

# THE POWER OF CONVERGENCE

HP Converged Infrastructure for the  
Data Center of the Future

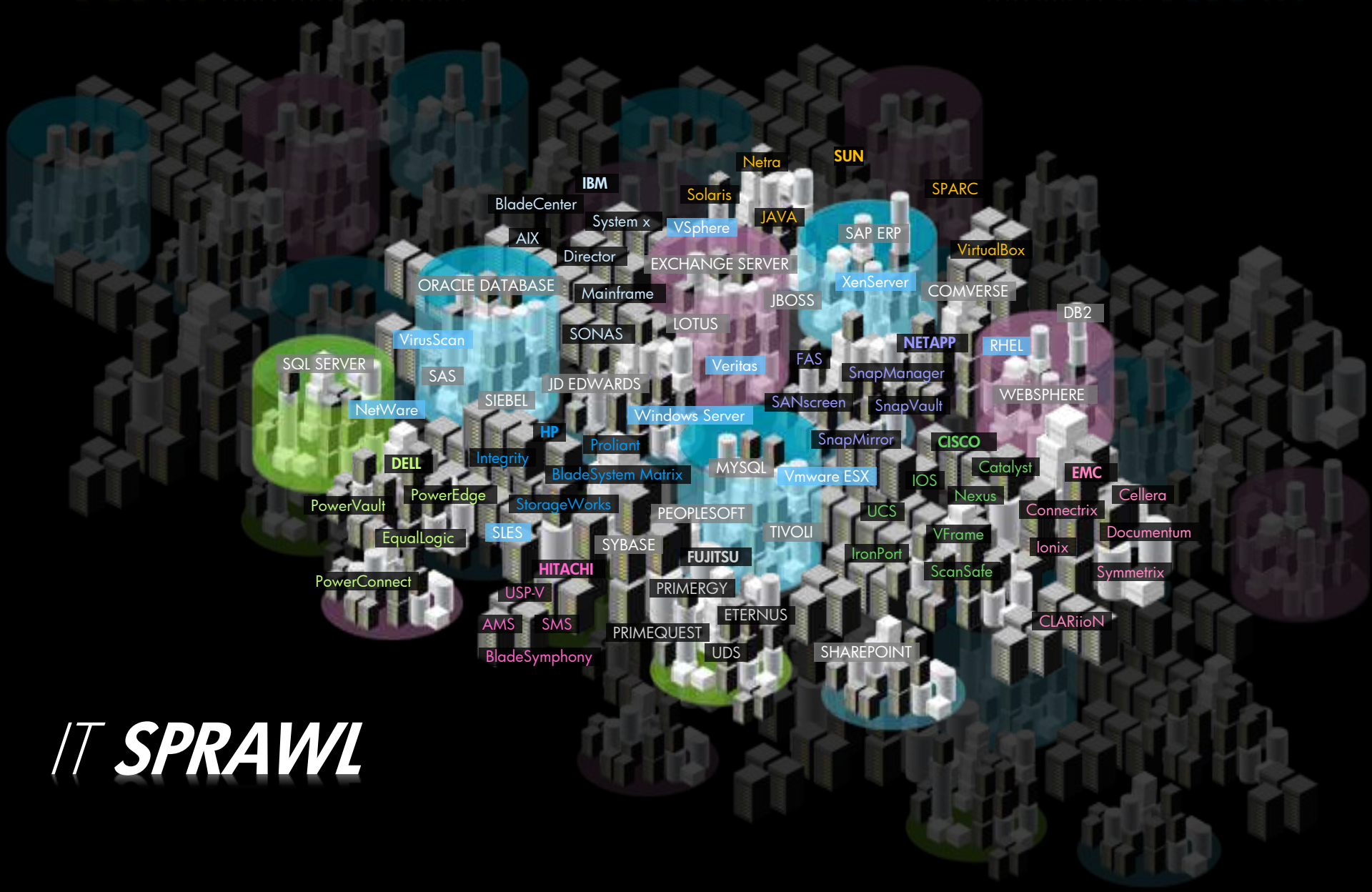
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Caribbean & PR ESSN Manager

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**70%** Captive in operations and maintenance

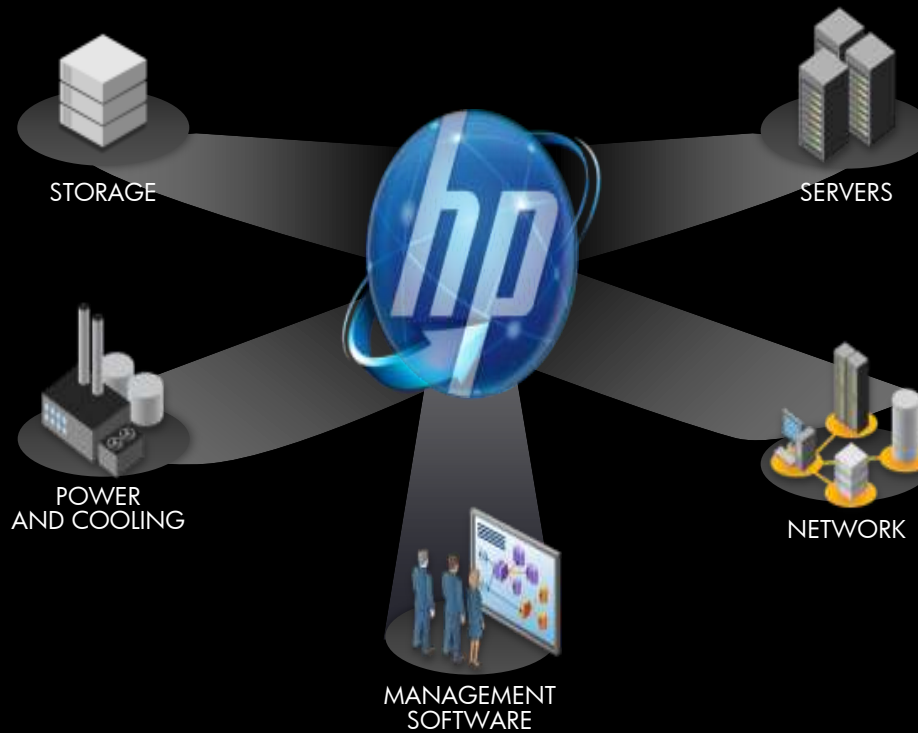
Business innovation throttled to **30%**



**IT SPRAWL**

# THE POWER OF CONVERGENCE

## HP CONVERGED INFRASTRUCTURE



VIRTUALIZED

RESILIENT

OPEN

ORCHESTRATED

MODULAR



# INNOVATIONS IN HP SERVERS



# HP SERVERS

Most extensive server portfolio

**4.5x**  
Improved  
reliability

**35%**  
Better TCO



INTEGRITY SUPERDOME 2  
AND NONSTOP

**95%**  
Approximate  
sprawl reduction



BLADESYSTEM

**91:1**  
Greater  
consolidation

**1TERAFLOP**  
Performance per  
unit of rack space



PROLIANT SCALE-UP  
SERVERS

**95%**  
Reduction in  
networking equipment



VIRTUAL CONNECT  
FlexFabric

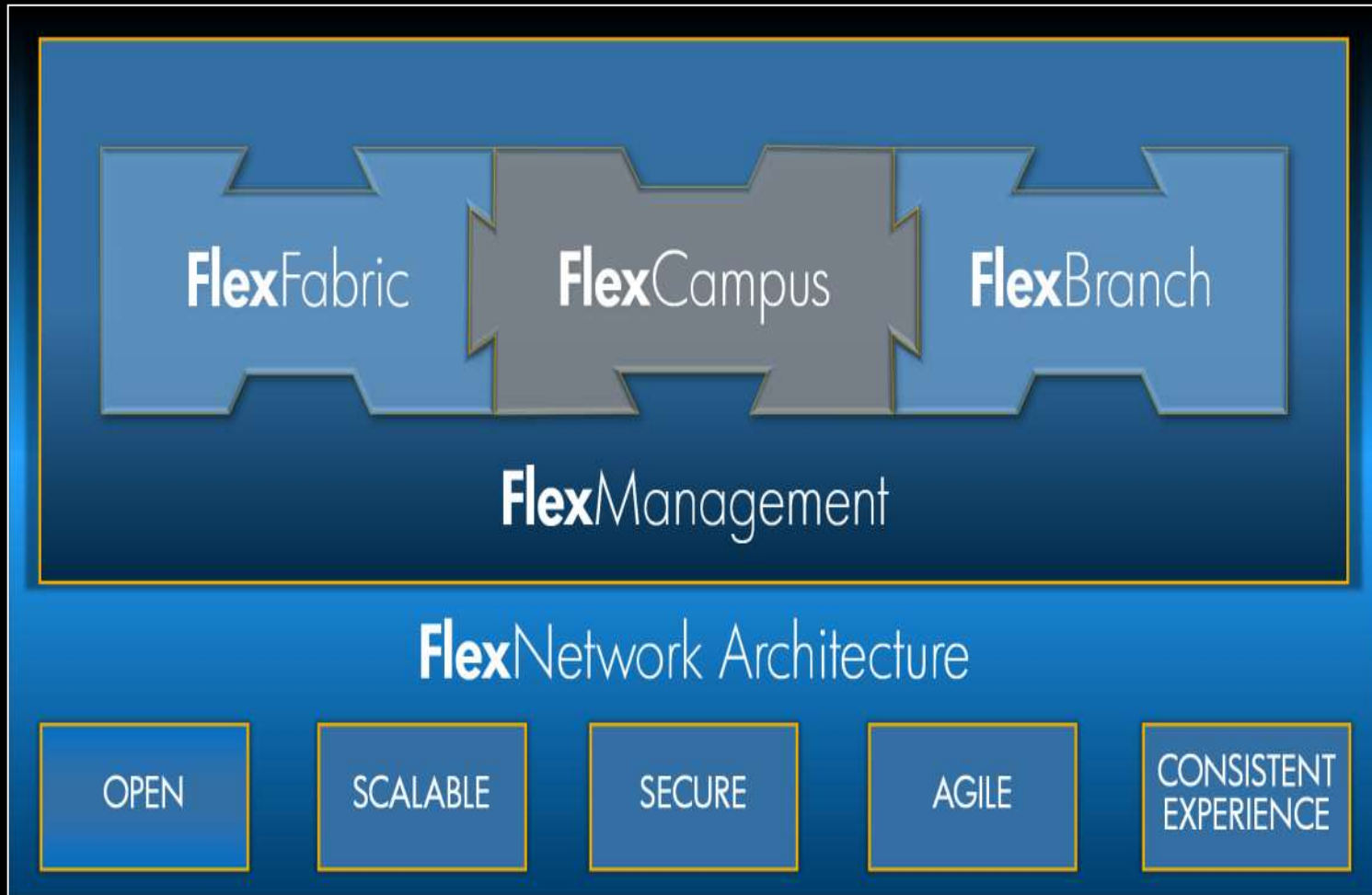


# INNOVATIONS IN HP NETWORKING



# FLEXNETWORK ARCHITECTURE

Industry's first network architecture—converging data center, campus and branch



# INNOVATIONS IN NETWORKING



HP 10500 SERIES	HP E5400z1/E8200z1	HP E-MSM430/460/466	HP TIPPINGPOINT S6100N
<p><b>75%</b> Lower latency</p>	<p>Up to <b>90%</b> Lower latency</p>	<p><b>150 Mbps</b> At 200' vs. 30'</p>	<p><b>33% Lower</b> Power consumption</p>
<p><b>250%</b> Higher performance</p>	<p><b>600%</b> Higher performance</p>	<p><b>50%</b> Higher performance</p>	<p><b>100%</b> Greater performance</p>
<p><b>270%</b> Higher 10GbE density</p>	<p><b>128%</b> Higher port density</p>	<p><b>15 HD Streams</b> Per AP vs. 10</p>	<p><b>309 vs. 1</b> Known vulnerabilities</p>
<p>vs. Cisco Catalyst 6509</p>	<p>vs. Cisco Catalyst 4506</p>	<p>vs. Cisco Aironet 1140 &amp; 3500 APs</p>	<p>vs. Cisco IPS 4270</p>



# FLEXNETWORK INNOVATION

Single pane-of-glass management

## INTRODUCING THE HP Intelligent Management Center 5



- Converges physical & virtual network management
- Auto-discover virtual machines and virtual switches
- Federates network management and server orchestration

**5786**

Devices supported

**153**

Manufacturers

**1000+**

From Cisco



# INNOVATIONS IN HP STORAGE



# INNOVATIONS IN STORAGE

Fastest growing market segments

P10000/T800 3PAR



UTILITY STORAGE

X9000 IBRIX



SCALE OUT NAS

STOREONCE D2D 4312



DISC BASED BACKUP

P4000 LEFTHAND



iSCSI SAN

P6000



EVA



# WHY CUSTOMERS LOVE 3PAR

Investing in next-generation Tier 1 Utility Storage

**MULTI-TENANT**  
Industry-leading storage  
for Cloud Computing

**AUTONOMIC**  
Storage management  
efficiency +10x

**EFFICIENT**  
Reduce acquisition  
and operational costs  
by 50%



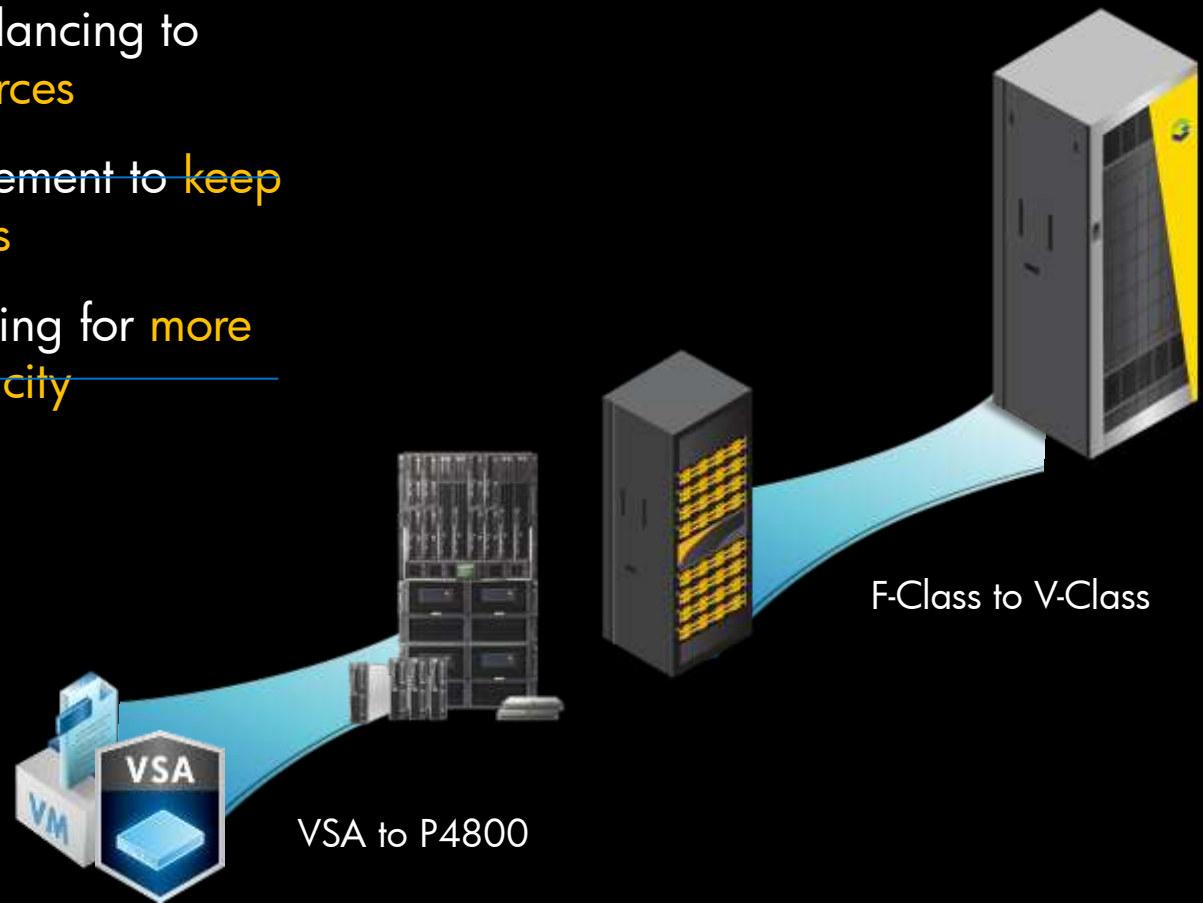
# HP PEER MOTION FOR LEFTHAND & 3PAR

The only federated storage to span from SMB to Service Provider

Federated Workload Balancing to  
map workloads to resources

Federated Asset Management to keep  
running during upgrades

Federated Thin Provisioning for more  
efficient pooling of capacity



# INNOVATIONS IN HP SYSTEMS



# EXTENDING CONVERGED INFRASTRUCTURE TO APPLICATIONS

Common architecture

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Best-in-class applications & technology

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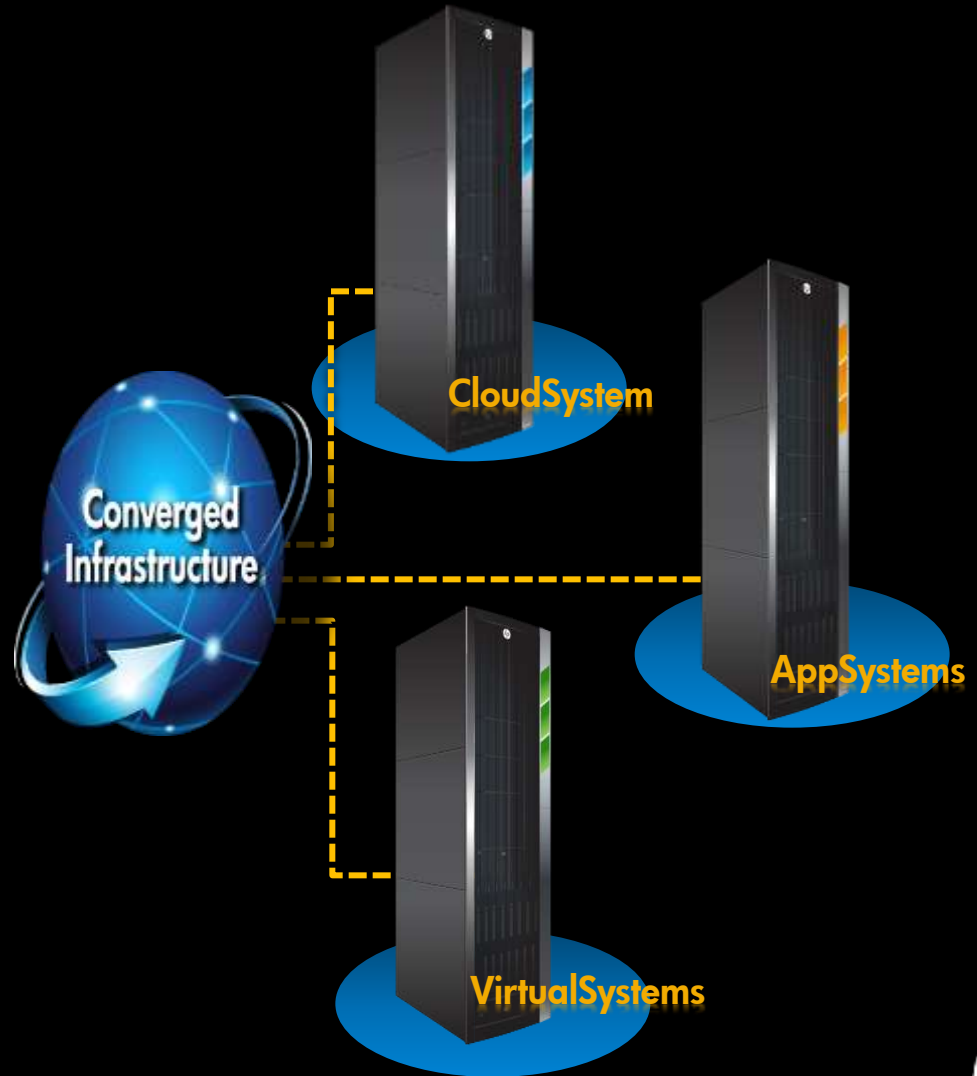
Open ecosystem and standards

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One vendor: turnkey, BTO, or hosted

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Investment protection



# MORE CHOICE—ONE OPEN ARCHITECTURE

## CHOICE OF MODULAR SYSTEMS

*# of virtual servers*      *# of virtual clients*

750

3,000

2,500

6,000

## BEST-OF-BREED VIRTUAL ARCHITECTURE

3PAR/P4000 • BladeSystem • Virtual Connect

## CHOICE VIRTUALIZATION ECOSYSTEM

Citrix • Microsoft • VMware

## INTEGRATED SERVICE EXPERTISE

HP Start Services and HP Solution Support Services



# BUILDING ON THE INDUSTRY'S MOST COMPLETE, OPEN ECOSYSTEM



## DEPTH OF APPLICATION EXPERTISE

Microsoft, Oracle, SAS, SAP...

## LEADING INVESTMENTS

Quarter billion dollar Microsoft partnership

## STRATEGIC ACQUISITIONS

Modern analytics architectures

**Microsoft**

#1 platform for  
Windows<sup>®2</sup>

**ORACLE**

More validated  
configs than any  
other partner<sup>4</sup>

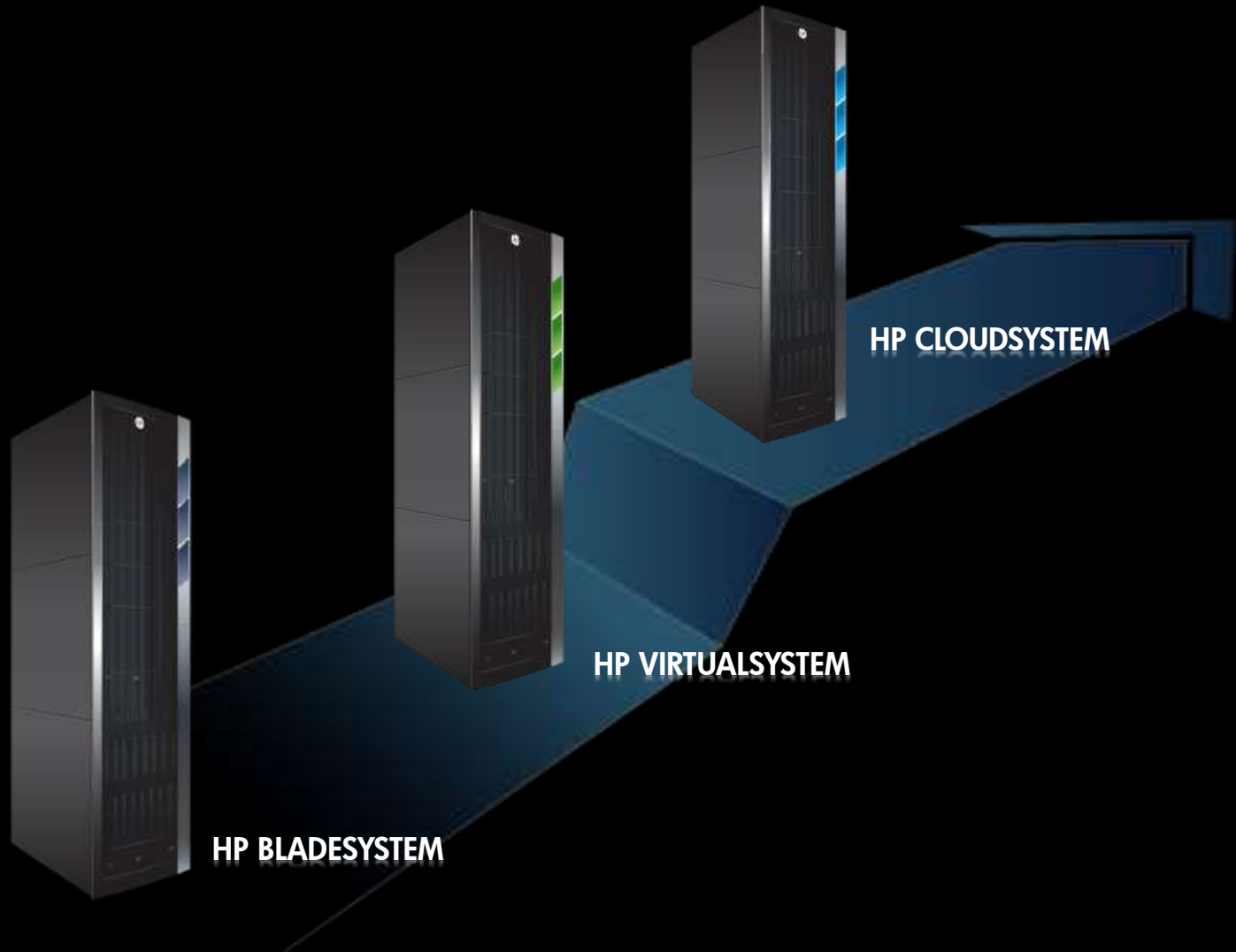
**VERTICA**  
An HP Company

Leading  
real-time analytics



# CLEAR UPGRADE PATH TO THE HYBRID CLOUD

100% common architecture for legacy, virtual & cloud apps



# INNOVATIONS IN HP CLOUD

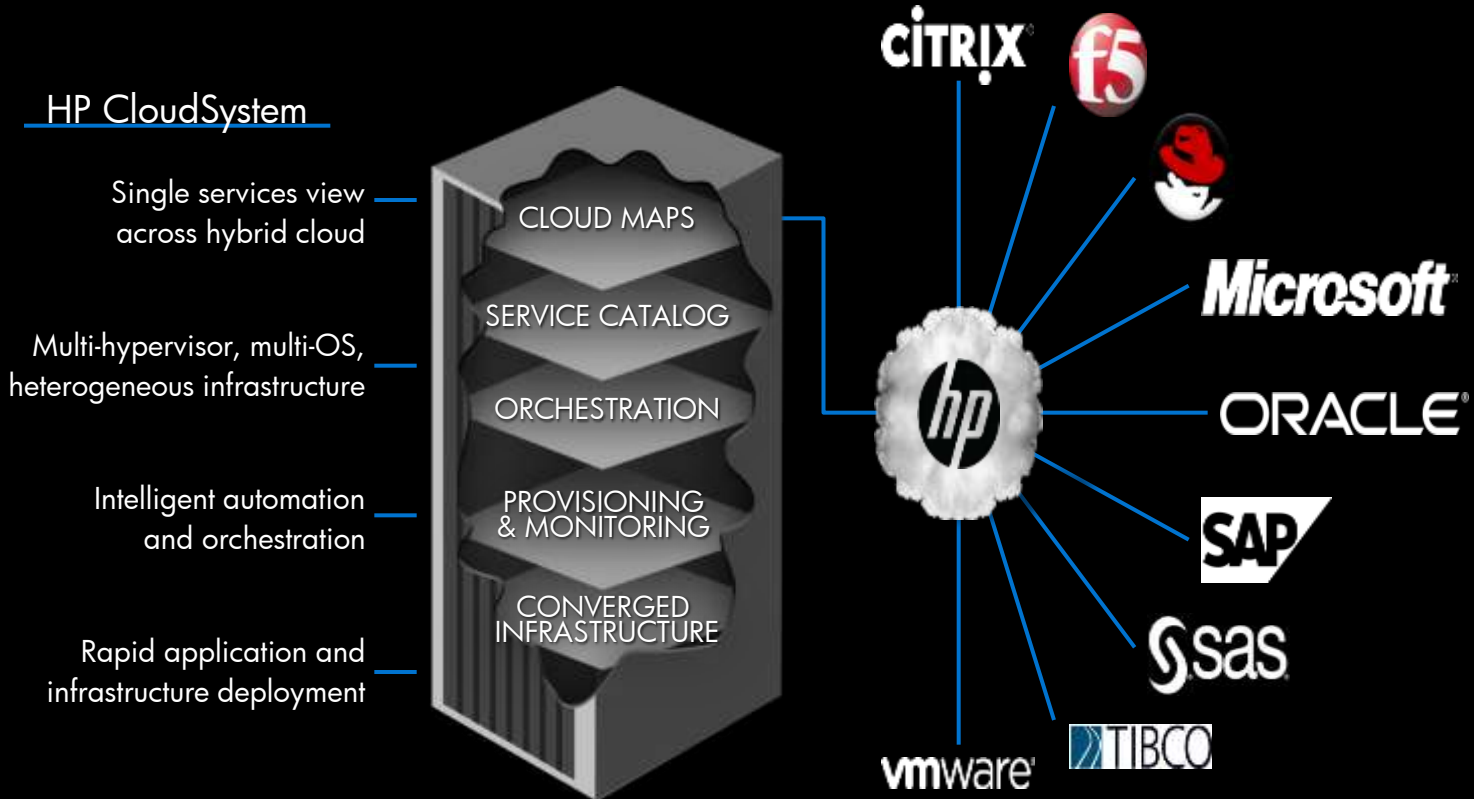


# BEST OF BREED CLOUD INFRASTRUCTURE



# INNOVATION FOR THE CLOUD

Most complete, open, integrated system



# HP POWERS THE WORLD'S BIGGEST CLOUDS

100s of private clouds deployed



8 of 10

of the world's most trafficked web sites

4 of 5

of the world's largest search engines

7 of 10

of the world's largest cloud service providers

3 most popular

social media properties in the U.S.



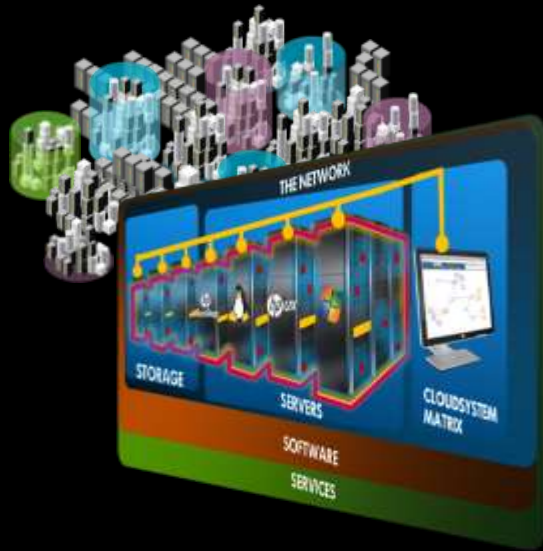
# INNOVATIONS IN NEW DATA CENTER MODELS



# THE CONVERGED INFRASTRUCTURE

## Comprehensive Data Center Solutions

### DESIGNED FOR FLEXIBLE DATA CENTER ENVIRONMENTS



TRADITIONAL SYSTEMS & APPLICATIONS

PRIVATE, PUBLIC, HYBRID CLOUD

NEW MODELS



*THANK YOU*



