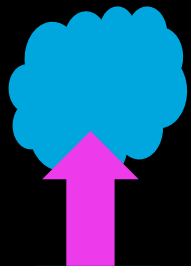# Solving Business Challenges in a World of Many Clouds

JP Van Steerteghem

Sr Dir CTO Global Data Center

Cloud Leadership Forum

June 13th, 2012

Cloud deployments expected to increase significantly

Today
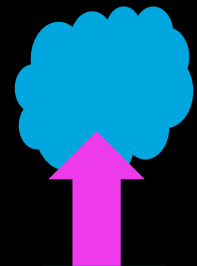
End of 2014

½

Total Apps

+½

Total Apps

5% IT decision makers

20% IT decision makers

Tomorrow's IT—World of Many Clouds
Enabling Multiple IT Sourcing Models

Hybrid Cloud

Public Cloud Services

Private Cloud

Traditional Data Center
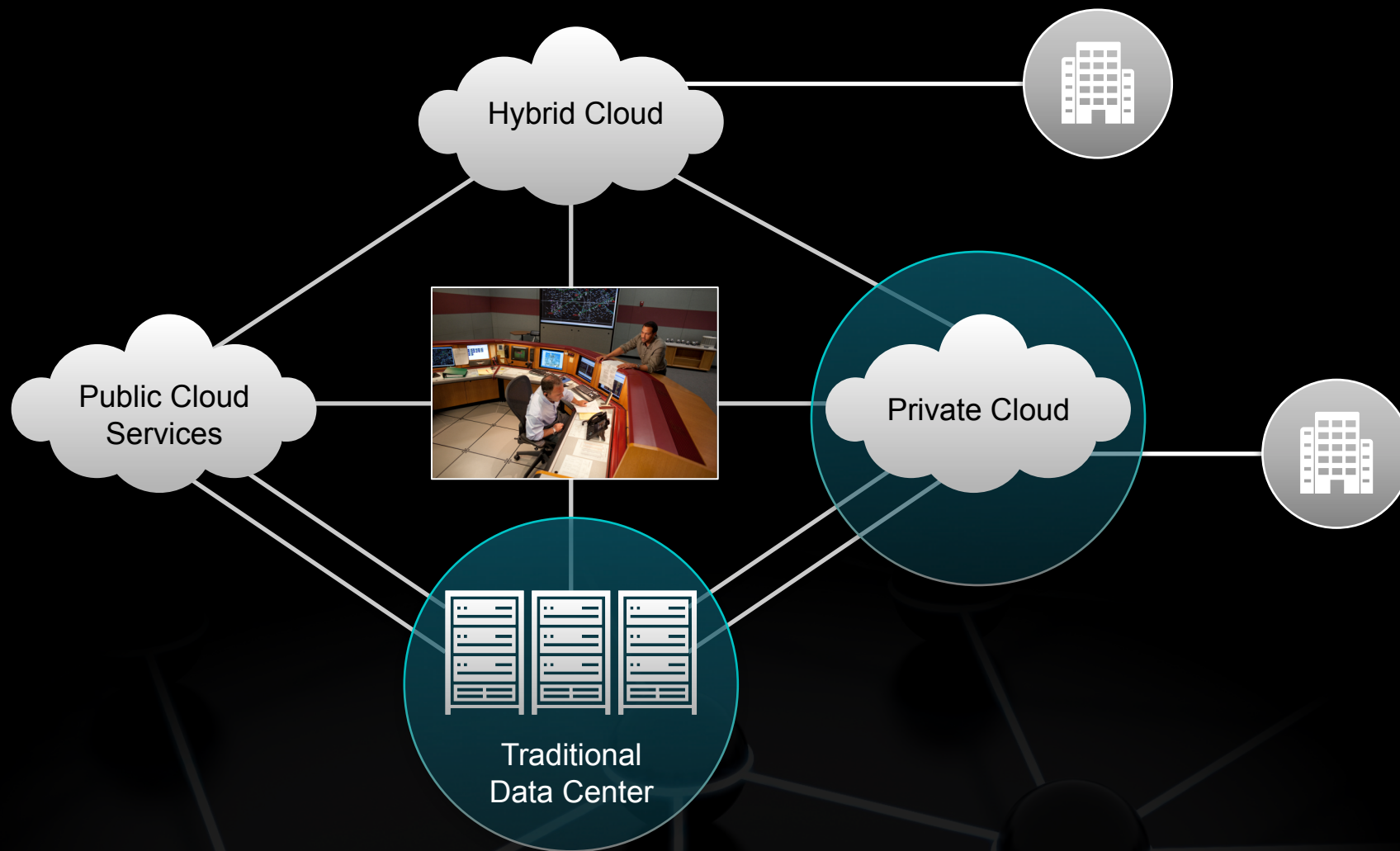
Most Critical Infrastructure for cloud deployments

37%
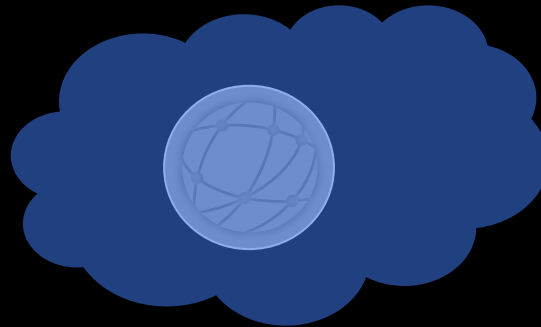
Cloud Ready Networks

28%

Virtualized Data Centers

Cisco CloudVerse
Key Capabilities for Public, Private and Hybrid Clouds

Cloud Applications

Unified Data Center

Cloud Intelligent Network

Cloud Enablement Services
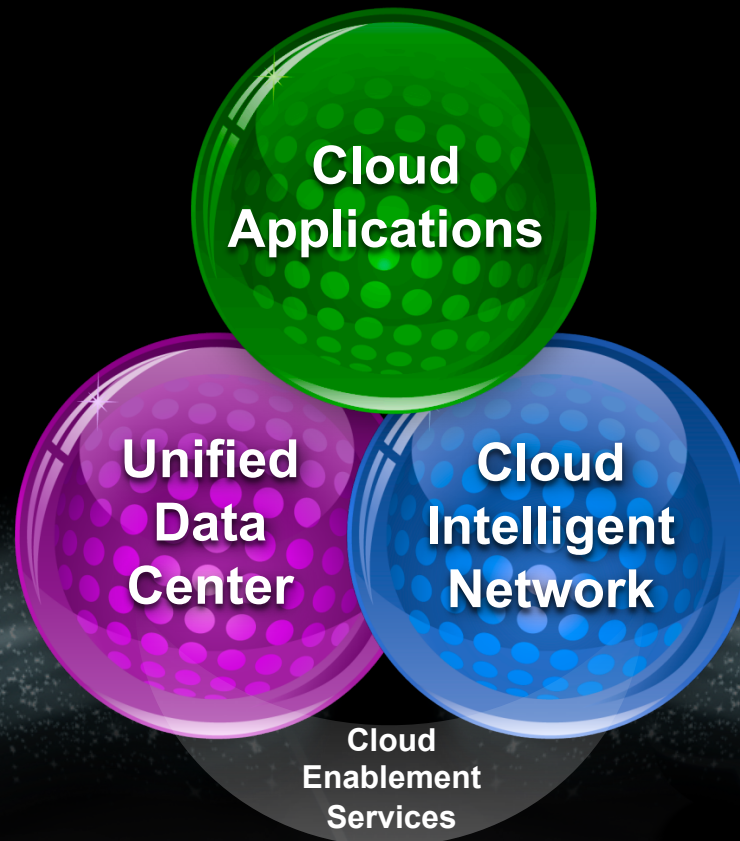
Enabling Cloud Applications/Services by Uniquely Combining the Unified Data Center and Cloud Intelligent Network

Cisco Unified Data Center
The Platform for Delivering IT-as-a-Service

HIGHLY SCALABLE, SECURE NETWORK FABRIC

UNIFIED FABRIC

MODULAR STATELESS COMPUTING ELEMENTS

UNIFIED COMPUTING

AUTOMATED RESOURCE MANAGEMENT (PHYSICAL AND VIRTUAL)

UNIFIED MANAGEMENT

Cisco Unified Data Center
Keeping the Promise

Virtualization → **Unified Data Center**

>50% TCO SAVINGS
(-59% OpEx, -37% CapEx)

Compute TCO ($/Qtr/OS instance)

$4,000	
$3,500	
$3,000	
$2,500	Virtualized
$2,000	
$1,500	Today
$1,000	Unified
$500	
$0	

-37%   -27%   -27%

Legacy (Rackmount): All Physical

Legacy: Medium Virtualization: 54%

Current State
Legacy/UCS: 46/54%
Virtualization: 75%

Target State
Private Cloud: 100%
Virtualization: 80%

Delivery Time

6–8 Weeks (Custom)

2–3 Weeks (Manual)

15 Min VM (2-9 Days E2E)

15 Minutes (Self-Service)

Current Networks Are Not Ready for Cloud

Key Findings – Cisco Global Cloud Networking Survey, April 2012*

Expectation

20%

Will have more than 50% apps in the cloud by 2014

37%

Consider Cloud-Ready WAN to be the most important infrastructure for cloud

Reality: Top Network Challenges

60%

Cited Performance as a key challenge for cloud

66%

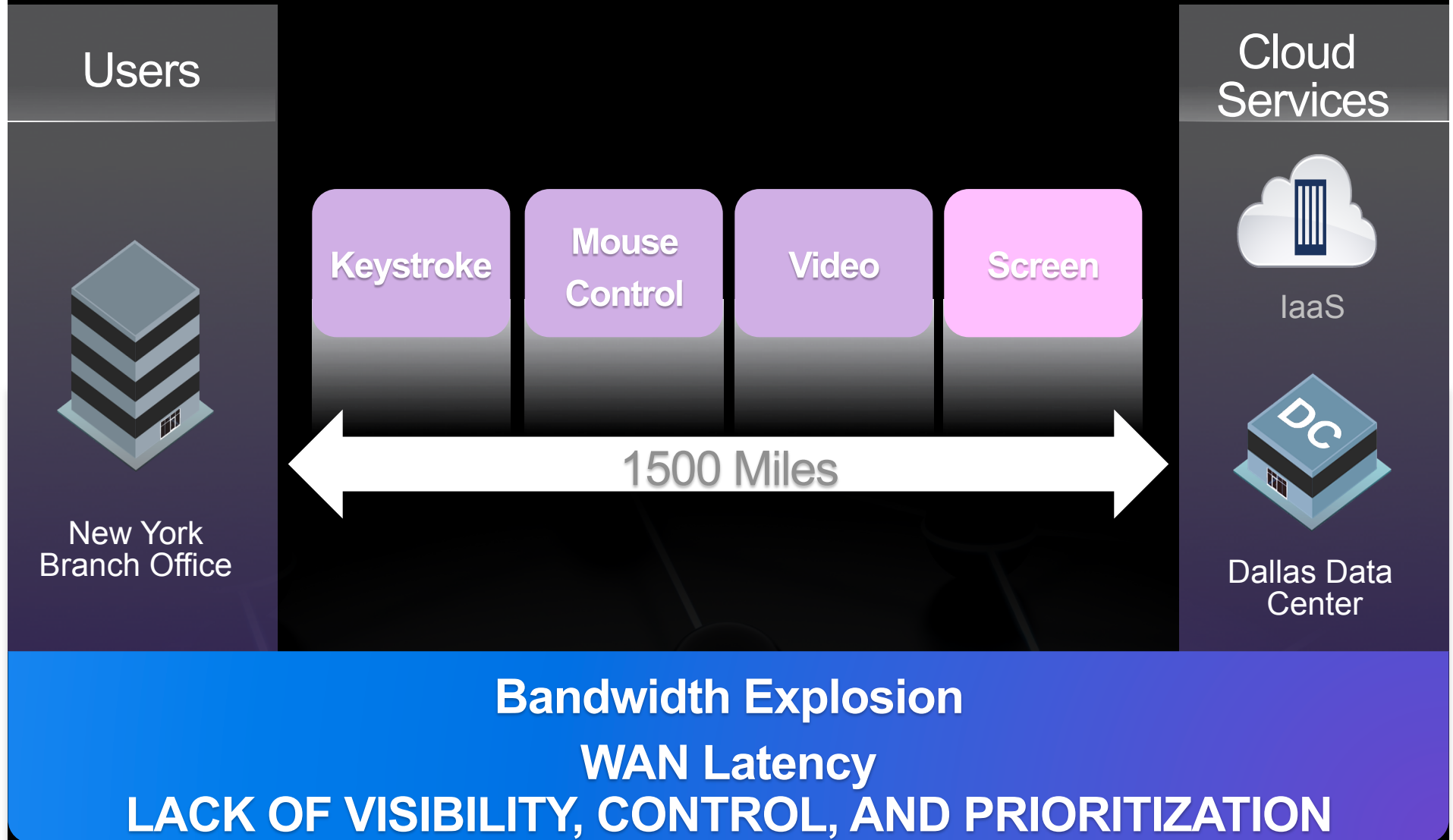Cited security and policy as a key challenge for cloud

60%

Cited management as a key challenge for cloud

* 1300+ Global IT professionals across 13 countries

The Private Cloud Challenge
User Experience

Users

New York
Branch Office

Keystroke

Mouse
Control

Video

Screen

1500 Miles

**Cloud
Services**

IaaS

DC

Dallas Data
Center

Bandwidth Explosion

WAN Latency

LACK OF VISIBILITY, CONTROL, AND PRIORITIZATION

Optimal Experience

Users

CITRIX

Branch/
Remote
User

AVP WAN/Internet AVP

WAN/Internet Citrix-Ready WAAS

Cloud Services

HQ/DC

Private Cloud

Hosted Virtual Desktops
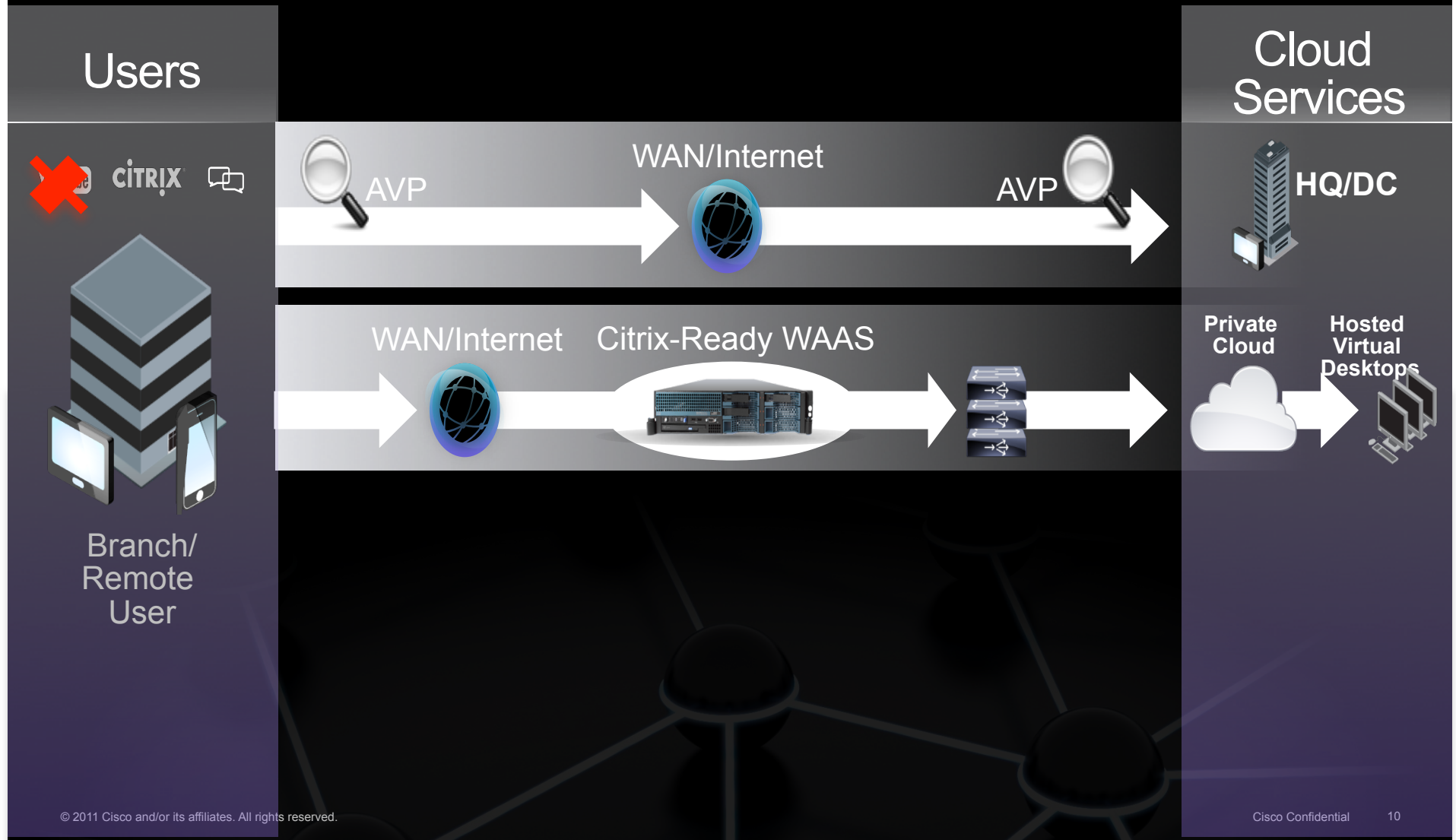
The Public Cloud Challenge
Inefficient Security

Users

Sales Rep at NY Branch / Mobile User

Salesforce

California, USA

SaaS

WAN / INTERNET

HQ/DC

Brazil

1 Cloud Networking Report, Metzler Associates, 2011
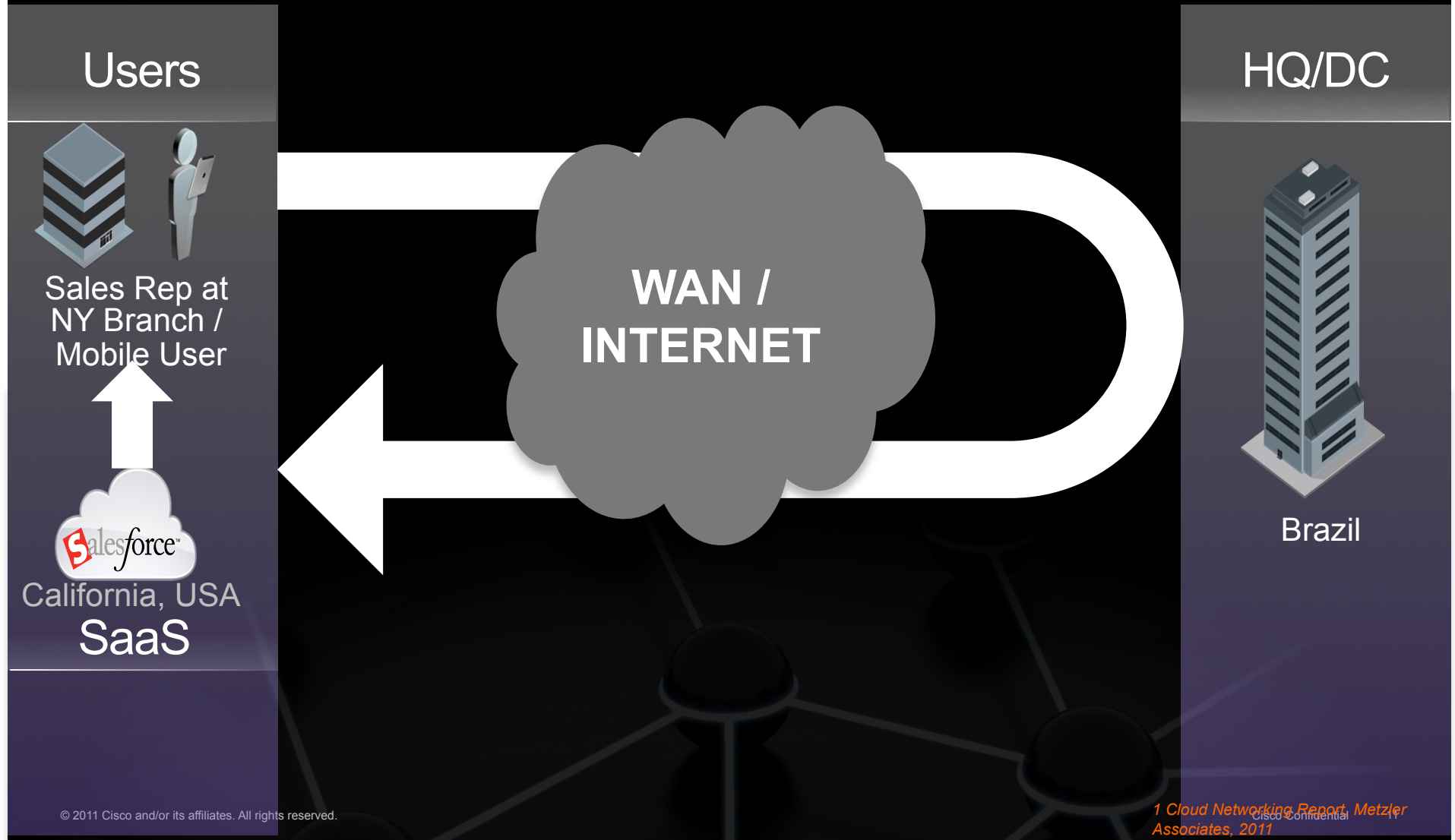
Cloud Security

Users

Cloud Services

ScanSafe Connector

Internet

Branch/
Remote
User

ScanSafe

SAAS

Cisco Cloud Connected Framework

- Delivering Optimal Experience, Pervasive Security, and Simplified Operations

Users

Branch

Integrated Management and Policy

Cloud Connectors

Collaboration Survivability

Web Security

Storage

3rd Party

Cloud-Ready Network Services

Visibility **Optimization** **Security** **Collaboration** **App Hosting**

Cloud-Ready Platforms

ISR

ASR

CSR

Branch Office

HQ / Data Center

Cloud

Cloud Services

Private/Public/Hybrid

Conclusion

- Cloud deployments are *increasing* significantly

- Unified Data Center delivers *cost efficiencies* and *business agility*

- The network must be cloud ready to deliver user *experience*, *security* and *performance*

- The Journey to ITaaS is *different* for each

Thank you.

CISCO