Journey to the cloud

Sergei Butenko
District Manager
EMC

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THE FUTURE

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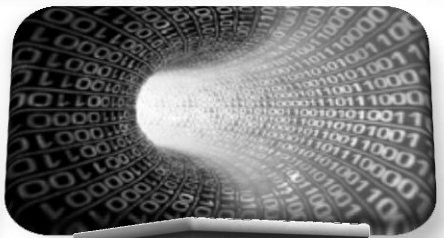
Mobile

Cloud

Big Data



Social

TRUST

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Our Focus

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Mobile Cloud Big Data Social

Mobile Devices

LAN/Internet Client/Server

PC

Mainframe, Mini Computer

Terminals

Source: IDC, 2012

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Mobile Cloud Big Data Social

Mobile Devices

LAN/Internet Client/Server

PC

MILLIONS
OF USERS

Mainframe, Mini Computer

Terminals

THOUSANDS
OF APPS

Source: IDC, 2012

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Mobile Cloud Big Data Social

Mobile Devices

HUNDREDS OF MILLIONS
OF USERS

LAN/Internet Client/Server

PC

TENS OF THOUSANDS
OF APPS

MILLIONS
OF USERS

Mainframe, Mini Computer

Terminals

THOUSANDS
OF APPS

Source: IDC, 2012

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BILLIONS
OF USERS

3RD PLATFORM

MILLIONS
OF APPS

Mobile Cloud Big Data Social

Mobile Devices

HUNDREDS OF MILLIONS
OF USERS

2ND PLATFORM

TENS OF THOUSANDS
OF APPS

LAN/Internet Client/Server

PC

MILLIONS
OF USERS

1ST PLATFORM

THOUSANDS
OF APPS

Mainframe, Mini Computer

Terminals

Source: IDC, 2012

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BILLIONS
OF USERS

MILLIONS
OF APPS

3RD PLATFORM

Mobile Cloud Big Data Social

Mobile Devices

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2ND PLATFORM

LAN/Internet Client/Server

PC

TENS OF THOUSANDS
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OF USERS

1ST PLATFORM

Mainframe, Mini Computer

Terminals

THOUSANDS
OF APPS

Source: IDC, 2013

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Our Brands

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EMC²: A Unique Federation Of Businesses

Focused and Free to Execute on their Mission, Strategically Aligned

Pivotal	Paul Maritz		PLATFORM FOR CLOUD & BIG / FAST DATA APPLICATIONS
vmware	Pat Gelsinger		SOFTWARE-DEFINED DATA CENTER HYBRID CLOUD END USER COMPUTING
EMC II	David Goulden		INFORMATION STORAGE & PROTECTION INFORMATION SECURITY INFORMATION INTELLIGENCE

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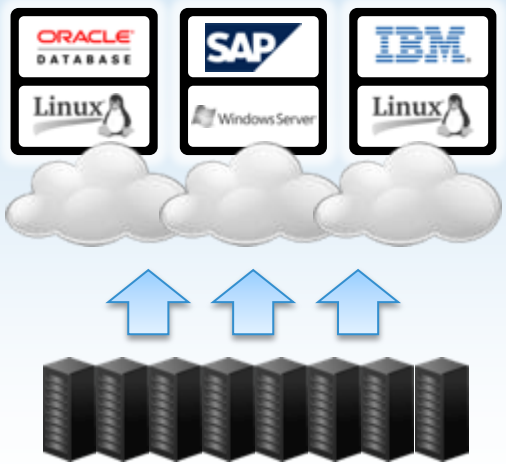
Cloud Transforms IT Infrastructure



1 Standardize

2 Virtualize

3 Automate

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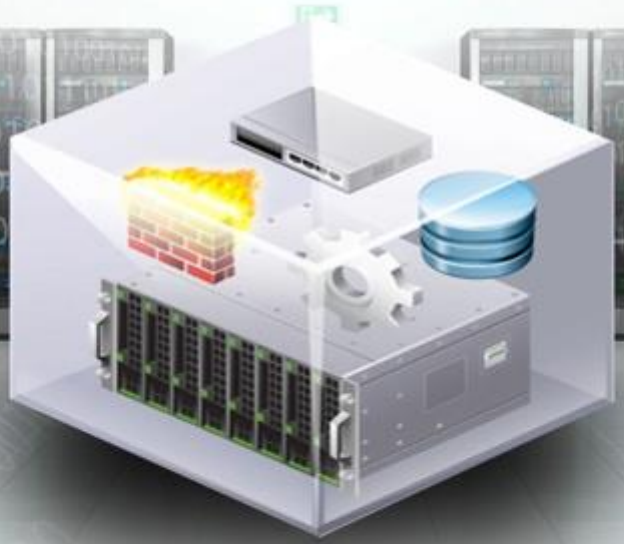
SOFTWARE-DEFINED DATA CENTER

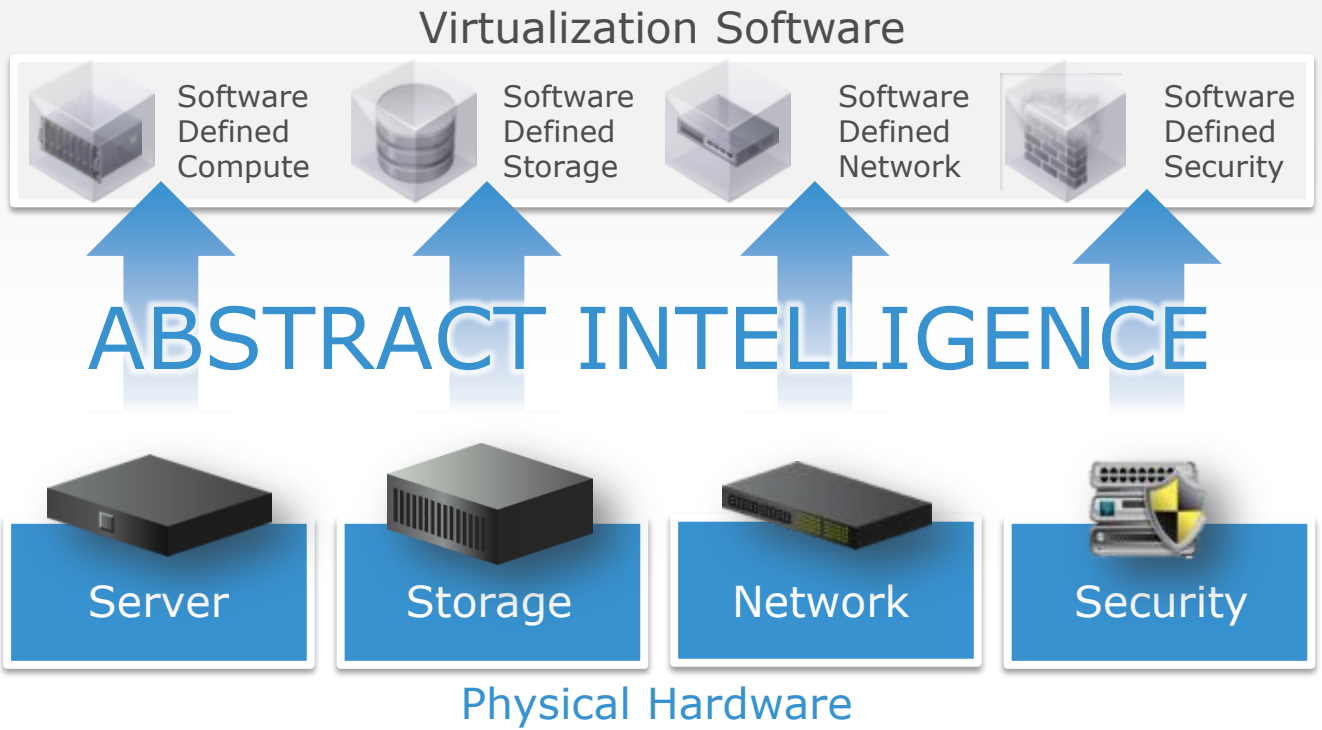
ALL INFRASTRUCTURE IS VIRTUALIZED AND DELIVERED AS A SERVICE, AND
THE CONTROL OF THIS DATA CENTER IS ENTIRELY AUTOMATED BY SOFTWARE.



Abstract **Pool** **Automate**

The Software-Defined Data Center

Abstract, Pool And Automate



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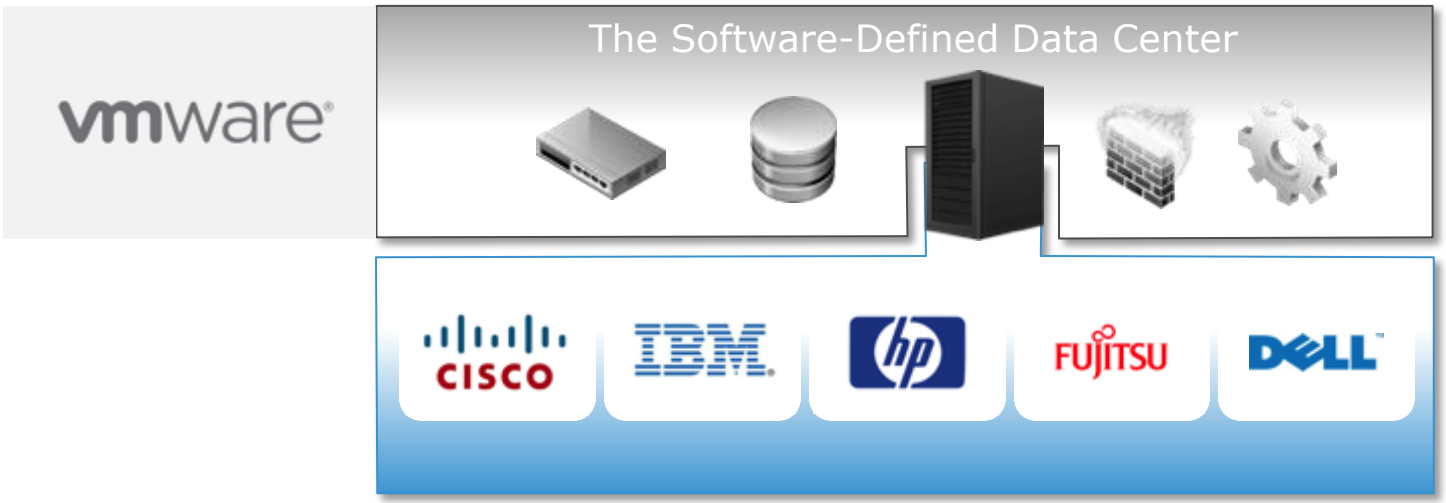
Open Architecture Provides Choice

Clean Separation Between Infrastructure & Virtualization Layers



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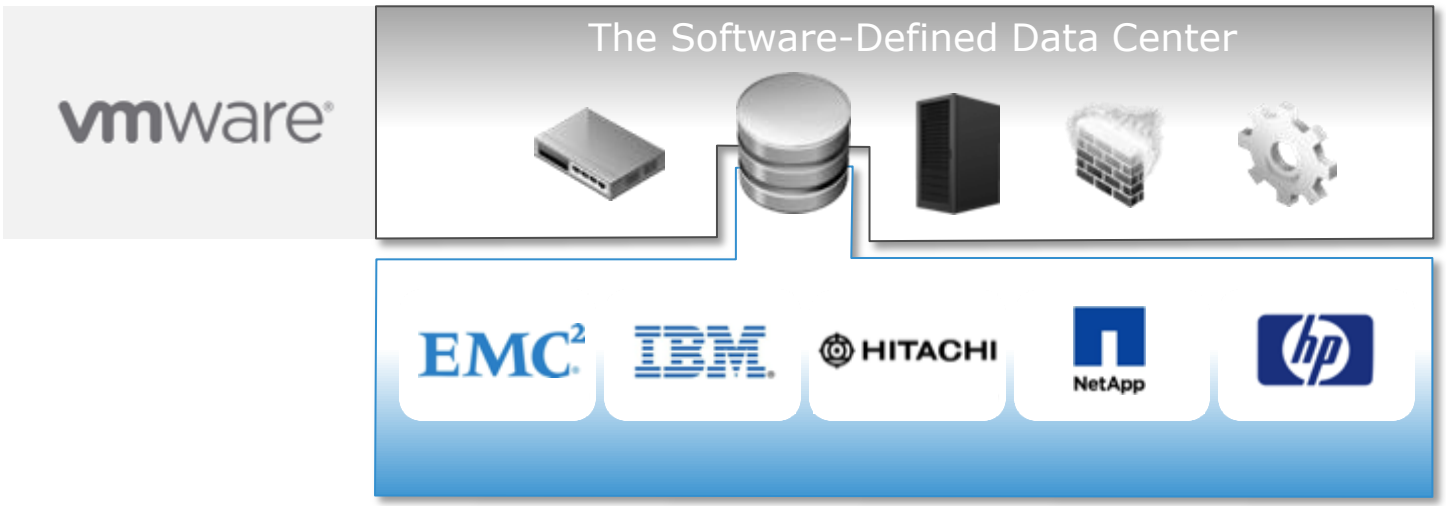
Open Architecture Provides Choice

Clean Separation Between Infrastructure & Virtualization Layers



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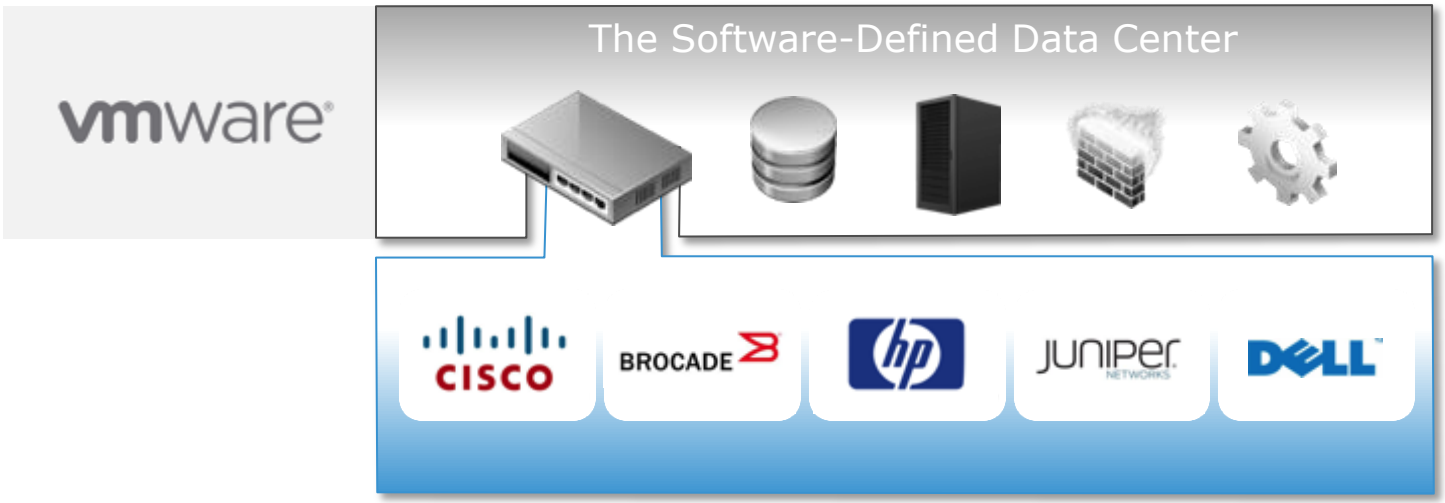
Open Architecture Provides Choice

Clean Separation Between Infrastructure & Virtualization Layers



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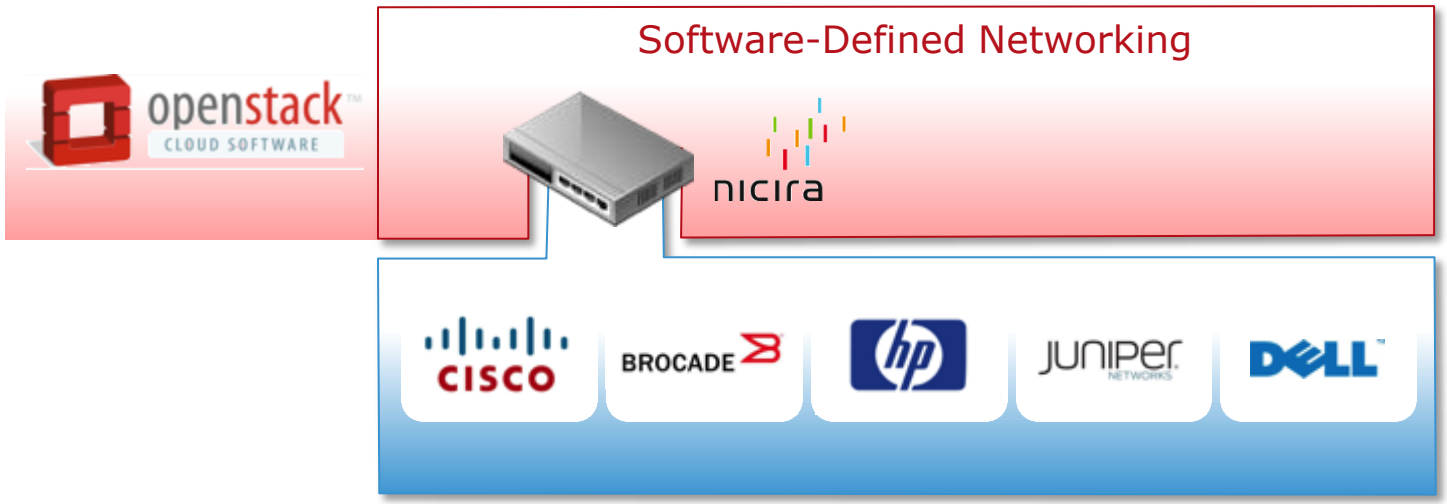
Open Architecture Provides Choice

Clean Separation Between Infrastructure & Virtualization Layers



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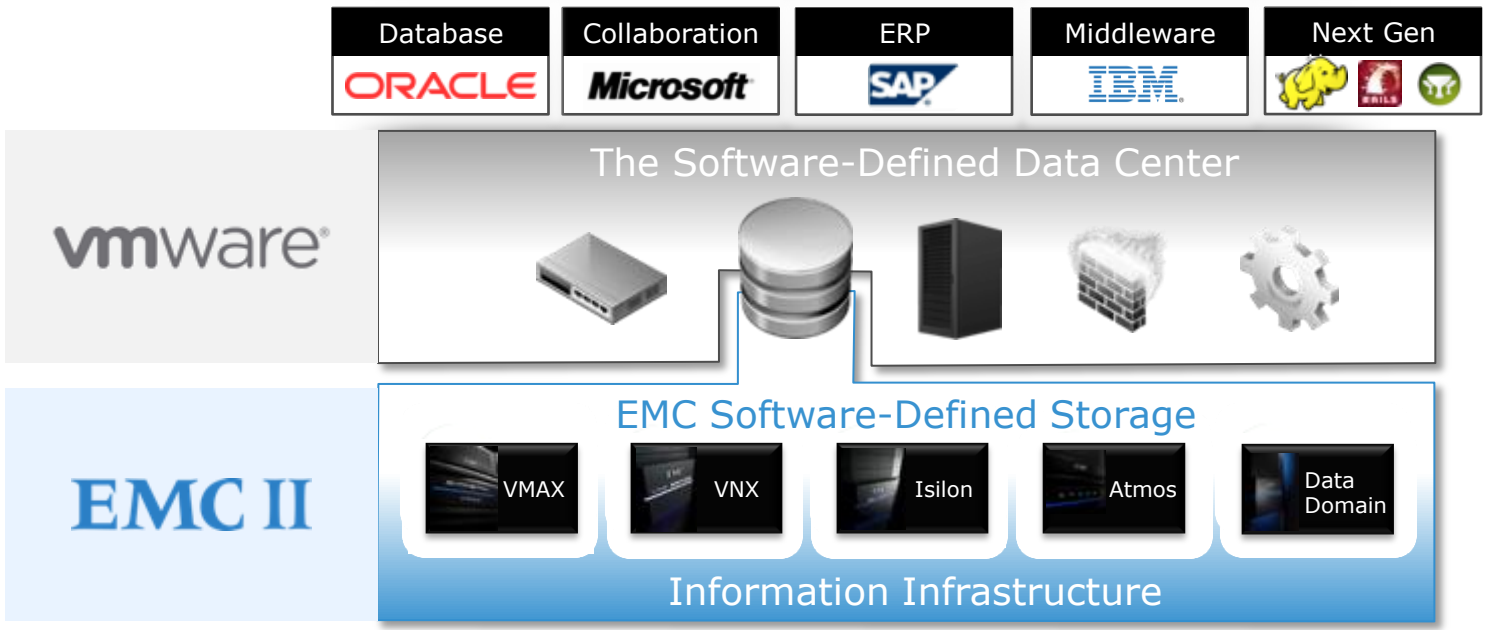
“Horizontal” Architecture Provides Choice

Open & Runs ANY Application



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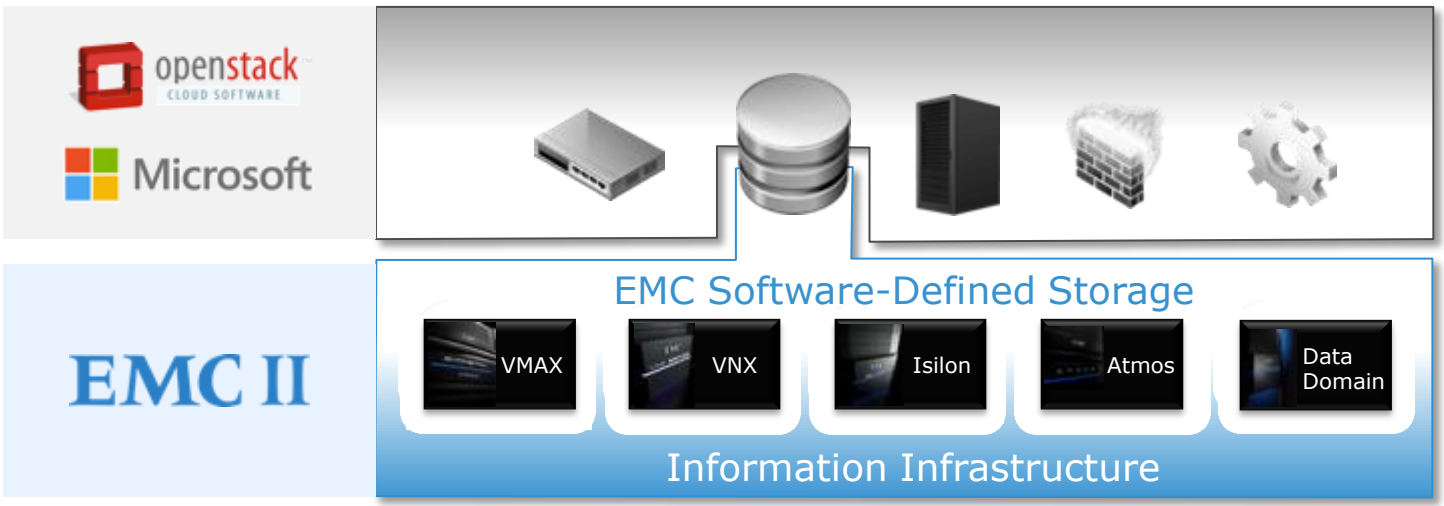
Open Architecture Provides Choice

EMC Software-Defined Storage Integrates With Hyper-V & OpenStack



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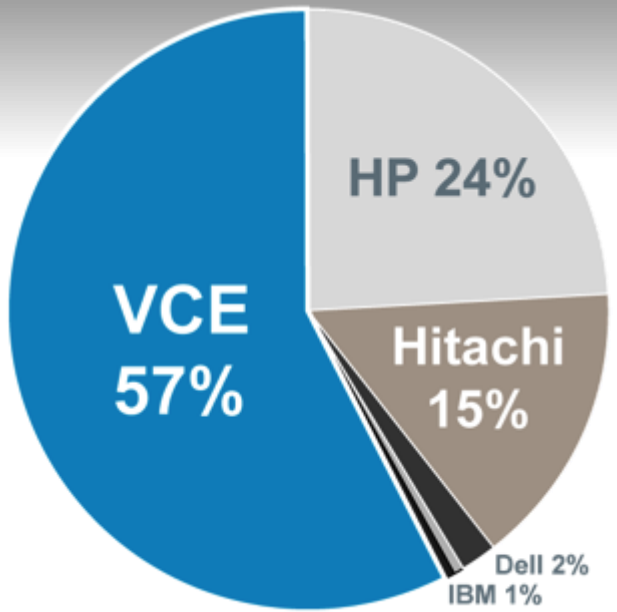
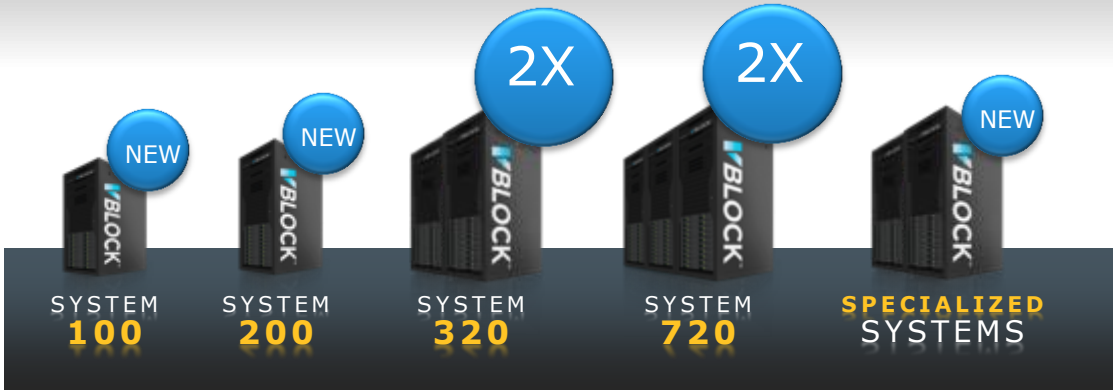
VCE Is The Integrated Systems Leader

Integrated Infrastructure Systems





Source: Gartner - Market Share Analysis: Data Center Hardware Integrated Systems, 1Q11-2Q12, 30 Nov 2012 G00239623; 6 quarters

vmware cisco EMC²

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BIG DATA

TRANSFORMS BUSINESS

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Location & Types Of Big Data

Enterprise

Structured Data

Unstructured Data

Partner

Credit Data

Shipping Data

Forecast Data

Location Data

Public

Social, Video Data

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Location & Types Of Big (& Fast!) Data

Enterprise

Structured Data

Unstructured Data

Telemetry Data

Partner

Credit Data

Shipping Data

Forecast Data

Location Data

Public

Social, Video Data

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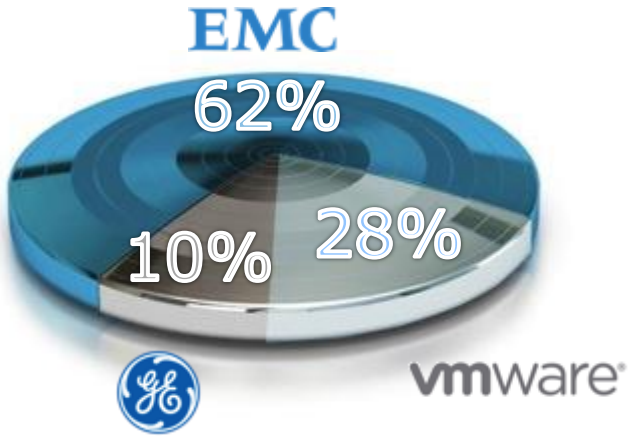
Introducing Pivotal

Pivotal

PLATFORM FOR NEXT GENERATION
CLOUD & BIG / FAST DATA
APPLICATIONS

1250
EMPLOYEES

~$300M
IN 2013 REVENUE



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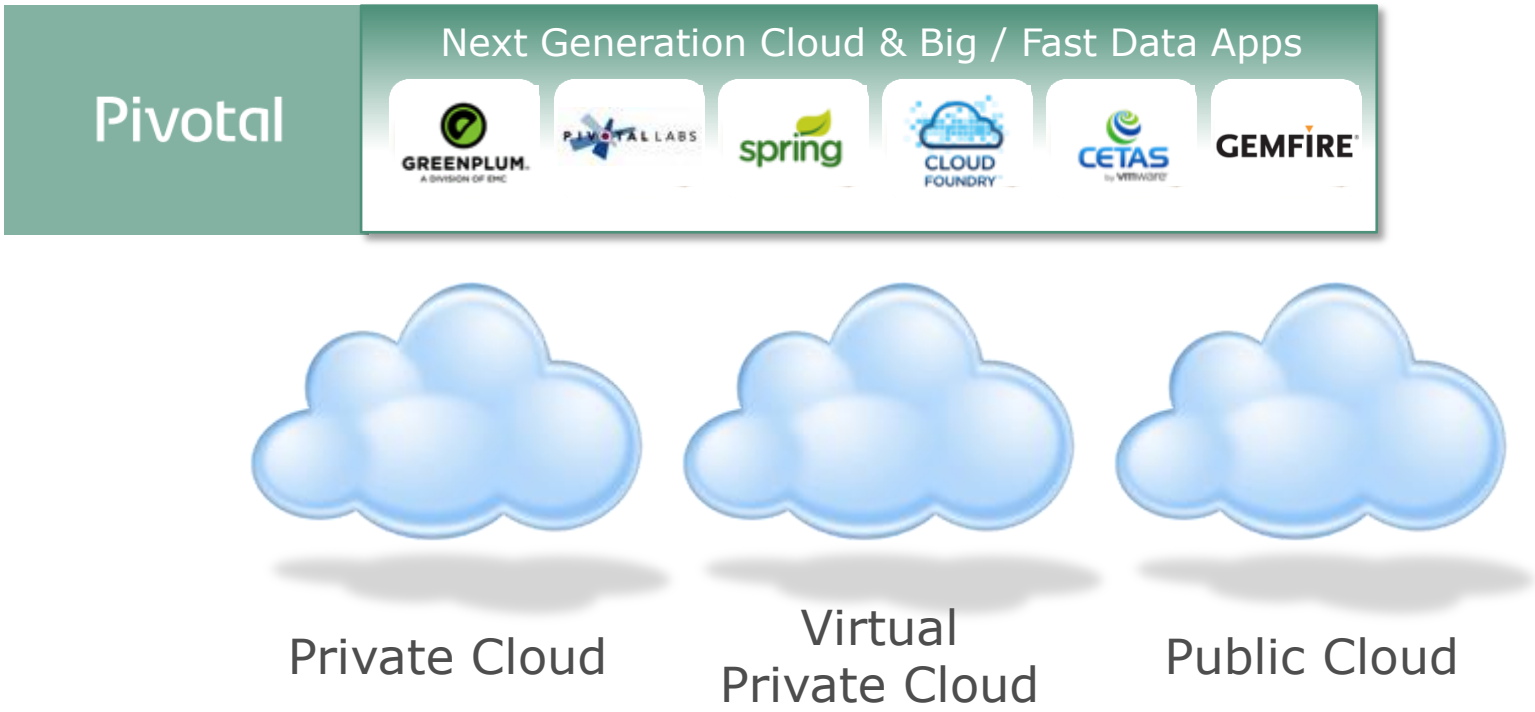
Open Architecture Provides Choice

Private, Virtual Private & Public Cloud Deployment Options



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Completing The Portfolio

Pivotal

Next Generation Cloud & Big / Fast Data Apps

GREENPLUM · PIVOTAL LABS · spring · CLOUD FOUNDRY · CETAS · GEMFIRE

Content, Process & Collaboration Apps

EMC

vmware

The Software-Defined Data Center

EMC

Information Infrastructure

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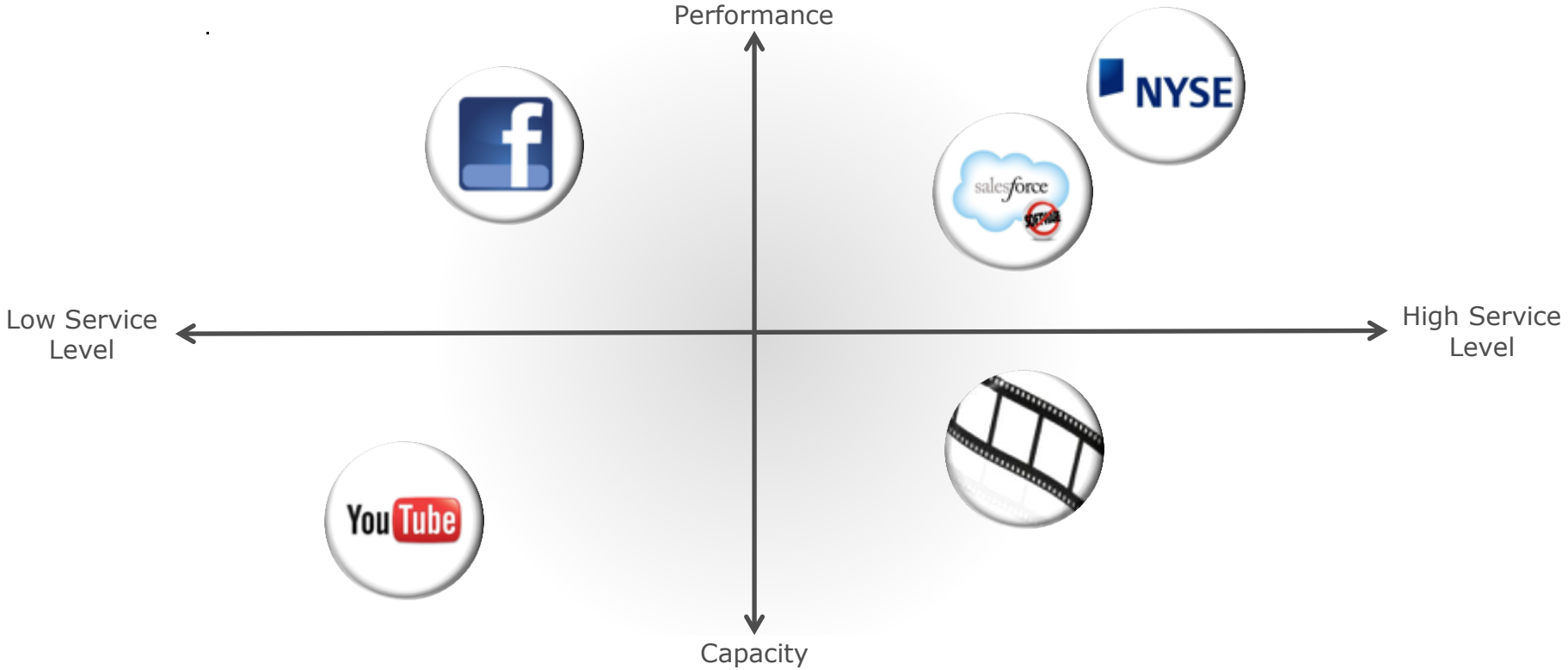
Workloads Will Drive Storage Innovation



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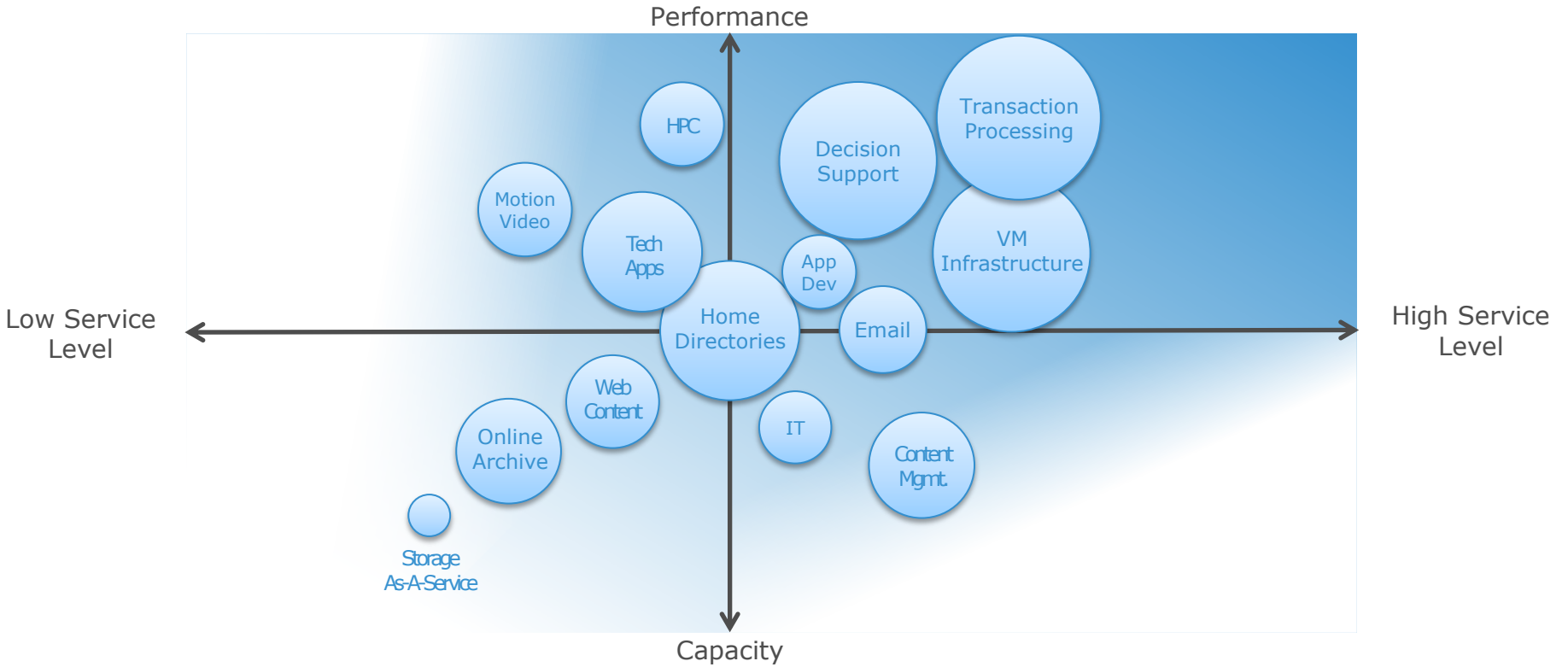
Workloads Will Drive Storage Innovation



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Our Strategy: Best Of Breed Storage & Backup

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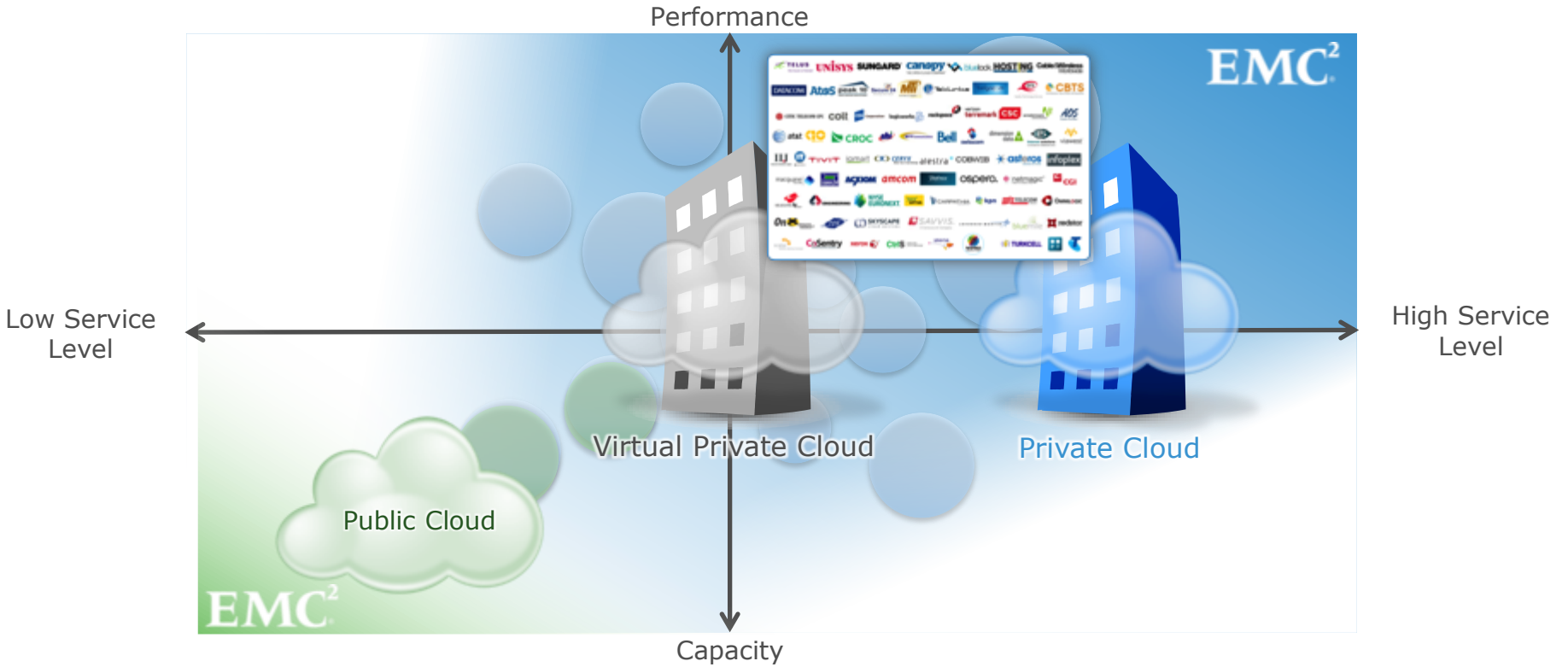
Workloads Will Migrate To Clouds



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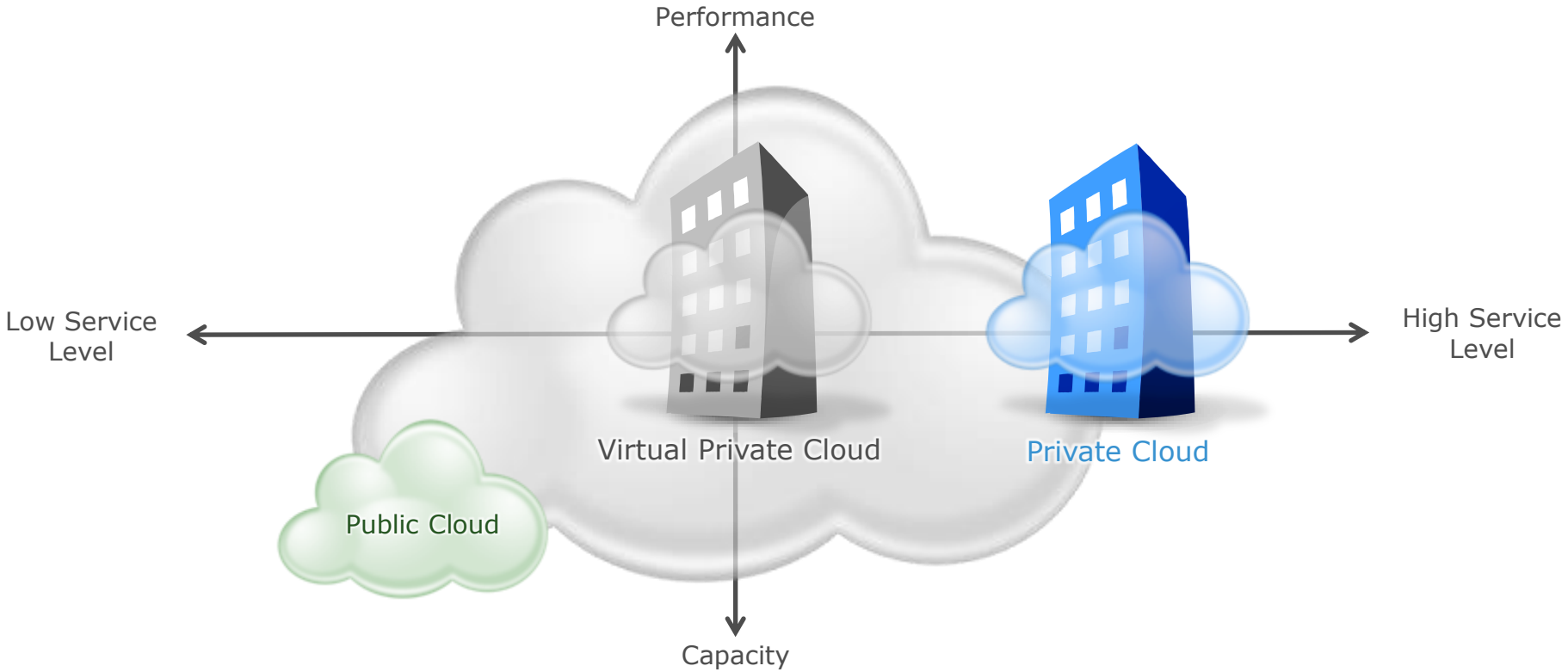
Hybrid Clouds Will Be Pervasive



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EMC Software-Defined Storage

VIRTUALIZE EVERYTHING
COMPROMISE NOTHING

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EMC ViPR, Software-Defined Storage

Software Control Plane AND Data Plane

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EMC ViPR, Software-Defined Storage

Control Plane : The EMC ViPR Controller

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ViPR Controller: Provisioning

Step 1 : Discover Physical Storage Arrays

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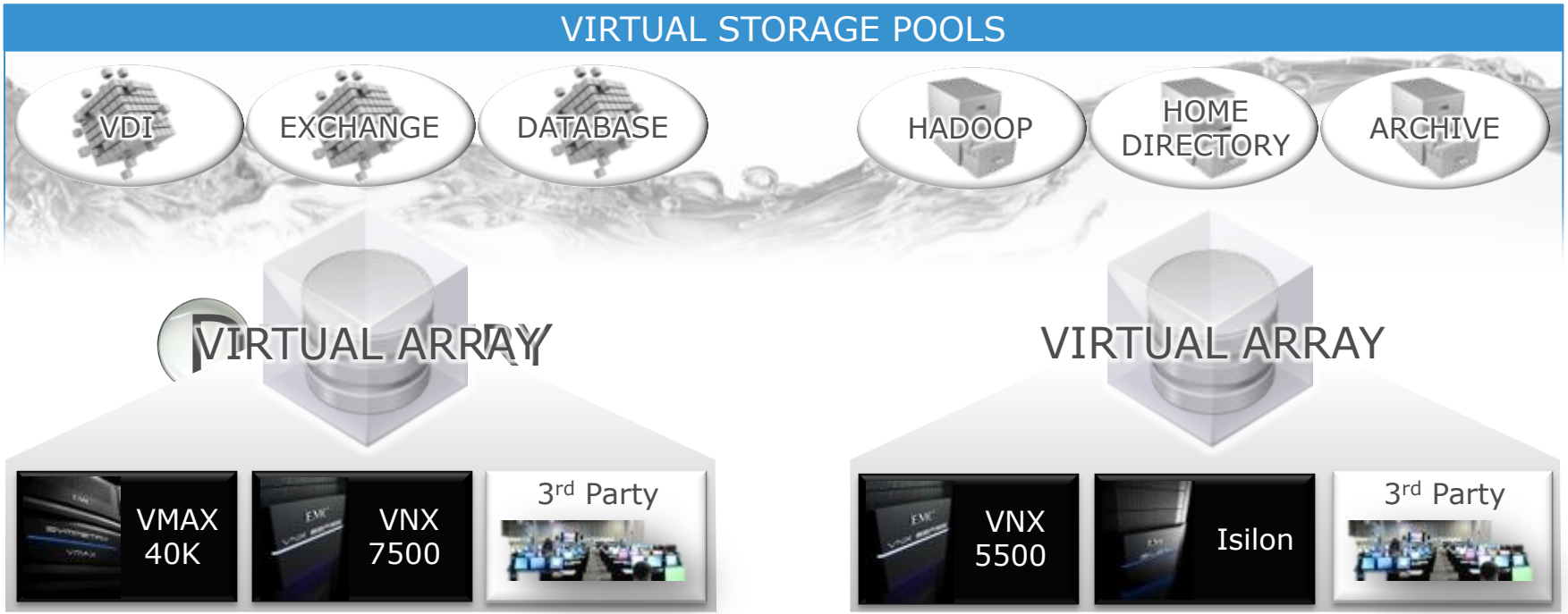
ViPR Controller: Provisioning

Step 2 : Create Virtual Storage Arrays & Virtual Storage Pools



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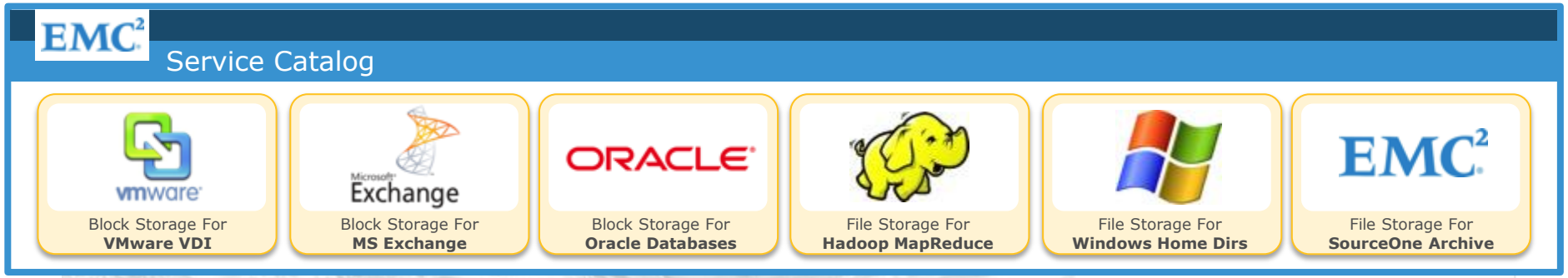
ViPR Controller: Self-Service Catalog



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Use Case : EMC Syncplicity

COMPANY A

COMPANY B

PUBLIC CLOUD
ORCHESTRATION

syncplicity by EMC

Off-Premise

amazon web services

SP PARTNER

On-Premise

EMC ViPR PLATFORM

3rd Party

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Trusted IT Means

- Identifying & Repelling Threats
  Advanced Security
- Protecting Data
  Integrated Backup & Recovery
- Ensuring Availability Of Applications, Systems & Data
  Continuous Availability

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EMC CAN HELP YOU LEAD YOUR TRANSFORMATION

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