

WELCOME



THE CARRIER CLOUD

SKMM Seminar on Cloud Computing

Michael TADAULT

5 April 2012

THE RISE FOR CLOUD CONTINUES

75%

reduction in
introducing new
services to market

80%

of all new software
will be available as cloud
services by 2014

90%

of organizations will
support corporate mobile
applications by 2014

Adaptive to
Market
Demand

Faster
Product
Deployment

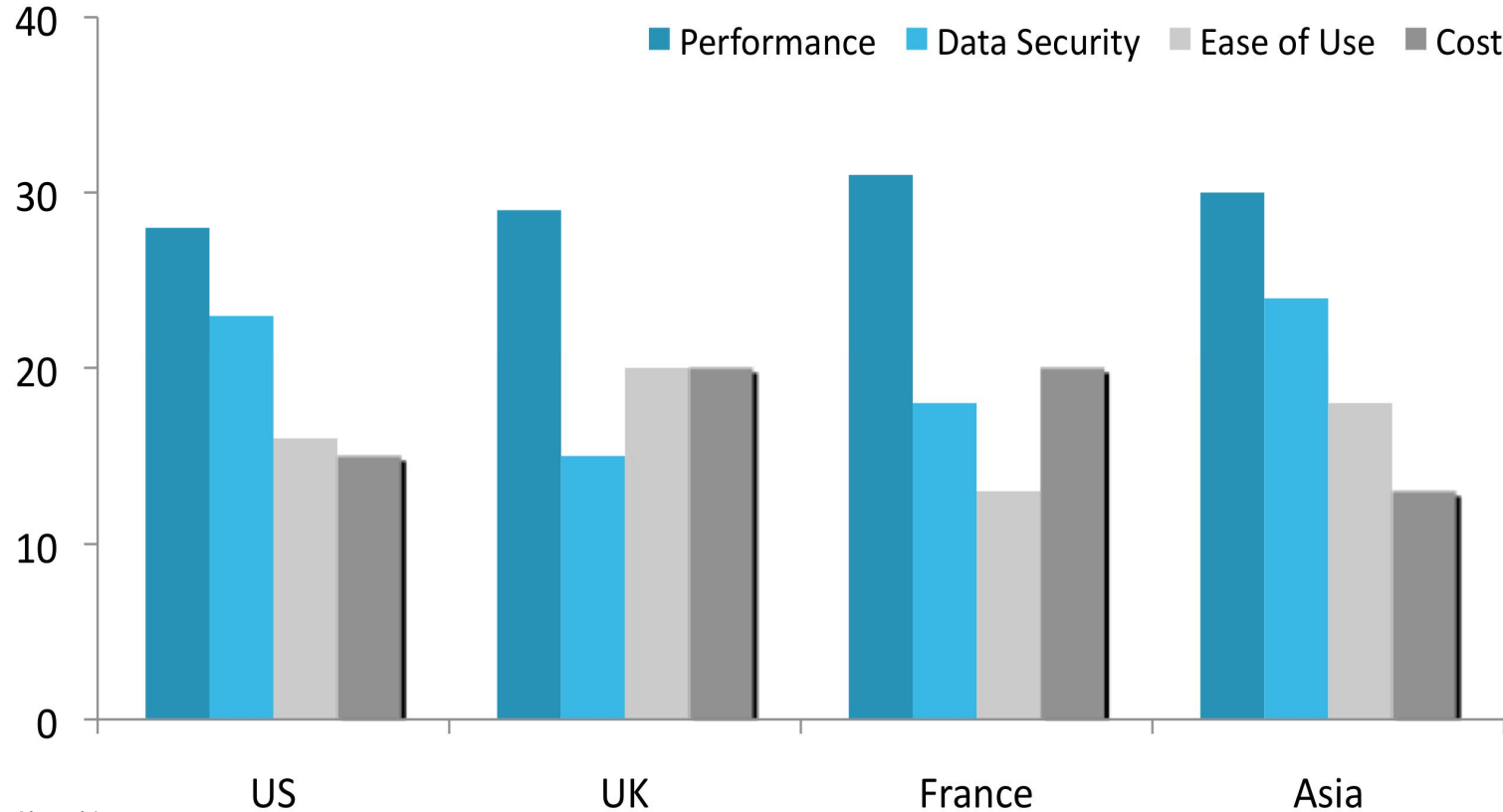
Reduced
Complexity
and Cost

New
Revenue



FACTORS INHIBITING CLOUD ADOPTION

(%) ITDMs Question: What single aspect of your current cloud solution needs the most improvement?

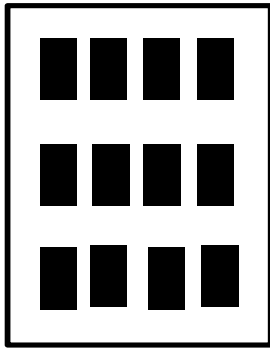


Source: Alcatel-Lucent
Global Cloud IT Decision Maker Study | September 2011

Alcatel-Lucent survey of 3500+ enterprise decision makers shows that performance is a key requirement that service providers must address before they increase use of the public cloud.

ENTERPRISES TODAY MOST APPLICATIONS INTERNALLY HOSTED

Enterprise

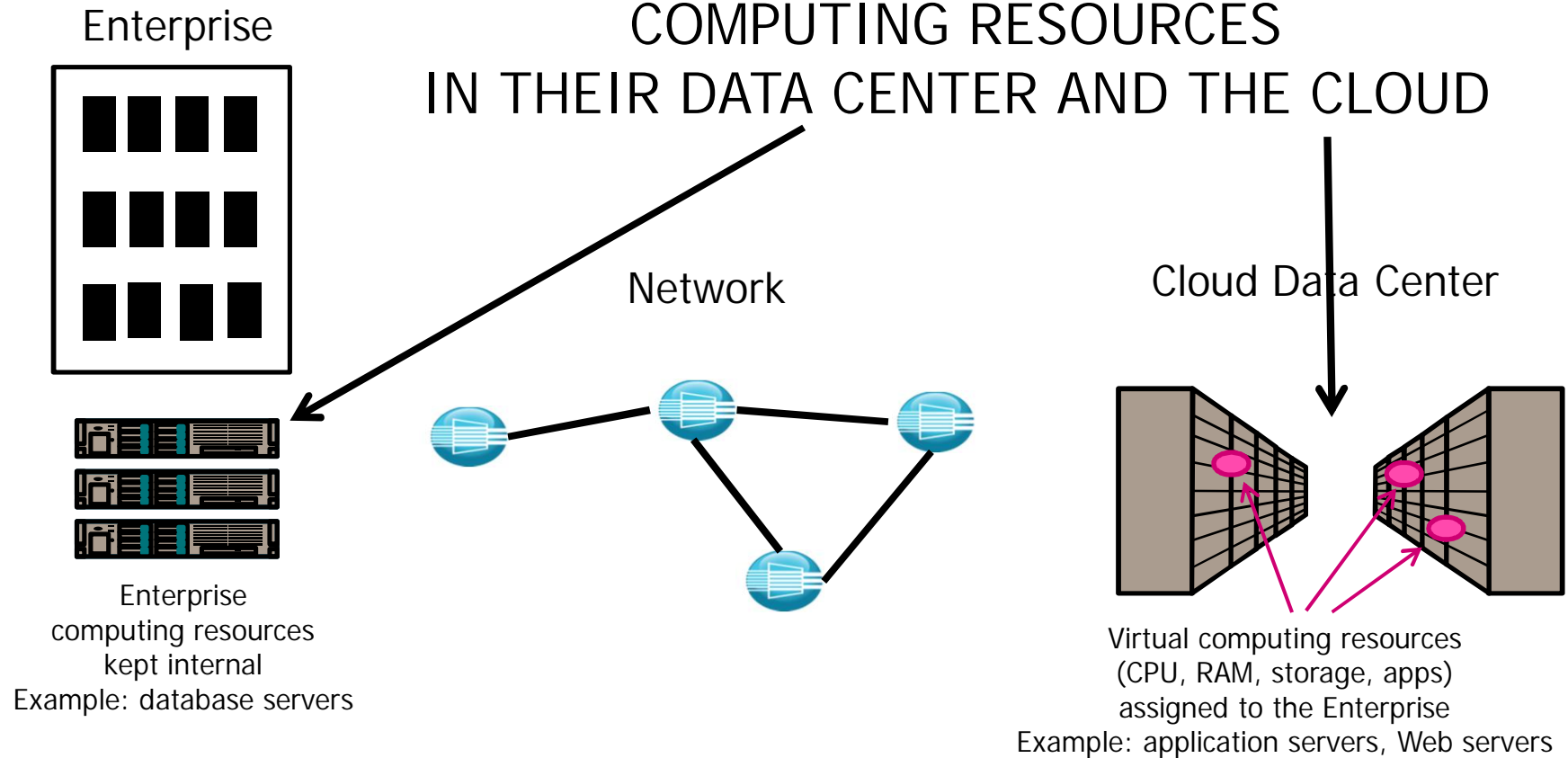


Enterprise
computing resources

ENTERPRISES AND THE CLOUD

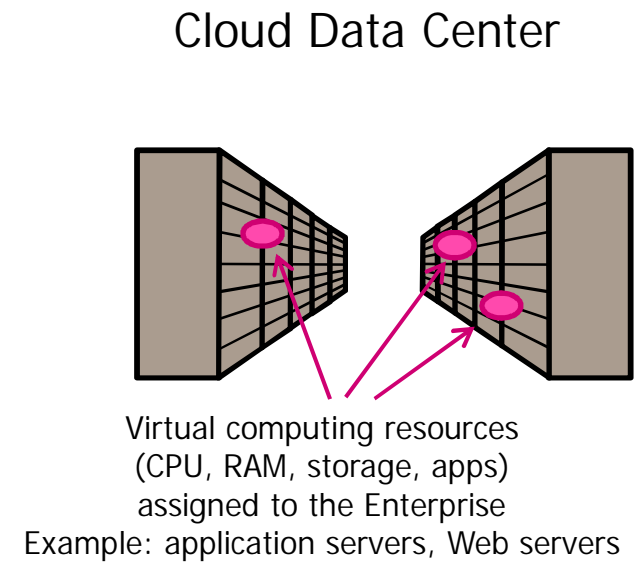
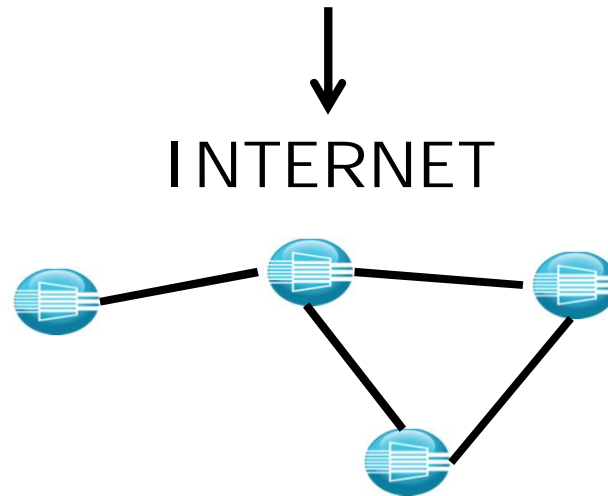
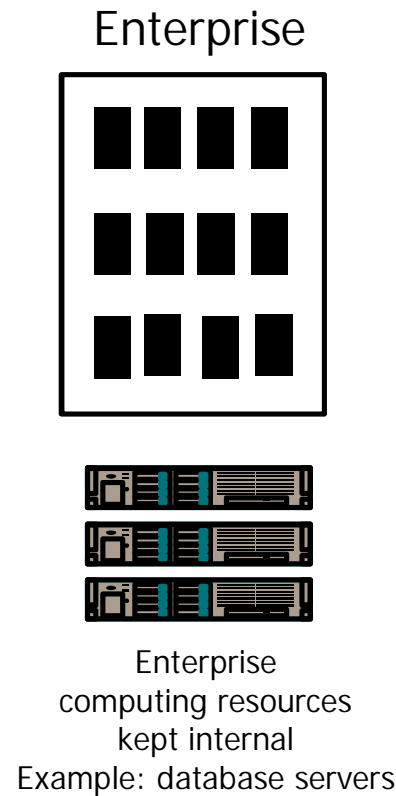
GRADUAL OUTSOURCING OF COMPUTING

ENTERPRISE APPLICATIONS RELY ON
COMPUTING RESOURCES
IN THEIR DATA CENTER AND THE CLOUD



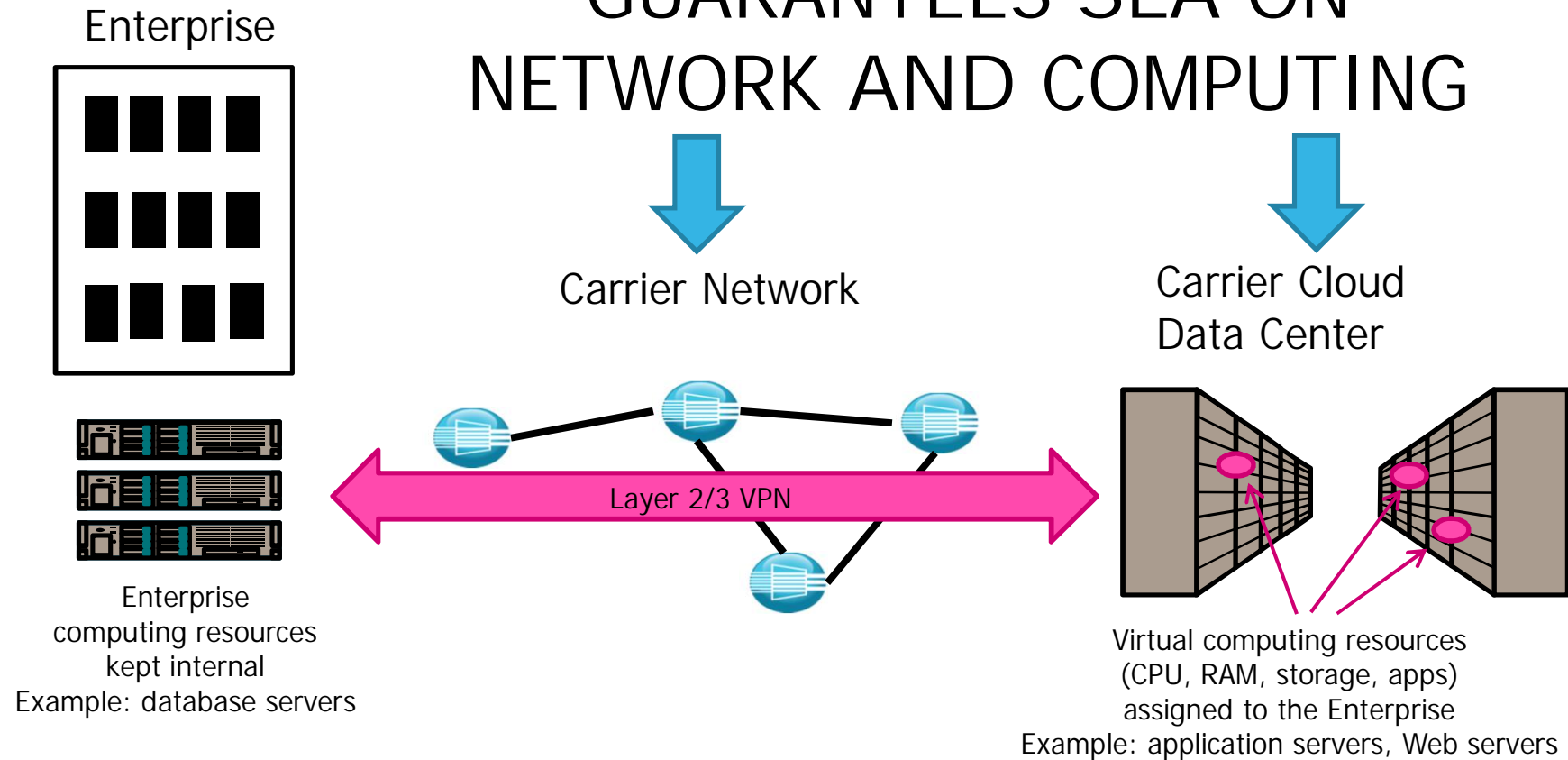
WHAT PREVENTS ADOPTION? LACK OF END-TO-END SLA

WOULD YOU RUN MAINSTREAM BUSINESS APPLICATIONS WITH THIS LINK IN THE MIDDLE?

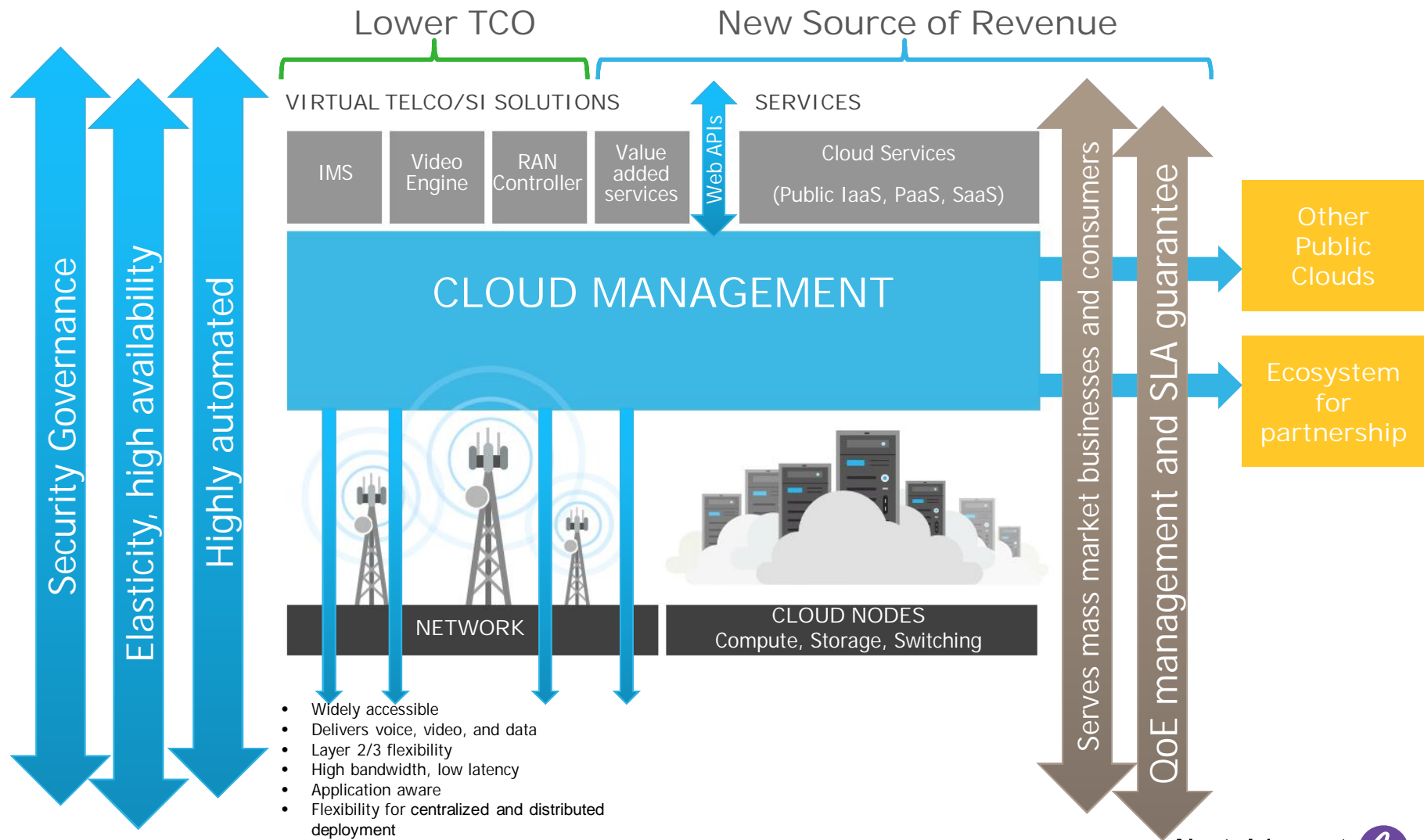


CARRIER CLOUD WITH AN END-TO-END SLA

THE CARRIER CLOUD GUARANTEES SLA ON NETWORK AND COMPUTING



THE CARRIER CLOUD



AT THE SPEED OF IDEAS

FIRST CARRIER CLOUD EXAMPLES

AT&T



- February 13, 2012, Introducing AT&T's "Virtual Private Cloud"
 - <http://www.att.com/gen/press-room?pid=22362&cdvn=news&newsarticleid=33844>
 - "The new enterprise-class cloud service combines technologies from virtual private networking (VPN) industry leader AT&T and cloud infrastructure software industry leader VMware."
 - "Like AT&T's other cloud offers, this new cloud capability is embedded directly into its network. This means compute and storage services can be scaled, managed, routed and delivered to business customers, down to virtually any fixed or mobile device, quickly and flexibly, on demand, with enterprise-grade security and performance."
 - "The service allows VMware's more than 350,000 customers to extend their private clouds across and into AT&T's network-based cloud using AT&T's industry leading VPN. The benefits of this "virtual private cloud" include the flexibility and cost efficiencies of using private and public cloud systems interchangeably and strategically."



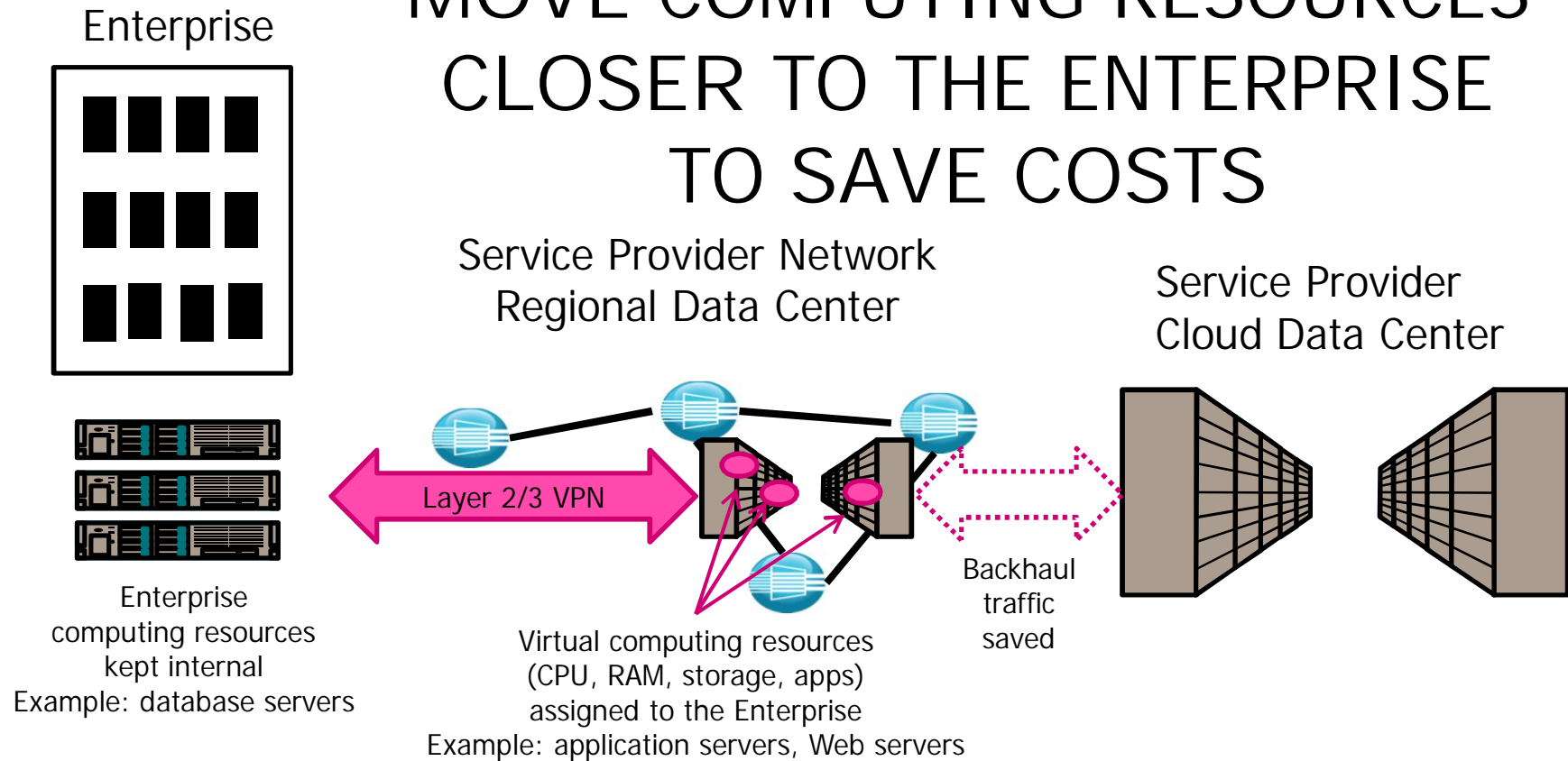
FIRST CARRIER CLOUD EXAMPLES ORANGE BUSINESS SERVICES



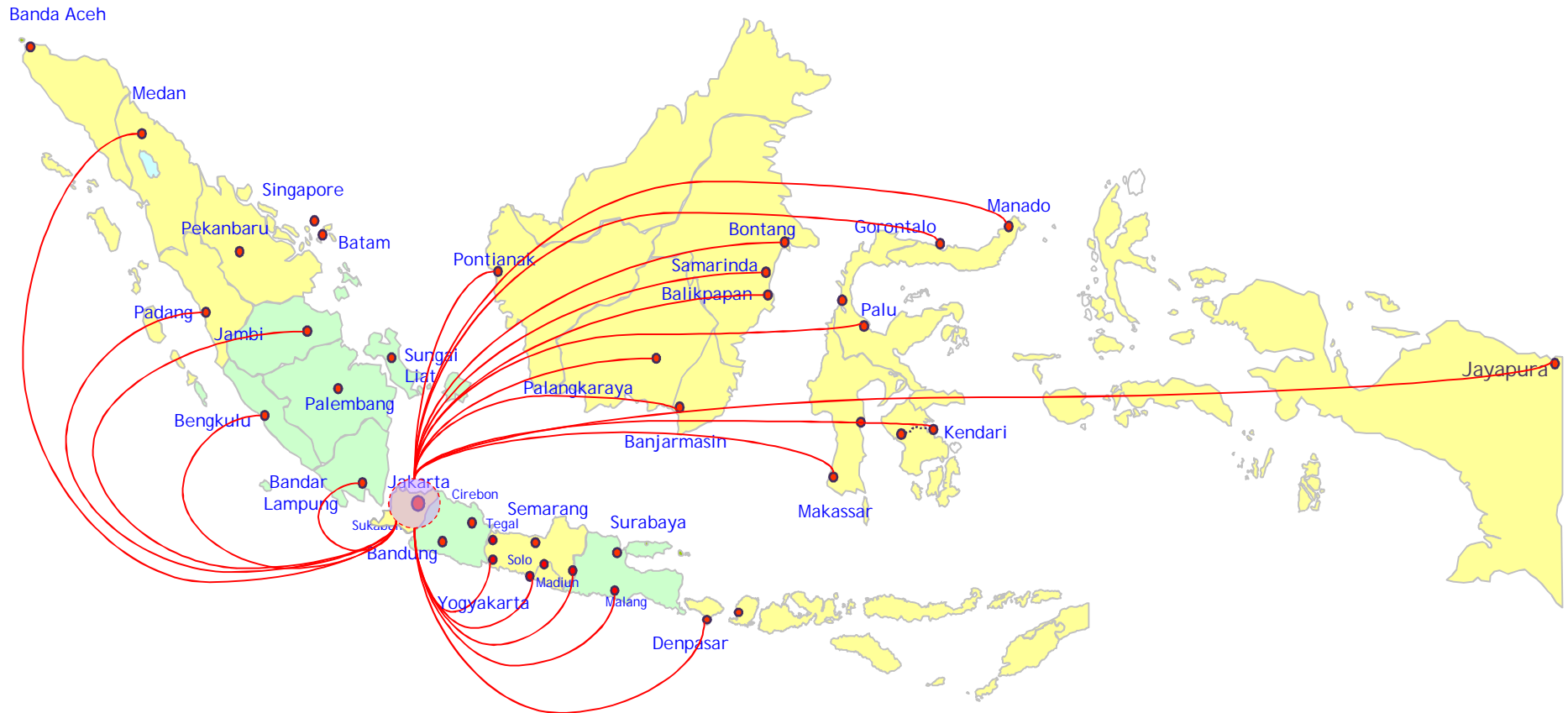
- Extract from Orange Business Services website
 - <http://www.orange-business.com/en/mnc2/themes/cloud-computing/approach/>
 - “Our ambition is to make it easy for you to access the IT resources you need, by providing a one-stop-shop to a range to our services and those from selected partners. By taking an integrated approach, we can deliver business applications and IT infrastructure-as-a-service with an end-to-end service level agreement (SLA).”
 - <http://www.orange-business.com/en/mnc2/themes/cloud-computing/cloud-ready-networking/>
 - “For most of our customers looking for cloud computing solutions, the security and performance of the public Internet is not enough to support critical applications around the clock. Combining our acclaimed Business VPN service and Business Acceleration, our application performance management suite, we provide a network service which offers application-specific performance backed by strong service level agreements.”

CARRIER CLOUD OPTIMAL RESOURCE PLACEMENT

MOVE COMPUTING RESOURCES CLOSER TO THE ENTERPRISE TO SAVE COSTS

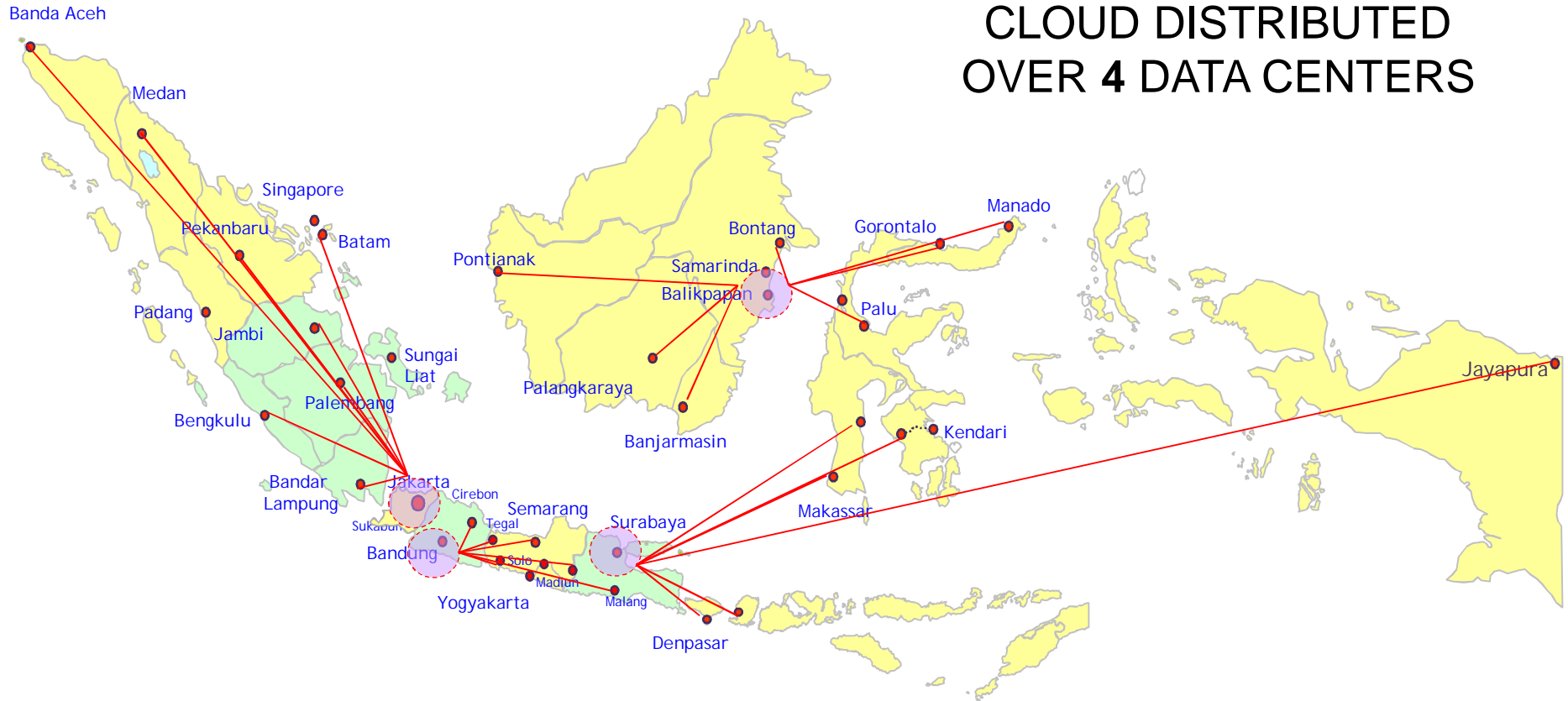


EXAMPLE OF A CENTRALIZED CLOUD ALL TRAFFIC BACKHAULED TO THE CENTER



THE CLOUD BACKHAUL TRAFFIC CAN BECOME EXPENSIVE

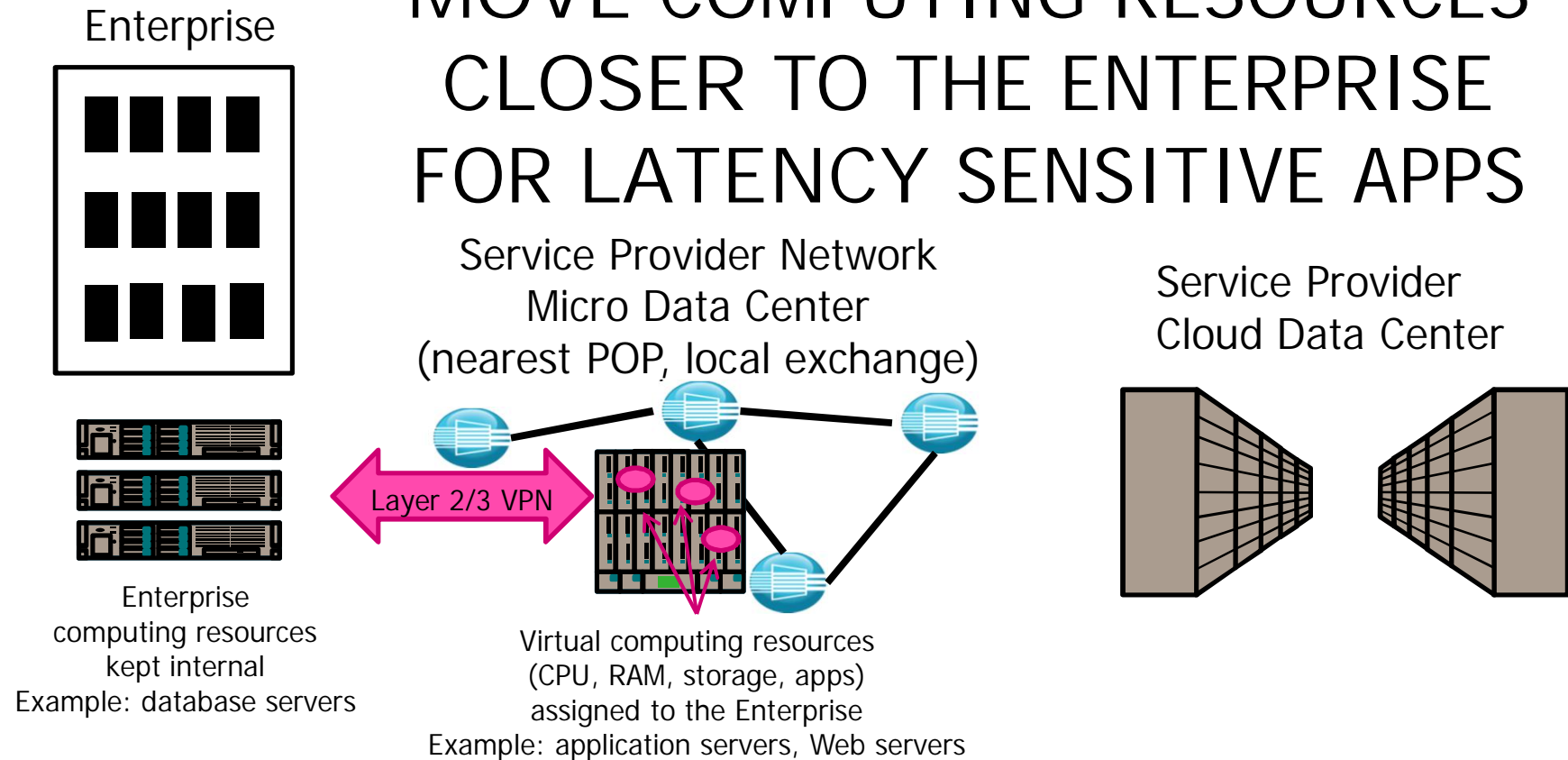
EXAMPLE OF A DISTRIBUTED CLOUD MORE CLOUD TRAFFIC KEPT LOCAL



**FOR POPULAR OR NETWORK INTENSIVE CLOUD APPLICATIONS,
THE BACKHAUL SAVINGS OVERCOME THE COST OF DISTRIBUTING
THE CLOUD**

CARRIER CLOUD OPTIMAL RESOURCE PLACEMENT

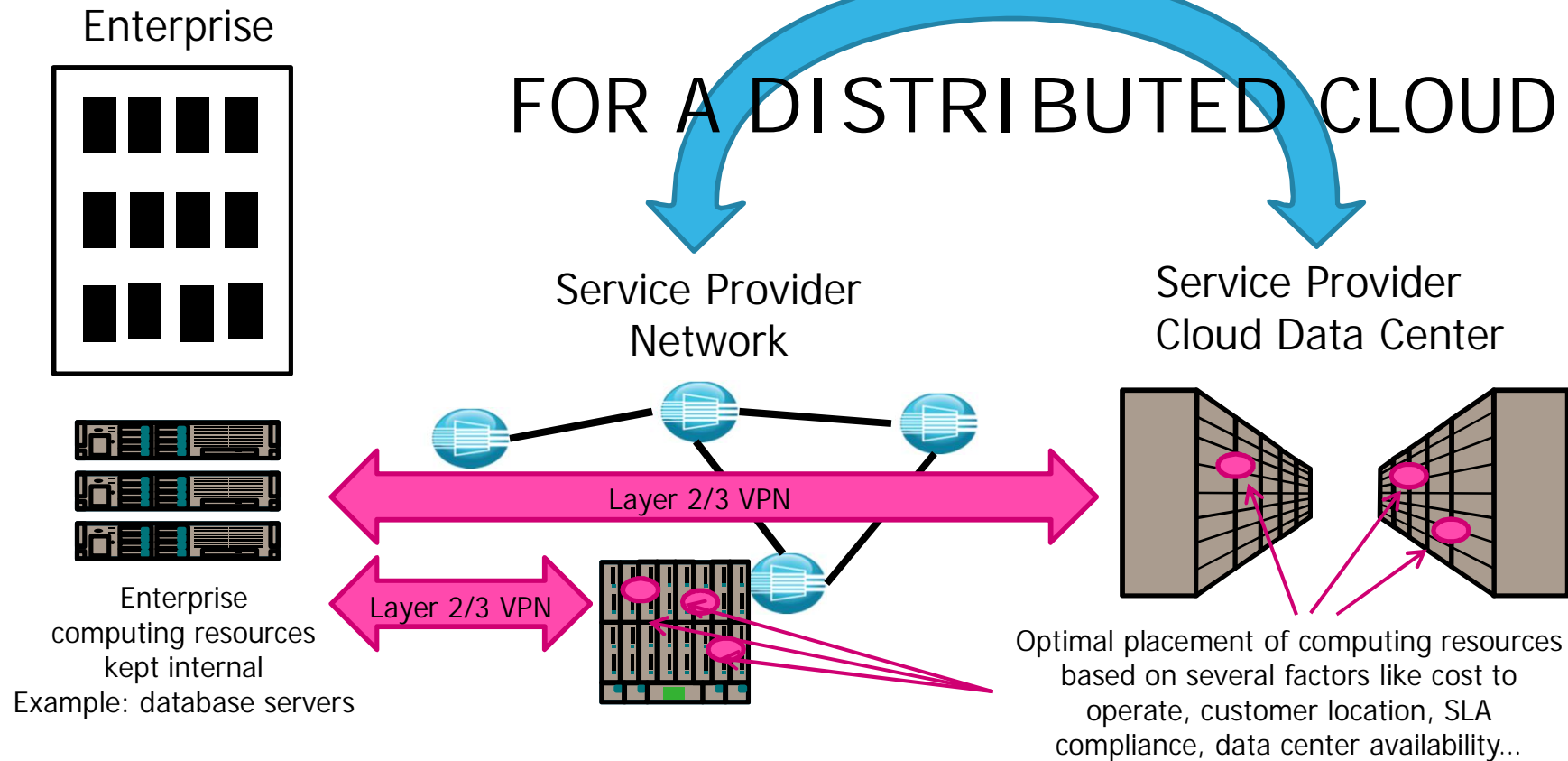
SERVICE PROVIDER CAN MOVE COMPUTING RESOURCES CLOSER TO THE ENTERPRISE FOR LATENCY SENSITIVE APPS



THE CARRIER CLOUD – DISTRIBUTED

SYNCHRONIZED DELIVERY OF NETWORK AND COMPUTING

FOR A DISTRIBUTED CLOUD



CARRIER CLOUD CONCLUSION

- Concerns about performance and security prevent massive adoption by enterprises of public Cloud services
- Existing Cloud offerings don't offer end-to-end Service Level Agreements (SLA)
- Carriers can fill the gap by developing the Carrier Cloud
 - Manage both the network and computing to deliver an end-to-end SLA
 - Distribute computing resources to save costs and provide differentiated Cloud services
 - Automation of computing and network delivery to reach the price points and elasticity expected by enterprises
 - A multiservice Cloud management system that smartly combines compute and IT resources with customer requirements and network intelligence.

AT
THE
SPEED
OF
IDEAS

www.alcatel-lucent.com