



Business Continuity Plan with AWS

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近年來發生許多難以預料的**突發災難**，引發**營運韌性**的省思

CATEGORIES OF DISASTER



流行病
Pandemic



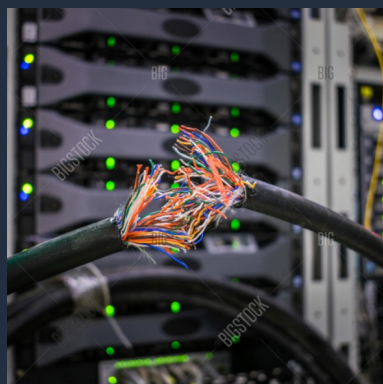
網路攻擊
Cyber Attacks



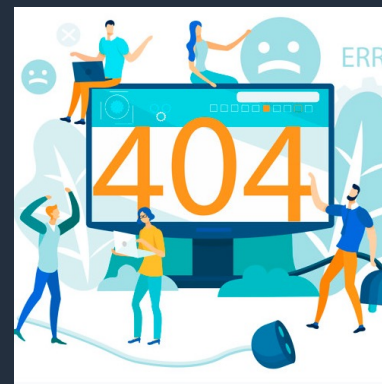
自然災害
Natural Disasters



基礎設施異常
Infrastructure
Exceptions



實體損壞
Technical
Failures



人為疏失
Human actions

營運持續計畫

BUSINESS CONTINUITY PLAN

• 業務影響分析 Business impact analysis

- 中斷的成本是多少？
What is the cost of disruption?
- 相關系統的影響範圍？
What is the blast radius?

• 風險評估 Risk assessment

- 有哪些風險？
Which risks?
- 可能性有多高？
How likely?

• 設計災難復原措施進行營運持續規劃

Align DR to Business Continuity Plan

- 處置措施為何？
How will you operate?

\$1.25B to \$2.5B

Fortune 1,000 企業年度
應用程式停機成本 (IDC)
Annual Fortune 1,000 application
downtime costs (IDC)

\$474K

停機時間的平均成本/小時 (Ponemon Institute)
Average cost/hour of downtime
(Ponemon Institute)

\$500K to \$1M

關鍵應用程式故障的每小時成本 (IDC)
Cost/hour of a critical application
failure (IDC)

\$100K

基礎設施故障每小時的平均成本 (IDC)
Average cost/hour of an
infrastructure failure (IDC)

營運持續的關鍵指標

RECOVERY OBJECTIVES

資料復原點

可承擔多長時間的資料遺失或需重建？

環境復原時間

可接受多長時間的停機及其成本？



災難復原策略

STRATEGIES FOR DISASTER RECOVERY



AWS 如何協助您佈局營運持續計畫

Business Continuity Plan (BCP) of AWS

AWS Recognized as a Cloud Leader for the 12th Consecutive Year

Gartner 2022 Magic Quadrant for Cloud Infrastructure & Platform Services (CIPS)



Gartner, Magic Quadrant for Cloud Infrastructure & Platform Services, Raj Bala, Bob Gill, Dennis Smith, Kevin Ji, David Wright, Miguel Angel Borrega 27 June 2022. Gartner and Magic Quadrant are registered trademarks of Gartner, Inc. and/or its affiliates in the U.S. and internationally and is used herein with permission. All rights reserved. Gartner does not endorse any vendor, product or service depicted in its research publications, and does not advise technology users to select only those vendors with the highest ratings. Gartner research publications consist of the opinions of Gartner's research organization and should not be construed as statements of fact. Gartner disclaims all warranties, expressed or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose.

Figure 1: Magic Quadrant for Cloud Infrastructure and Platform Services



“
我們需要建立將故障視為
自然現象的系統

We needed to build systems that embrace failure as
a natural occurrence.

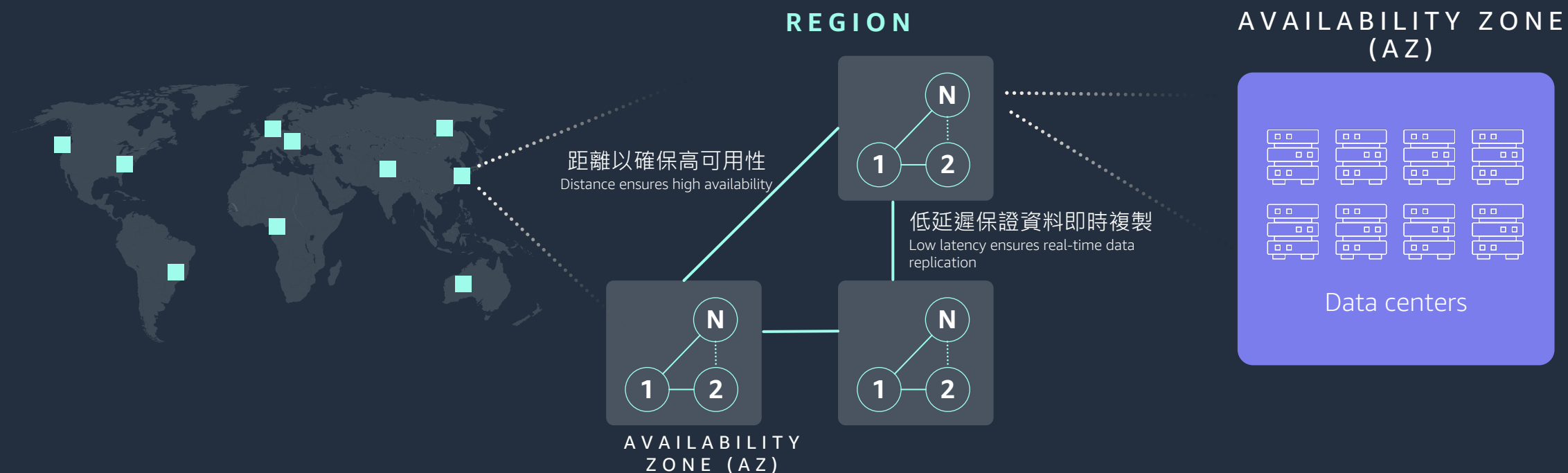
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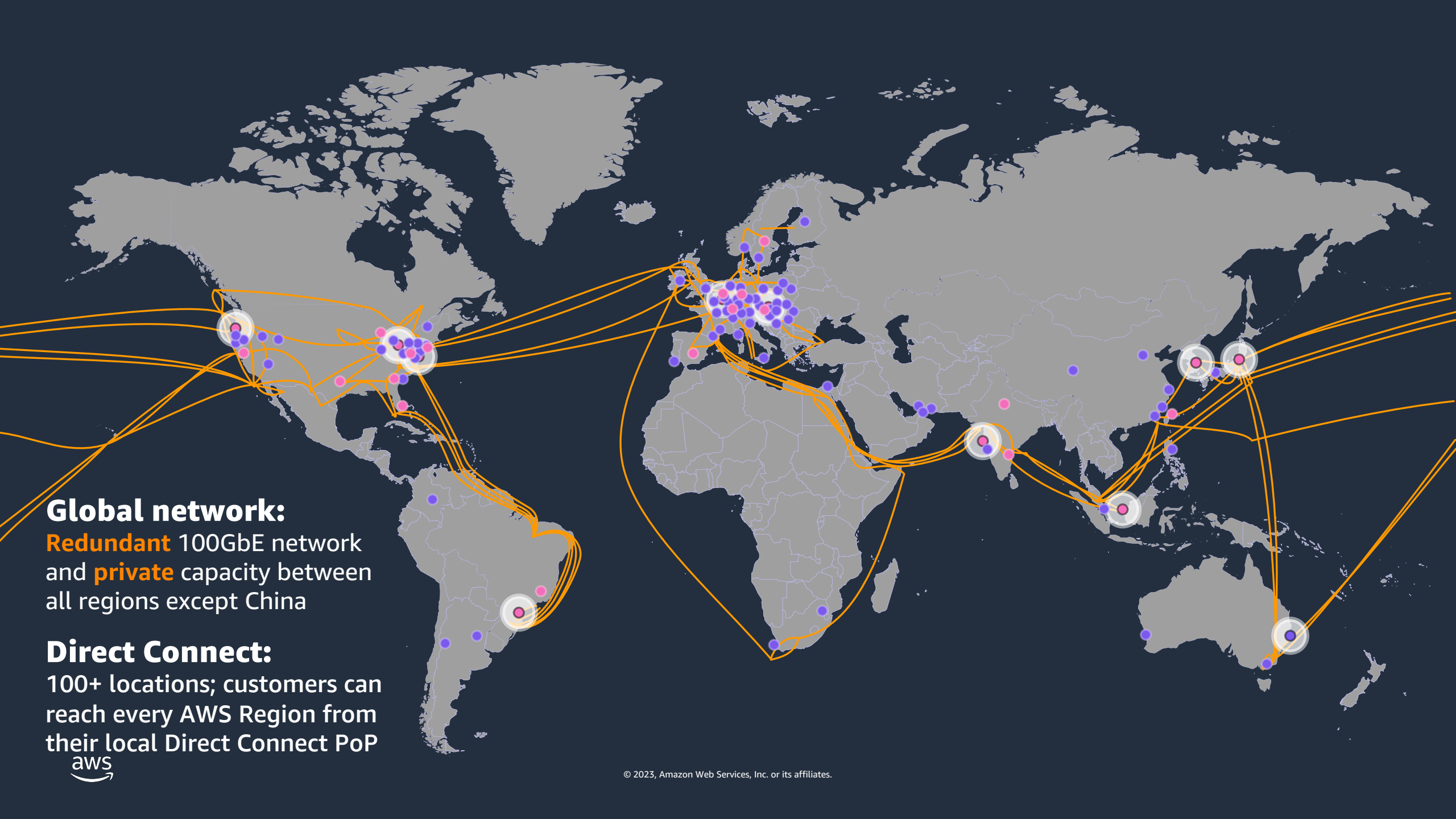
- Werner Vogels, VP and CTO, AWS



AWS 原生基礎架構設計旨在支援營運韌性

OUR INFRASTRUCTURE IS DESIGNED TO SUPPORT OPERATIONAL RESILIENCY





Global network:

Redundant 100GbE network and **private** capacity between all regions except China

Direct Connect:

100+ locations; customers can reach every AWS Region from their local Direct Connect PoP



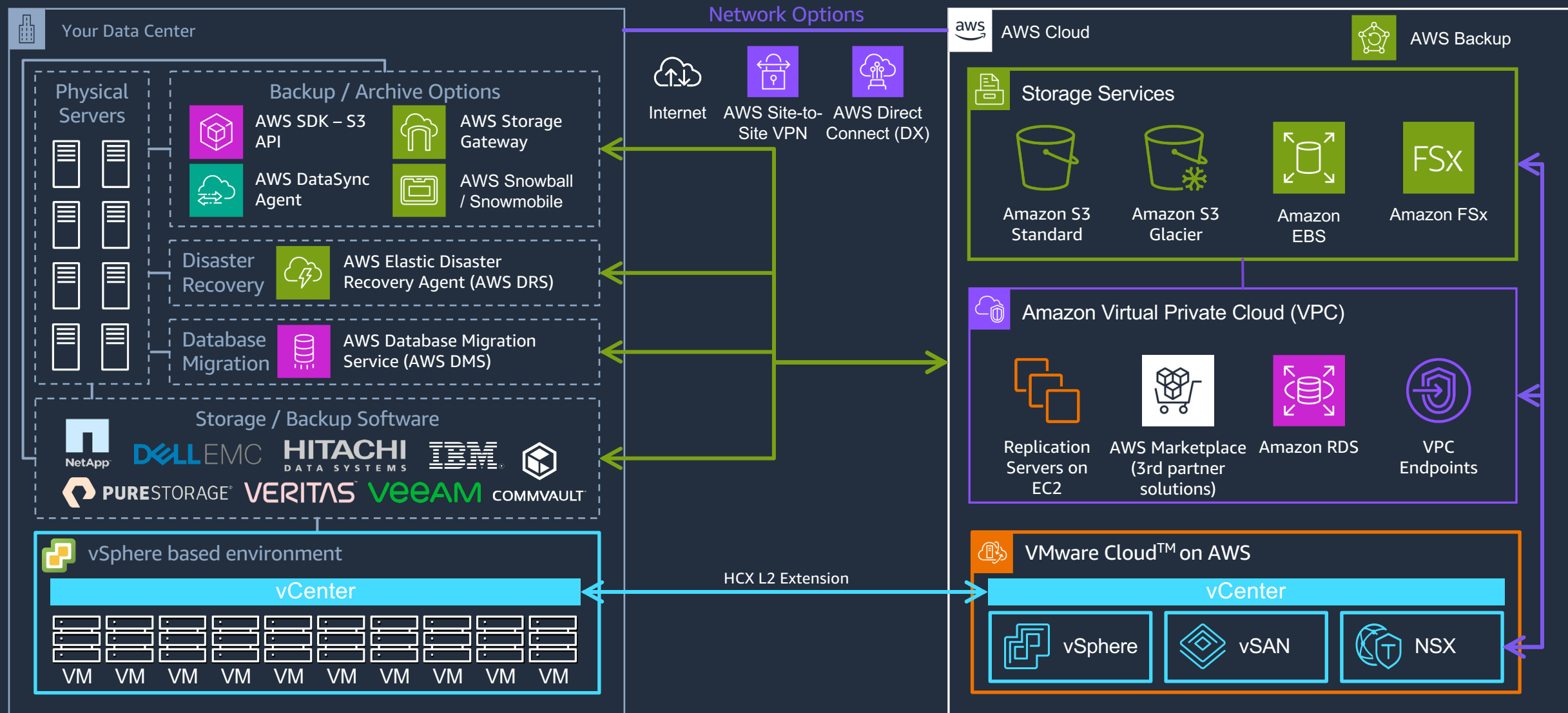
AWS 已通過 ISO 22301 BCMS 合規認證

SECURITY AND RESILIENCE - BUSINESS CONTINUITY MANAGEMENT SYSTEMS



您可以利用 AWS 災備地端機房 Business Continuity Plan (BCP) in AWS

將 AWS 作為地端機房的備份及災難復原環境



合作夥伴儲存及備份解決方案

TECHNOLOGY SOLUTIONS VETTED BY THE AWS STORAGE COMPETENCY PROGRAM

儲存擴充

Storage Extension

利用文件、區塊、物件和串流數據格式作為本地存儲擴展的解決方案

Solutions that leverage file, block, object, and streamed data formats as an extension to on-premises storage

A V E R E

ctera™

panzura™

SoftNAS™
Powering the Cloud

ZADARA
STORAGE

NetApp™

備份與還原

Backup and Recovery

利用 Amazon S3 備份數據的解決方案

Solutions that leverage Amazon S3 for durable data backup

DELL EMC

VERITAS™

IBM

druva

COMMVAULT™

Cloudberry

ctera™

NetApp™

G

災害復原

Disaster Recovery

利用 AWS 實現專注於符合 RTO 和 RPO 要求的災難復原的解決方案

Solutions that utilize AWS to enable recovery strategies focused on RTO and RPO requirements

vmware aws

druva

NetApp™

CLOUDVELOX

Zerto

封存歸檔

Archive

利用 Amazon Glacier 實現經濟高效的長期數據備份的解決方案

Solutions that leverage Amazon Glacier for durable and cost-effective long-term data backup

NetApp™

COMMVAULT™

sonian



AWS 可協助有效規劃與實踐業務持續性及提升韌性

DISASTER RECOVERY BENEFITS OF AWS CLOUD

傳統災難復原難題

Traditional disaster recovery

- 大量前期硬體投資和高持續成本
Massive upfront & ongoing hardware cost
- 管理和基礎架構開銷，難進行復原演練
Management and infrastructure overhead
- 資料成長增加硬體和營運成本
Data growth increases costs
- 易受網路威脅/駭客攻擊
Vulnerable to cyber threats/hacking

應用雲端的災難復原

Disaster recovery in the cloud

- 僅在實際需要時為當前的運算/存儲付費
Pay as you go for the rightsized compute/storage
- 降低 IT 管理開銷
Lower IT overhead
- 更高度的自動化
(MUCH!) More automation
- 簡單且可重複性的復原演練
Easy and repeatable testing
- 系統可在數分鐘內啟動 (而非數小時/天)
Systems up in minutes (not hours/days!)



Thank you!