

Arcstar Universal One:

Launching of Cloud Networking Services

**Industry's first NFV-enabled network services
available globally**

NTT Communications Corporation
Corporate Planning / Network Service Department

May 29th, 2014

NTT Communications Group

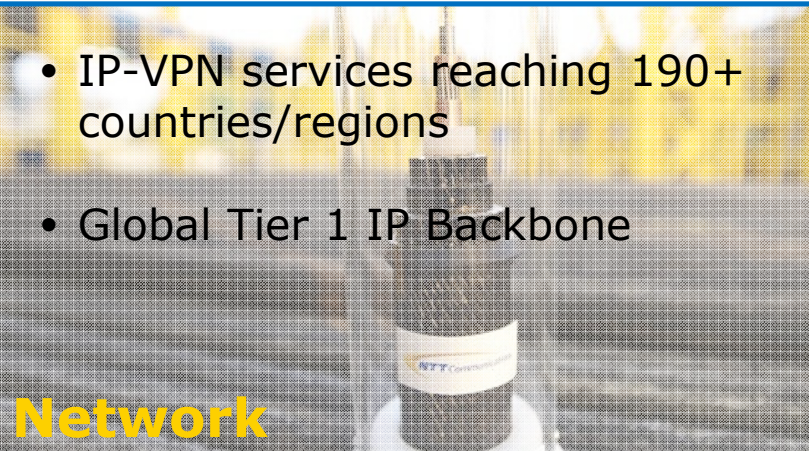


As of end of February 2014

- **Services available in:**
In **190+** countries/regions
- **Subsidiaries and offices:**
In **120** cities in **41** countries/regions
- **Number of Employees:**
20,400 employees worldwide
- **Operating Revenue for FY 2013:**
1,230+ billion JPY (Approx. 12.3 billion USD)



Full Breadth of Services



- IP-VPN services reaching 190+ countries/regions
- Global Tier 1 IP Backbone

Network



- 150+ data centers worldwide
- Private Cloud Service Hosted at 11 locations in 9 countries worldwide

Data Center and Cloud



Security

- Experienced security professionals
- Security Solutions and Managed Security Services powered by self-developed SIEM Engine



Voice and Video

- UCaaS and SIP Trunking Services
- Arkadin International SAS to extend voice and video offerings

Instant Messaging
Video Web Conferencing

Awards and Recognitions

Industry Analysts

- Positioned in the **Leaders Quadrant** of Gartner's "Magic Quadrant for Global Network Service Providers" report
- Positioned as **Leader** in IDC MarketScape: Asia/Pacific Next-Generation Telcos: Hosted Cloud and Data Center Services 2013-2014 Vendor Analysis
- Retaining **World-Class** Position for Global Data VPN in Ocean82 Customer Satisfaction Report

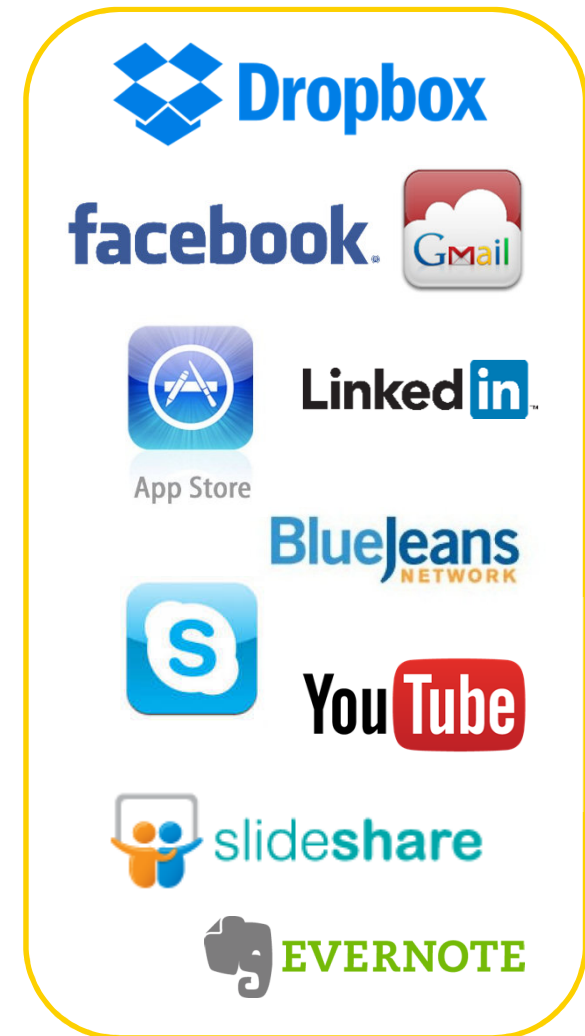
Awards

- Awarded **Best Cloud-Based Services** and **Best Managed Service Provider** at Telecom Asia Awards 2014
- Won **User's Choice Award** at World Communication Awards 2013

Challenges, Transformation, Innovation

CIOs: Facing Biggest Challenges of their Lifetime

- No longer feeling in control of IT
- Application response time vs. network uptime
- Benchmarked against performance at home
- “Single threaded” staff and Do more with less
- Technology overload



CIO's Road to Transformation

Disruptive Technology Adoption: Must-Have Strategy

- Cloud
- Big Data and Analytics
- Mobile Apps
- User Interfaces and Visualization
- Internet of Things (IoT): everything connected, mini, APIs, etc.



Adoption is Driving New Network Architecture

SDN and NFV are Leading the Network Innovation

Biggest Industry Innovations Since Telecom Companies Built Internet

- Massive Non-linear Disruption Changes the Game
- Network Simplification
 - Fewer Layers, Simpler Architecture
 - Eliminate Network Islands
 - Better End-User Performance
- “Auto” Everything
 - Rapid Configuration
 - Self-Service Provisioning



Cloud Networking enabled by **NTT Com's NFV platform** powered by Virtela

- NTT Com is the **first provider** to offer NFV-enabled services on a global scale
- NTT Com is **transforming enterprise WAN architecture** and eliminates industry limitations of long service delivery & long-term contracts
- Leveraging NFV into **Arcstar Universal One** – NTT Com's enterprise network service
- **Open, Vendor-Neutral** – Self-developed platform capable to integrate different application providers to support rapid development of new services

NTT Com is disrupting the current industry model

Game Changing new service model for enterprise networking...

Real time self-service activation

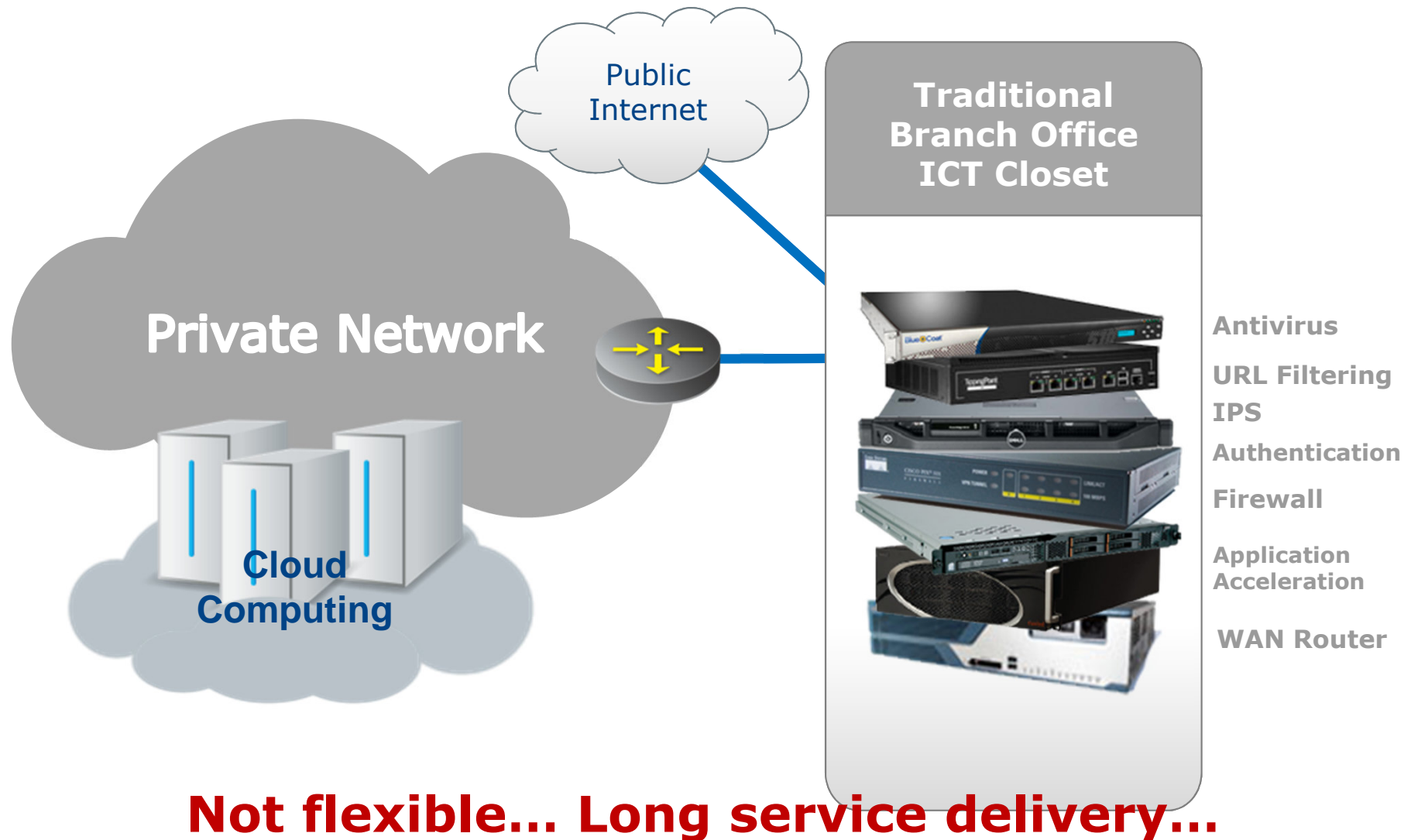


Pay-per-use pricing model

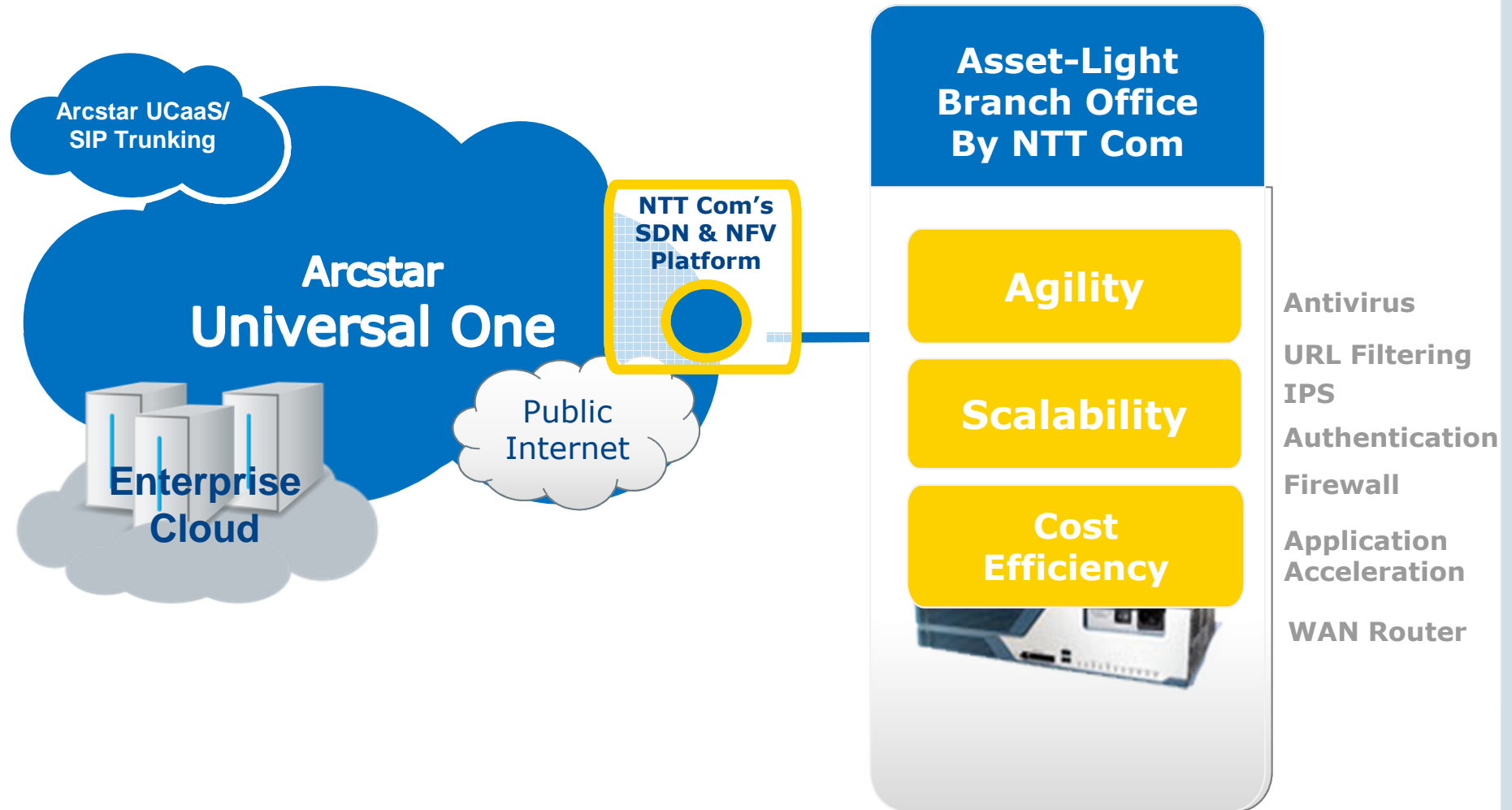


Customers decide when to activate the service and for how long to keep it

Traditional Branch Office Networking



Transform Branch Office Networking



Instant Self-Service Activation Demo

NTT Com Arcstar Universal One Portal Demo NFV-enabled Cloud-Based Network Services

CLICK>> http://www.ntt.com/universalone_e/images/cloud_networking_services.wmv

Agility

Deployment

**Change
Management**

Traditional
Branch Office
ICT Closet

Months

Weeks



Asset-Light
Branch Office
by NTT Com

Minutes

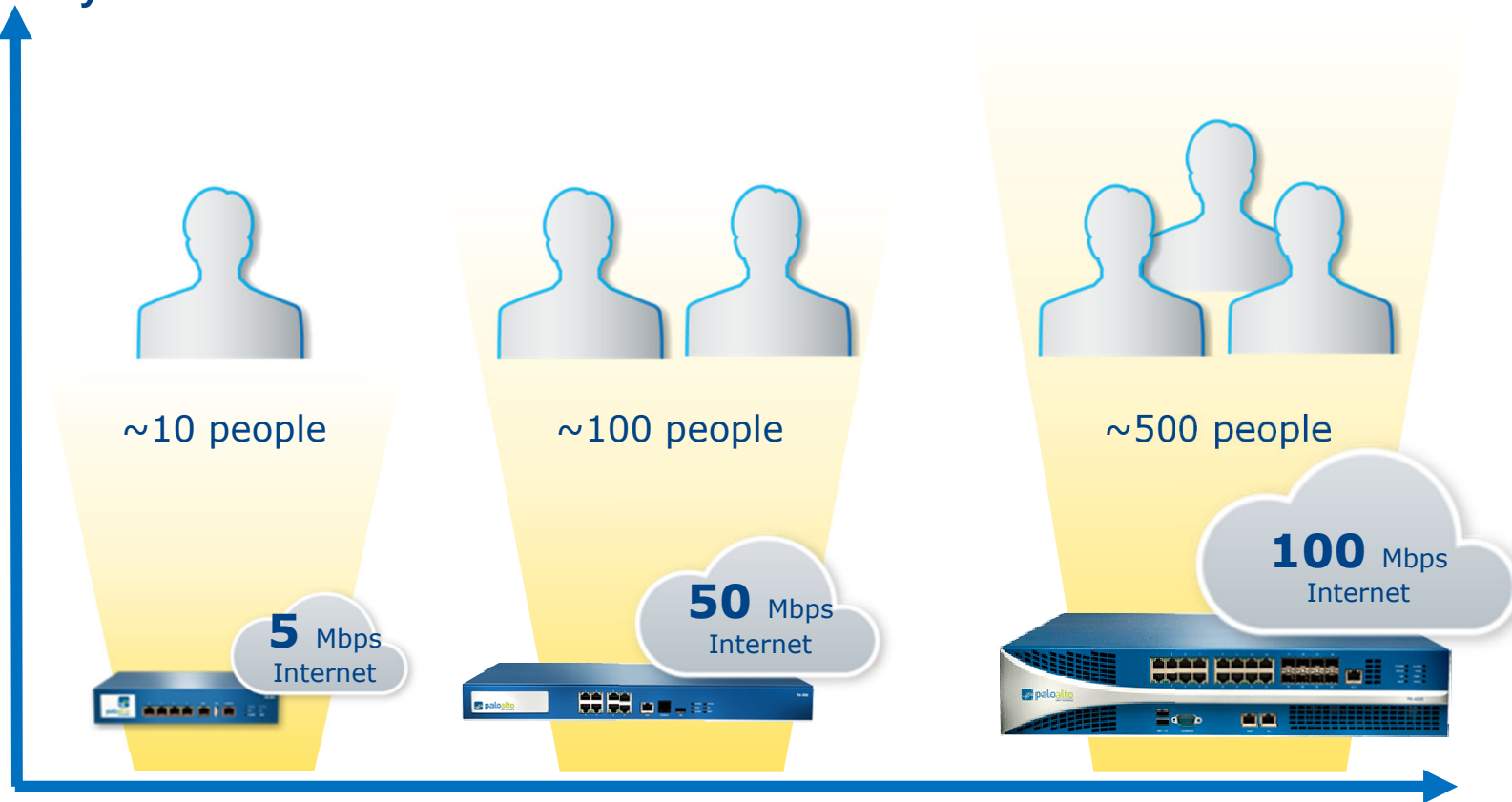
Real-Time



Scalability

Scalability

Capacity



Hardware, License Subscription and Internet Access Prices

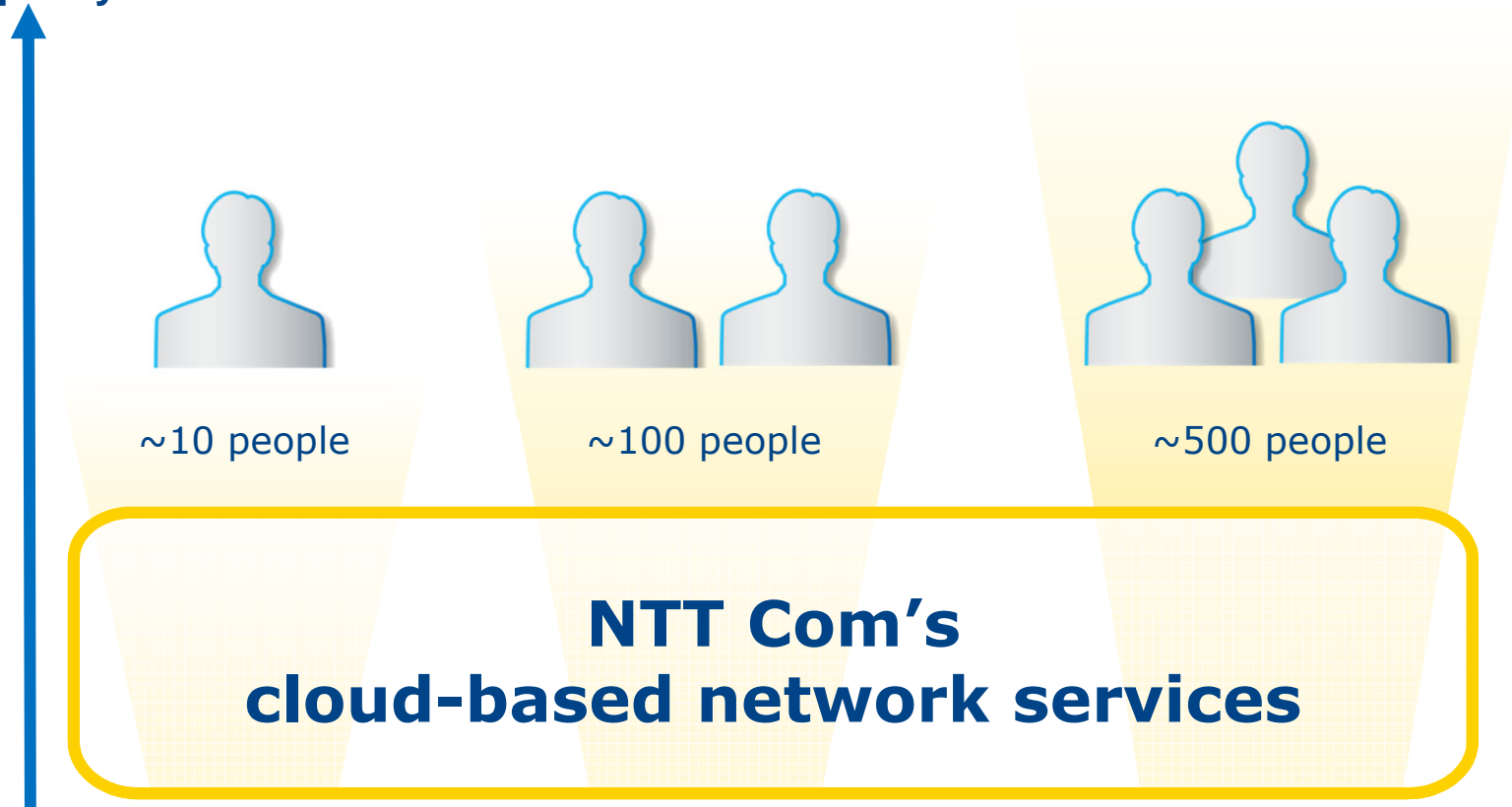


Global ICT Partner
Innovative. Reliable. Seamless.

Scalability

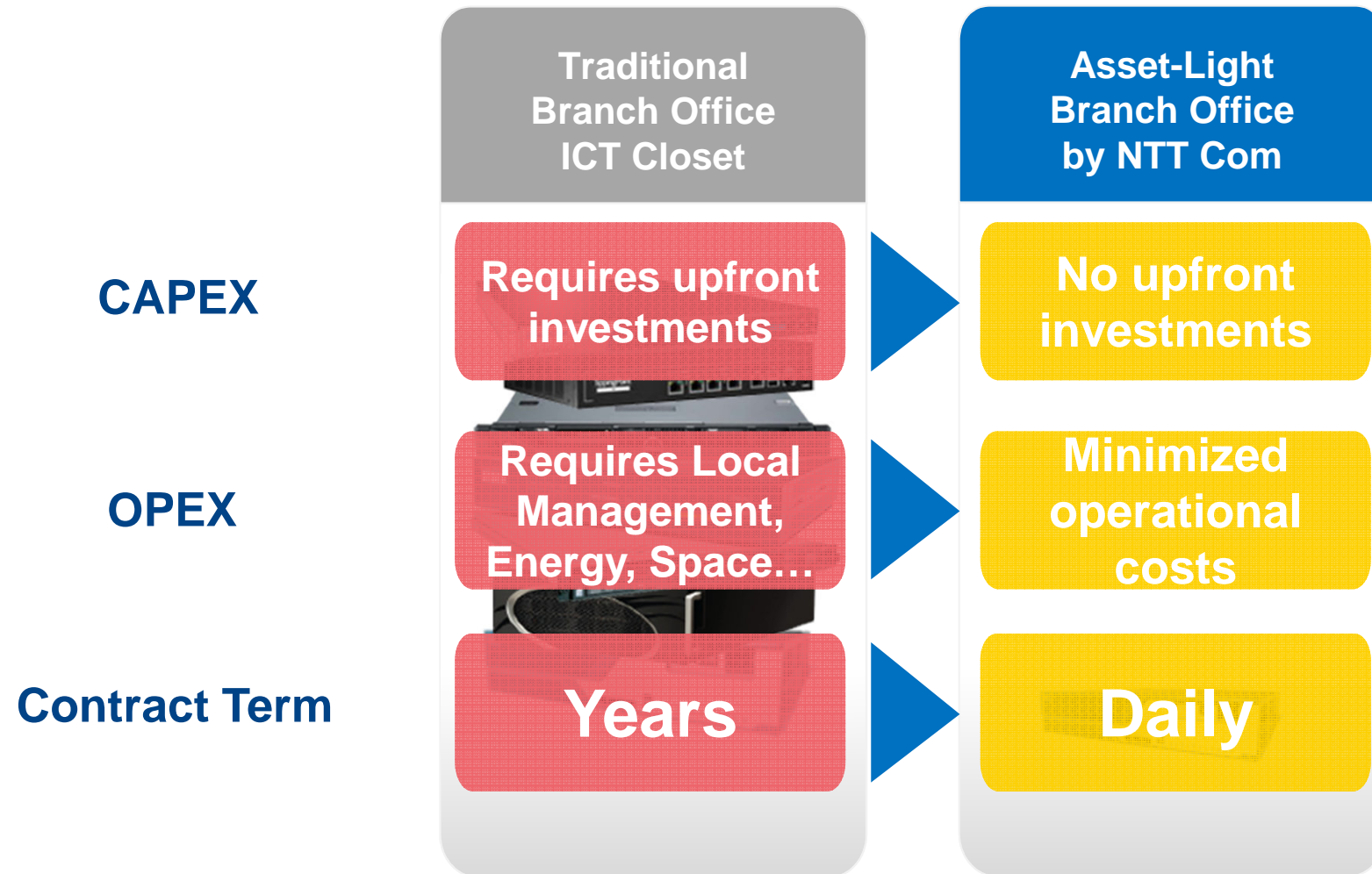
Scalability

Capacity

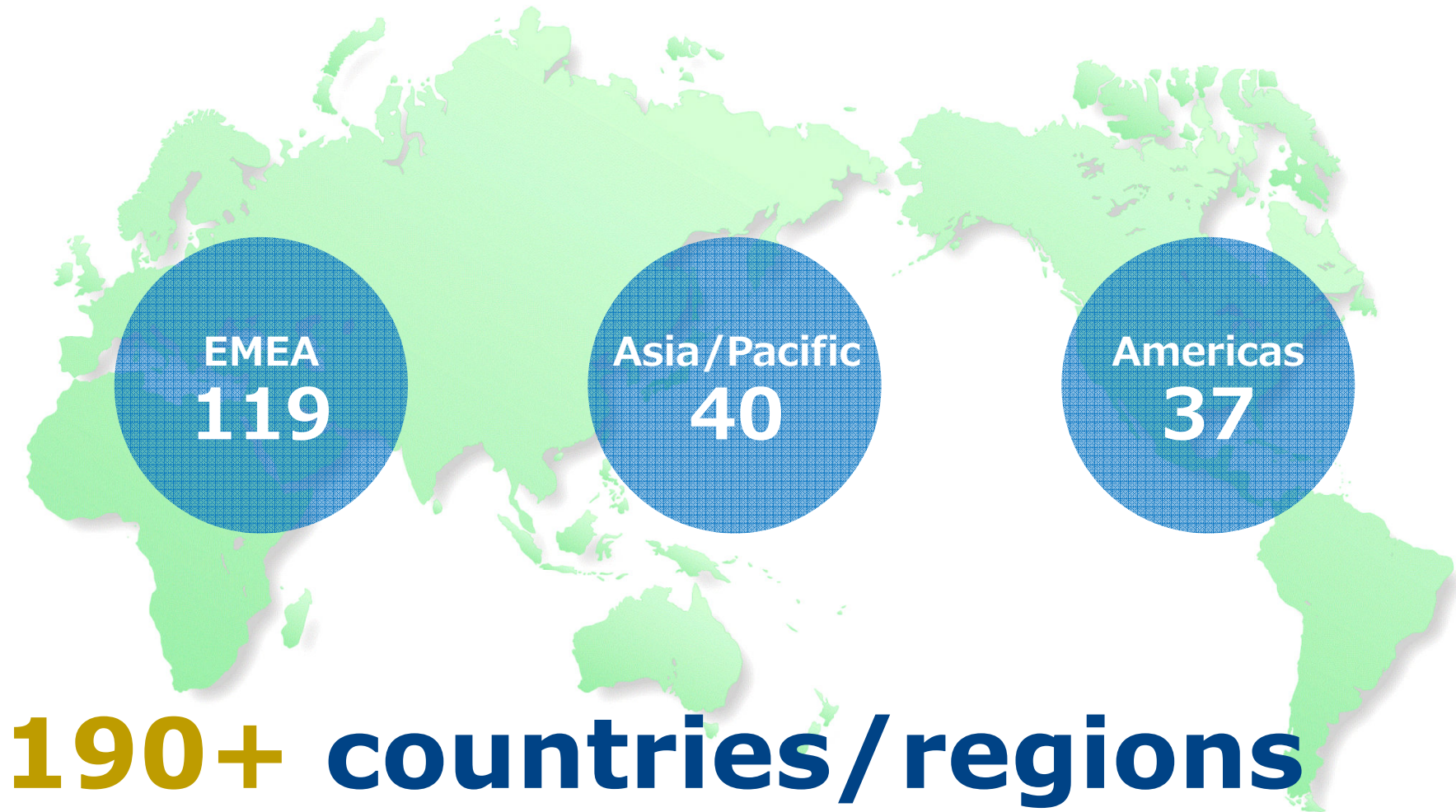


Hardware, License Subscription and Internet Access Prices

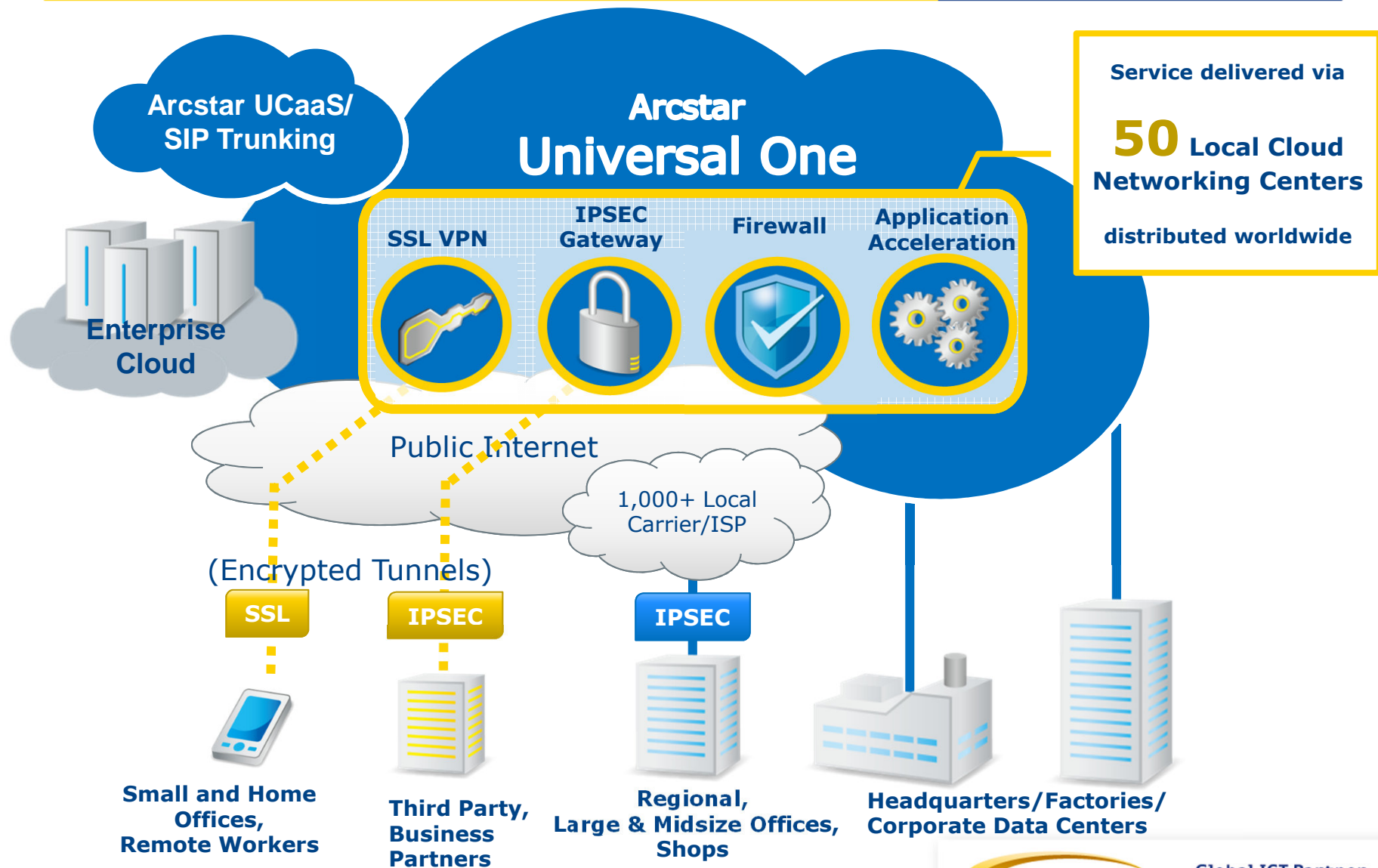
Cost Efficiency



NTT Com's cloud-based network services global coverage

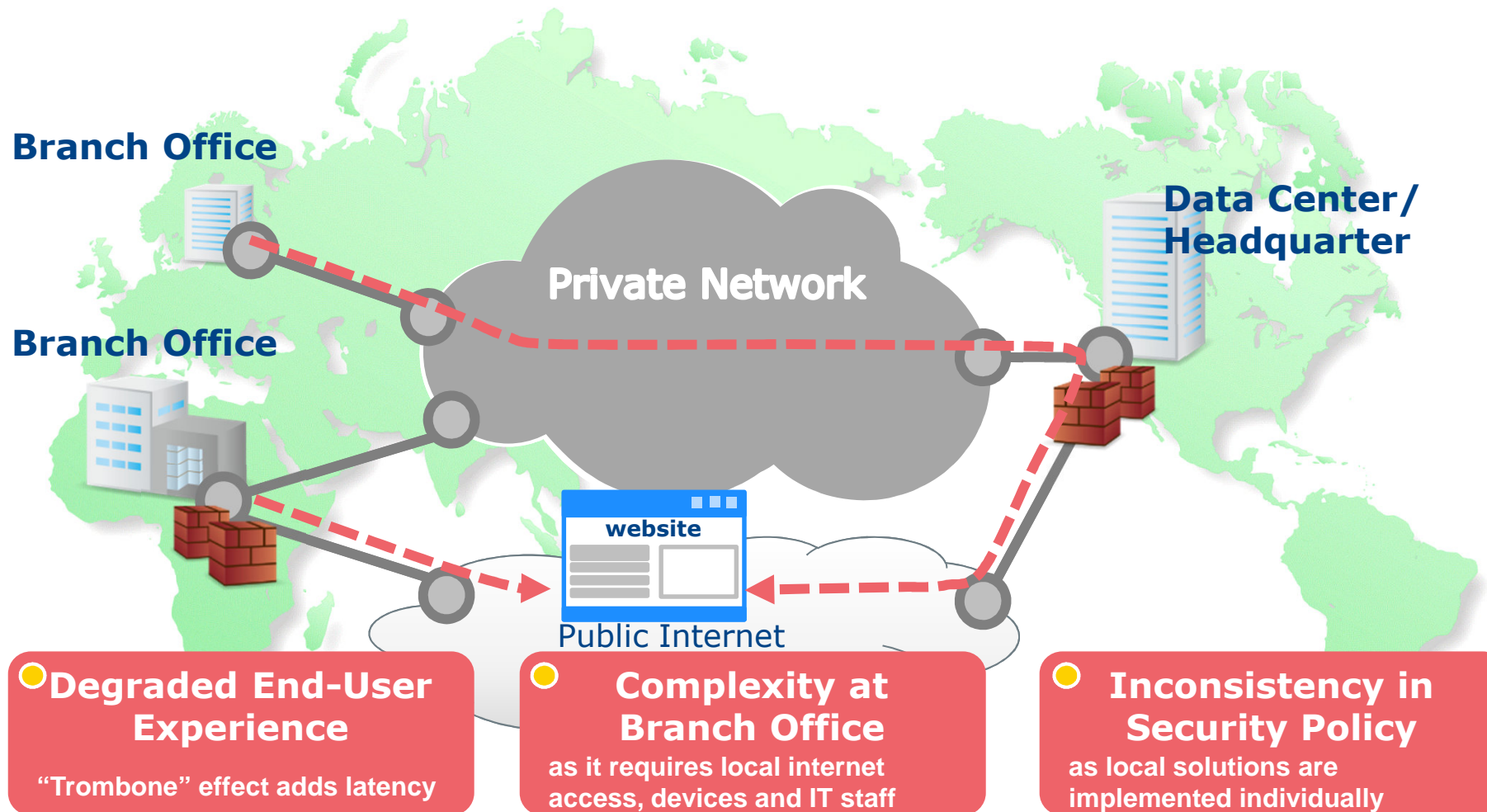


NTT Com's Cloud Networking Services

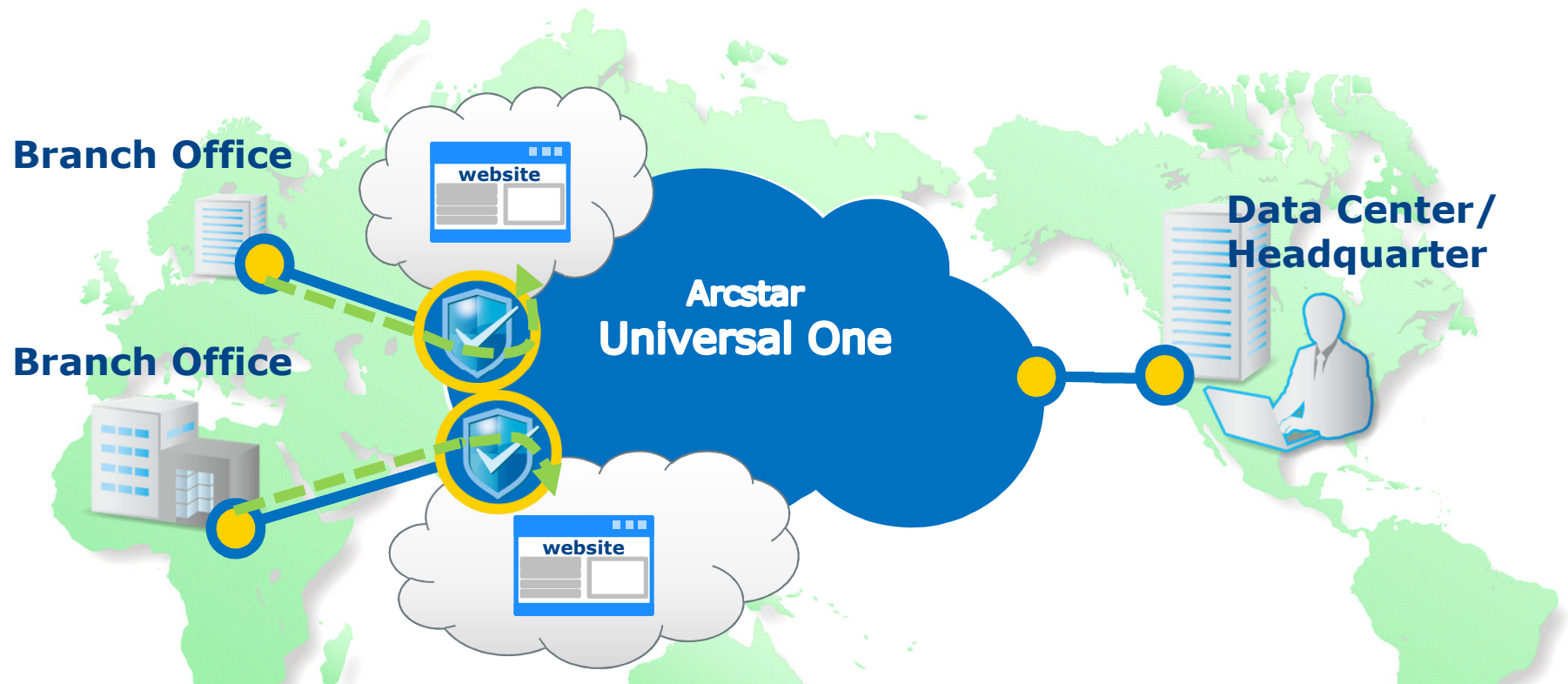


Use Case

Traditional Designs – When Branch Offices Accessing to Public Internet



Cloud-Based Firewall



● **Improved End-User Experience**
with 50 Local Cloud Network Centers distributed globally

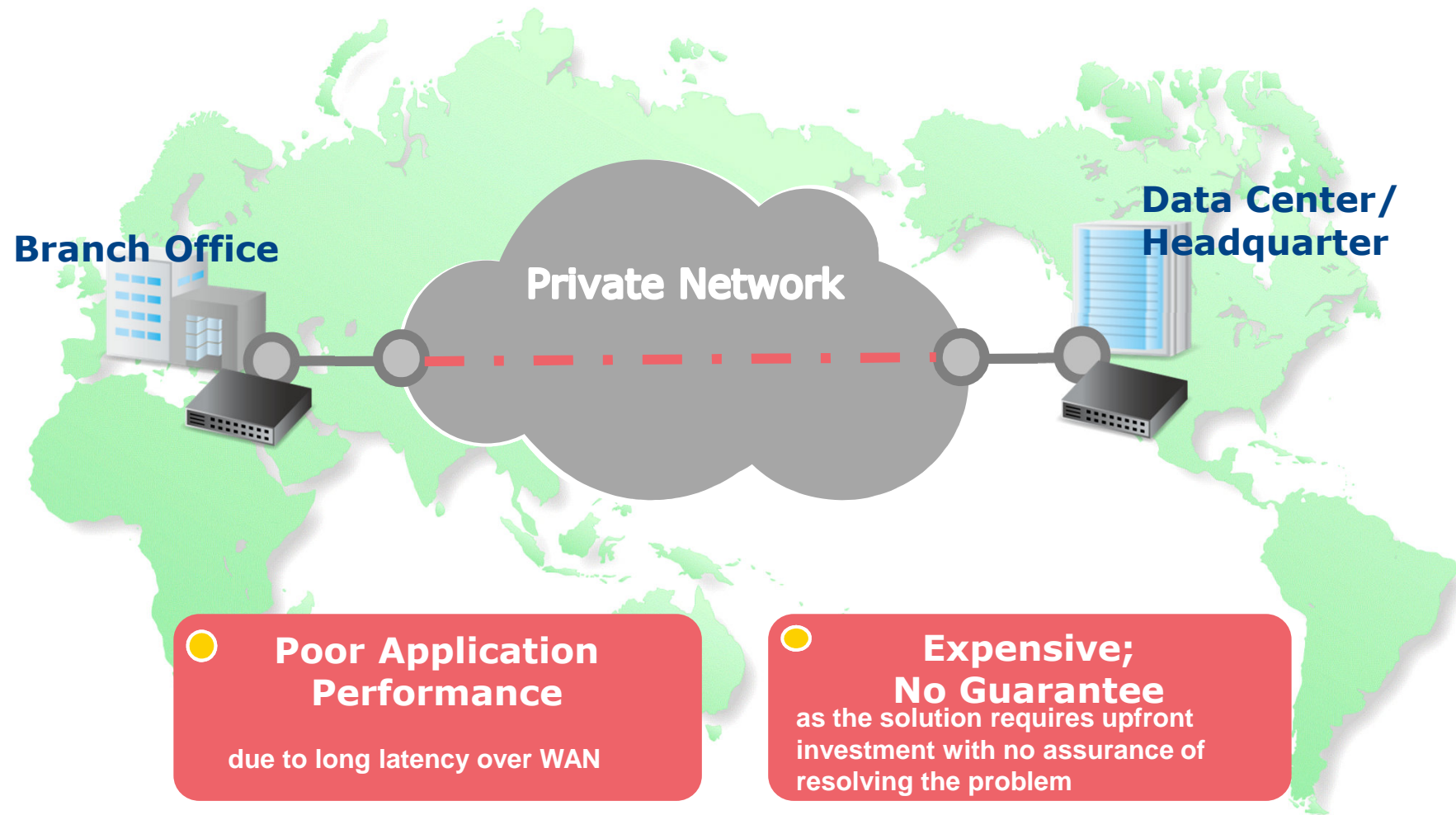
● **Branch Office Simplified**
as it requires no extra access-lines, devices and local IT staff

● **Security Governance in Place**
through central management via customer web portal

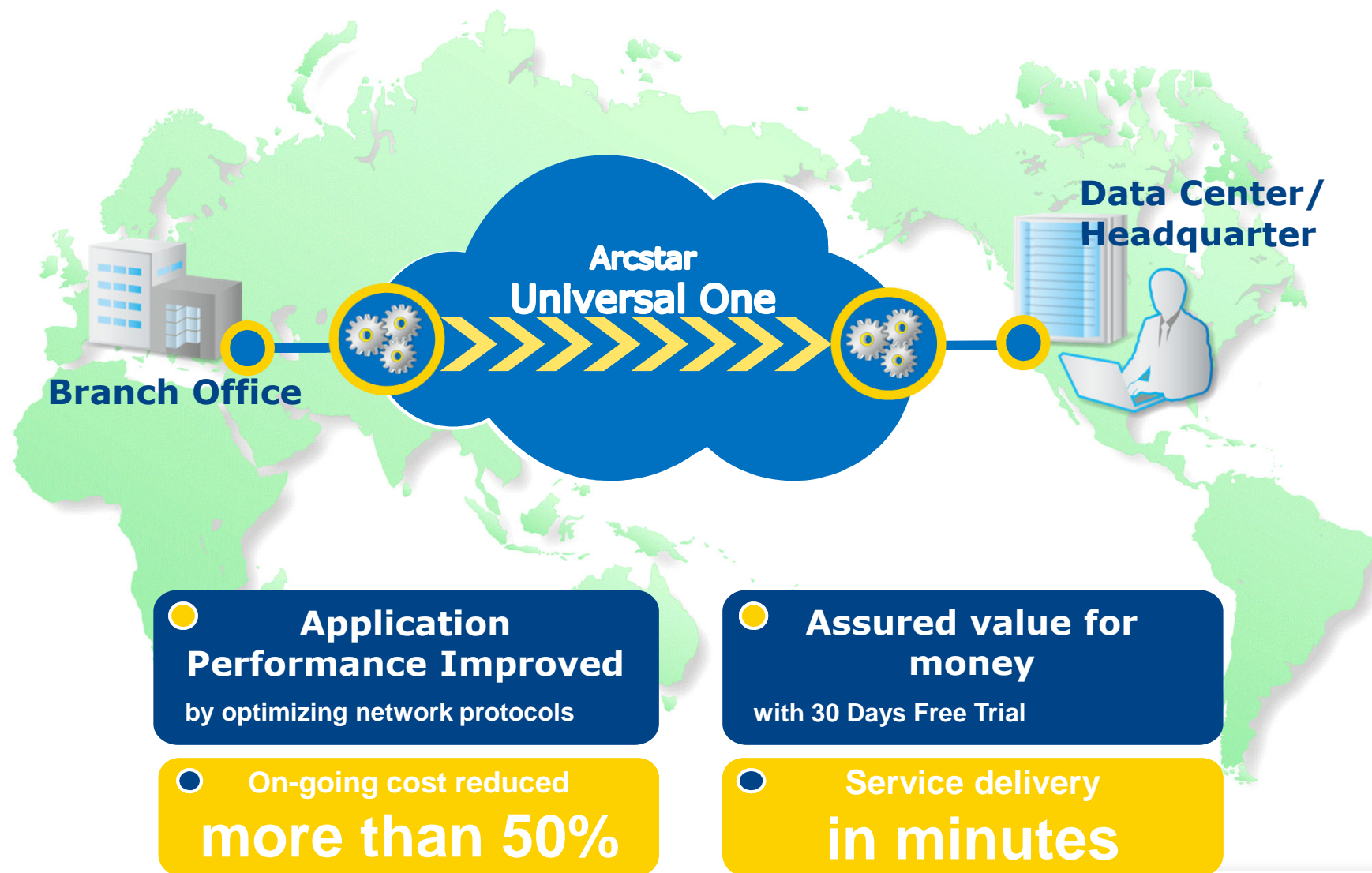
● On-going cost reduced
more than 50%

● Service delivered
in minutes

Traditional Designs – With Application Performance Issues



Cloud-Based Application Acceleration



Global

One of the most visionary
global telcos, with a
comprehensive portfolio
and extensive service coverage

NTT Com powered by Virtela

Innovative

Taking leadership in
SDN/NFV innovation

Quality

Passionate about
Customer Support

