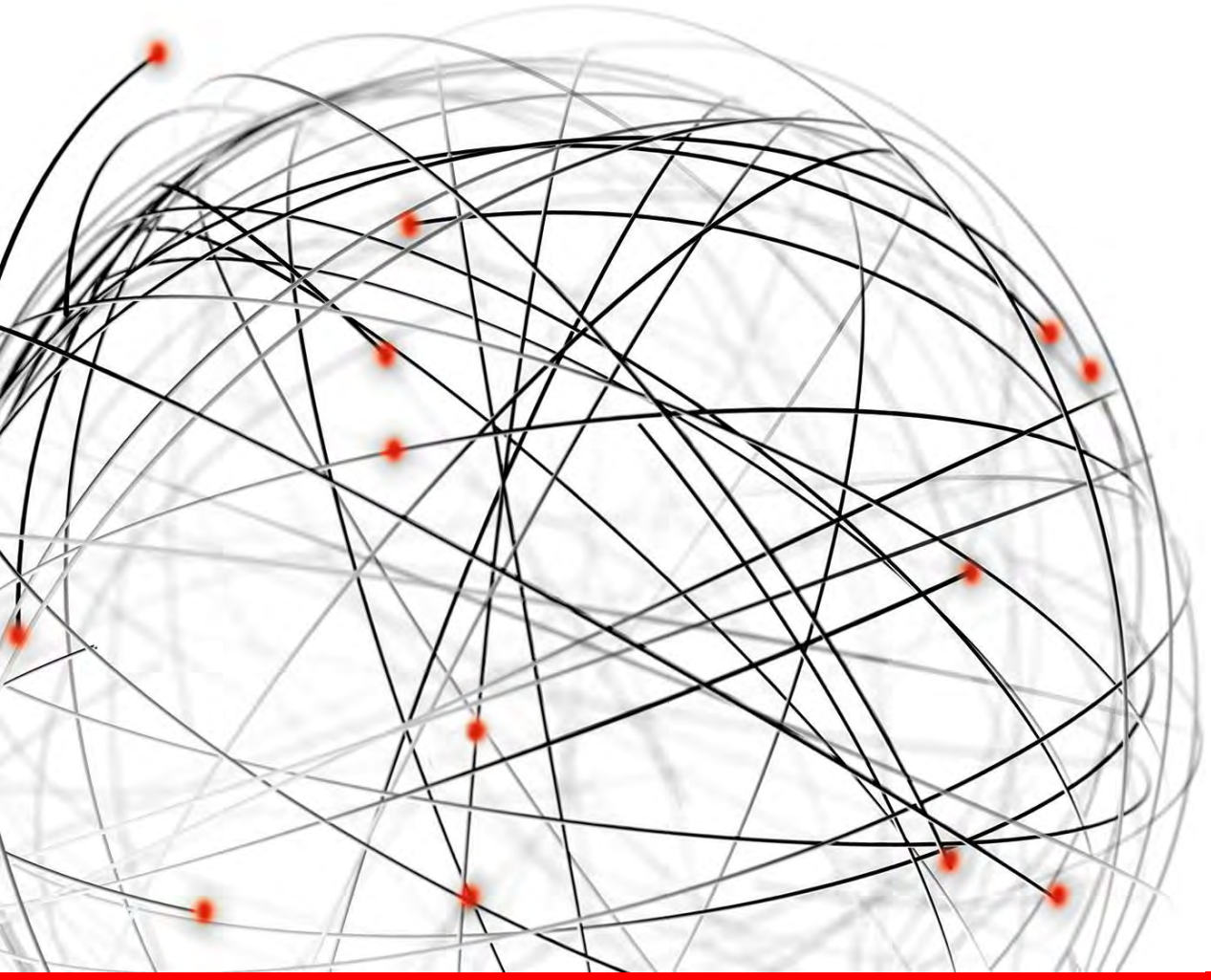


EQUINIX

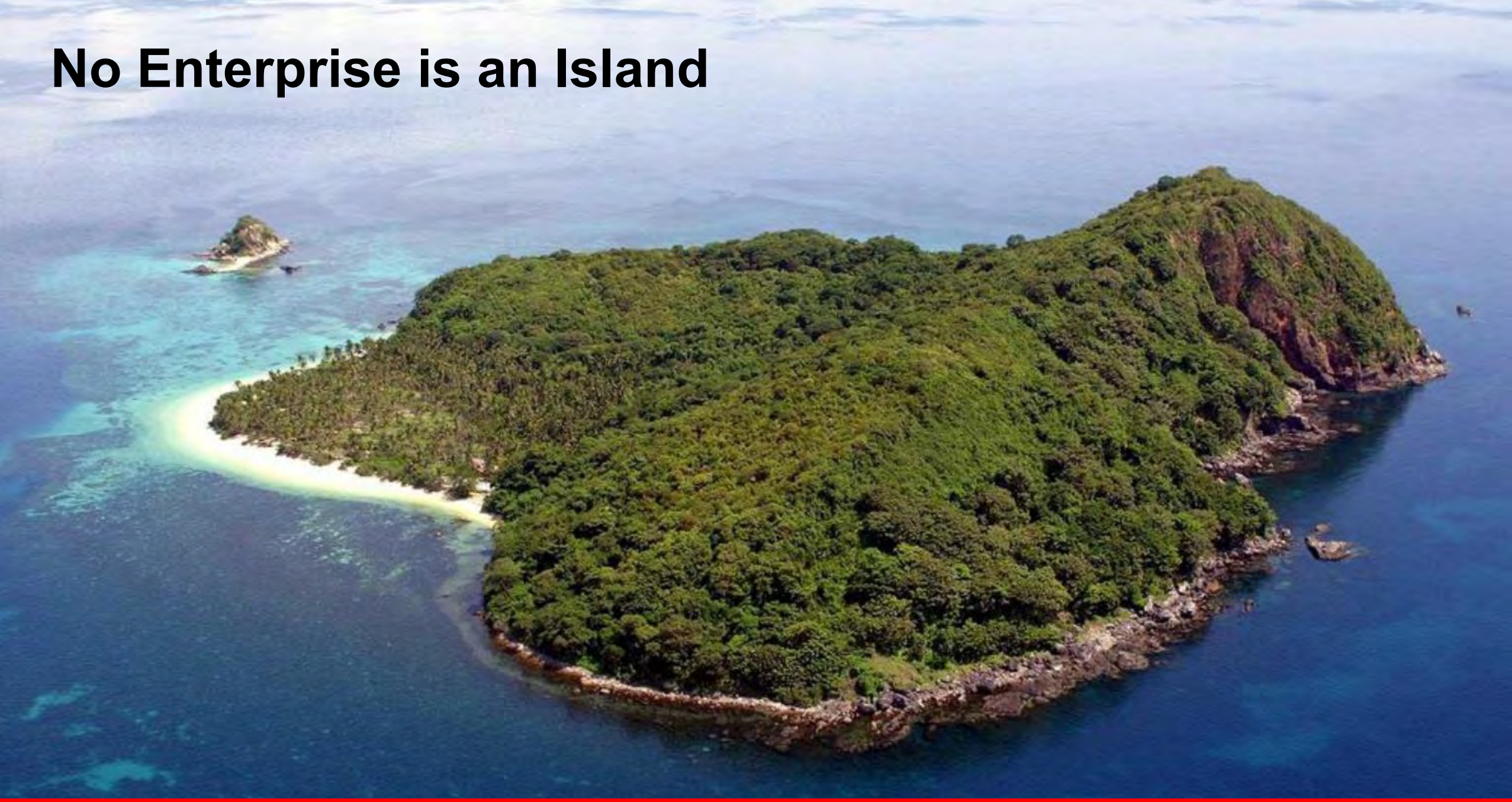
Build hybrid/multicloud architecture using private connection to Oracle Cloud

Jason Sherwood, Director, Global Solutions Architecture

Presented on: October 2, 2017

Our **lack of flexibility** is hurting us more than we know, and the **pain is growing exponentially**.

No Enterprise is an Island



Interconnection is Essential

By 2020, the Global Interconnection Index predicts Interconnection Bandwidth will outpace the growth of internet traffic by 2X and 6X the volume

Interconnection Bandwidth Growth…

IS EXPECTED TO GROW BY

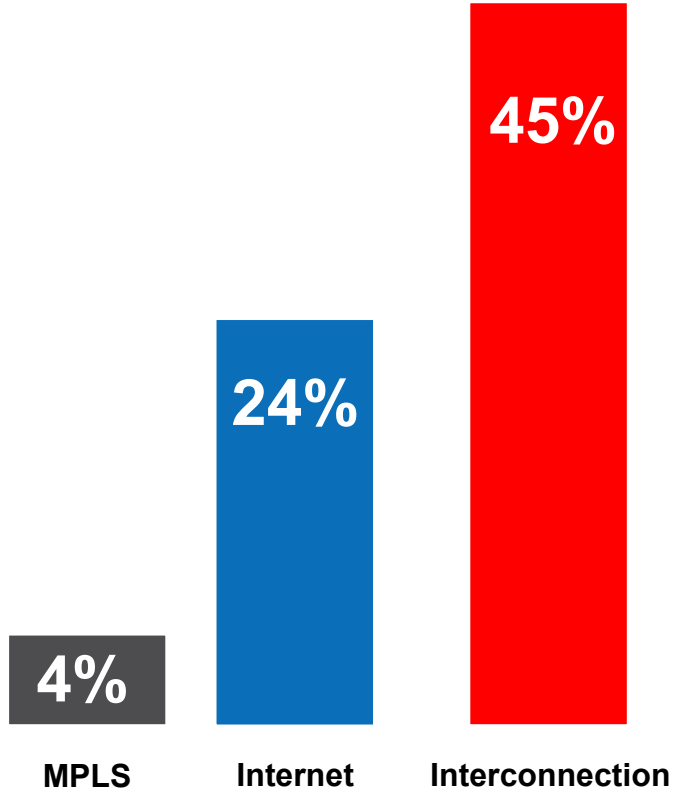
45%

TO

5000 TBPS

OF INSTALLED BANDWIDTH

…Is Expected to Outpace the Growth of internet & MPLS Traffic



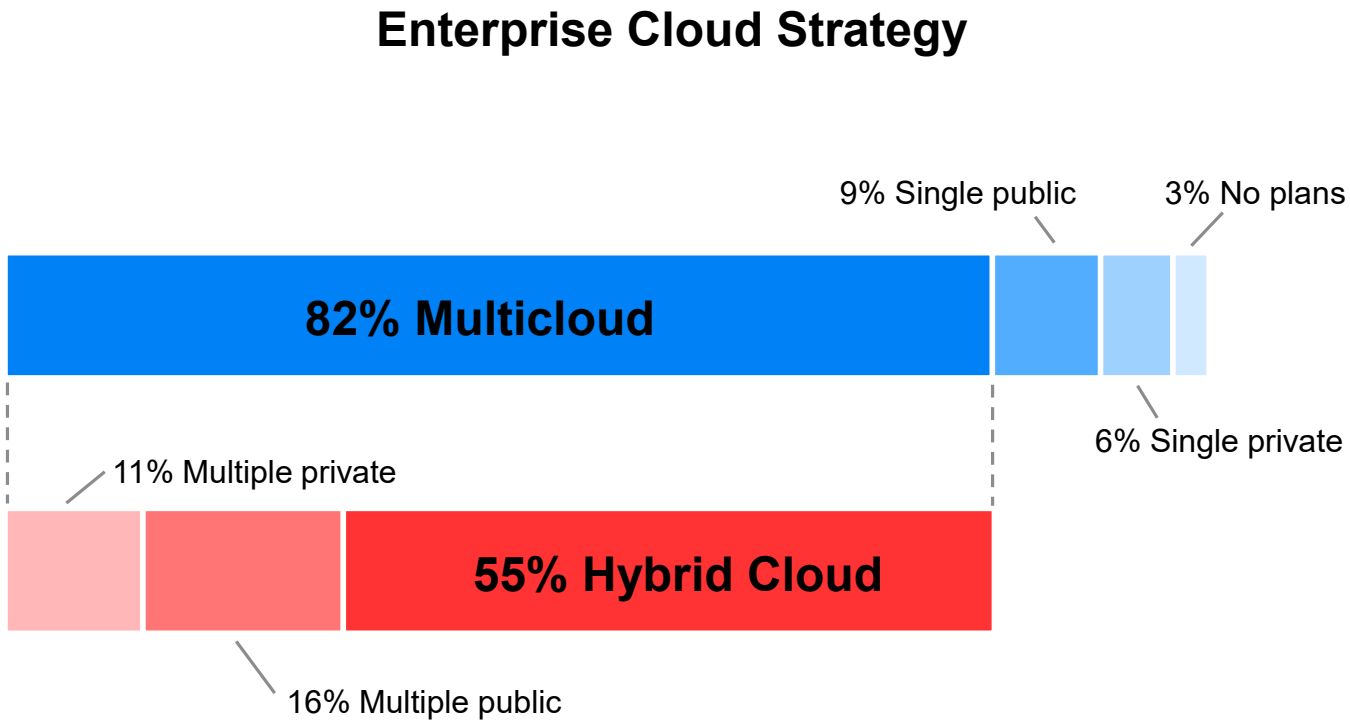
5000 TBPS of Interconnection Bandwidth in One Minute Could Concurrently Process

1.9B	PayPal Transactions
4.5M	Uber Driver Streams
50B	IoT Device Streams
18.8B	Emails with Attachments
938K	Corporate Training Videos
837M	UCC Calls
825M	Document Uploads
35M	Pre-Production 4K Video Streams

Interconnection Bandwidth is defined as the total capacity provisioned to privately and directly exchange traffic with a diverse set of counterparties and providers at distributed IT exchange points

Enterprises Continue to Adopt Hybrid and Multicloud

A majority of enterprises have hybrid and multicloud strategies already in place



Hybrid Cloud

- 55% of enterprises have a hybrid cloud strategy

Multicloud

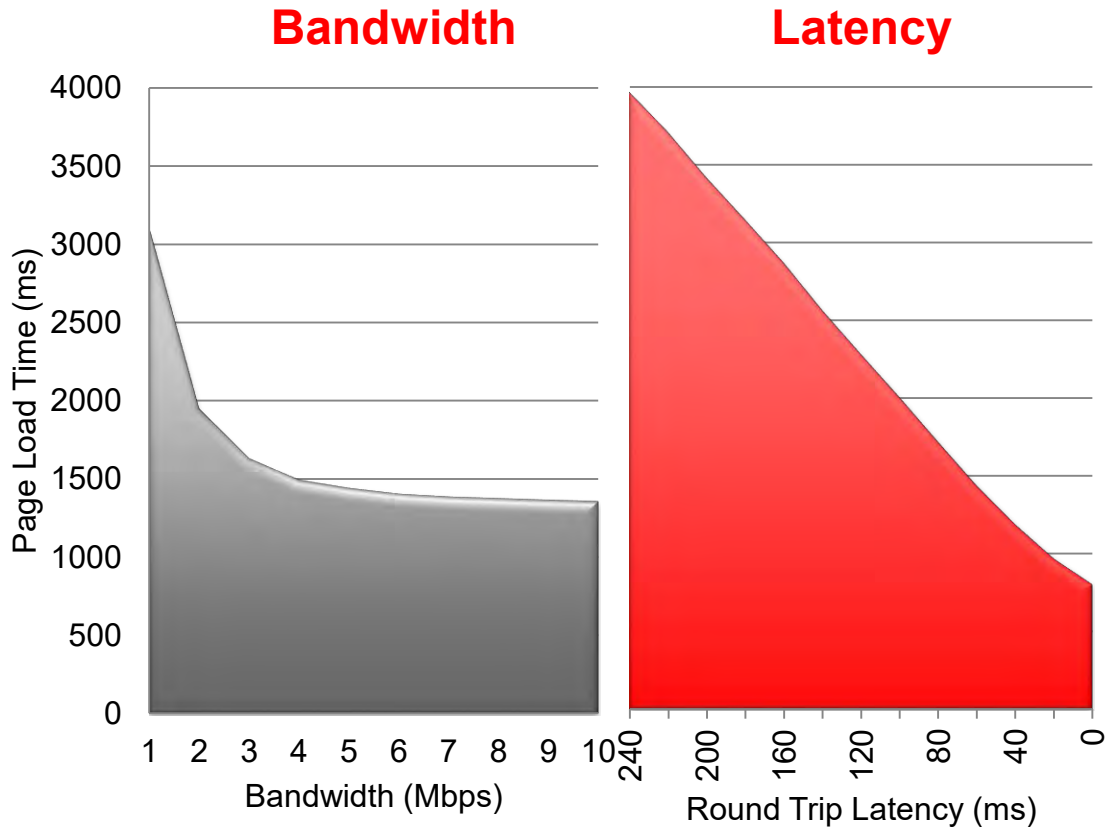
- 82% of enterprises have a multicloud strategy
- Cloud users leverage 6 clouds on average

Source: RightScale 2016 State of the Cloud Report

Proximity Matters

Distributed delivery improves performance

Globally distributed service delivery gets you closer to users



Source: Mike Belshe, Google, “More Bandwidth Doesn’t Matter (much)”

Oracle Cloud Infrastructure FastConnect at Equinix

Connectivity matters

Interconnection drives performance

Equinix Cloud Exchange™

Application and data portability

Customer Premises

On-premises
- Database
- Fusion Middleware
- Applications

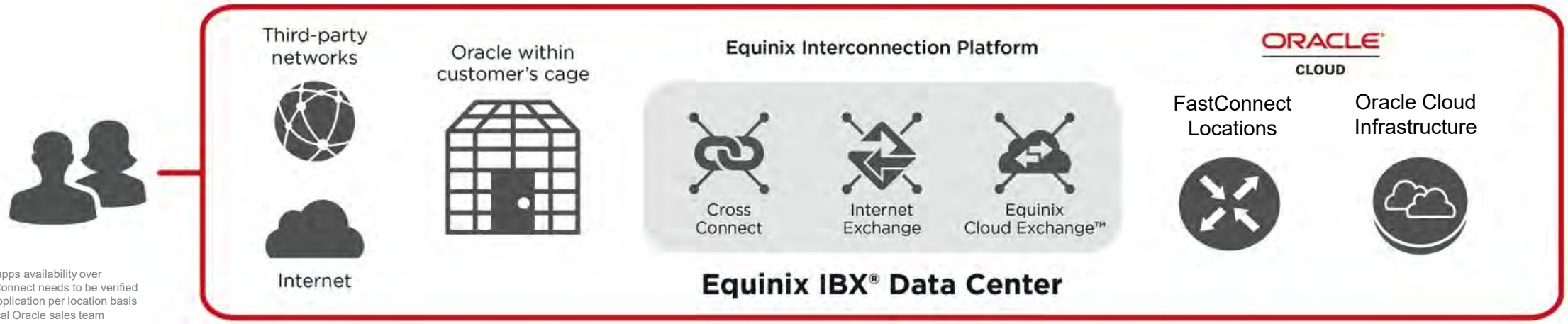
Cloud at customer
- Cloud Machine
- Exadata Cloud Machine
- Big Data Cloud Machine

Oracle Cloud Infrastructure

IaaS
- Elastic Compute
- Storage

PaaS
- Database
- IoT
- Java

SaaS*
- HCM
- SCM
- ERP

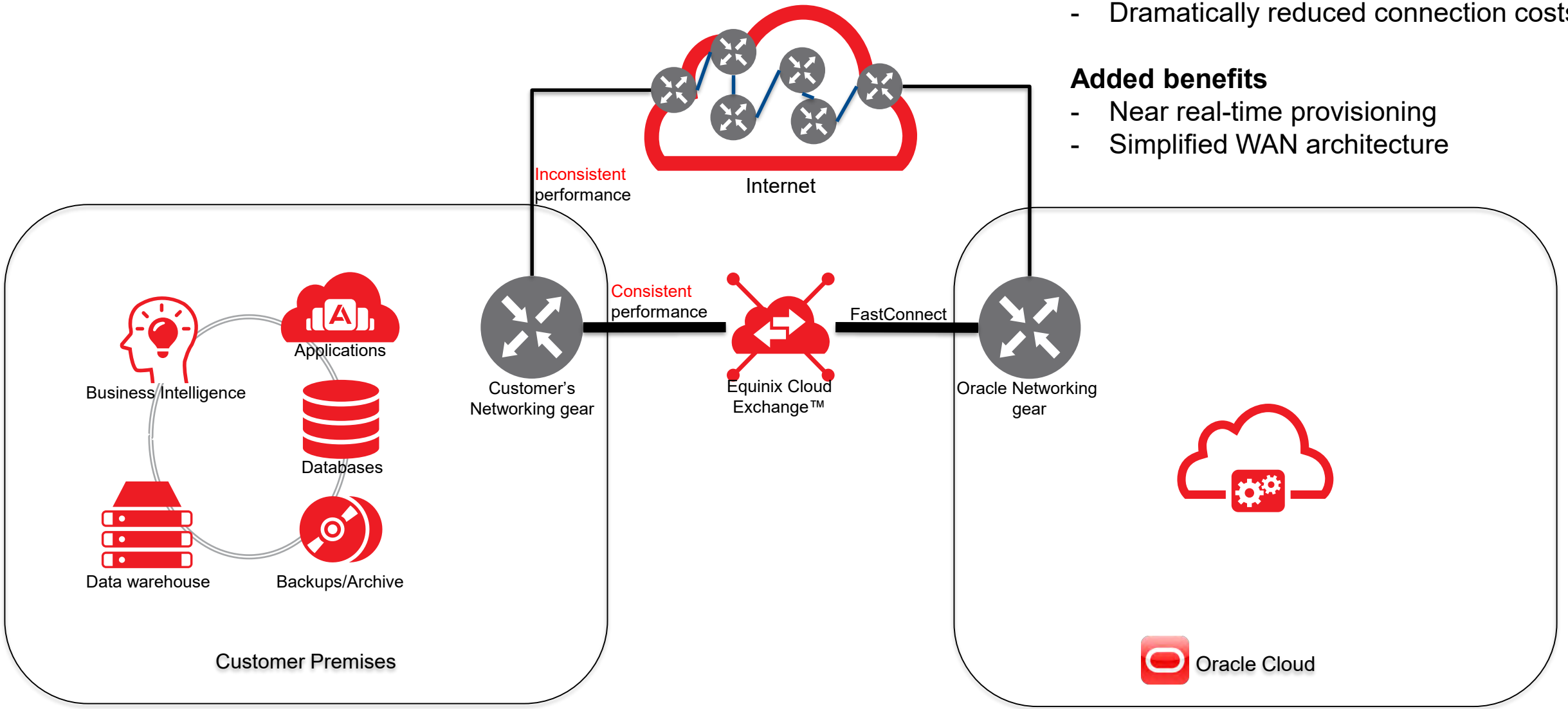


* SaaS apps availability over FastConnect needs to be verified per application per location basis by local Oracle sales team

Hybrid Cloud Solutions

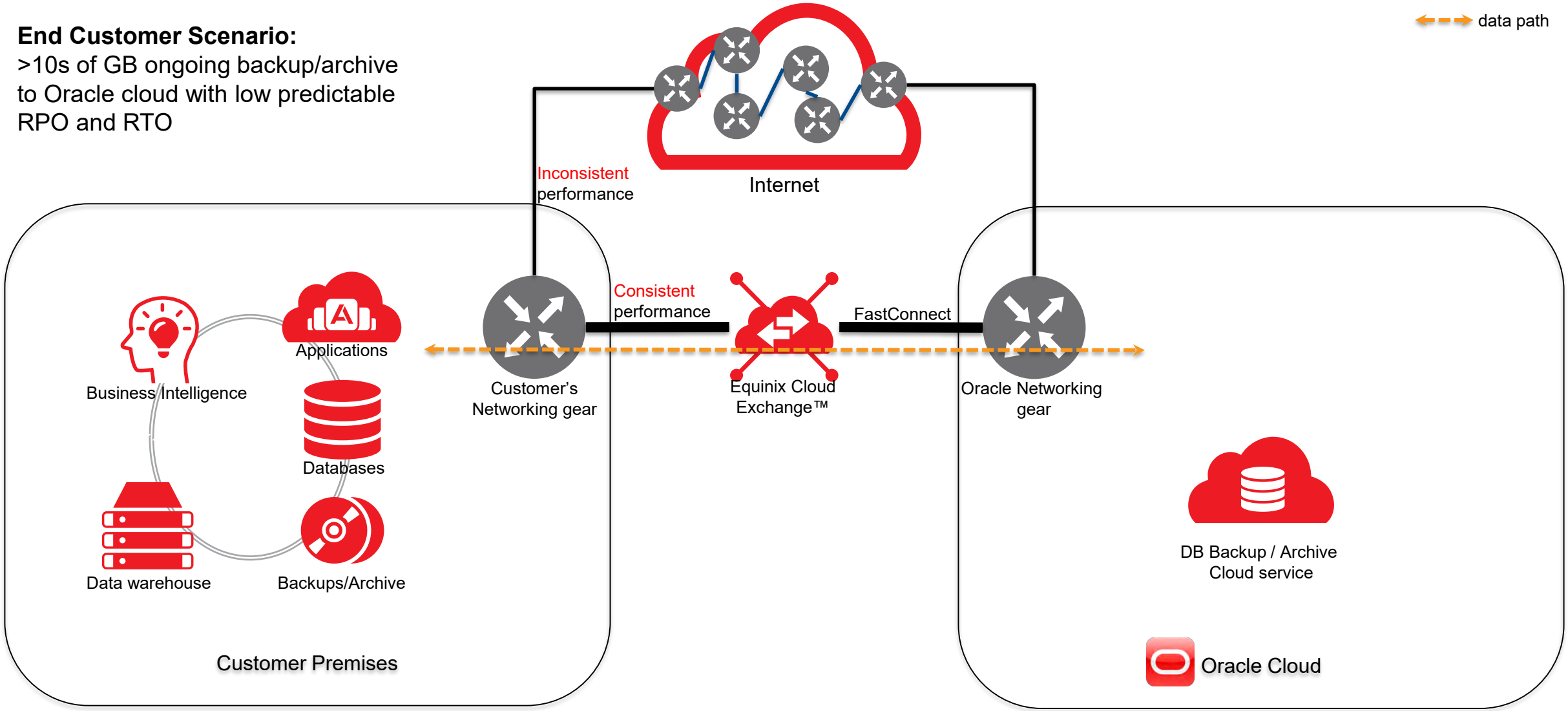
Bypass the public internet
- High throughput
- Low latency
- Dramatically reduced connection costs

Added benefits
- Near real-time provisioning
- Simplified WAN architecture



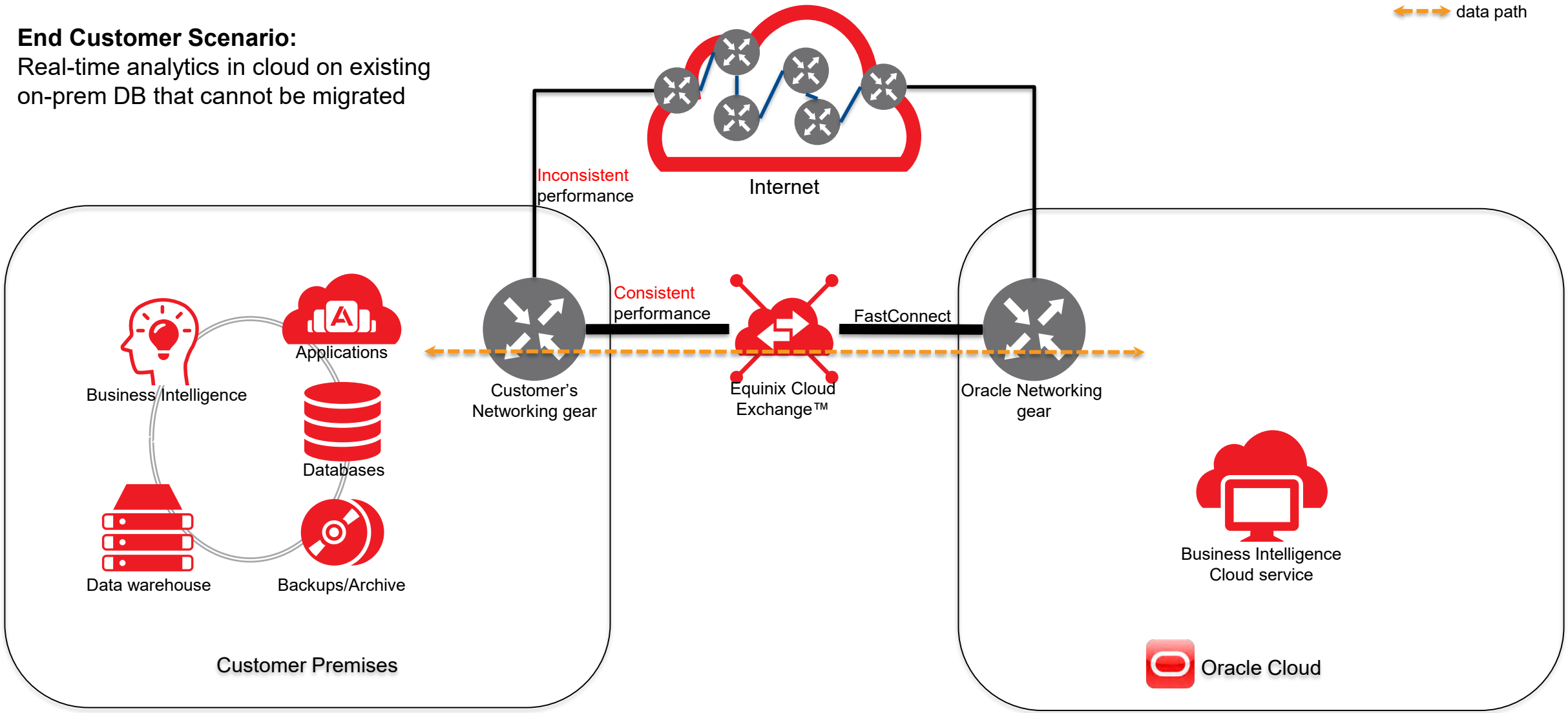
High-throughput Use Case: DB Backup Cloud Service

End Customer Scenario:
>10s of GB ongoing backup/archive to Oracle cloud with low predictable RPO and RTO



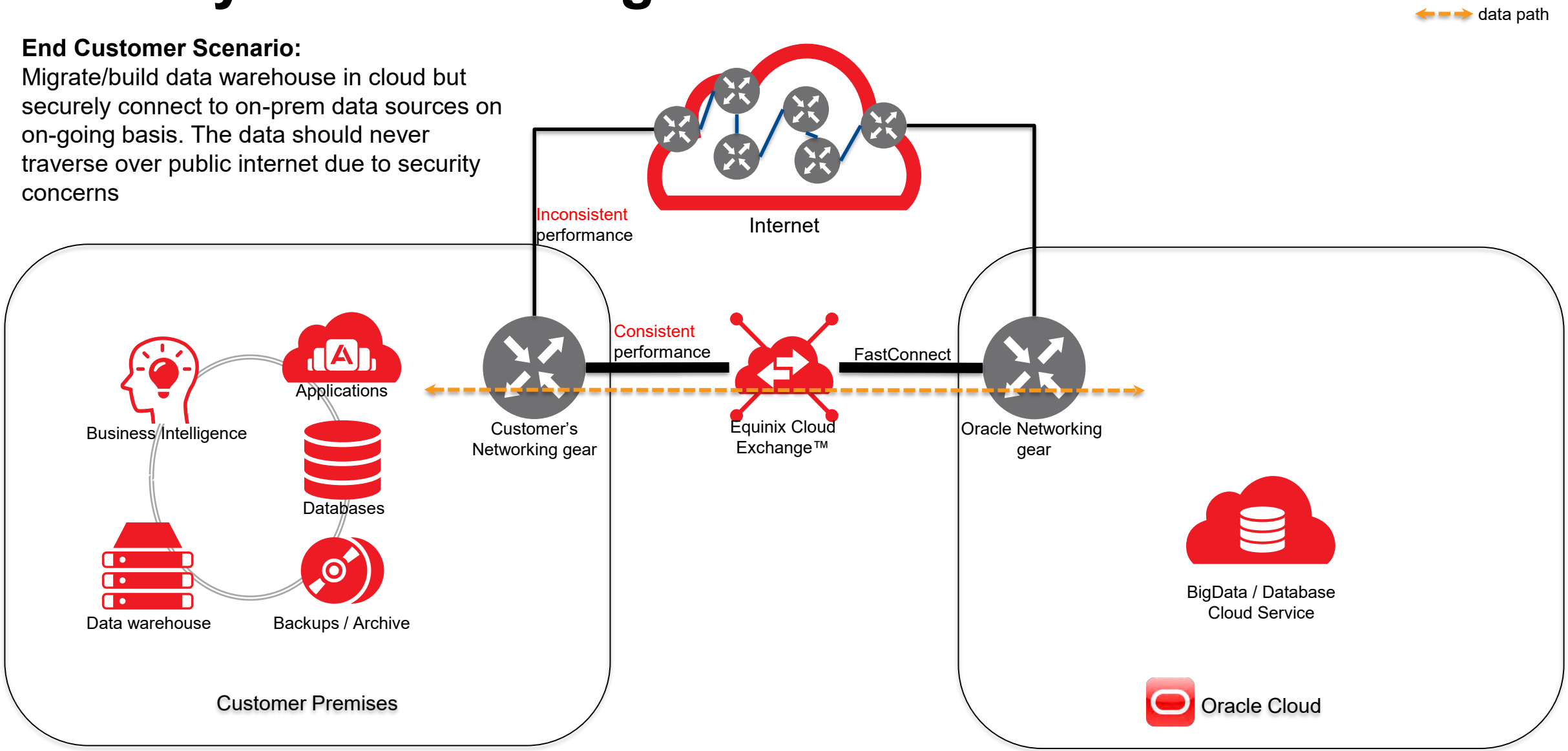
Low Predictable Latency Real-time Analytics

End Customer Scenario:
Real-time analytics in cloud on existing on-prem DB that cannot be migrated

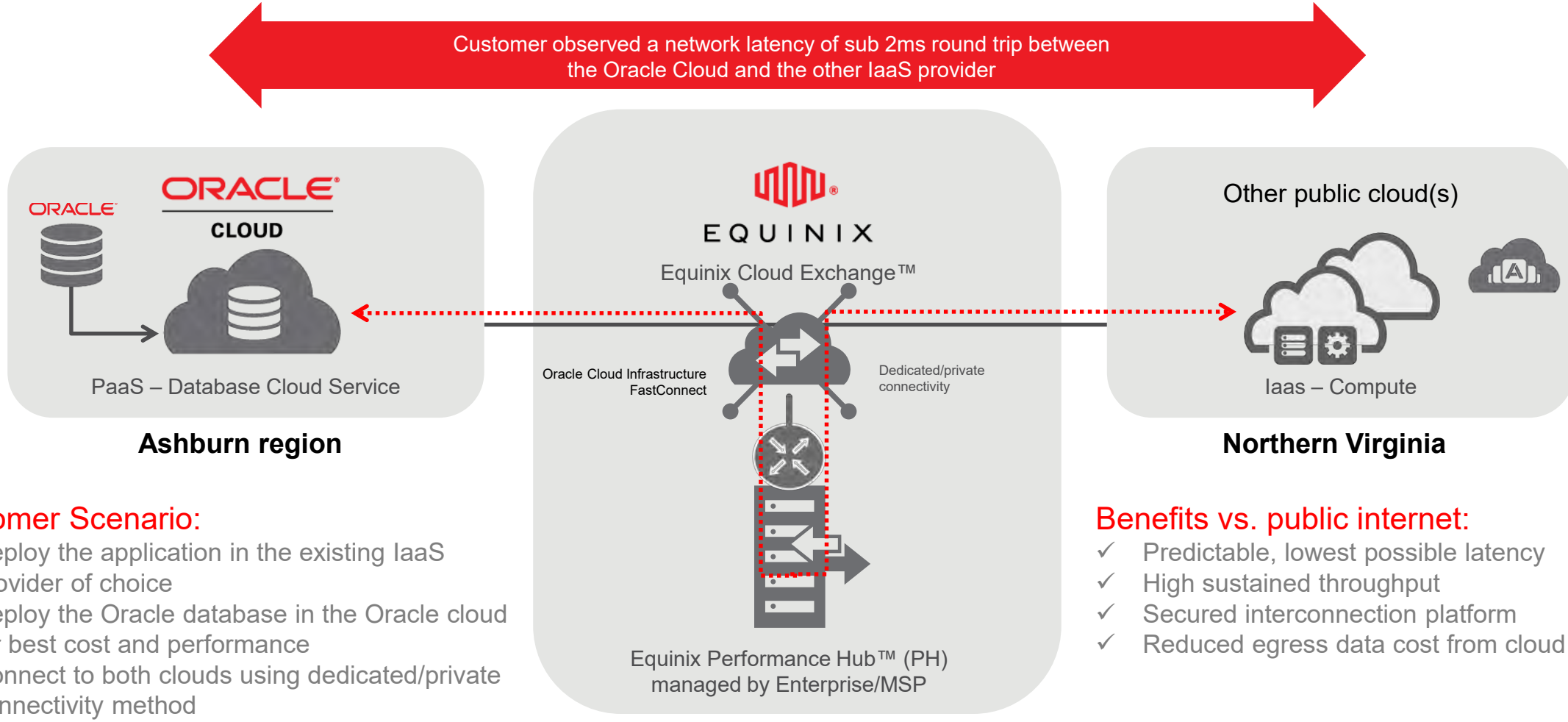


Security Use Case: Big Data/DBCS

End Customer Scenario:
Migrate/build data warehouse in cloud but securely connect to on-prem data sources on on-going basis. The data should never traverse over public internet due to security concerns



Multicloud Case Study: Database in Oracle® Public Cloud; Application in Another Public Cloud



Customer Scenario:

- ✓ Deploy the application in the existing IaaS provider of choice
- ✓ Deploy the Oracle database in the Oracle cloud for best cost and performance
- ✓ Connect to both clouds using dedicated/private connectivity method

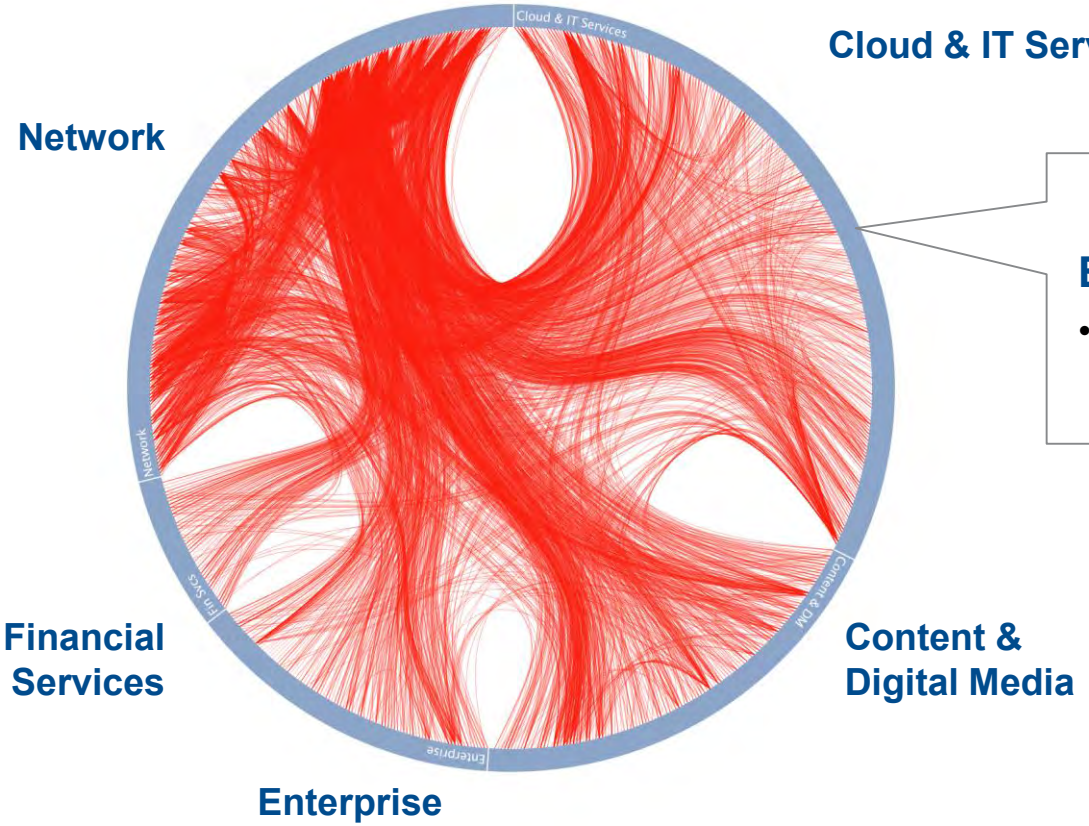
Benefits vs. public internet:

- ✓ Predictable, lowest possible latency
- ✓ High sustained throughput
- ✓ Secured interconnection platform
- ✓ Reduced egress data cost from cloud provider

Ecosystems: Silicon Valley

Rich, cross-vertical connectivity: network, content, financial, cloud and enterprise

Silicon Valley 2010 – Current



Ecosystem Evolution

- Cloud-enabled enterprise

Hybrid Cloud Models

Combination of select services leads to hybrid cloud deployment using Equinix Interconnection Platform

Lift & shift

DB upgrades

Data marts & analytical apps

Dev/test & mobile app dev

Cloud native & containers

iPaaS integration

Big data

Multicloud

IoT

Customer Cage in Equinix	Equinix Interconnection Platform	Oracle Services accessed via Oracle® FastConnect

On premises

Database
Fusion Middleware
Oracle Applications
Engineered Systems
Exadata Database Machine
Big Data Machine
Enterprise Management

Cloud at customer

Oracle® Cloud Machine
Exadata Cloud Machine
Big Data Cloud Machine

Cross Connects

Cloud Exchange™

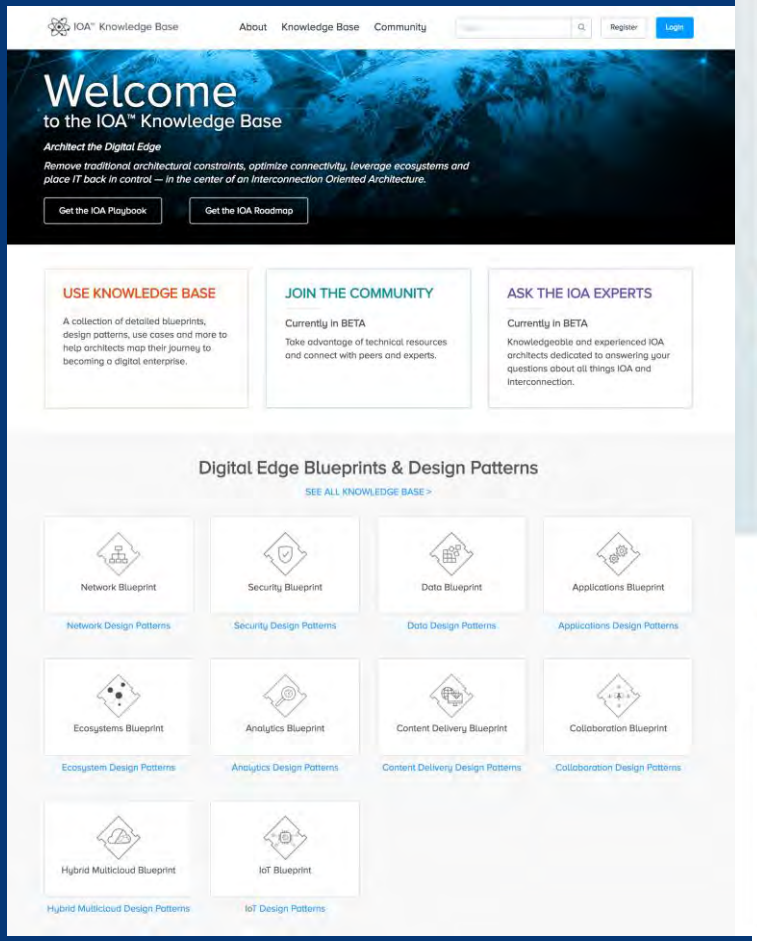
Internet Exchange

Oracle® Public Cloud

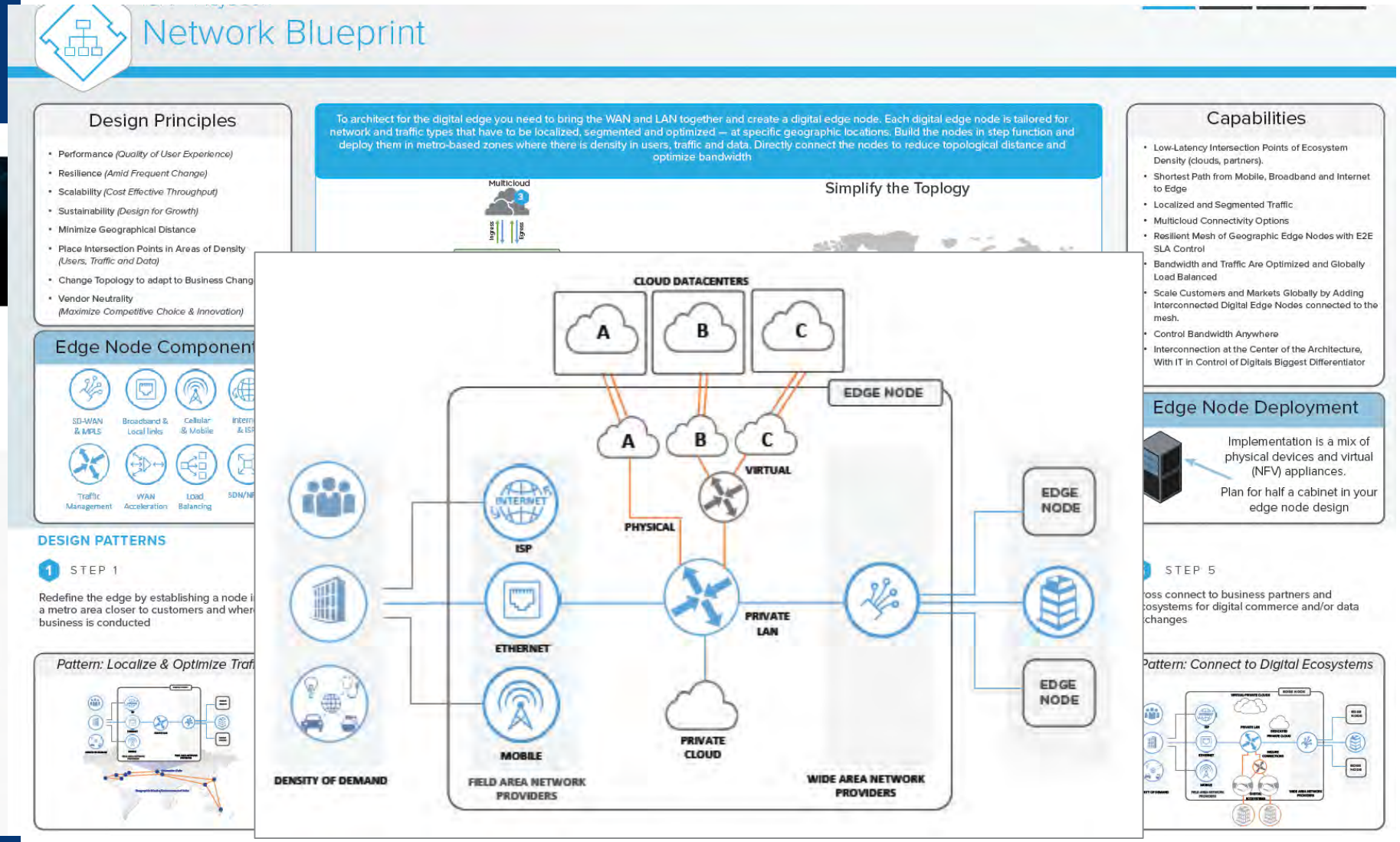
IaaS	PaaS	SaaS
Compute—Elastic Compute	Data—Database	ERP
Compute—Container Service	Data—DB backup	Human Capital Management
Compute—Ravello	Big Data/BD preparation	Data
Compute—Dedicated	Management Cloud	Analytics
Compute—Engineered System	Golden Gate	Customer Experience
Storage—NVMe	IoT	Industry Solutions
Storage—Object	API Platform	Supply Chain
Storage—Archive	Business Intelligence	EPM
Cloud Loud Balancing	Mobile	Social

IOA™ Knowledge Base & Community

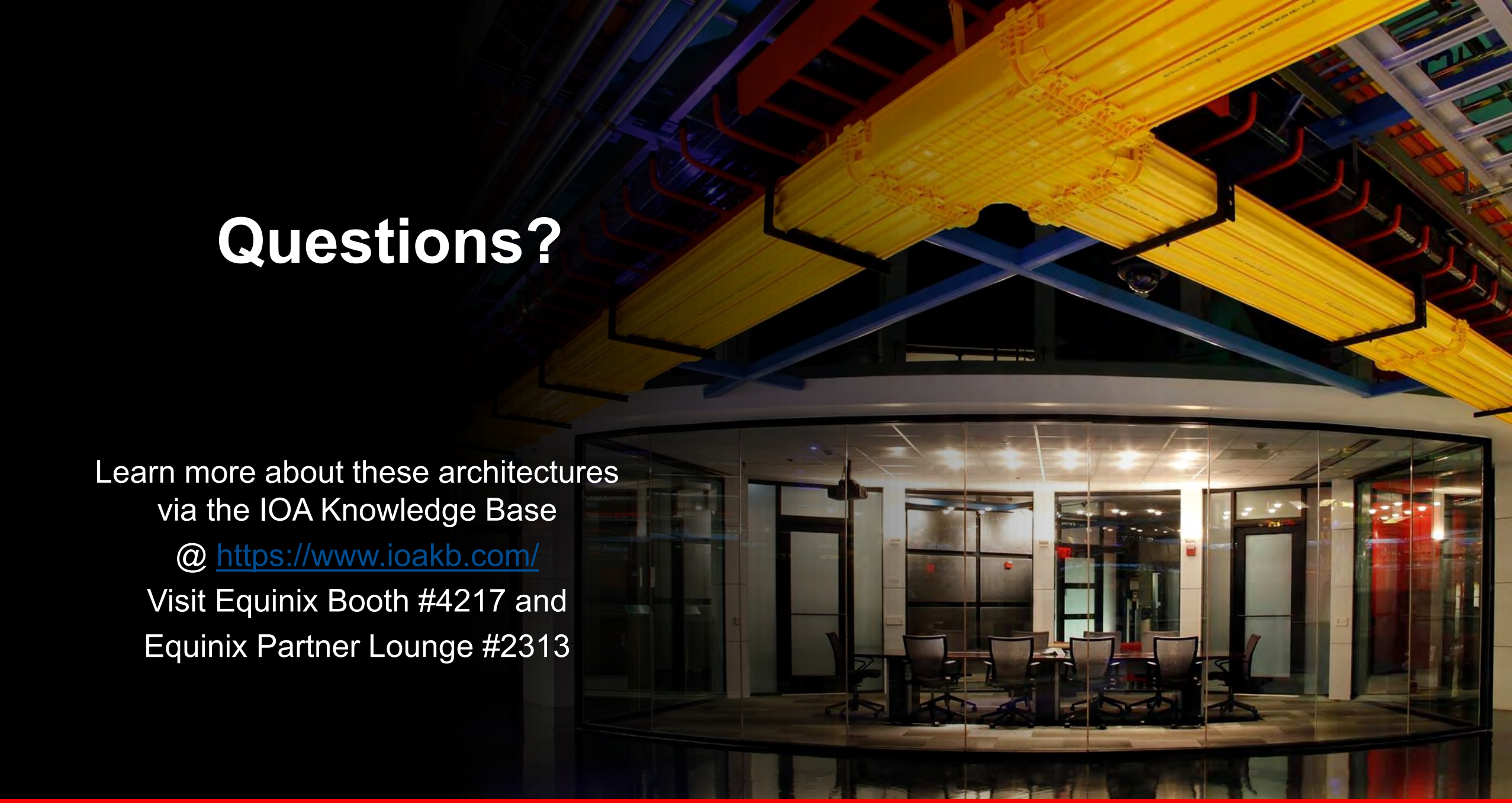
IOAKB.COM



Designs & best practices available as blueprints and steps in the IOA Knowledge Base



Questions?



Learn more about these architectures via the IOA Knowledge Base @ https://www.ioakb.com/

Visit Equinix Booth #4217 and Equinix Partner Lounge #2313

EQUINIX

WHERE OPPORTUNITY CONNECTS

Cloud Exchange Locations

Available in 20+ top metros globally