Huawei Cloud Stack Solution

Huawei Cloud Stack
Brand-new Hybrid Cloud Solution

Accelerating Intelligent Transformation
of Governments and Enterprises
**Huawei Cloud Stack: Ideal Platform for Intelligent Upgrade**

Deployed on-premises, Huawei Cloud Stack enables enterprises to establish a secure, reliable, and efficient hybrid cloud with continuous service innovation. It also serves as a single, unified cloud for enterprise that can help with the shift from cloud migration to a dive into cloud, where they can unleash digital power.

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**Huawei Cloud Stack 8.2.1 Cloud Services**

- **AI**
  - City Core
  - Industrial AI
  - ModelArts
  - ELB

- **Application Integration**
  - Connect
  - Factory
  - AOM
  - APM
  - DCS

- **IoT**
  - IoTDA
  - IoT Edge
  - DRS
  - MCP

- **Security**
  - HSS
  - WAF
  - CFW
  - KMS

- **Enterprise Application**
  - Workspace

- **Management**
  - IAM
  - AutoOps
  - Service Builder

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*Services available vary slightly by region, consult sales for details*
HUWEI CLOUD Stack Enables Intelligent Transformation of Governments and Enterprises

Cloud-based Infrastructure

HUWEI CLOUD Stack can meet the performance needs of running enterprises' highly sophisticated core application systems on the cloud. It offers best-in-class IaaS services and containers for various types of applications, such as office resources, heavy-load applications, active-active applications, and web applications, accelerating TTM and improving O&M efficiency for customers.

Cloud Management

- Multi-cloud mgmt
- Multi-evel mgmt
- Maintenance
- Operations
- Cloud marketplace

Resource Pools

- Compute resource pool
- Storage resource pool
- Network resource pool
- Container
- Public cloud resource pool

Advantages

One cloud, multi-pools
Unified management and hybrid deployment of x86 and Kunpeng resource pools; multi-cloud management, and takeover of legacy 3rd-party virtualization systems to protect customer investment, accommodating diverse business needs.

Agile and easy to use
Flexible orchestration of multiple resources with simple drag-and-drop; quick rollout of core applications through one-click deployment; automated, service-oriented O&M; rapid scaling of containerized, cloud-native applications; and higher resource utilization.

Secure and reliable
All-round security protection, covering network, virtualization, cloud services, and governance. Tenant-level DR services are easy to deploy, meeting high reliability requirements of cloud-based applications. Available DR solutions include local DR, same-city DR, remote DR, and geo-redundant DR (3DC).

Intelligent Data Lake

HUWEI CLOUD Stack provides a wide array of cloud services used for big data analytics, such as MRS, DWS, GES, and DGC. With these services, HUWEI CLOUD Stack helps governments, financial organizations, telecom carriers, and large enterprises extract value from massive amounts of data to run data-driven businesses.

Industry Ecosystems

Consulting/Modeling/Governance

DGC: Date Lake Governance Center

Data Enablement

Data Lake

- DWS
- MRS
- GES

- Log
- App
- Video
- IoT

Advantages

Ultra-fast deployment
The time needed to deploy a big data platform is reduced from 22 days to just a few hours.

Improved performance
Multi-source converged data analysis improves performance by over 10 times, and the data retention period is doubled.

Shared ecosystem
Huawei partners with 800 top ISVs to build an intelligent data lake ecosystem, and uses DGC to share data models, supporting the work of AI developers.
**All-Scenario DR**

Huawei Cloud Stack provides an all-region, all-scenario, and per-tenant DR solution. The solution leverages software/hardware synergy to deliver robust disaster recovery (DR) capabilities. It eliminates the need to reconstruct your applications, which massively slashes costs. It can also be used to develop active-active cloud-native applications for full-stack, fully automated switchover. Plus, the solution provides geo-redundant DR, so you can meet even the most extreme DR requirements. This DR solution ensures zero data loss and service recovery within minutes.

**Advantages**

- **Cloud-based DR, no application changes**
  Software/hardware synergy and platform-level DR services reduce DR reconstruction costs by multiple times.

- **Active-active instances, automated switchover**
  Active-active cloud-native applications, automated full-stack switchover without manual intervention.

- **Disaster recovery as a service**
  Self-service with a web console, one-click DR switchover, Zero RPO and RTO in minutes.

**Industry Cloud**

HUAWEI CLOUD Stack helps governments and enterprises digitize and thereby activate core industry assets accumulated over the years using cutting-edge technologies, including cloud computing, big data, AI, and service-oriented architecture (SOA), transforming them into digital services that can be made accessible to external users. This helps improve IT efficiency, accelerate ecosystem growth, and fuel innovation.

**Advantages**

- **Unified cloud**
  A distributed cloud covers multi-branch, multi-site, multi-DC, and multi-edge scenarios, O&M.

- **Synergy**
  Resources, data, applications, and manage-Continuous innovation Cutting-edge technologies, such as big data, AI, container, microservice, and edge computing, are used to transform customers’ core application systems and allow them to evolve continuously on the cloud.

- **Open ecosystem**
  An open architecture helps aggregate eco-partners and ISVs from across industries and enable joint innovation.
Efficient Cloud Management

Huawei Cloud Stack provides cloud desktop services, including the FusionAccess solution deployed based on server virtualization and the Workspace solution deployed based on Huawei Cloud Stack. These services help government and enterprise customers build a unified cloud office platform integrating the production and office cloud architectures. Based on the cloud office platform, users can obtain cloud office resources, such as office desktops and applications on the cloud, anytime and anywhere. Administrators can use ManageOne to plan, manage, and maintain global IT resources in a unified manner, accelerating digital office transformation.

Advantages

- Unified management of multiple clouds
  - Integrated with VMware, AWS, Azure and open-source OpenStack cloud platforms.

- ServiceCenter
  - Fine-grained authorization by operation and refined compliance management.
  - Unified orchestration of cloud resources within Huawei Cloud Stack and between Huawei Cloud Stack and Huawei Cloud.

- Intelligent O&M
  - Automated O&M for tens of thousands of VMs
  - Dynamic threshold assistance and intelligent fault demarcation
  - Black-box testing, golden metrics.

- Operations Command Center
  - Visible global operations situation, supporting scientific decision-making of managers
  - One-stop collaborative command and quick problem closure.

Infrastructure platform for multi-cloud management

- Physical machine
- Virtualization
- On-premises cloud
- Public cloud

Huawei Cloud Stack is Deployed Globally with Extensive Practices

- 800+ e-Government clouds
- 300+ financial clouds
- 65% provincial medical insurance institutions
- 29 provincial smart highways
- 20+ smart airports

No. 1 in China’s e-Gov cloud market

Source: IDC China Smart City Data Tracker (2022 H1)

No. 1 in China’s digital government big data market


No. 1 in China’s financial cloud infrastructure market

Source: IDC China Financial Cloud Market (2021 H2) Tracker

No. 1 in China’s software-defined compute software market

Source: IDC’s PRC SDC Software Tracker, 2022 H1

No. 1 in China’s container software market

Source: IDC’s PRC SDC Software Tracker, 2022 H1

No. 1 in China’s cloud system software market

Source: IDC’s PRC SDC Software Tracker, 2022 H1

No. 1 in China’s desktop cloud market

Source: IDC’s PRC Virtual Client Computing Software, H1 2022

No. 1 in China’s cloud management software market

Source: IDC’s PRC Cloud System and Service Management Software Tracker,
The Choice of 4,800+ Government and Enterprise Customers

**Government**
- Cooperate with 10 provinces/cities to release City Intelligent Twins.
- 700+ e-Gov cloud projects
- 38 national ministry-level projects
- 40+ provincial/municipal ministries' projects
  - Beijing e-Gov Cloud | Shenzhen e-Gov Cloud | Shanghai e-Gov Cloud | Jiangsu Finance | Shandong Finance | Beijing Human Resources and Social Security...

**Finance**
- Covering six major banks in China
- 12 joint-stock commercial banks
- Top 5 insurance institutions
- 300+ financial institutions

**Mining**
- Supports construction of 20+ intelligent mining cloud platforms, helping reduce the number of personnel needed for mine production and operations, while also improving security and efficiency.
  - Shenhua Hongyuan Coal Mine of Shaanxi Coal and Chemical Industry Group | CHN Energy Shendong Coal Group | Jinlong Holding Group | Shandong Coking Coal Group | Shandong Gold Group

**Electric power & oil & gas**
- 14 provincial branches of State Grid
- Digital transformation support for China National Energy Group, China Huaneng Group, and Three Gorges Group
  - One cloud for CNPC and Sinopec
  - AI-enabled digital platform for PipeChina
  - State Grid, PipeChina, China Energy, CNPC, Sinopec...

**Transportation**
- 20+ smart airports | 30+ urban rail clouds
- Free flow of highways in 29 provinces
  - Shenzhen Airport, Hangzhou Airport, Zhengzhou Airport, Shenzhen Metro, Road Network Center of the Ministry of Transport...

**Healthcare**
- 65% provincial medical insurance information platforms
- Beijing Hospital and the National Telemedicine Center of the First Affiliated Hospital of Zhengzhou University
- Digital transformation of medical institutions is booming.
  - National Smart Medical Insurance Laboratory | Guangdong Provincial Medical Insurance Bureau | Guangzhou Medical Insurance Bureau | Beijing Hospital...

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**Logos**
- China Meteorological Administration | State Information Center of China | State Administration of Taxation | ICBC | China National Highways
- China Post | Mahindra University | State Grid | China Life | Totalplay
- China Petroleum | China Oil | China National Transportation Group | China National Telecom