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Multinational Companies 'Go China' Cloud Strategy

Imagining the Future What if you could...

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What if you could ...

Be the world's largest online shopping event e-commerce site?

Know what your customers are thinking before they do?

Know how to protect your website from crawlers?

USD25B

In sales over 24 hours on "11.11 Singles' Day", 5x larger than Black Friday



12%

Increase in sales after implementing cloud-based predictive analytics



90%

Crawlers identified and eliminated



Why Go China?

"Digital" China continuously drives technical innovation in domestic cloud market, attracts MNCs' creation of new China presences, and places greater demands on cloud adoption

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Unmatched "Digital Lifestyle"



The smartphone continues to dominate China, with impressive trends across the mobile industry. MNCs looking to operate in China need to understand the dynamics of this mobile environment and the associated cloud migration requirements.

Key Themes

- China has fully embraced the mobile revolution, particularly when it comes to mobile payments.
- Chinese mobile users are not only abundant, they are also willing participants in experiments with new technologies.





1.57B mobile phone subscribers in China as of 2018. (news.china.com)

As of 2018, China has 829 million internet users, representing a penetration rate of 59.6%. (chinainternetwatch.com)

More than 98% of internet users in China use mobile devices to access the internet. (chinainternetwatch.com)

AI Empowering a Digital China



Four Key Drivers are tipping the balance in China's favor as the next AI Superpower. This trend will continuously attract MNCs to create new China presences.

"By 2020, they would have caught up. By 2025, they will be better than us. By 2030, they will dominate the industries of AI." Eric Schmidt, Chairman of Google parent company Alphabet



The scale of data in China is unmatched anywhere. Companies build a richly textured map of life in China by merging online activities with events in the physical world.



Chinese entrepreneurs have **left the previous era behind** and
morphed into **highly agile**, **competitive entrepreneurs**.



China has **grown its eminence in AI from scratch**. For example, image and speech recognition are **now the forte of Chinese firms**.



In 2017, the Chinese government issued a plan to have a RMB1 trillion AI industry by 2030. Investment in AI skyrocketed. Globally, 48% of all venture capital investments in AI occur in China.

Multinational Companies will need a China Cloud Strategy



If a multinational company (MNC) is looking at utilizing cloud or heading in that direction, it could face various challenges.

MNC entering or expanding in China?

Catering to consumers' leisure spending and 'digital' buying behavior?

Experiencing cloud service issues in China with current provider?

Having compliance issues with China's New Cyber Security Law?

Cloud is more than a technology conversation; it is about **BUSINESS**

Deloitte and Alibaba Cloud can help MNCs develop a China Cloud Strategy



Deloitte and Alibaba Cloud help MNCs develop a robust multi-cloud strategy and realize it through comprehensive solutions.

Deloitte.



Deloitte is a **leading consulting firm** with **a more than 100-year China presence** and strong global business network.



Deloitte is a **leader in the Risk Management Advisory** market and has a **mature methodology** designed for **China's Cyber Security Law compliance**.



Deloitte can provide MNCs with **leading** industry insights and end-to-end cloud solutions to help MNCs drive their digital transformation journeys in China.

(-) Alibaba Cloud



Alibaba Cloud is one of the **leading cloud providers in China**, with **robust cloud infrastructure within China** and connections globally.



Alibaba Cloud has a thorough understanding of what it takes to **comply with China's Cyber Security Law**.



Alibaba Cloud can provide offerings and solutions featuring **high performance and high scalability**.

Connectivity

Using Alibaba Cloud's global network to access a high speed downloading and website loading experience

Alibaba Cloud Enterprise Network and Express Connect



Alibaba Cloud can provide connections to most geographies including China.

Global Networking⁽¹⁾

#1 CDN in China with over 2,500 nodes Express Connect POPs: 70+ in China Mainland, 110+ Worldwide

Global Solutions

Go-China, Go-Asia, Go-Any Cross-border Solution

Leading CSP in China

8 Cloud Regions, 35 Availability Zones in China

Alternative to Telecom Provider

Month-to-month pricing that can be changed based on capacity

Further improved network access experience



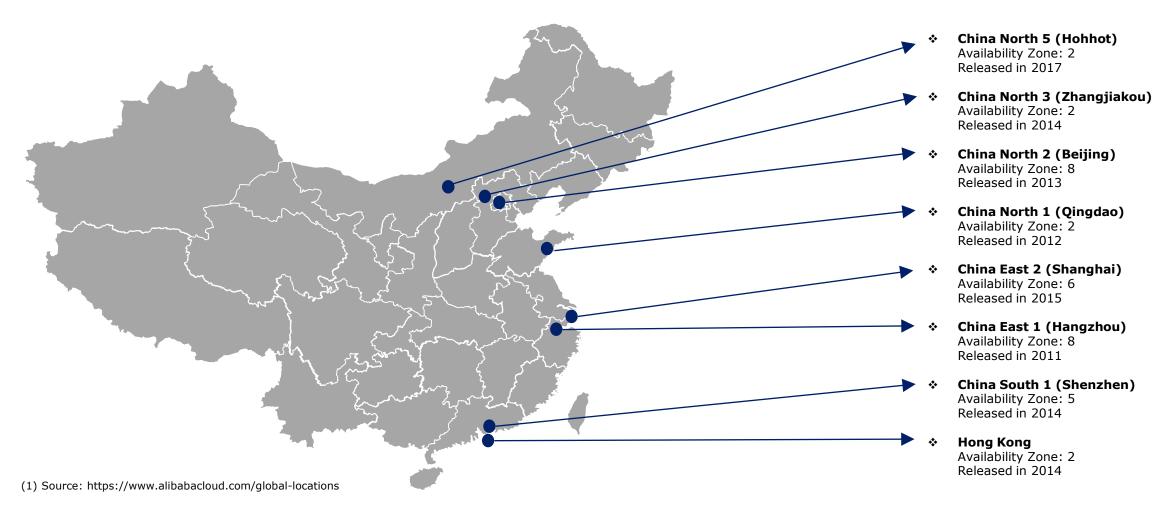
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(1) Source: https://www.alibabacloud.com/global-locations

Alibaba Cloud Locations (Regions in China)



Alibaba Cloud has set up 59 availability zones worldwide, and 35 availability zones in China⁽¹⁾.



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Multi-national Companies Go China

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Extending your Web Presence in China



MNCs with a web presence outside the Chinese Mainland seeking to establish such a presence have several challenges that can be resolved via Alibaba Express Connect.



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Challenge:

- Dynamic, feature-rich website content; website users in China connect through internet back to the US, resulting in slow performance, and they may not have guaranteed SLAs.
- Chinese users have poor and inconsistent performance accessing US based websites.
- US MNC wants to avoid deploying a website near or in China.
- US MNC wants to avoid the expense of a long-term telecom contract.

Approach:

Customer experience traversing the public internet from China to the US is not a viable option due to multiple factors such as # of
users, unpredictable bandwidth, packet loss, blocked IPs and network jitter, that can affect user experience. Validated performance
gains with Alibaba Express Connect, which provides a direct connection from the US to China, seamlessly, without the Great Firewall.

Solution:

Leverage Alibaba Express Connect in lieu of a leased telecom line and AliProxy for publishing public IPs to the China market. Use
Express Connect monthly pricing to avoid long-term telecom contract. Performance and network stability achievable with new SLAs.

Additional Benefits:

- This is a foundation to build-on for global deployments that must be centralized back at US-HQ involving the China market.
- Eliminates the need for near-China/"China Rim" infrastructure.
- Can be reproduced for any global location with an Alibaba Express Route point-of-presence; as of July 2018, there are 18 points-of-presence around the world.

Security

Alibaba Cloud can provide secure cloud solutions that comply with China's Cyber Security Law (CSL) for MNCs

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China's Cyber Security Law (CSL) driving Cloud Adoption



China's new CSL creates additional compliance requirements for companies operating in China and is an important component in discussions of cloud in China.

Six primary elements of China's CSL

01

Ascertains the principles of cyberspace sovereignty.

04

Further enhances the rules for protection of personal information.

02

Defines the securityrelated obligations of network products and services. 05

Establishes a framework of security protection for Critical Information Infrastructure.

03

Clarifies the duties of network operators over network security.

06

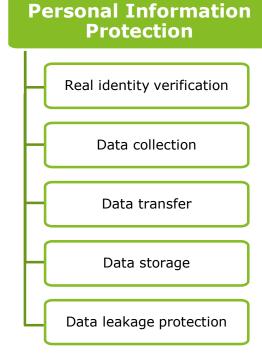
Establishes regulations pertaining to crossborder transmissions of important data.

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Alibaba Cloud Security Capabilities

Vulnerability management Computer virus and cyber attack prevention Stores network logs for at least six months Emergency response Management and training













Preventing 50% of Large-scale DDoS Attacks (over 50Gbps) in China



Against Decoding
Password
Against Web Attacks
Anti-DDoS



Helping Customers
Recover from over
8.33 million
vulnerabilities

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Securing your Web Presence in China



Working with Alibaba and Deloitte, MNCs can resolve several of the challenges they face when looking to secure their web presences in the Chinese Mainland.



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Challenge:

- Global MNCs will need to focus on the protection of personal information and individual privacy in addition to data security. Holding massive amounts of personal information means they will be recognized as critical information infrastructure operators and face more restricted requirements, including data localization.
- Large MNCs will be required to view their infrastructure setups equivalently to a network service provider, with stringent security controls requirements where they have physical assets in China.
- Greater demands will be placed on managing, monitoring and securing locally deployed infrastructure.
- Global MNCs will need to undertake classification of data and systems and plan for local maintenance of Level 3 systems and above.

Approach:

- Use Deloitte CSL Services to ensure compliance from architecture and governance perspective, especially CII protection, PII protection, Content Security, CPCS 2.0, Data Cross-Border and interaction with authorities.
- Leverage Alibaba Cloud's security solutions to address most CSL compliance challenges.

Solution:

 Conduct CSL assessment, design best fit security architecture that fulfills global and local requirements, build using native Alibaba Cloud solutions such as Secure VPN Gateway, Database Protection, Cloud Firewall, WAF, Content Moderation and Security Center and other required tools to secure data and IP.

Additional Benefits:

- Mapping local compliance requirements to existing global security controls to help global MNCs maintain consistent security measures.
- Progressive investment to minimize risk in an increasingly stringent, rapidly changing compliance environment.

Performance and Scalability

Alibaba Cloud offers a comprehensive product portfolio featuring high performance, high scalability and competitive pricing

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Alibaba Cloud demonstrates its Capabilities in High Performance and Scalability





Challenge:

- Need to create local deployment of infrastructure in China without building a data center.
- Optimize to run in Eastern US region with need to match service availability and performance expectations.

Approach:

• Deploy via Alibaba China, map service to service and test for performance and scalability requirements.

Solution:

- Leverage Alibaba China region to provide clients with comparable services and host large applications in China. Alibaba Cloud is scalable with required performance to sustain a large number of users
- MNCs in China prefer to use Alibaba Cloud services because of its competitive price.

Additional Comment:

• Alibaba Cloud offers competitive pricing for cloud services, such as Elastic Compute Service (ECS), Elastic GPU Service (EGS), Auto Scaling, Container Server, Object Storage Service (OSS), Table Store, Alibaba Cloud CDN and Network Attached Storage (NAS).

Deloitte's ATADATA automating Alibaba Cloud Migration



If a MNC already has workload on other cloud services in the US but wants to create new China presence, Deloitte's ATADATA and Alibaba Cloud Migration service can provide the solution.



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Substantial advantage in efficiency and cost saving for migrating 100 servers from US to China

Challenge:

- Need to create local deployment of infrastructure in China without building data center.
- Manual migration over public internet will take too long.
- Manual migration is labor intensive and requires many resources that are geographically scattered.

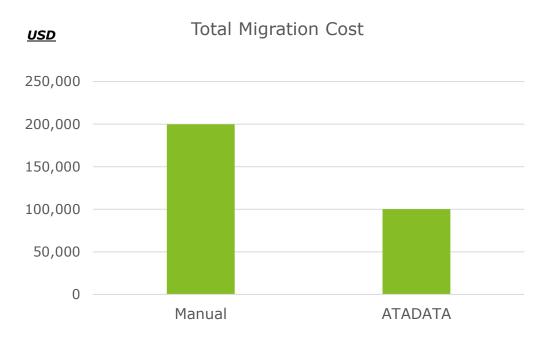
Approach:

• Use Alibaba Express Connect for reliable and price efficient network connectivity to China. Avoid as much manual effort as possible by using a migration toolset.

Solution:

- The combination of ATADATA for migration and Alibaba Express
 Connect allows for a substantial reduction in manual labor as well as consistent network experience.
- ATADATA pricing is even more attractive for larger server migrations and as more servers are being migrated.
- Alibaba Express Connect charges a monthly fee which can be changed depending on need.

Cloud Migration Cost Comparison ATADATA vs Manual⁽¹⁾



(1) This cost comparison was conducted from 6 Aug.-7 Sep. 2018. and is based on a Cloud Migration of 100 servers. ATADATA license fees and labor are included. Manual migration is based on Deloitte's standard rate for a Senior Consultant.

Deloitte-Alibaba Cloud Collaborations

Deloitte has strong capabilities to provide endto-end cloud services, and Deloitte-Alibaba cocreate cloud solutions across industries

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Deloitte Cloud Services and Capabilities



Deloitte is able to support our client's journeys to cloud at any stage, alongside multicloud strategy, services, and solutions.

Advise⁽¹⁾ Implement Operate



Cloud Strategy & Readiness

Business Model Disruption

Cloud Strategy & Operating Model

Cloud Economics

Organizational Alignment & Readiness

Cyber Risk Assessment

Digital Identity Assessment

Cloud Suitability & Planning



SaaS Implementation

Enterprise Resource Planning (ERP)

Customer Relationship Management (CRM)

Human Resources Transformation

Application Security

Digital Identity Transformation

Other SaaS Domains



Custom Implementation

Cloud Native Application Architecture & Development

Orchestration & Automation

Application Development

Micro-Services

Cloud Security Architecture



Cloud Migration

Cloud Migration Services

Cloud Platform Engineering & Implementation

Cloud Transition & Integration Management

Application Modernization

Cloud Platform Security

Digital Identity Platform Implementation



Cloud Enabled Solutions

API Management & Integration

Software Defined Data Center & Networking

DevOps

DevSecOps

Cloud Security Assessment & Monitoring

Deloitte OpenCloud

CBCAP



Cloud Managed Services

Cloud Managed Services

Deloitte Managed Analytics Platform

Deloitte Managed Cyber Services

BPaaS Services

ExaLink

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Enterprise Services

Digital DNA

- Organizational & Transformation Change Management
- Cloud Leadership Development & Teaming
- Cloud Workforce Strategy & Planning
- Marketing & Communications Support

Risk Powers Performance

- Governance & Regulatory Compliance
- Business Continuity & Resilience
- Cyber Risk
- Data Security & Regulation
- Extended Enterprise & 3rd-party Risk

Operational Enablement

- Cloud Impact to Facilities & Assets
- Strategic Sourcing
- Vendor Ecosystem Governance
- Tax Integration Services

⁽¹⁾ For inquires or requests about Deloitte Cloud Services, please contact cnconcloud@deloitte.com.cn.

Alibaba Cloud Product Portfolio

A total of 188 products are deployed on Alibaba Cloud's China Portal.

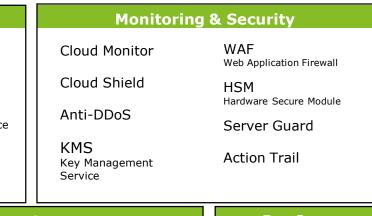
Support Technical Support Professional Services





Big Data				
MaxCompute	DataHub			
E-MapReduce	Data Lake Analytics			
DataWorks	Quick BI			
DataV	ElasticSearch			

Application Service			
HttpDNS	Domain		
Log Service	IOT Suite		
Performance Testing	ONS Open Notification Service		
Live Streaming	EDAS		
DirectMail	Enterprise Distributed Application Service		

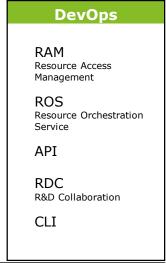


Compute
ECS Elastic Compute Service
Auto Scaling
SLB Server Load Balance
Container Servicer
HPC High Performance Compute
BatchCompute
Function Compute

Network		
CDN		
VPC Virtual Private Cloud		
ExpressConnect		
Elastic IP		
Nat Gateway		

Storage		
Block Storage		
OSS Object Storage Service		
Archive Storage		
NAS Network Attached Storage Message Service		
Lighting Cube		

Database	
RDS Relational Database Service Redis Memcache Table Store Oceanbase	AnalyticDB MongoDB PetaData DMS Database Management DTS Data Transmission Service







Alibaba Cloud Solutions

Beyond cloud infrastructure, Alibaba Cloud provides different industry solutions.

Digital Transformation







Retail

(\$ 5 00

Finance

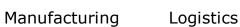


Industry

Brain









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SOLUTIONS:

- Best Practice
- Leverages Alibaba Group Ecosystem

Advanced



Big Data AI



Security



Internet Middleware



Global Connection



SaaS



Private Cloud



Quantum Computing

Technical Differentiators:

· Distinguished from other CSPs

Fundamental



Compute



Storage



Network



Database



Domain



Application Service

Comprehensive products:

Compatible with other CSPs

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- · Competitive price
- · Multi-cloud readiness

Deloitte-Alibaba Cloud Joint Solutions



Deloitte and Alibaba Cloud co-create customized solutions across industries by integrating their leading capabilities.



Retail

- Social CRM
- E-commerce (B2B, B2C, cross-border)
- Smart customer insight
- Intelligent supply chain analysis
- Smart mall
- Smart management
- Smart store location
- Retail 360
- Smart store solution
- Smart logistics, smart warehousing
- Unmanned convenience store solution



Manufacturing / Automotive

- Auto new retail
- Auto digital marketing solution
- Auto digital operation solution
- Smart manufacturing solution
- E-commerce (B2B)
- Smart logistics solution
- Industrial IoT solution
- · Sales e-commerce
- Social CRM



FSI

- Intelligent banking risk control solution
- Intelligent anti-fraud solution
- Intelligent banking digital operation solution
- Blockchain solution for financial industry
- Business intelligence
 big data solution

Energy / Infrastructure

- Social CRM
- Sales e-commerce (B2B, B2C, crossborder)
- Smart customer insight
- Intelligent supply chain analysis
- Smart mall
- E-commerce (B2B)
- Smart logistics solution
- · Industrial IoT solution
- Smart manufacturing solution
- Digital transformation solution for gas & water



Government / Public Services

- Digital industrial park operation solution
- Smart education solution
- Smart city IoT platform
- D.Assist



Cross-Industry

- Go China solution
- Cloud migration solution
- Human resource shared services solution
- Financial shared services solution

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