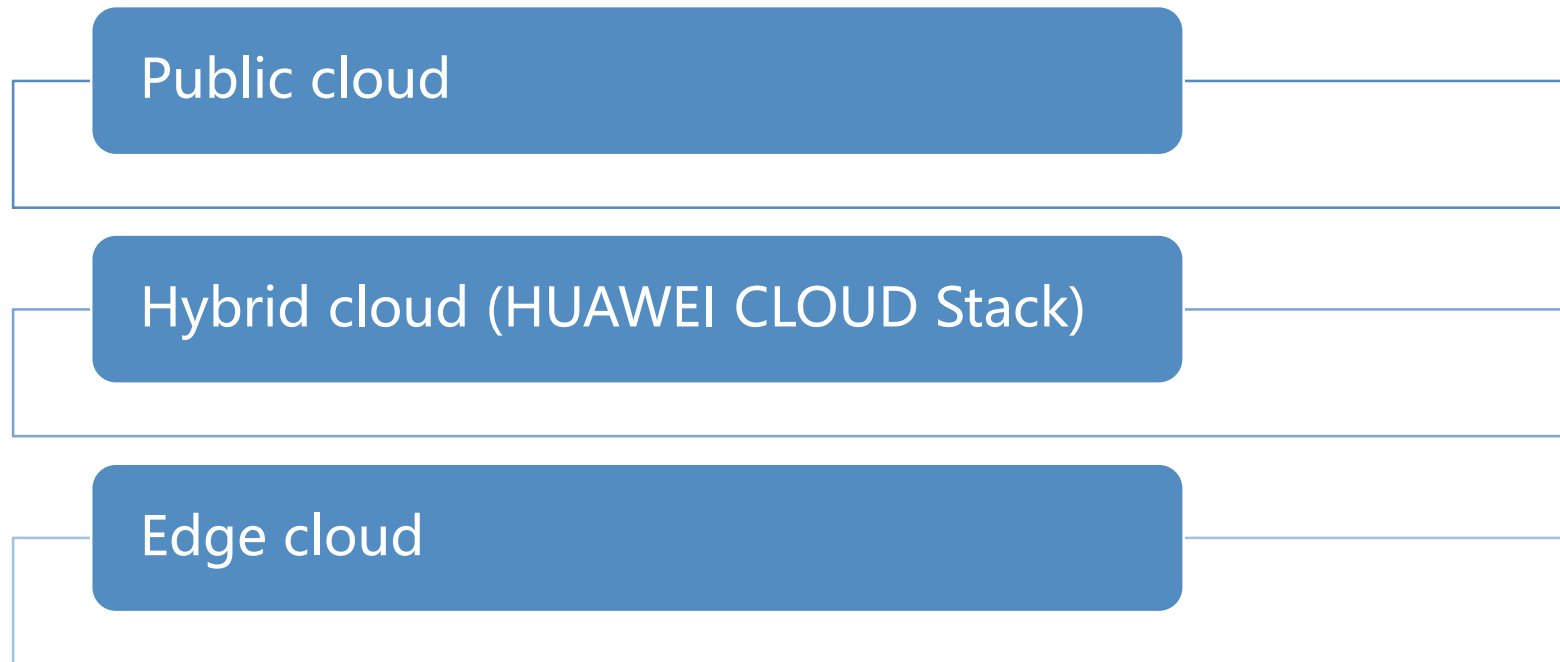
Government & public utilities	<ul style="list-style-type: none">• Rainforest Connection
Financial services	<ul style="list-style-type: none">• WAPI Pay in South Africa
Internet	<ul style="list-style-type: none">• Nestia in Singapore
Energy and manufacturing	<ul style="list-style-type: none">• PTT Digital in Thailand
Automobile	<ul style="list-style-type: none">• AASA in South Africa• UCARS in Singapore

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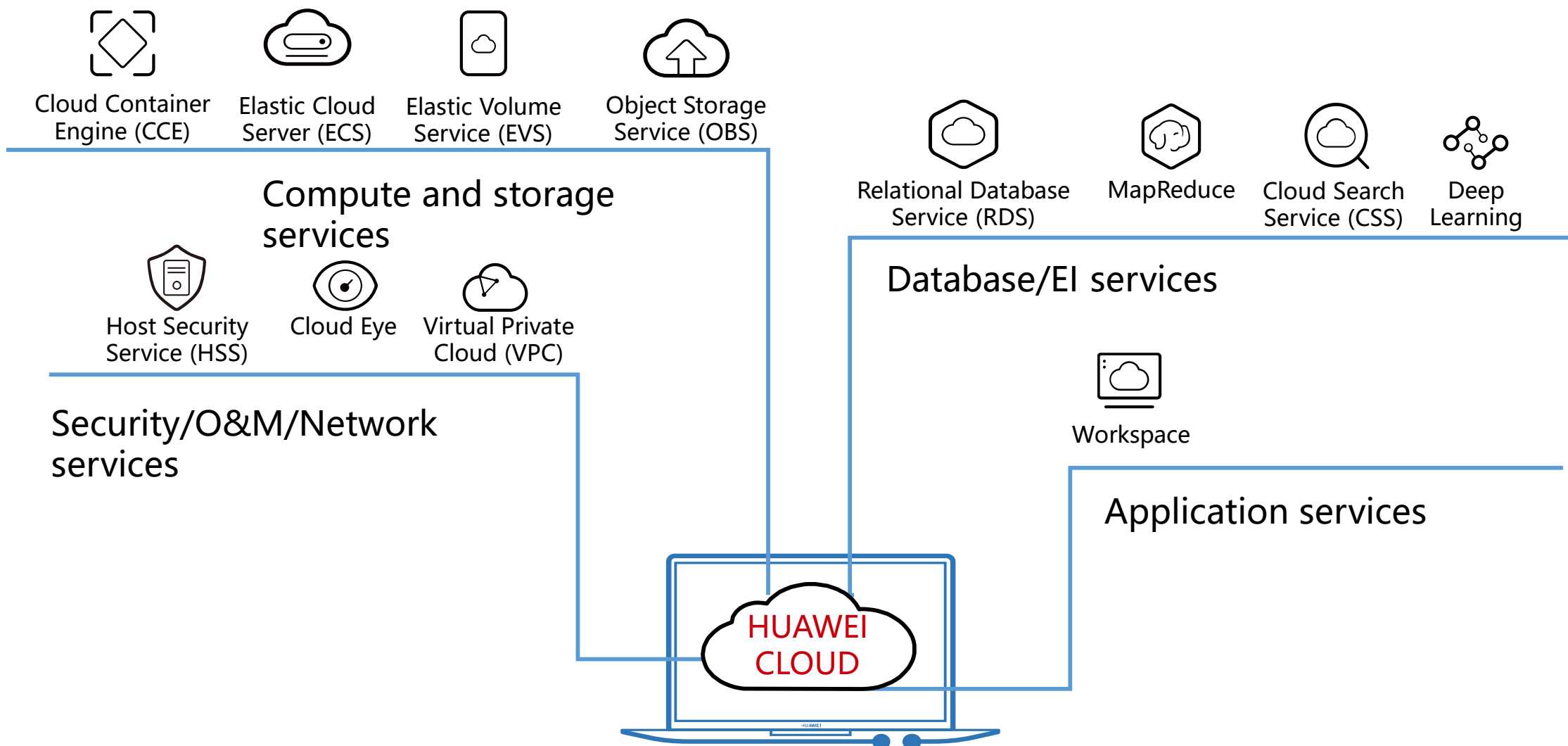
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Delivery Modes

- Different users may have different requirements for cloud service delivery.
HUAWEI CLOUD provides the following delivery modes:

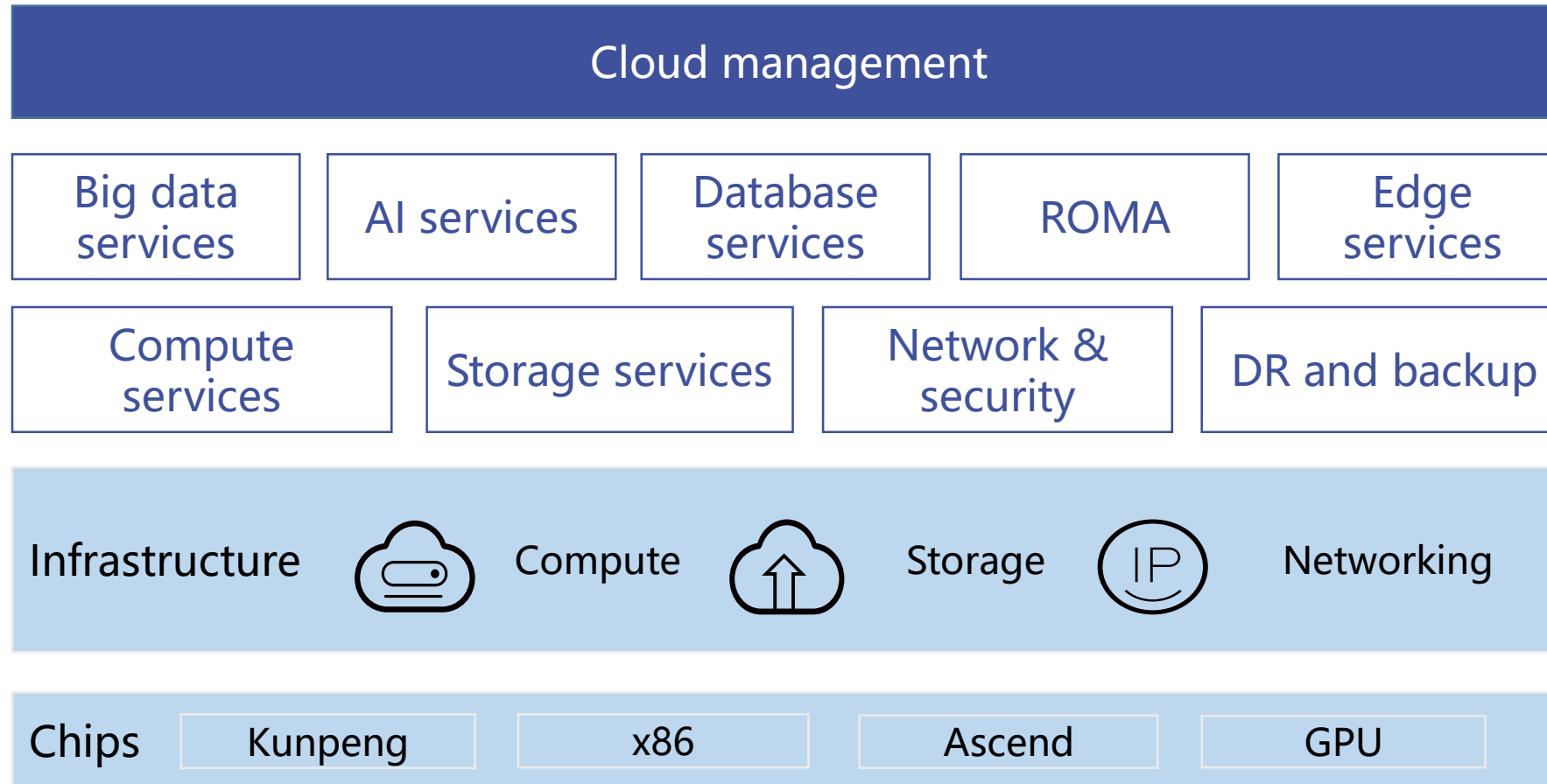


Public Cloud



HUAWEI CLOUD Stack

- HUAWEI CLOUD Stack is a cloud infrastructure deployed at on-premises data centers.

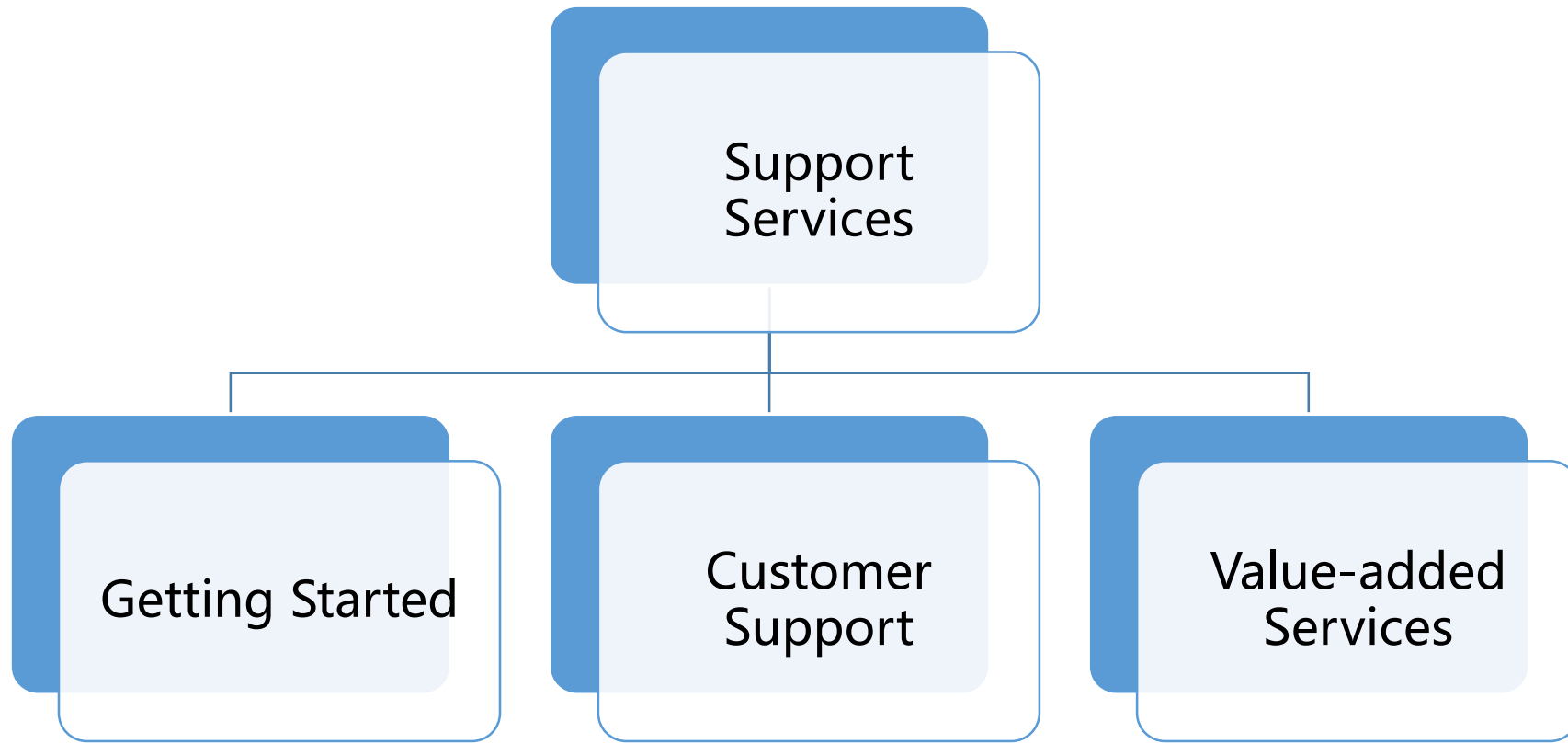


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HUAWEI CLOUD Technical Support

- HUAWEI CLOUD provides efficient service assurance and diverse support plans to walk you through the cloud migration process.



Getting Started

Getting started with cloud products

Learn about compute, network, storage, application, EI, database, security, and migration services. Familiarize yourself with common operations in minutes.

Hands-on labs

Log in to the HUAWEI CLOUD website, register an account, and try out the cloud services.

Online courses

Take the online courses designed for your role. These online courses can help sharpen your cloud skills and expertise.

Customer Support

Chatbot

- Intelligent diagnosis, quick response, and fast troubleshooting.

Self-service

- Convenient O&M tools and answers to frequently asked questions.

Contact us

- Professional pre-sales consulting and after-sales support services.

Service assurance

- 24/7 support and free ICP filing.

Product notices

- HUAWEI CLOUD official bulletins.

Value-added Services

Support plans

- Service support plans of different levels

Professional services

- Full-process professional services

Training services

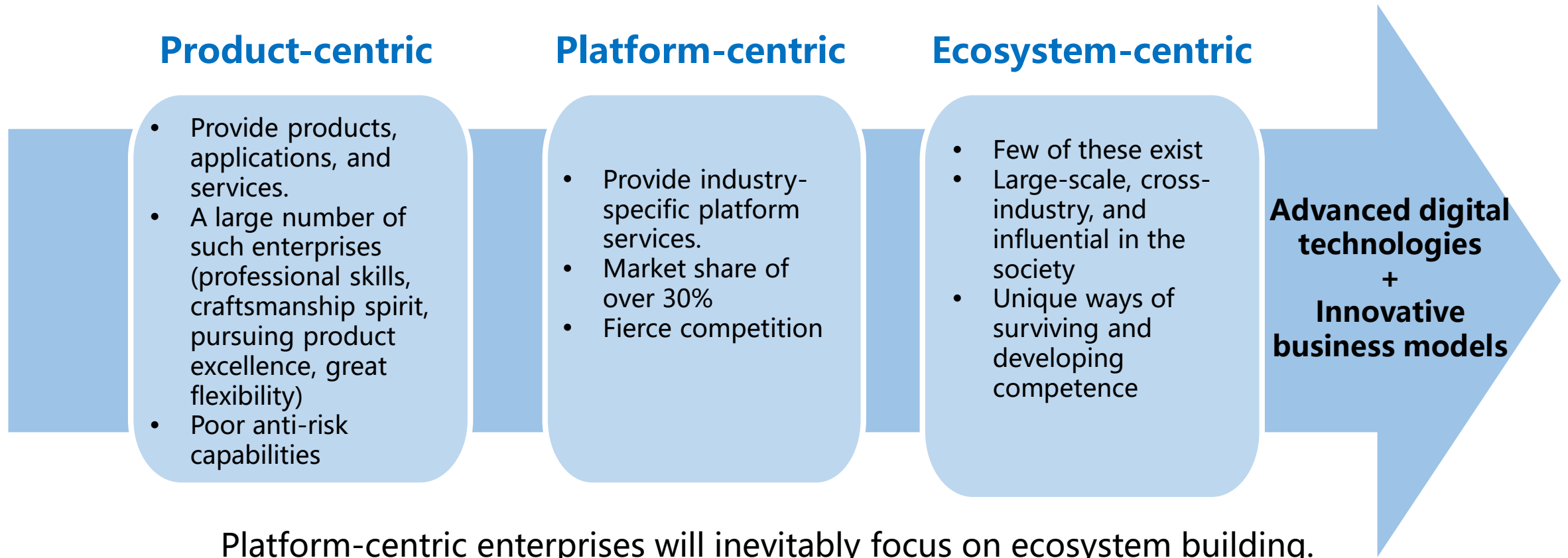
- Training and certification services for cloud migration

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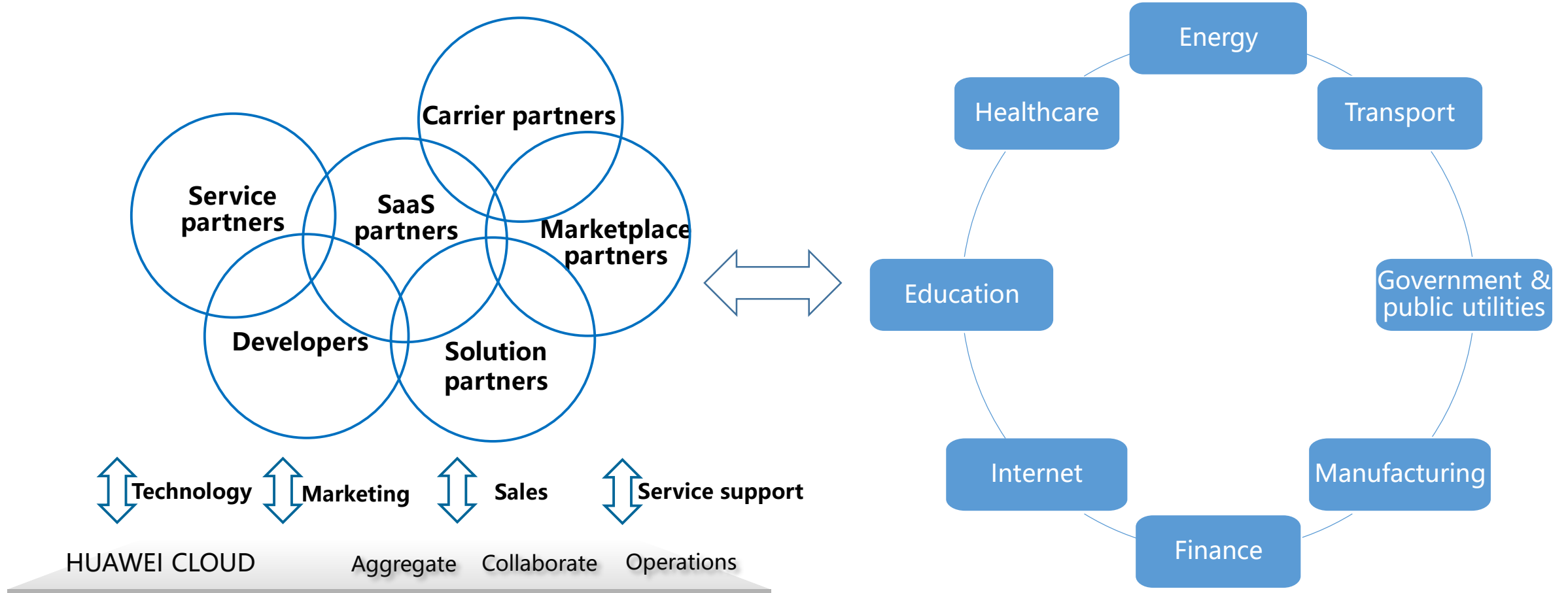
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New Tech Gives Rise to New Products, and Ecosystems

- Digital technologies are reshaping the business models of various industries.

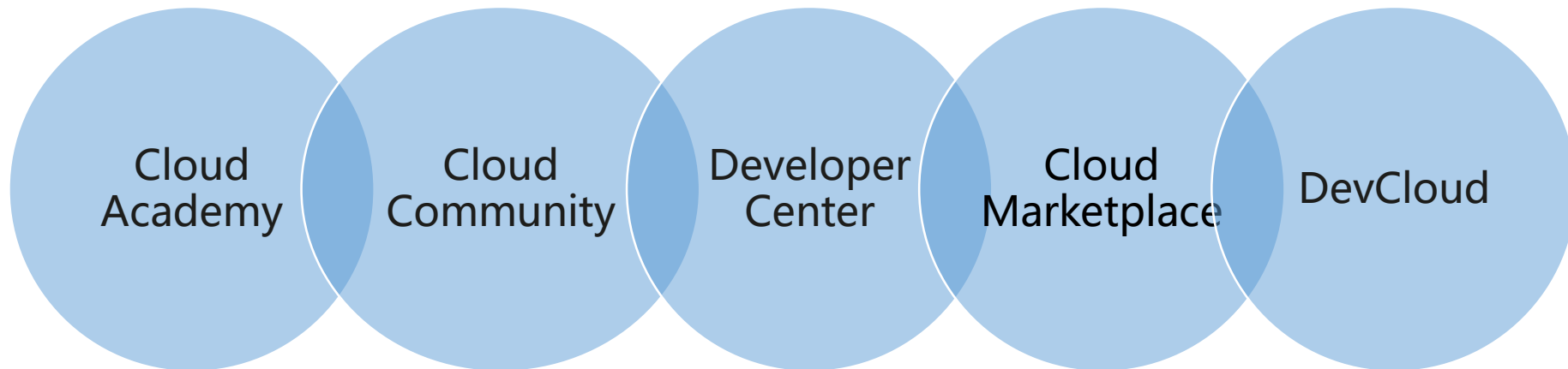


Multiple Parties Joining Hands for Digital Transformation





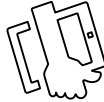


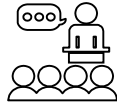


HUAWEI CLOUD Developer Support Platform

- A one-stop platform for developers to obtain resources and toolkits and interact with each other.



HUAWEI CLOUD Marketplace Seller Learning Center

- HUAWEI CLOUD Marketplace provides end-to-end services for service providers, making registration and operations easier.

Negotiation	Registration	Operations and marketing	Monetization
 Advisory services <ul style="list-style-type: none">• Professional consulting• Business design• Package design• Registration	 Technical support <ul style="list-style-type: none">• Resources for testing• Solution testing• Security testing• Fault rectification	 Operations <ul style="list-style-type: none">• Operations dashboard• Recommended on homepage• Displayed as popular products• Brand pavilion	 Monetization <ul style="list-style-type: none">• Online reconciliation• Monthly settlement• Quick payment
 Market analysis <ul style="list-style-type: none">• Documentation• Marketing strategy• Development trends	 Training <ul style="list-style-type: none">• Standard process• New product launch• Knowledge/Skill transfer• On-site/Online training	 Marketing <ul style="list-style-type: none">• Huawei exhibitions• Brand events• Forums & Salons• HUAWEI CLOUD partners	 Incentives <ul style="list-style-type: none">• Partner benefits• Annual MVPs

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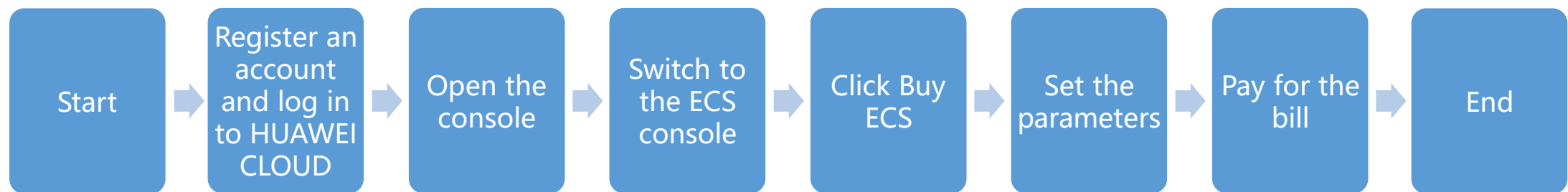
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How to Use HUAWEI CLOUD?

- How do we use HUAWEI CLOUD?
- What should we pay special attention to?

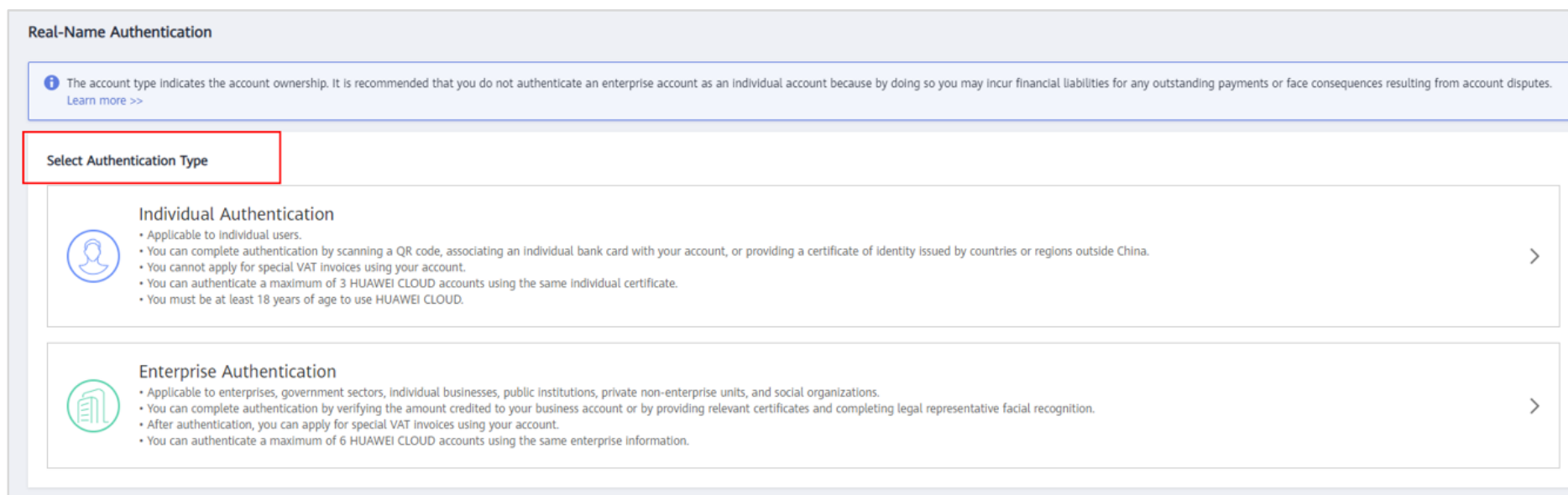


Buy an ECS



Register an Enterprise Account

- Log in to the HUAWEI CLOUD website at <https://www.huaweicloud.com/>.
- Register a HUAWEI CLOUD account.
- Verify the account.
 - After the registration is complete, use the registered account to log in to HUAWEI CLOUD. A message is displayed, indicating that the enterprise authentication needs to be completed or an email address needs to be added. Click OK.
 - Choose Real-Name Authentication > Enterprise Authentication and complete the real-name authentication.
- Add your Email address.



The screenshot shows the 'Real-Name Authentication' interface. At the top, there is a blue header bar with the title 'Real-Name Authentication'. Below the header, a light blue box contains an information icon and a warning message: 'The account type indicates the account ownership. It is recommended that you do not authenticate an enterprise account as an individual account because by doing so you may incur financial liabilities for any outstanding payments or face consequences resulting from account disputes.' Below this, a red-bordered box labeled 'Select Authentication Type' highlights the selection area. Two options are listed: 'Individual Authentication' with a person icon and 'Enterprise Authentication' with a building icon. Each option includes a list of bullet points and a right-pointing arrow.

Real-Name Authentication

Select Authentication Type

Individual Authentication

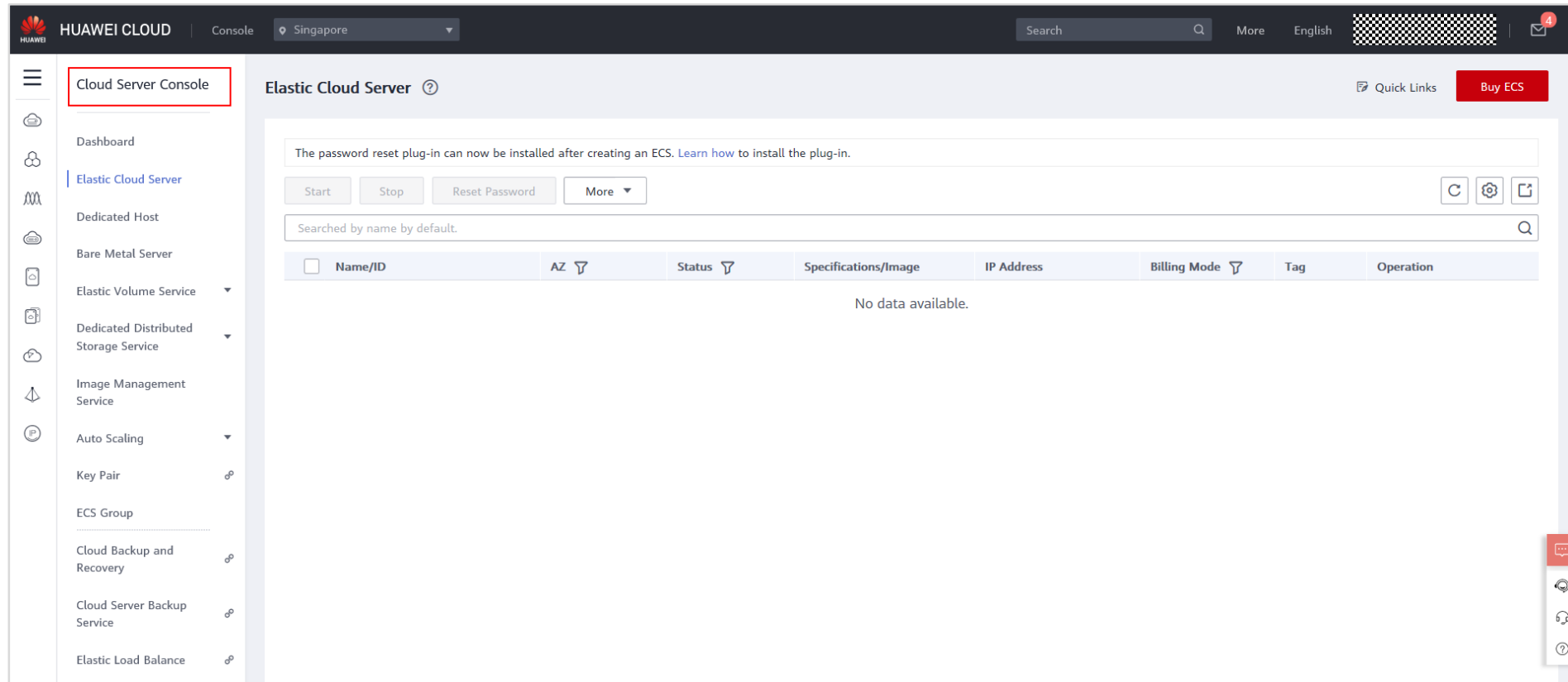
- Applicable to individual users.
- You can complete authentication by scanning a QR code, associating an individual bank card with your account, or providing a certificate of identity issued by countries or regions outside China.
- You cannot apply for special VAT invoices using your account.
- You can authenticate a maximum of 3 HUAWEI CLOUD accounts using the same individual certificate.
- You must be at least 18 years of age to use HUAWEI CLOUD.

Enterprise Authentication

- Applicable to enterprises, government sectors, individual businesses, public institutions, private non-enterprise units, and social organizations.
- You can complete authentication by verifying the amount credited to your business account or by providing relevant certificates and completing legal representative facial recognition.
- After authentication, you can apply for special VAT invoices using your account.
- You can authenticate a maximum of 6 HUAWEI CLOUD accounts using the same enterprise information.

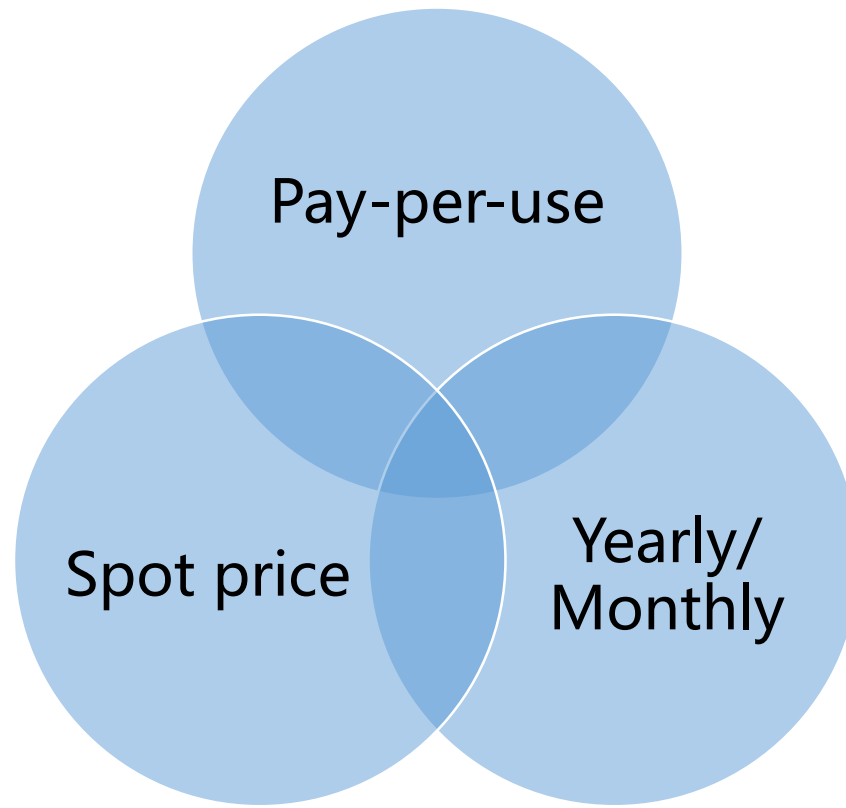
What Is Console?

- The console is where you can request and manage cloud service resources.



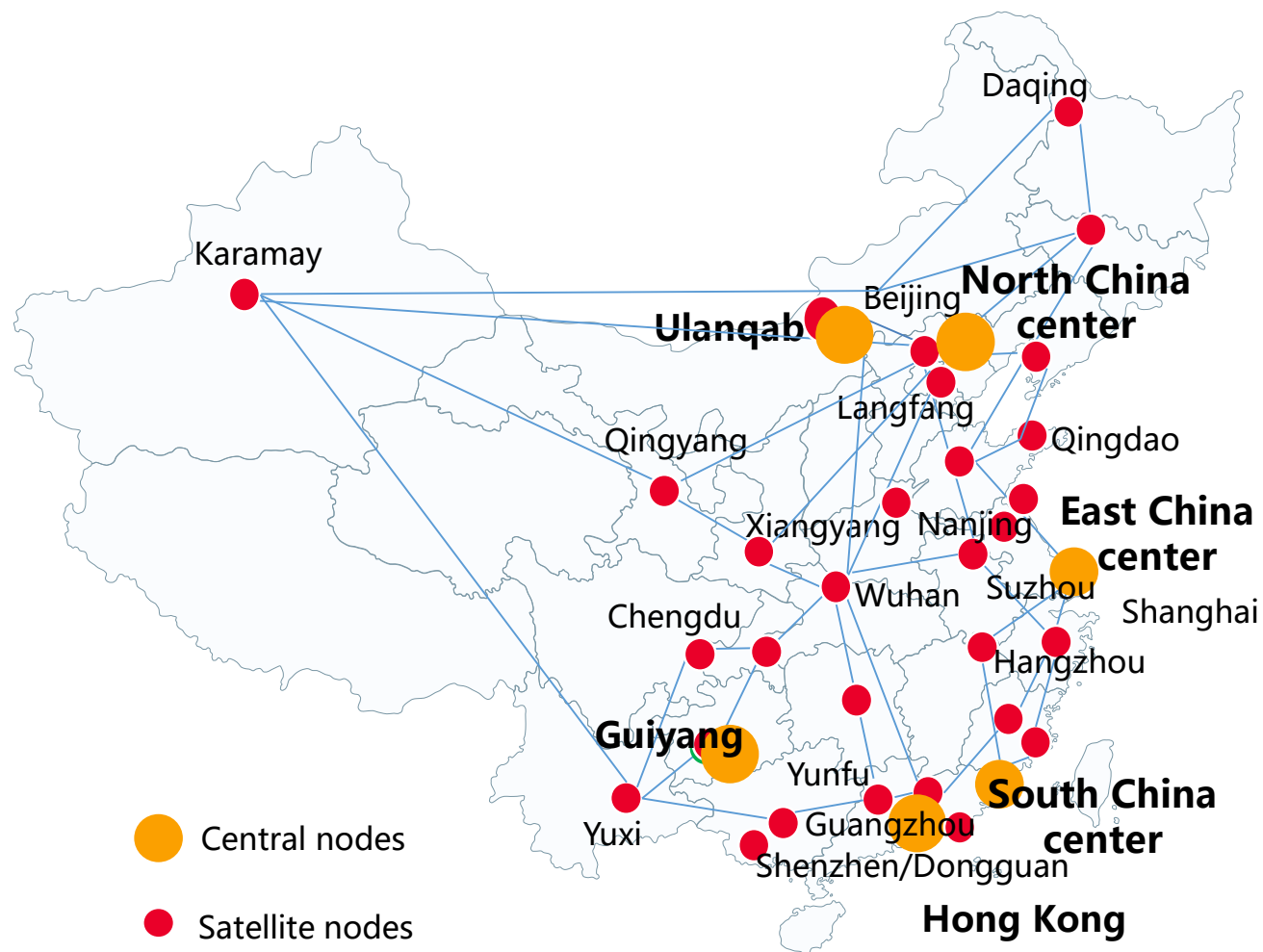
HUAWEI CLOUD Billing Modes

- The billing modes for cloud services vary. The following billing modes are available for ECS:



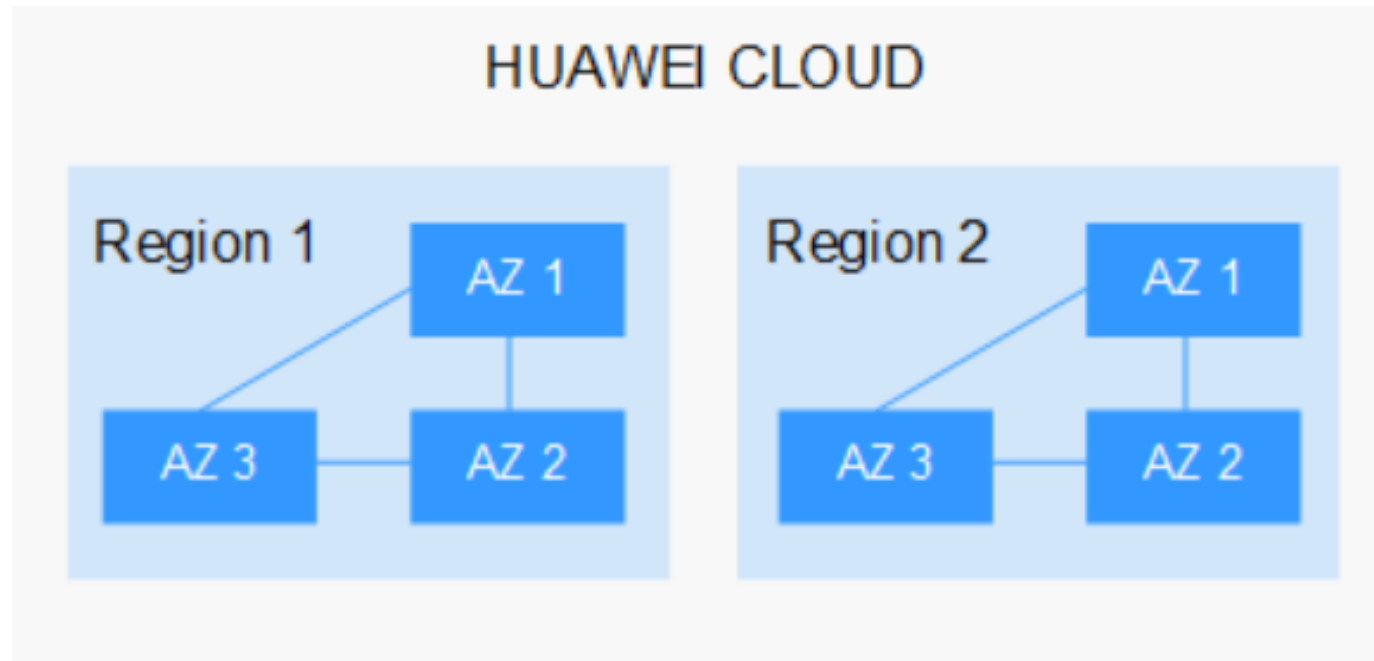
What Is Region?

- Regions are determined based on geographical location and network latency. Public services, such as Elastic Cloud Server (ECS), Elastic Volume Service (EVS), Object Storage Service (OBS), Virtual Private Cloud (VPC), Elastic IP, and Image Management Service (IMS), are shared within the same cloud region.
- Regions are classified as either universal or dedicated. A universal region provides cloud services for all tenants. A dedicated region provides only services of a certain type or only for certain tenants.



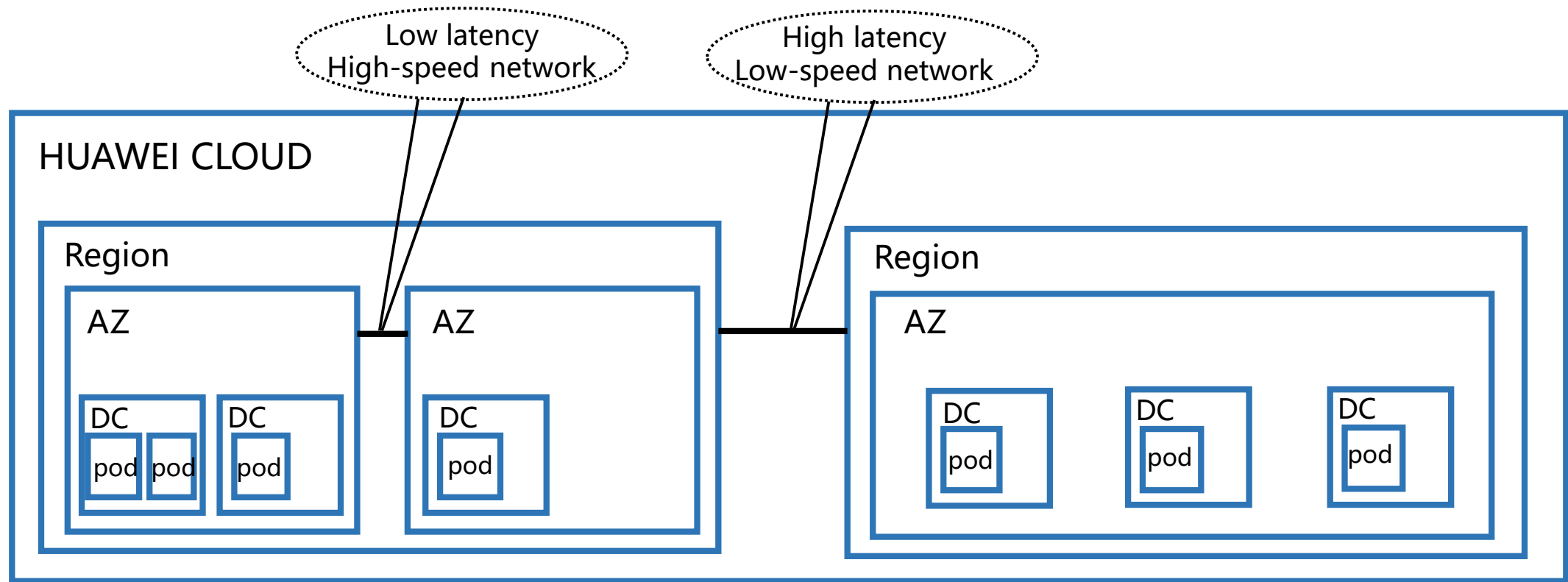
What Is AZ?

- An AZ contains one or more physical data centers. Each AZ has independent cooling, fire extinguishing, moisture-control, and electrical facilities. Within an AZ, compute, networking, storage, and other resources are logically divided into multiple clusters. AZs within a region are interconnected using high-speed optical fibers to ensure high availability.



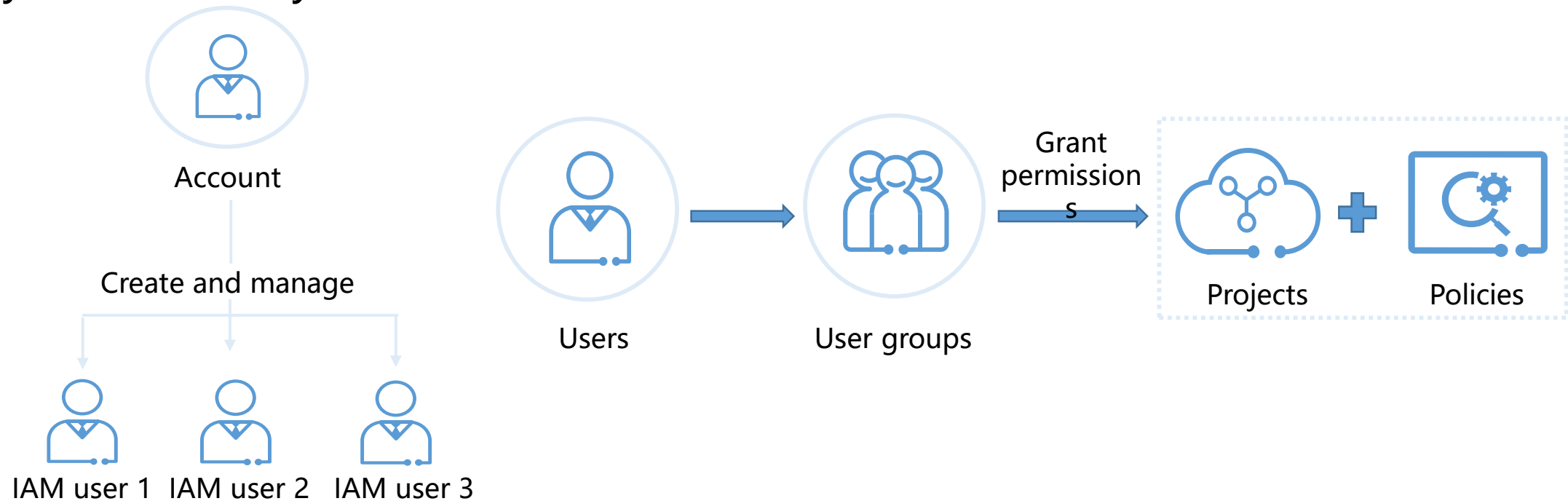
Differences Between Regions and AZs

- An AZ is a subdivision of a region. A region can contain multiple AZs.



What Is IAM?

- Identity and Access Management (IAM) is used to manage user access to cloud resources. If you want to share resources with others but do not want to share your account, you can create an IAM user.



What Is a Project?

Definition

- A project is used by IAM to group and isolate resources in the same region.

Features

- A project is used for physical isolation. Resources cannot be transferred between IAM projects. They can only be deleted and then provisioned again.

What Is an Enterprise Project?

Definition

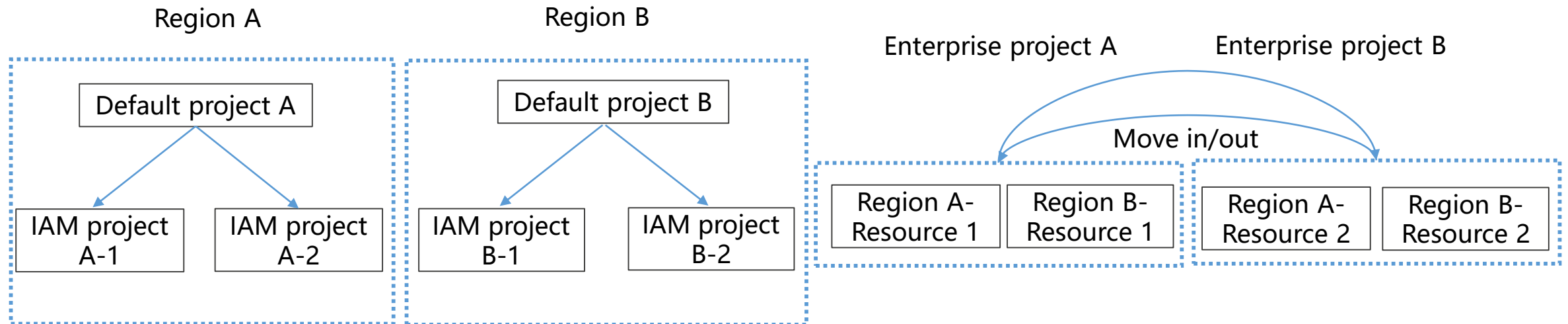
- The Enterprise Management Service also supports projects, which are called enterprise projects. Enterprise projects group and manage resources across regions.

Features

- An enterprise project can contain resources of multiple regions, and resources can be added to or removed from enterprise projects. If you have enabled enterprise management, you cannot create an IAM project. You can only manage existing projects.

Differences Between IAM Projects and Enterprise Projects

- IAM projects group and physically isolate resources in the same region. Resources cannot be transferred between IAM projects. They can only be deleted and then provisioned again.
- Enterprise projects group and logically isolate resources. An enterprise project can contain resources from multiple regions, and resources can be added to or removed from enterprise projects. Enterprise projects can be used to grant permissions to use specific cloud resources.



Quiz

1. (True or False) Can HUAWEI CLOUD services be billed by minute?
 - A. T
 - B. F
2. (Multiple-answer) Which of the following statements about regions and AZs are incorrect?
 - A. An AZ is larger than a region.
 - B. An AZ belongs to a region.
 - C. A region can contain multiple AZs.
 - D. A region can contain only one AZ.

Summary

- We provided a brief introduction to HUAWEI CLOUD, including the advantages of nodes, cloud products, solutions, ecosystems, and technical support systems, the positioning of HUAWEI CLOUD, and how to better use HUAWEI CLOUD.

Recommendations

- Huawei Learning
 - <https://e.huawei.com/en/talent/#/>
- HUAWEI CLOUD technical support
 - <https://support.huaweicloud.com/intl/en-us/help-novice.html>
- HUAWEI CLOUD Academy
 - <https://edu.huaweicloud.com/intl/en-us/>

Acronyms and Abbreviations

- AI: Artificial intelligence
- AS: Auto Scaling
- APM: Application Performance Management
- AOM: Application Operations Management
- AZ: Availability Zone
- API: Application Programming Interface
- BMS: Bare Metal Server
- BCS: Hyperledger Fabric
- CCE: Cloud Container Engine
- CDN: Content Delivery Network

Acronyms and Abbreviations

- CBH: Cloud Bastion Host
- CPTS: Cloud Performance Test Service
- CAE: Computer Aided Engineering
- CES: Cloud Eye Service
- CTS: Cloud Trace Service
- CCS: Cloud Catalog Service
- CRS: Cloud Record Service
- CDM: Cloud Data Migration
- CMC: Cloud Migration Center
- DES: Data Express Service

Acronyms and Abbreviations

- DNS: Domain Name Service
- DDS: Document Database Service
- DDM: Distributed Database Middleware
- DAS: Data Admin Service
- DBSS: Database Security Service
- DMS: Distributed Message Service
- DWS: Data Warehouse Service
- DevOps: Development and Operations
- ECS: Elastic Cloud Server
- EVS: Elastic Volume Service

Acronyms and Abbreviations

- ELB: Elastic Load Balance
- EI: Enterprise Intelligence
- ERP: Enterprise Resource Planning
- GES: Graph Engine Service
- HMS: Huawei Mobile Service
- HSS: Host Security Service
- ICT: Information and Communications Technology
- IMS: Image Management Service
- IAM: Identity and Access Management
- IOPS: Input/Output Operations Per Second

Acronyms and Abbreviations

- I/O: Input/Output
- LTS: Log Tank Service
- MVP: Most Valuable Player
- MRS: MapReduce Service
- NIC: Network Interface Controller
- OBS: Object Storage Service
- OCR: Optical Character Recognition
- OMS: Object Storage Migration Service
- OVS: Open Virtual Switch
- QoS: Quality of Service

Acronyms and Abbreviations

- RoCE: RDMA over Converged Ethernet (a network protocol that allows remote direct memory access (RDMA) over the Ethernet.)
- RDS: Relational Database Service
- SDK: Software Development Kit
- SFS: Scalable File Service
- SA: Situation Awareness
- SMN: Simple Message Notification
- SWR: SoftWare Repository for Container
- SMS: Server Migration Service
- SSD: Solid State Disk

Acronyms and Abbreviations

- SAP: System Applications and Products, an enterprise management software company in Germany
- TMS: Tag Management Service
- TTS: Text-To-Speech
- VBS: Volume Backup Service
- VPC: Virtual Private Cloud
- VPN: Virtual Private Network
- VxLAN: Virtual Extensible Local Area Network
- WAF: Web Application Firewall

Thank you.

把数字世界带入每个人、每个家庭、
每个组织,构建万物互联的智能世界.

Bring digital to every person, home, and
organization for a fully connected,
intelligent world.

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