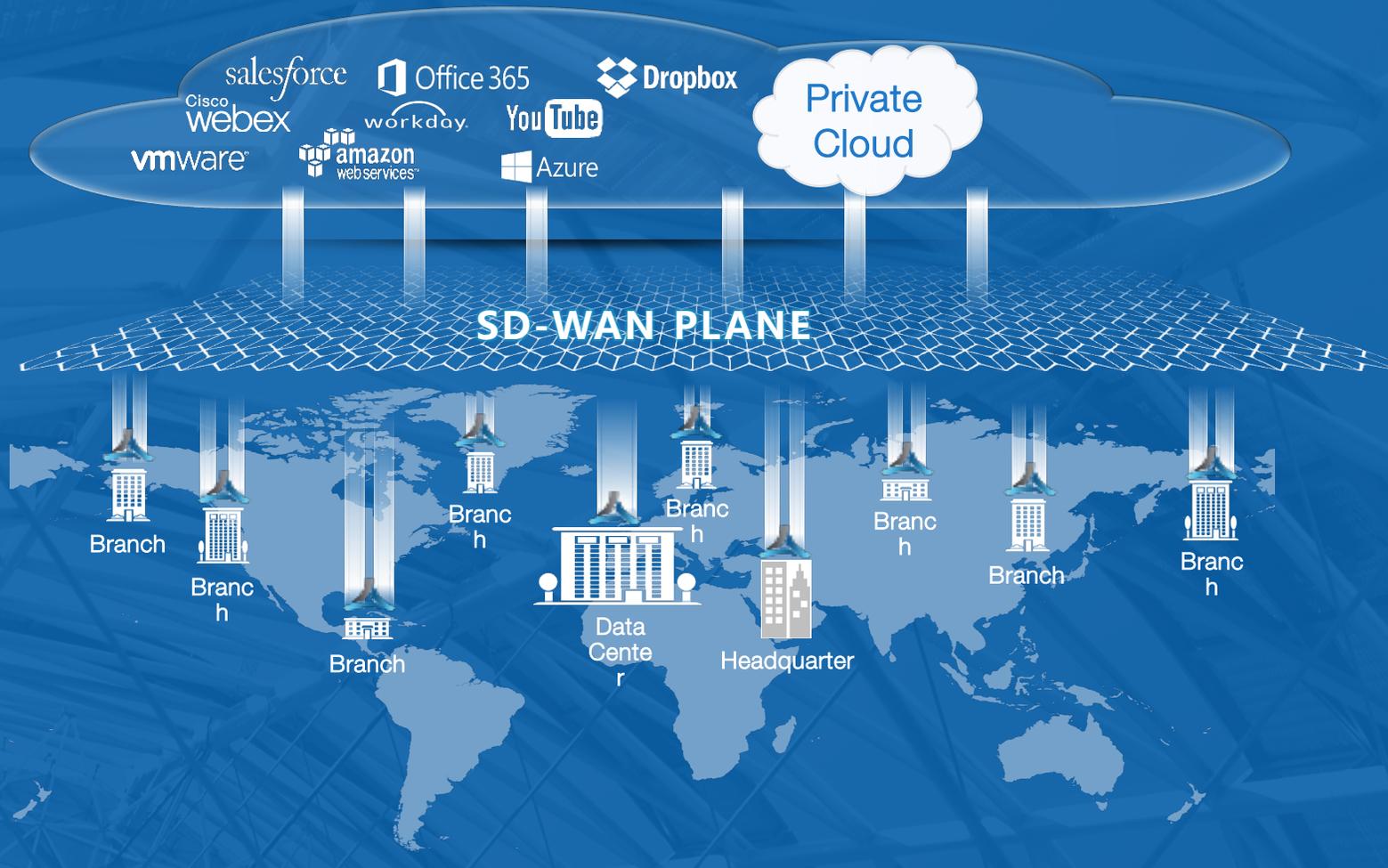


China Telecom Americas

Managed SD-WAN

Use-Cases for Global Network Operators in China

China Telecom's Software Defined WAN Architecture



China Telecom's Cloud Enabled SDN Architecture

Control Plane

SDN

Software deployed on the Cloud to manage the Virtual Gateway, create or release VMs and control bandwidth



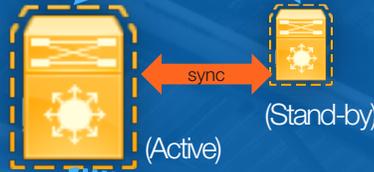
Service Orchestrator

Service Orchestrator

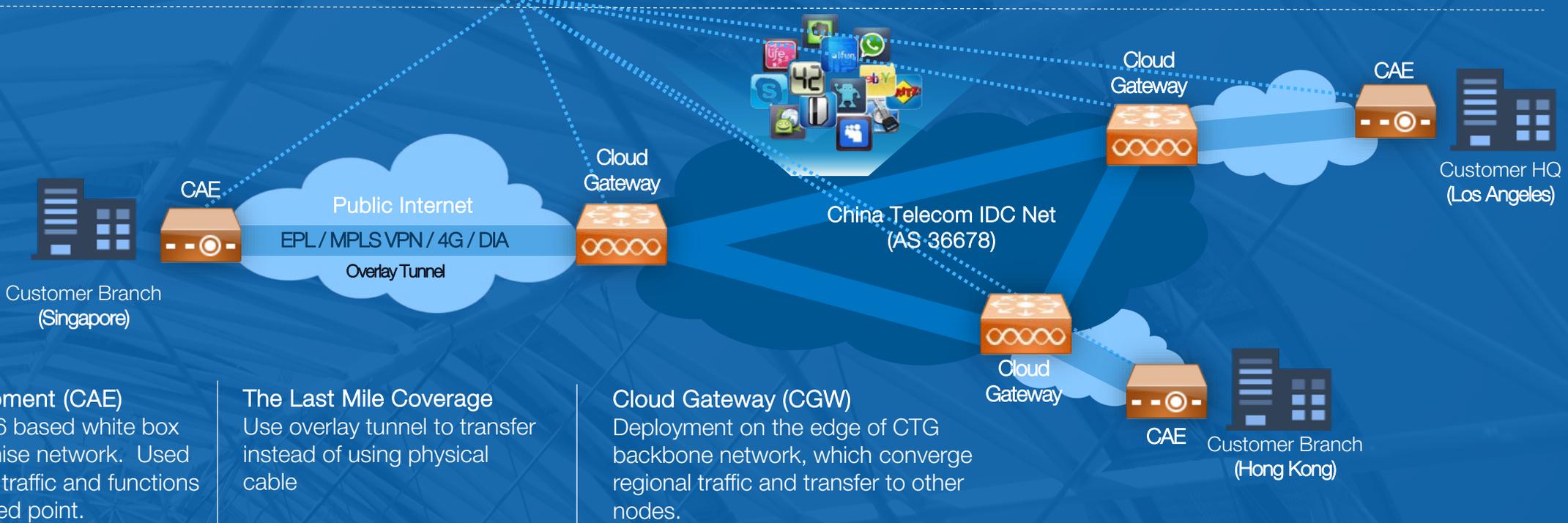
Deployed in CT global cloud node. In charge of added-value services and system docking.

SDN Controller

SDN Controller



Data Plane



Cloud Anchor Equipment (CAE)

Physical or virtual x86 based white box at customer on-premise network. Used for gathering internal traffic and functions as integrated managed point.

The Last Mile Coverage

Use overlay tunnel to transfer instead of using physical cable

Cloud Gateway (CGW)

Deployment on the edge of CTG backbone network, which converge regional traffic and transfer to other nodes.

Software Defined WAN Drivers

- ✓ Simplified management and orchestration
- ✓ Reduce costs via broadband Internet, increasing bandwidth utilization
- ✓ Increased visibility and security in the enterprise

By the end of 2019, 30% of enterprises will use SD-WAN products in all their branches.

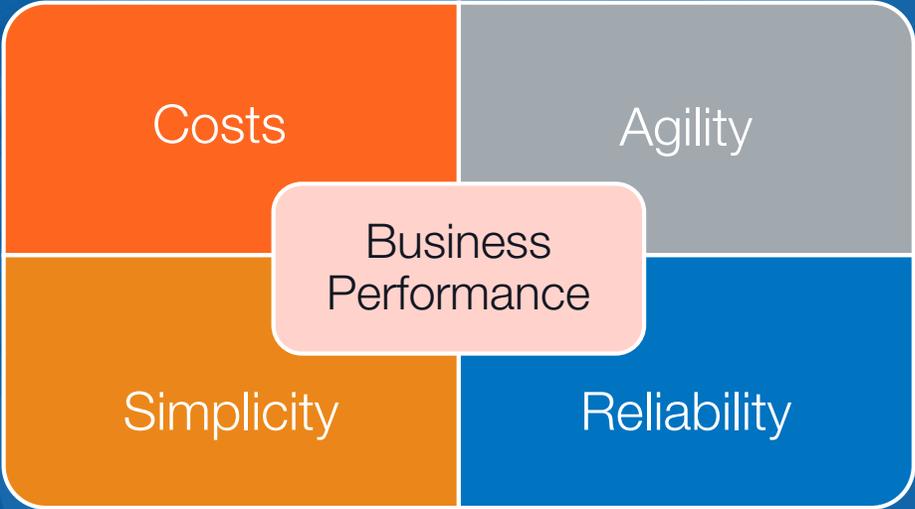
– Gartner

Network Enablement with Versa

China Telecom's managed SD-WAN service is built on Versa's comprehensive suite of virtualized network and security functions (VNFs), offering greater business agility and cloud readiness through application-level visibility, control and integrated set of security functions.

CT has deployed Versa's multi-tenant SD-WAN and SD-Security solution in 25+ cloud hubs globally to meet the demands of distributed enterprises with high availability workloads running in the cloud.

Versa's technology can be provisioned using x86 white box appliances, programmable with third-party VNFs to cut-down on CAPEX and vendor lock-in related costs.



Accelerating SD-WAN with Silver Peak



China Telecom delivers fully-managed SD-WAN services based on Silver Peak Unity EdgeConnect and Unity Boost technology. With this service, multinational enterprises can cost effectively address international connectivity, performance and security requirements to expand into and across China.

Unity EdgeConnect

- Zero Touch Provisioning
- Dynamic Path Control
- Path Conditioning
- Cloud Intelligence

Unity Orchestrator

- Single Screen Administration
- Granular Real-Time Monitoring and Historical Reporting
- Bandwidth Cost Savings Reports

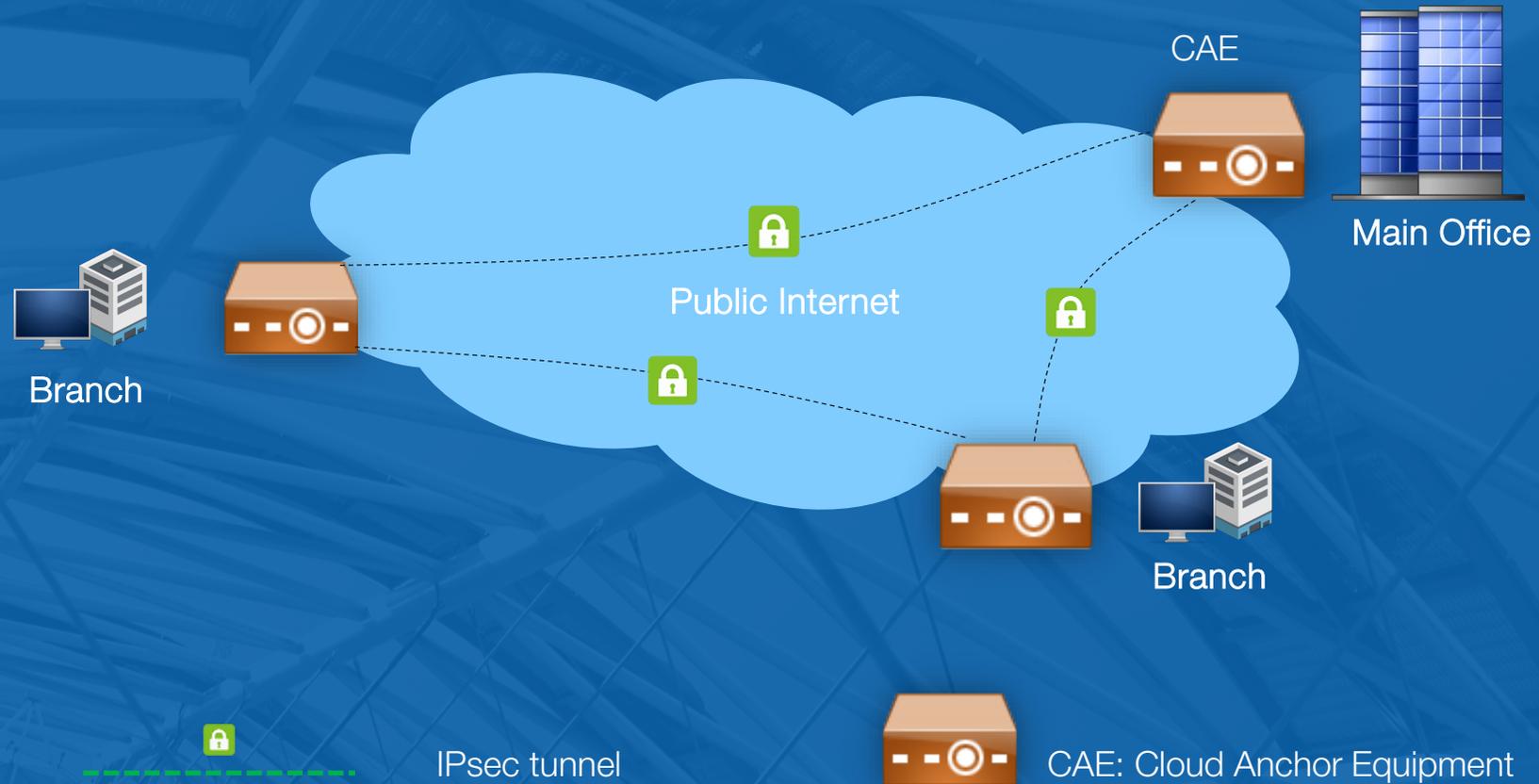
Tiered Packages

WAN
Optimization

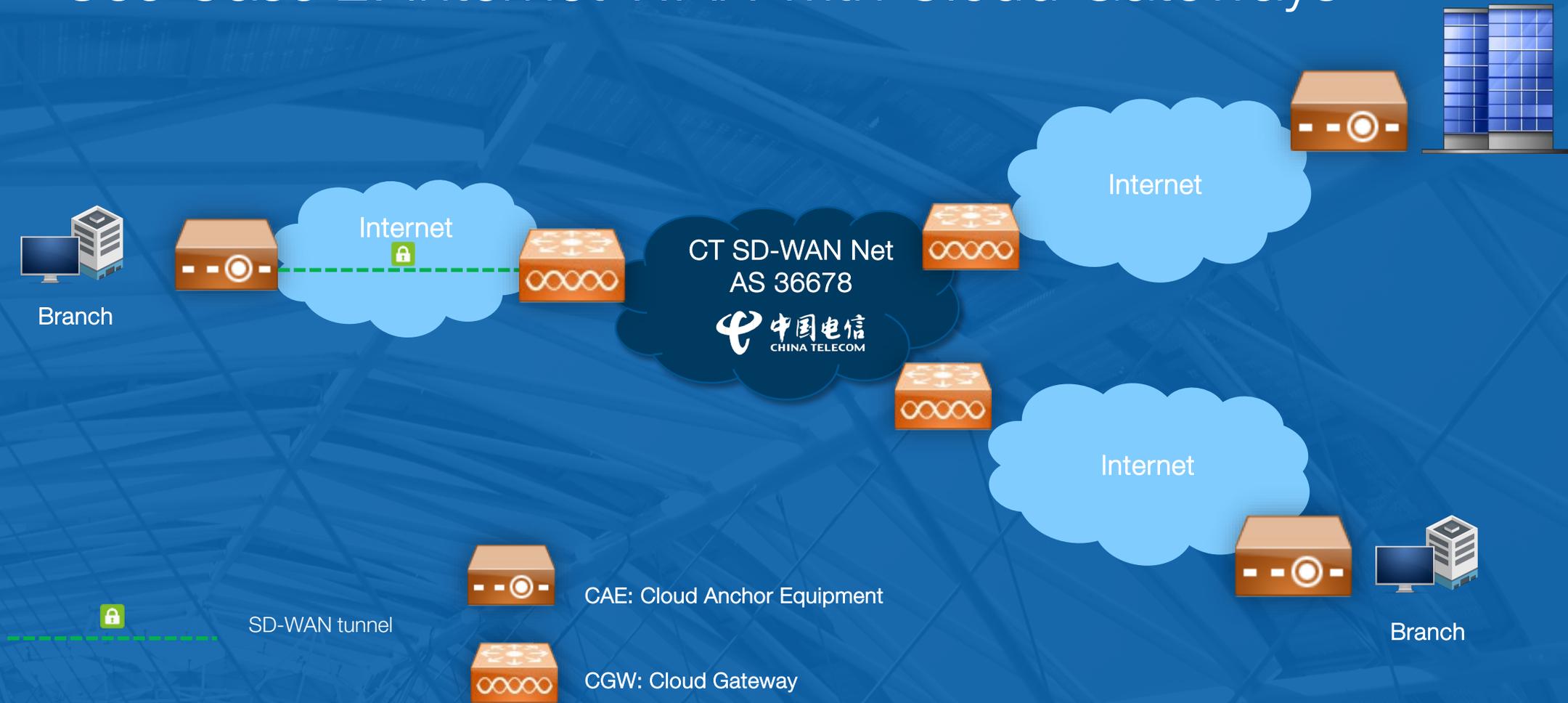
CT NetCare
Integration

Centralized
control

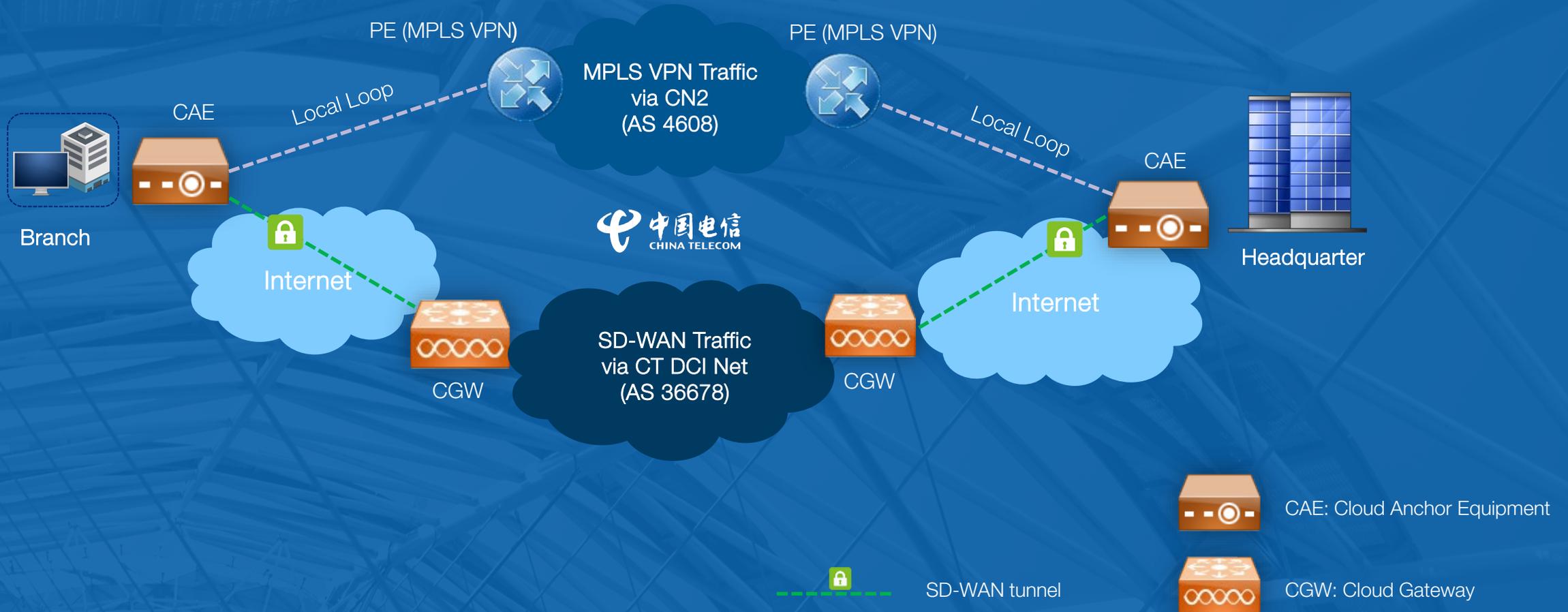
Use Case 1: Basic SD-WAN Over Public Internet



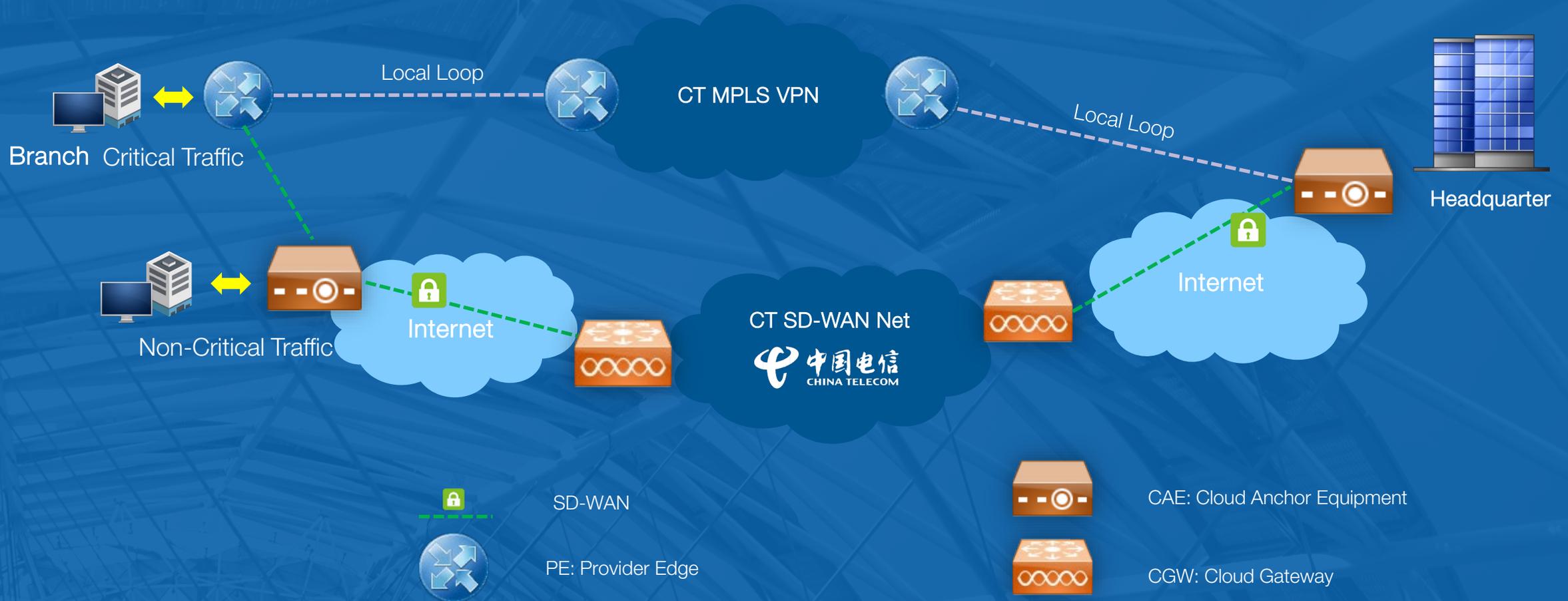
Use Case 2: Internet WAN with Cloud Gateways



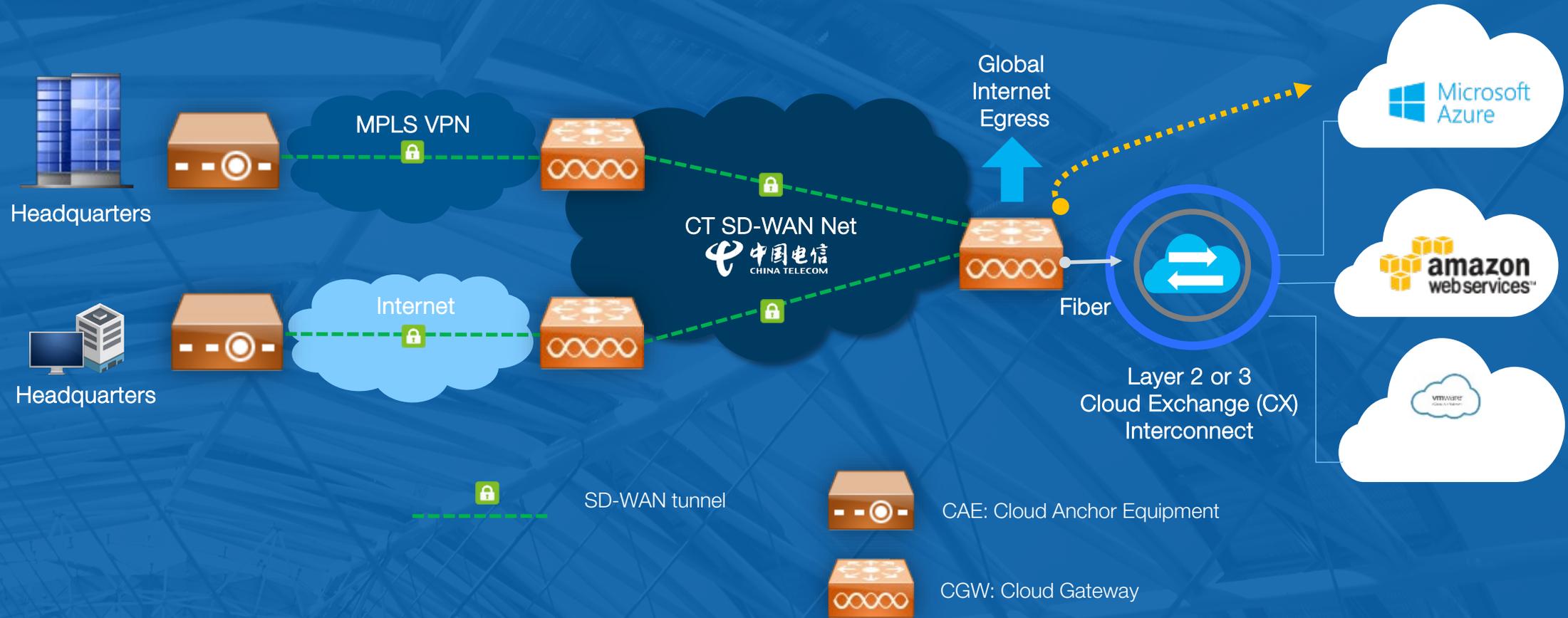
Use Case 3: Hybrid WAN – Replace CPE with CAE



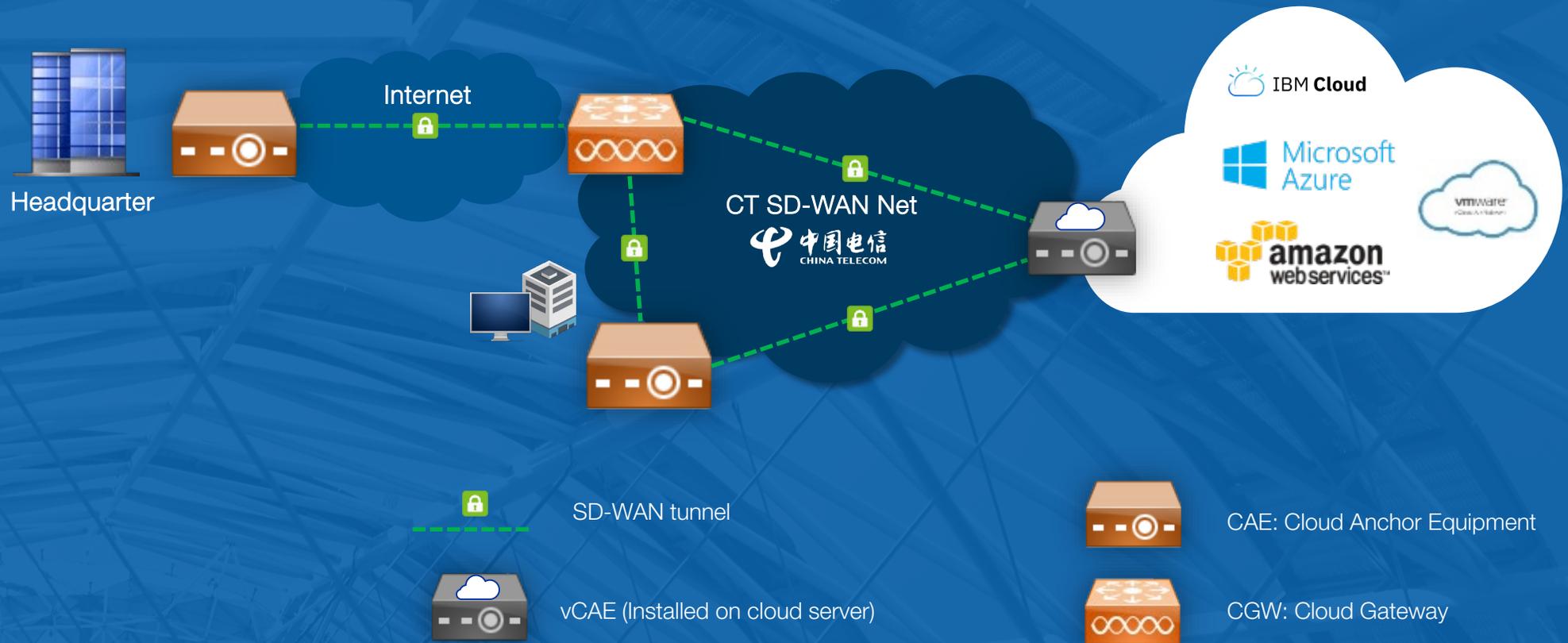
Use Case 4: Hybrid WAN – Existing Network + SD-WAN



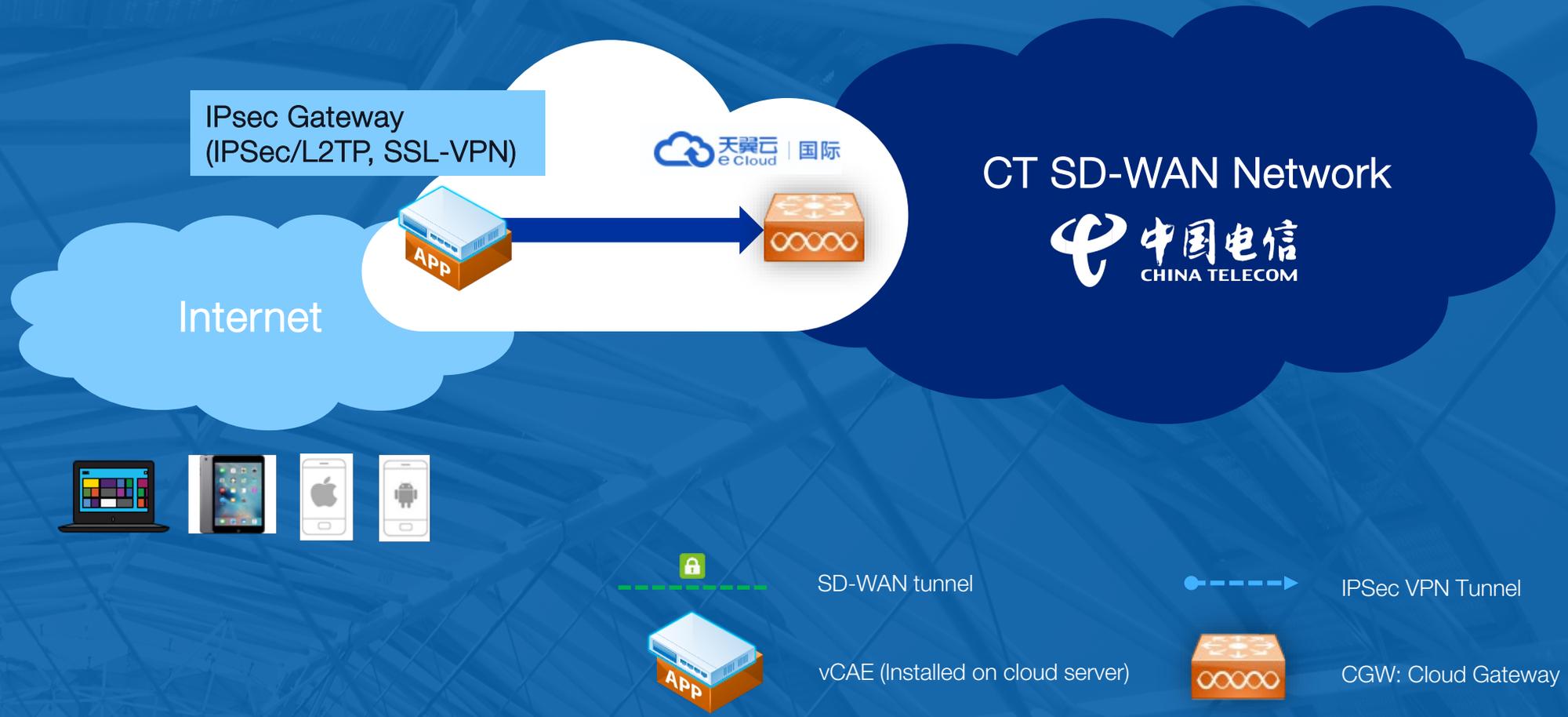
Use Case 5: Cloud Connected WAN via CX or Global Internet



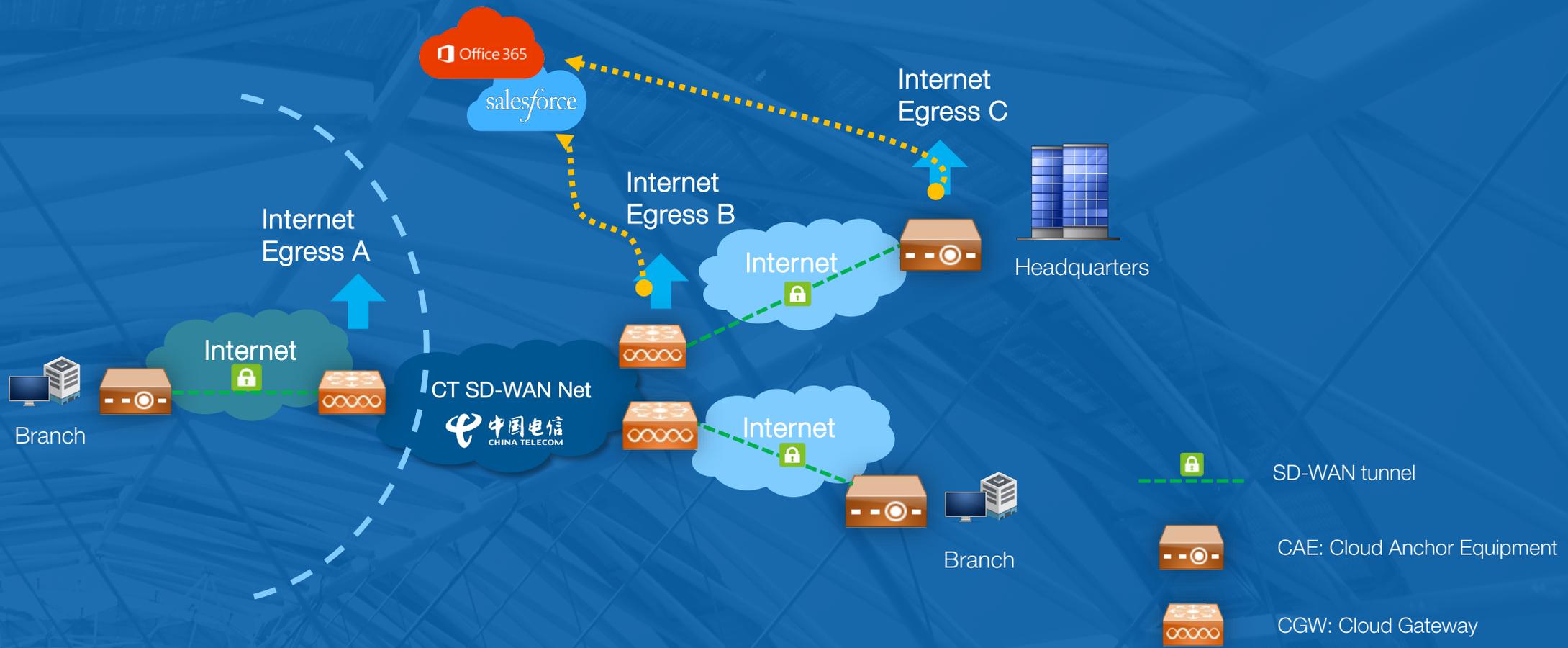
Use Case 6: Cloud Connected WAN via Cloud Exchange Outer Path



Use Case 7: Mobile Access



Use Case 8: SaaS Platform Acceleration



China Telecom Cloud Interconnection Coverage

Europe

- Frankfurt
- London
- Paris
- Prague
- Amsterdam
- Luxembourg

Africa & Middle East

- Johannesburg
- Nairobi
- Dubai
- Lagos
- Cairo

Asia-Pacific

- Beijing
- Shanghai
- Guangzhou
- Hohhot
- Jakarta
- Mumbai
- Tokyo
- Hanoi
- Bangkok
- Manila
- Chengdu
- Guizhou
- Hong Kong
- Kuala Lumpur
- Seoul
- Singapore
- Sydney
- Macau
- Phnom Penh
- Karachi

Americas

- Los Angeles
- San Jose
- Washington DC
- Chicago
- Toronto
- Sao Paulo

SD-WAN Business Case: Logistics Provider

Project

A privately-owned global transportation and logistics provider with 37 offices (18 in the US, 19 overseas) and 400+ employees worldwide required a reliable, end-to-end global SD-WAN solution for managing ERP application connectivity while complying with Chinese government Cybersecurity laws and regulations.

Challenge

Poor application performance and control for an 8 site network between the USA and China sites: Shanghai, Beijing, Guangzhou, Ningbo, Qingdao, Shenzhen, Xiamen and Chicago

Solution

- Customized, fully-managed SD-WAN solution from China Telecom and Versa Networks.
- Easily integration with China Telecom's DIA and licensed IPsec services.
- Centralized control help improved application performance and network agility.
- Lower CAPEX with less vendor lock-in for customer by using programmable white-box appliances.
- Lowered OPEX with simplified configuration and link provisioning reducing truck rolls and management of complex VLANs.

SD-WAN Business Case Results

200ms

Reduced US-China
latency from 250ms
to sub 200ms

15%

SD-WAN savings

60%

Internet savings

Improve agility and application performance with
China Telecom's Managed SD-WAN Service.
Start a Free Trial Today!



To get your free trial started, contact marketing@ctamericas.com