

# Hitachi Converged Infrastructure Solutions

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Solutions Consultant  
April 2022



**On-demand  
IT**



**Infrastructure  
Sprawl**



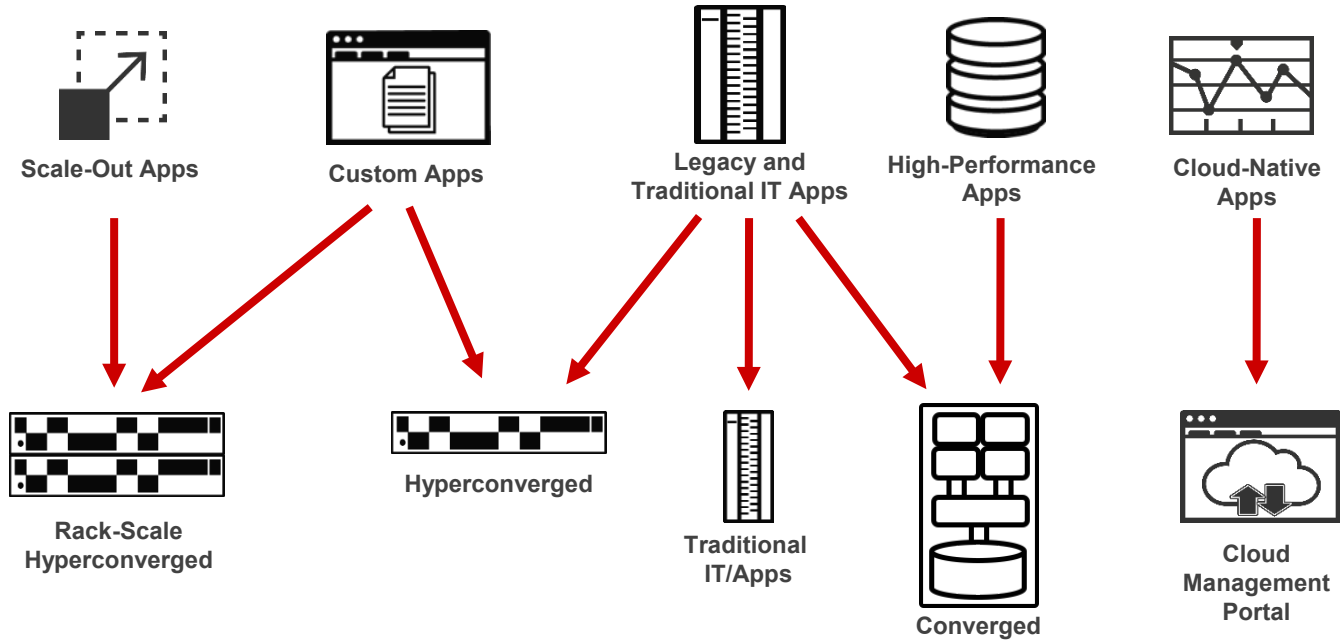
**Management  
Complexity**



**Minimize  
Risk**



# Transition to a Modern Data Center



FINANCE



HEALTHCARE



ENERGY



MINING



RETAIL



TRANSPORTATION



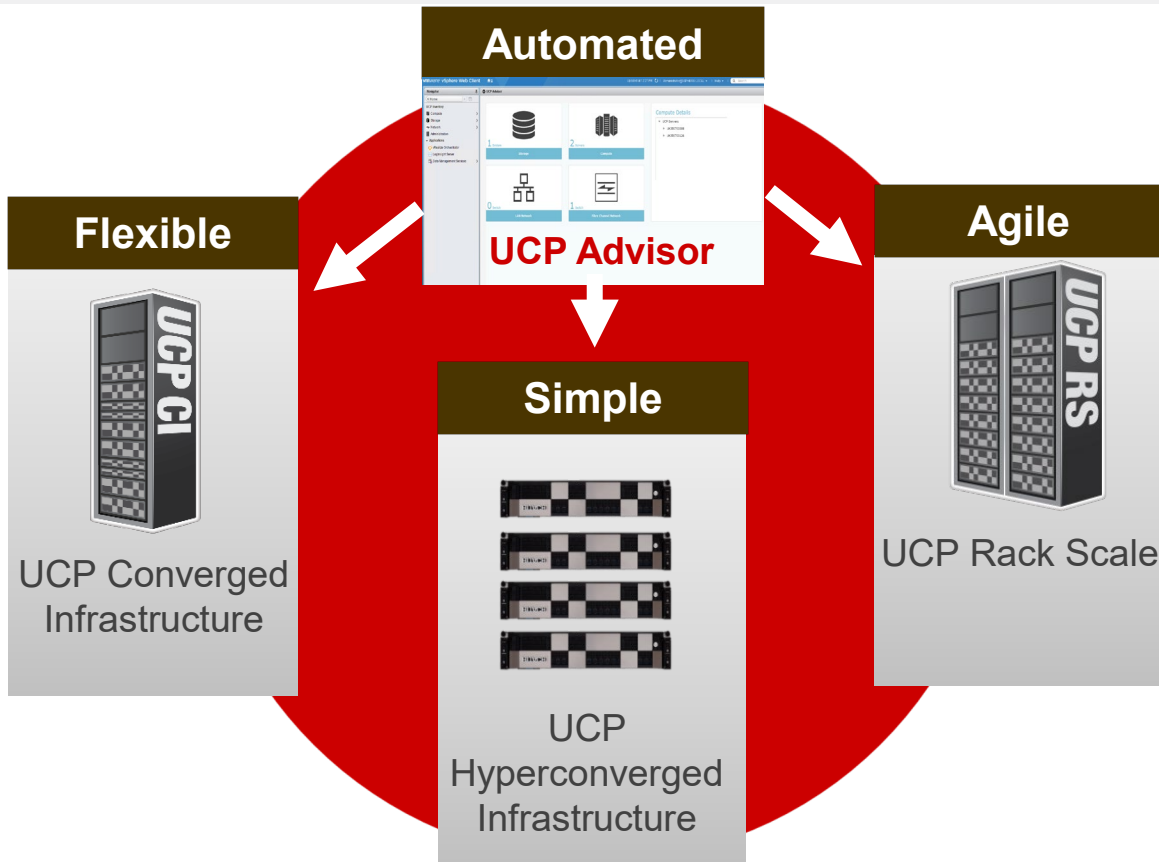
GOVERNMENT



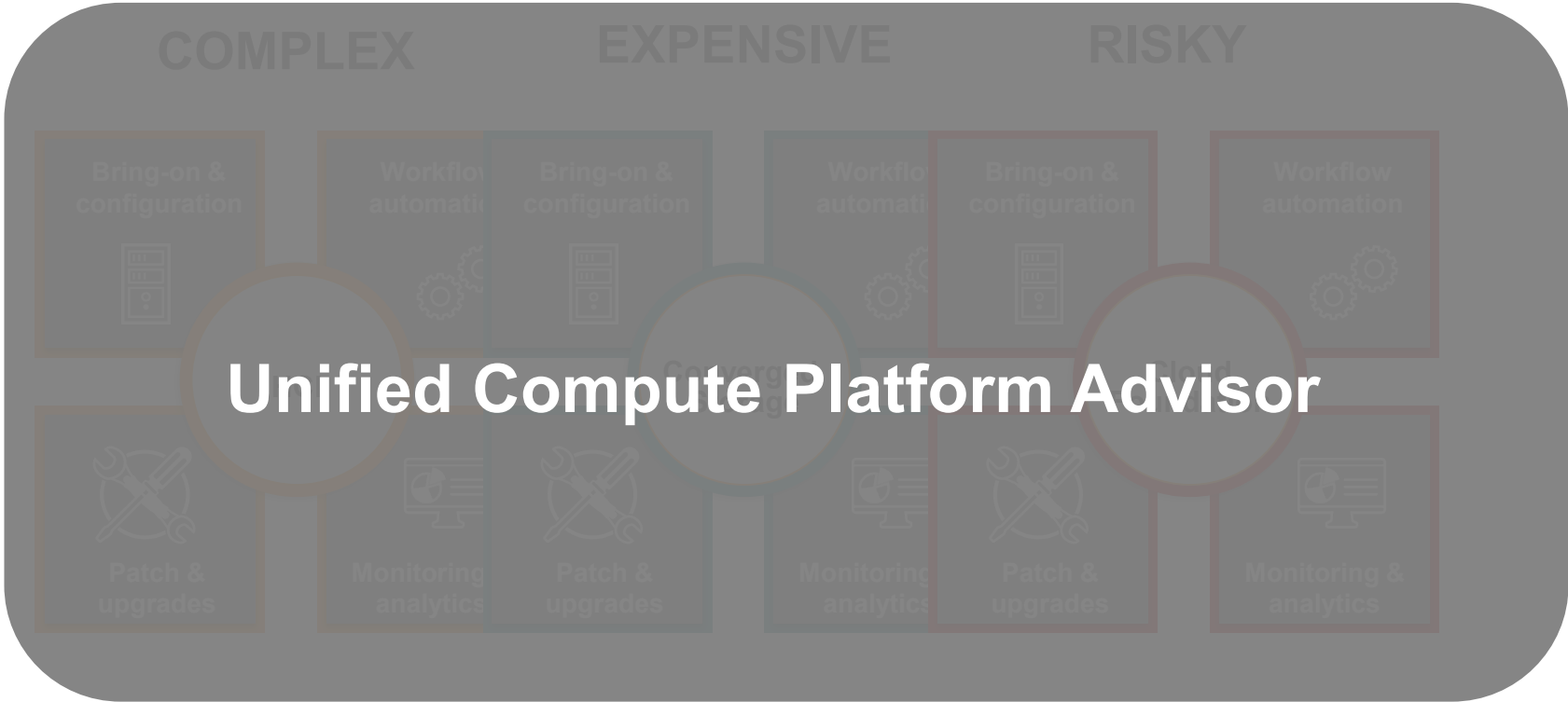
MANUFACTURING

# Hitachi Unified Compute Platform Family

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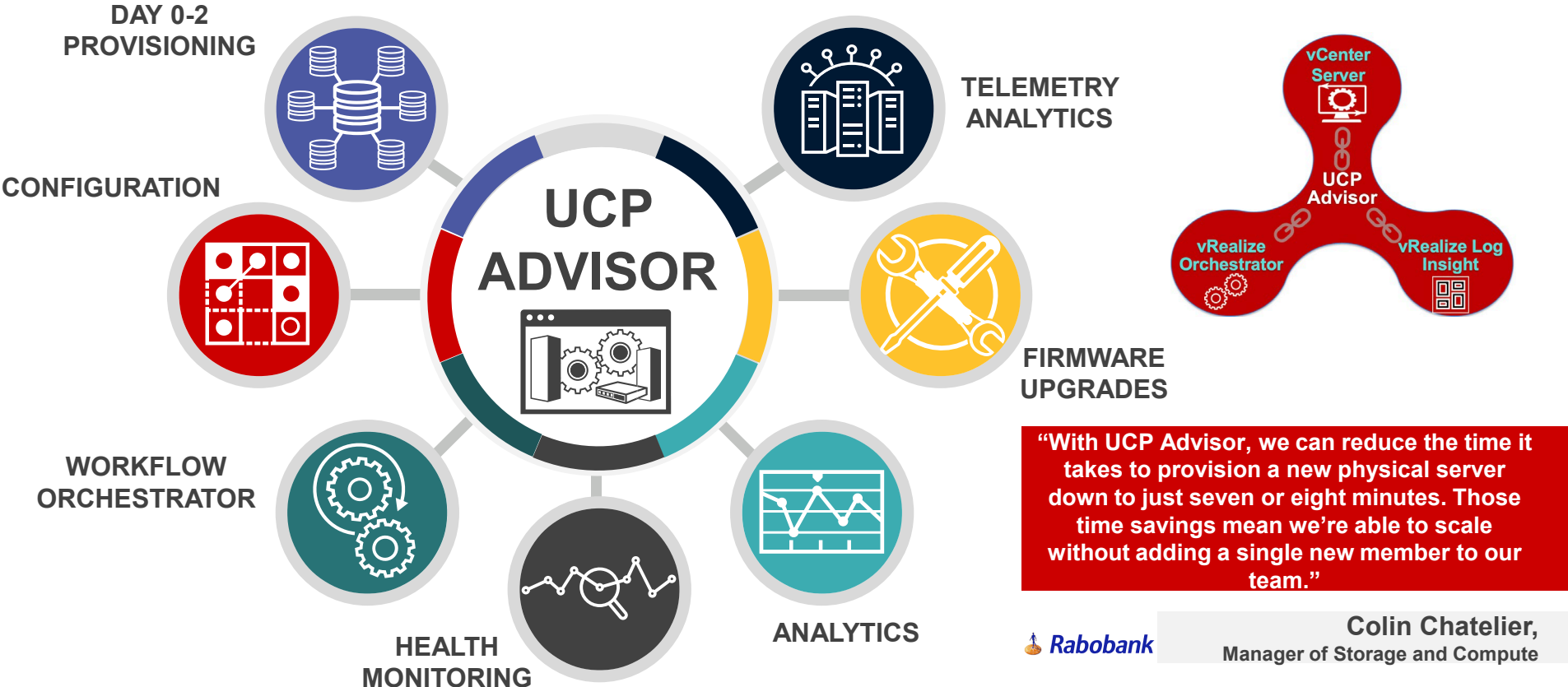


# Software Sprawl Challenges



# Unified SDDC Management

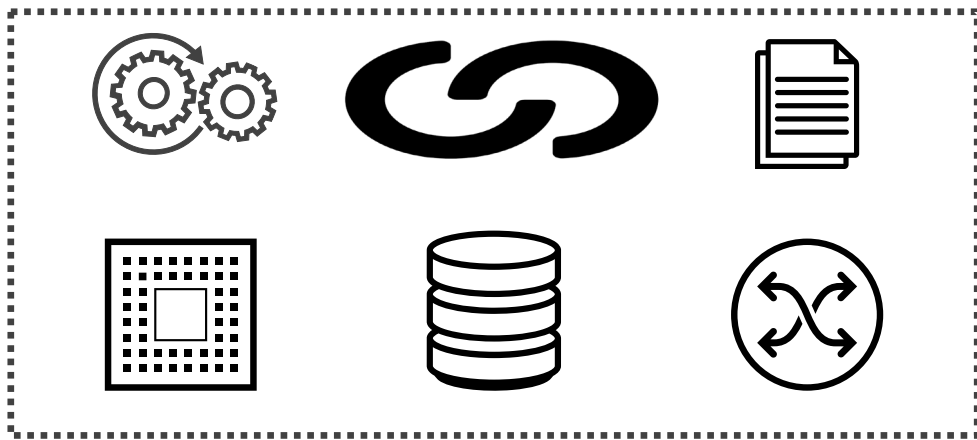
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 **Rabobank**

**Colin Chatelier,**  
Manager of Storage and Compute

# Non-disruptive Upgrades



- ✓ High-performance and compliance
- ✓ Policy-driven upgrade deployment
- ✓ Comprehensive life-cycle management
- ✓ Scheduling Flexibility with No Downtime

**Stress-free Upgrades with No Downtime**

# UCP Building Blocks



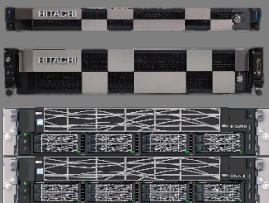
# Unified Compute Platform Building Blocks

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## COMPUTE

Hitachi Advanced  
Servers DS120,  
DS220, DS225,  
DS240, DS7000



Cisco UCS



## STORAGE

Hitachi Virtual  
Storage Platform  
(VSP) All-Flash  
and Hybrid

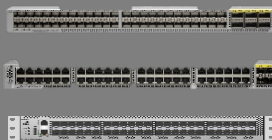
vSAN



## NETWORK



ARISTA



## OPERATING ENVIRONMENT

Hypervisors,  
containers  
and bare metal

vmware®



kubernetes



OPENSHIFT



## MANAGEMENT SOFTWARE

Hitachi UCP Advisor /  
Cisco UCS Manager

VMware vCenter

Hitachi  
Ops Center  
Protector

# Enterprise Class Storage for Everyone

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**Common Operating System  
Common Ops Center Software Portfolio**



600K IOPS  
12 Cores  
128GB Memory

-----  
2.8PB MAX. RAW  
2U Form Factor



4M IOPS  
24 Cores  
768GB Memory

-----  
8.9PB MAX. RAW  
2U Form Factor



6.8M IOPS  
64 Cores  
768GB Memory

-----  
8.9PB MAX. RAW  
2U Form Factor



8.4M IOPS  
64 Cores  
1TB Memory

-----  
25.9PB MAX RAW  
4U Form Factor



5.1M IOPS  
40 Cores  
1TB Memory

-----  
23.1PB MAX. RAW  
18U Form Factor



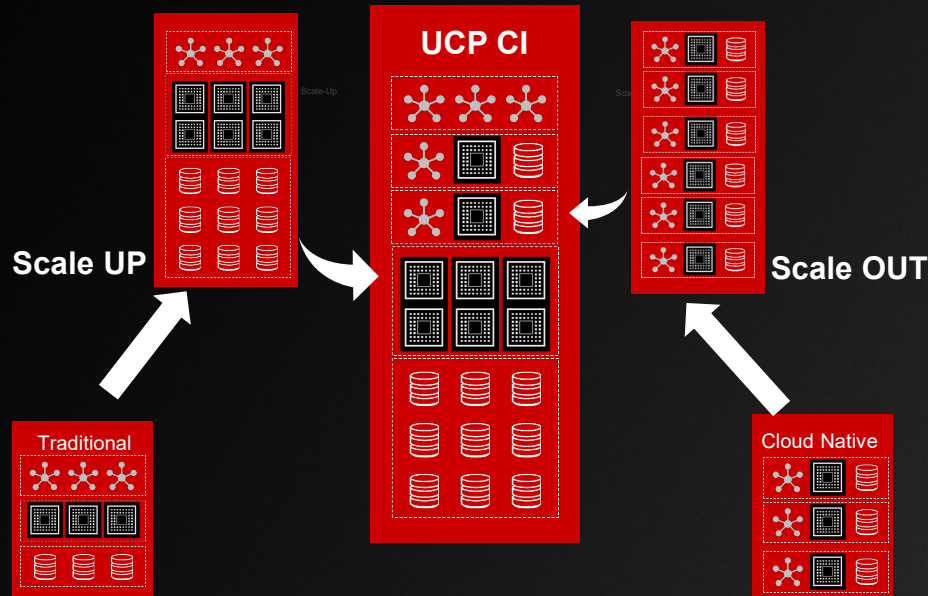
33M IOPS  
240 Cores  
6TB Memory

-----  
69PB MAX. RAW  
18U Form Factor

**100% Data Availability Warranty | Scale-Up & Out | Data-In-Place Upgrade to Next Gen**

# UCP Use Cases

## Agility and Scale for the Enterprise

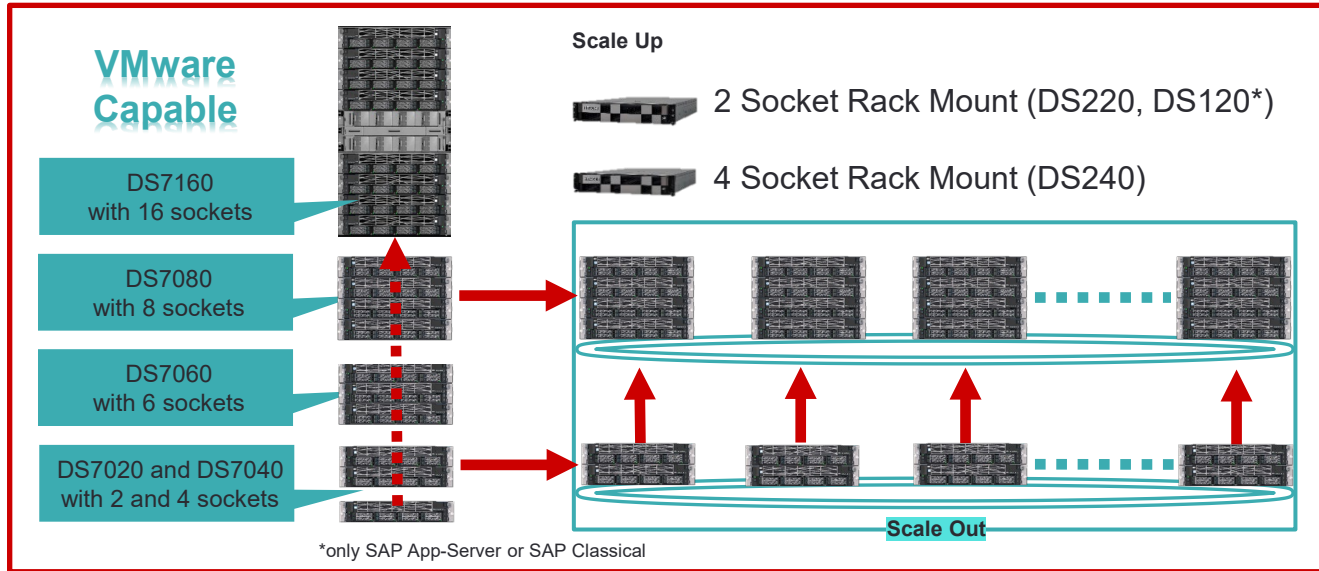


- Scale compute, storage and network independently
- Support mixed workloads, including virtualized and “bare metal”
- Integrate hyperconverged nodes
- UCP Advisor for physical and virtual stack
- 100% data availability guarantee with VSP
- Scale up and out to support both cloud-native and traditional applications
- Day Zero Deployment
- Pre-assembled and tested
- Pre-qualified Components

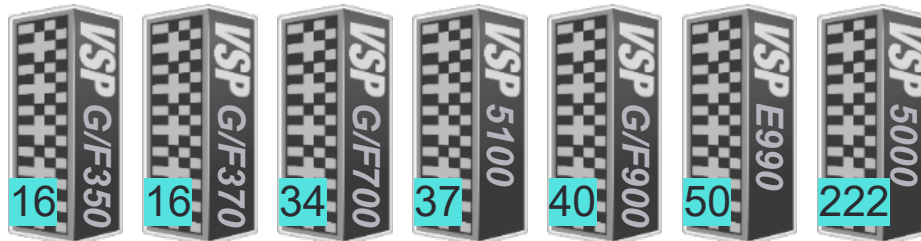
# Hitachi Solutions for SAP

## Unique Scalability in All Directions

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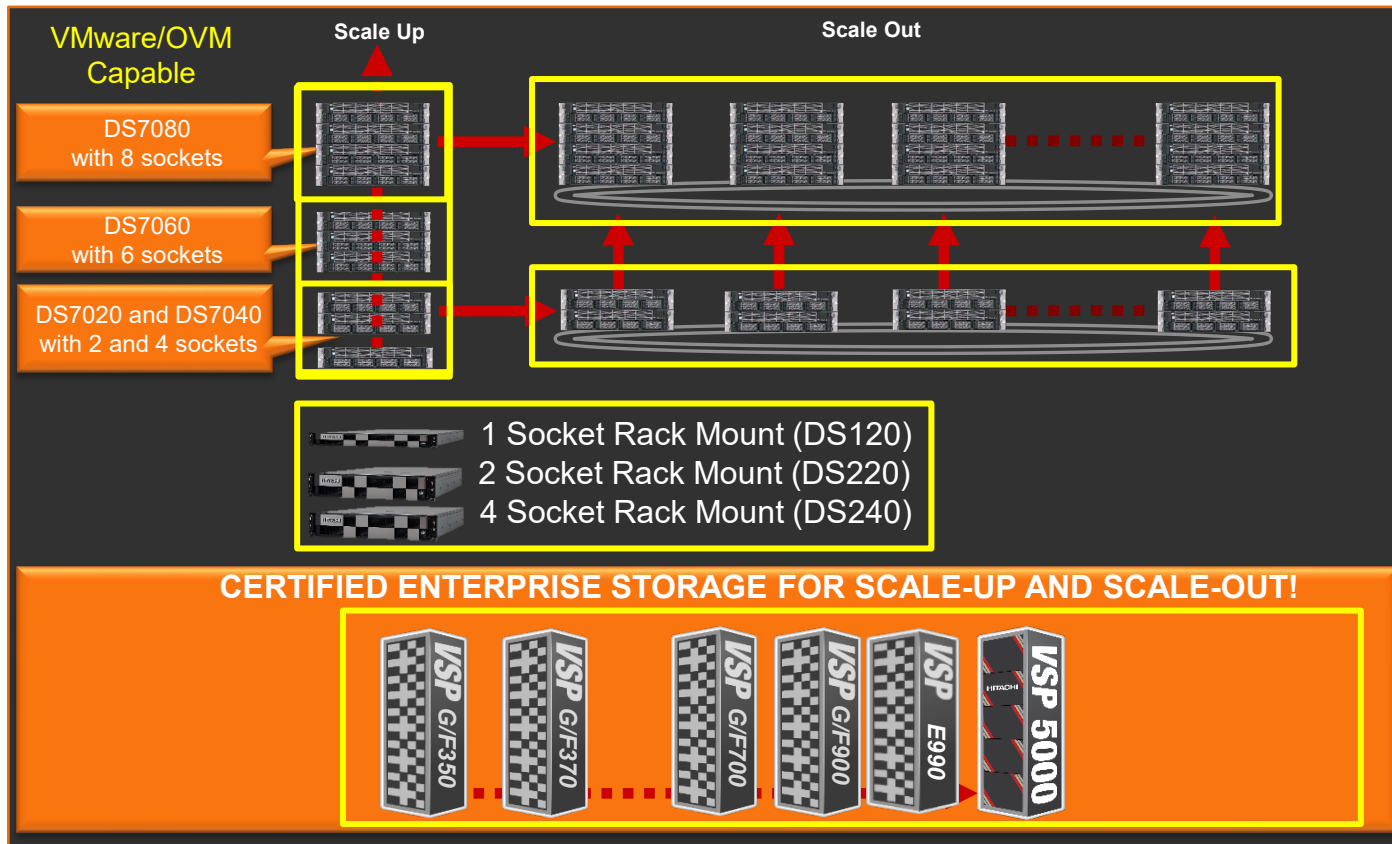
- Same HW Architecture for scale out and scale up with DS7000
- Modular scale w. 2 socket modules from 2 up to 16 sockets
- Best-in-class storage platform that scales up to 222 SAP HANA Nodes (VSP 5500)
- Highest Scalability per storage node for SAP HANA (up to 64 SAP HANA nodes per single frame)
- Extreme scalability from 1 up to 6 nodes with VSP 5600
- Highest Performance with 21m IOPS on VSP5500



**VSP Storage  
ranked #1  
by Gartner**

# Unique Scalability and Elasticity with Hitachi Solution for Databases

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- Best-in-class storage platform that scales up to 33M IOPS and 69PB of raw capacity (VSP 5600)
- Supports NVMe, FMD, SSD and HDD for effective database tiering and ILM.

**VSP 5000**  
**ranked #1**  
**by Gartner**



# Customer Challenges with Oracle Environments

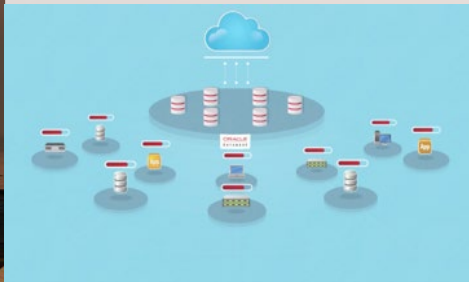
## Increasing Oracle Database Costs

Software licensing and maintenance costs continue to rise



## Inadequate Performance and Low Utilization

Legacy infrastructure struggles to support real-time business and mobile user demand



## Complex Database and Infrastructure Management

Sprawling databases and silos of infrastructure put business at risk



The total cost of ownership (TCO) of growing Oracle database and infrastructure undermines many CIOs' investments to expand their businesses, increase IT agility and accelerate transformation.

# Benefits of Using Database Infrastructure Evaluation Tool (DIET)

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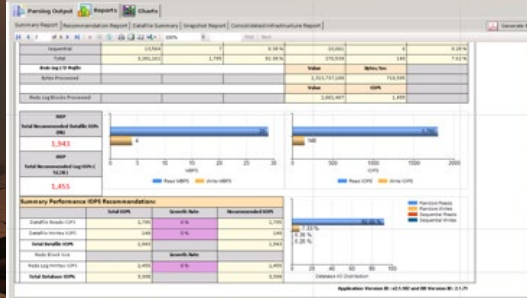
## Optimize Oracle Database Costs

Identify opportunities for infrastructure and software right-sizing



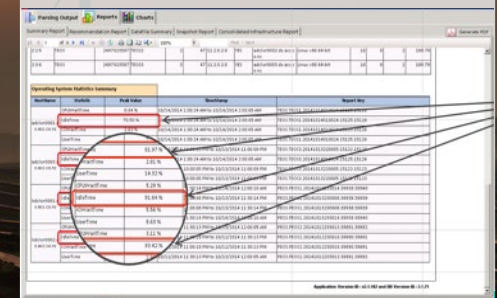
## Improve Performance, Resilience and Efficiency

Increase utilization and reduce business risk with DIET health checks



## Consolidate & Simplify Infrastructure

Reduce IT TCO and improve agility with modern infrastructure

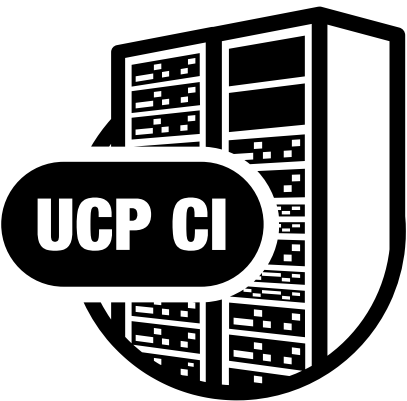


Hitachi has helped more than 2,000 companies use the Database Infrastructure Evaluation Tool over the past 10 years get more out of their Oracle infrastructure for less. What can we do for you?



# Unified Platform for All Your Apps

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**Any** Application



ORACLE



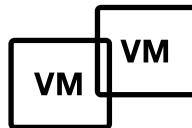
vmware®

CITRIX®

splunk>

**Any** infrastructure

Bare Metal



**Any** SLO

100% Data  
Availability

New Server  
in Minutes

Single Control  
Plane

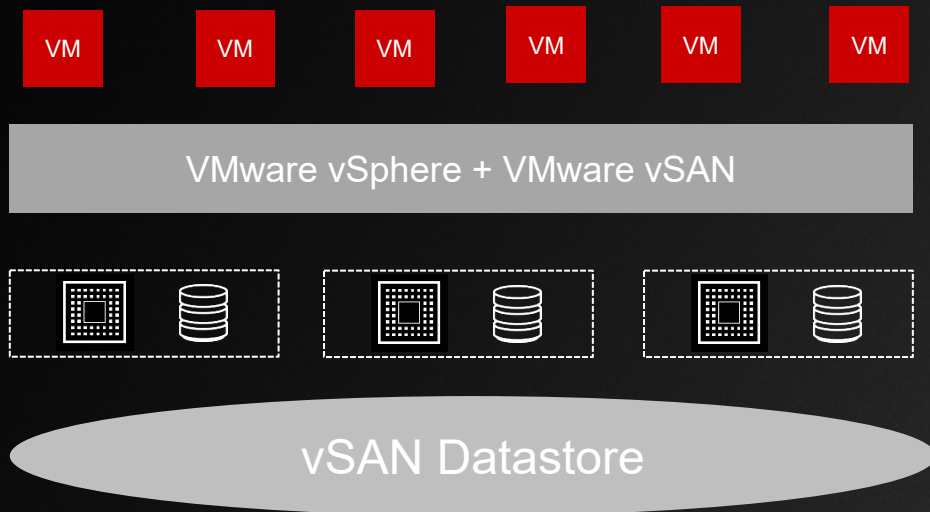
Cloud  
Integration

## Consolidate for Agility and Efficiency

# Hitachi Unified Compute Platform HC (UCP HC)

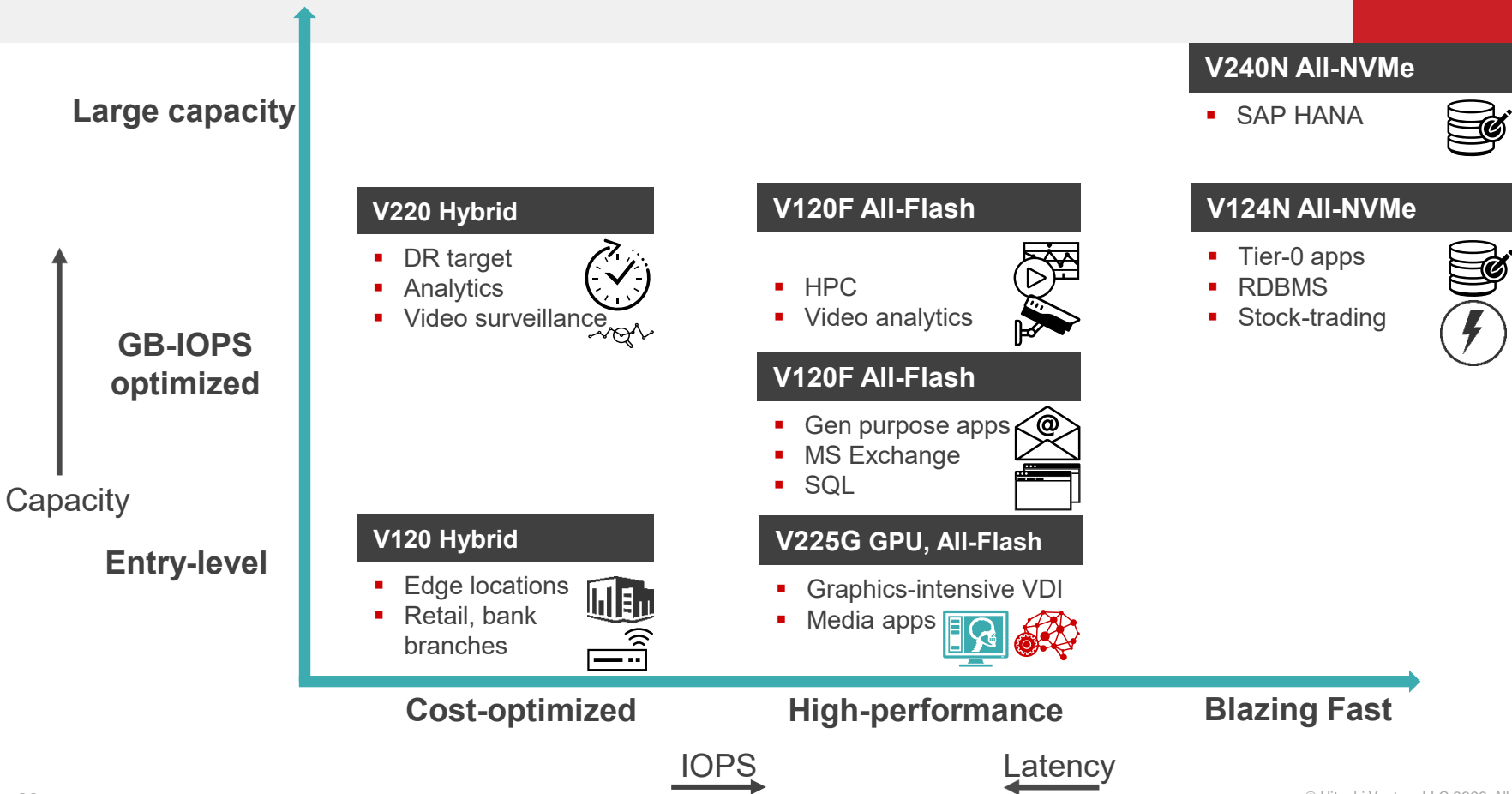
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**Designed for simplicity, scale and saving**



- Software-defined storage optimized for VMs
- Hypervisor-embedded architecture
- Certainty with policy-based automation
- Integration with VSP storage
- Enterprise-grade performance
- Continuous availability for critical apps
- Disaggregated HC – scale independently
- UCP HC inside UCP CI

# UCP-HC Configuration Flexibility



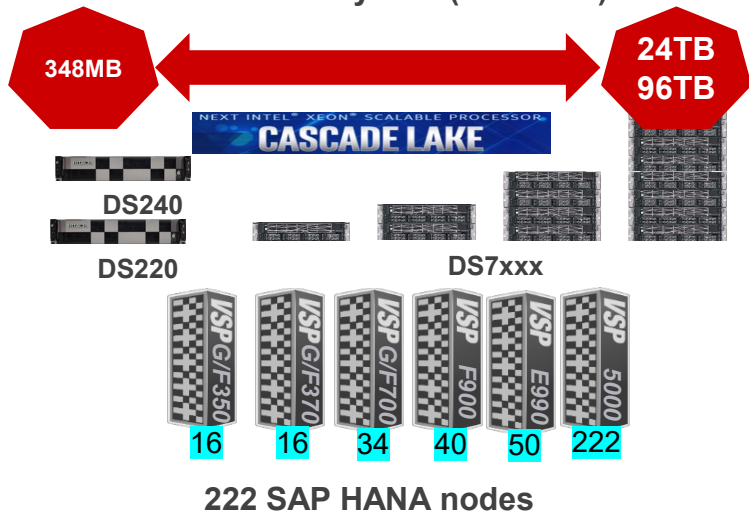
# SAP HANA on Hitachi Unified Compute Platform HC - Crowns the SAP Portfolio

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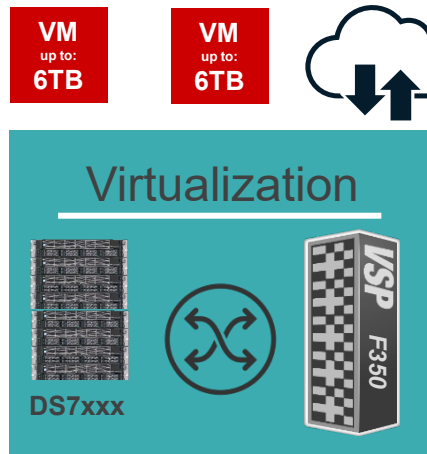
## Bare Metal

24 TB memory size (scale up)  
96 TB memory size (scale out)



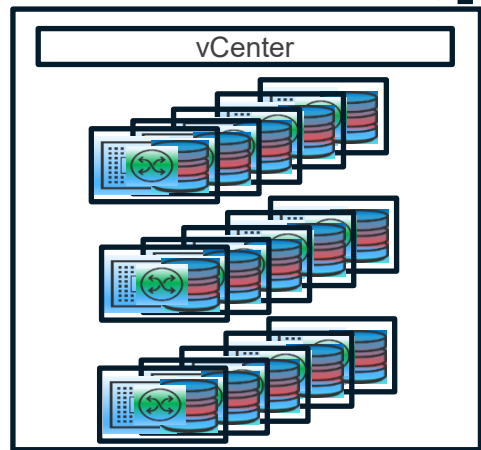
## Virtualized

12 TB memory size

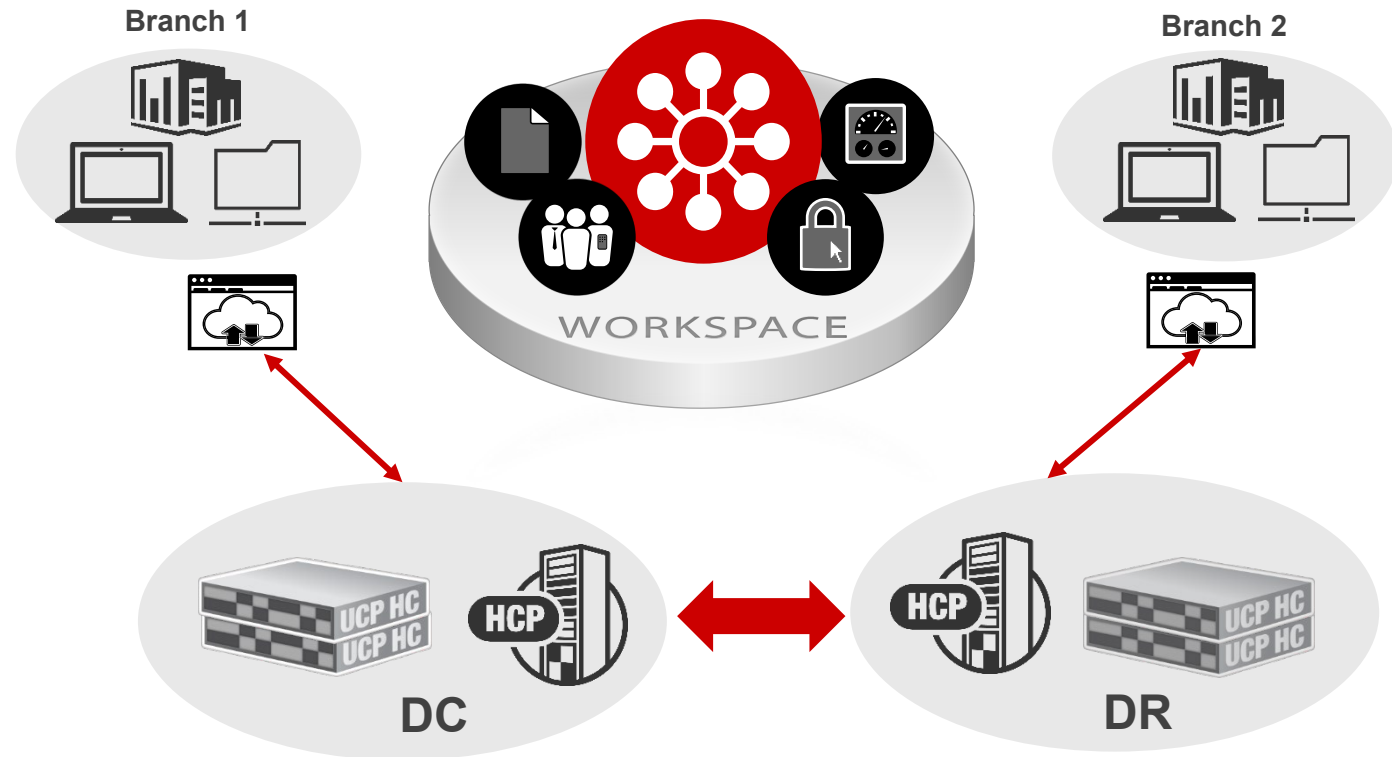


## Hyperconverged

6 TB memory size  
3 to 64 HANA Nodes



# Highly Available Virtual Desktops



- Desktop cost reduction
- VDI is becoming a tier-1 application, so high availability is critical
- Disaster recovery (DR) for VDI
- Reduce rack and power costs

HDI = Hitachi Data Ingestor, HCP = Hitachi Content Platform, DC = data center

# VDI Bundles



- 150-250 users
- 4-node UCP HC VDI bundle
- All-NVMe
- 350-500 users
- 6-node UCP HC VDI bundle
- All-NVMe
- 500-1,000 users
- 8-node+4 management
- All-NVMe + All-Flash

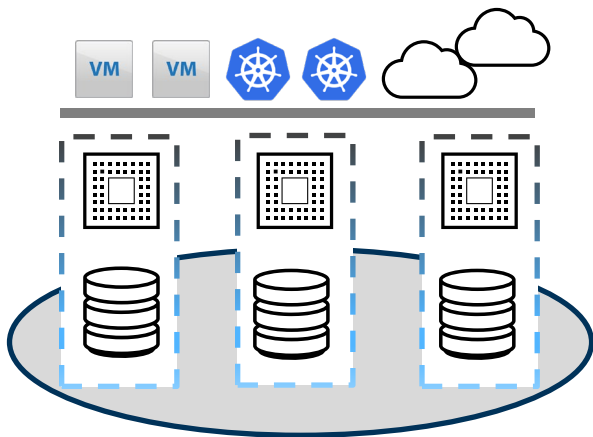
Easy to transact and  
deploy without guesswork

Seamless experience for  
all users without  
compromise

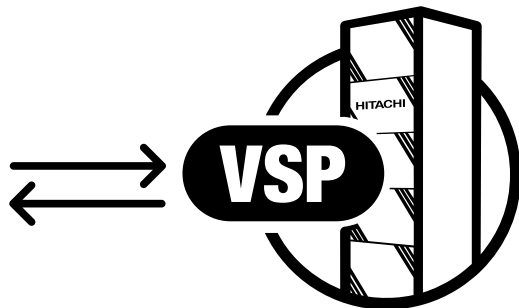
Simple management and  
flexible consumption

# Disaggregated HCI (Enterprise)

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Unified Compute Platform HC  
(UCP HC)



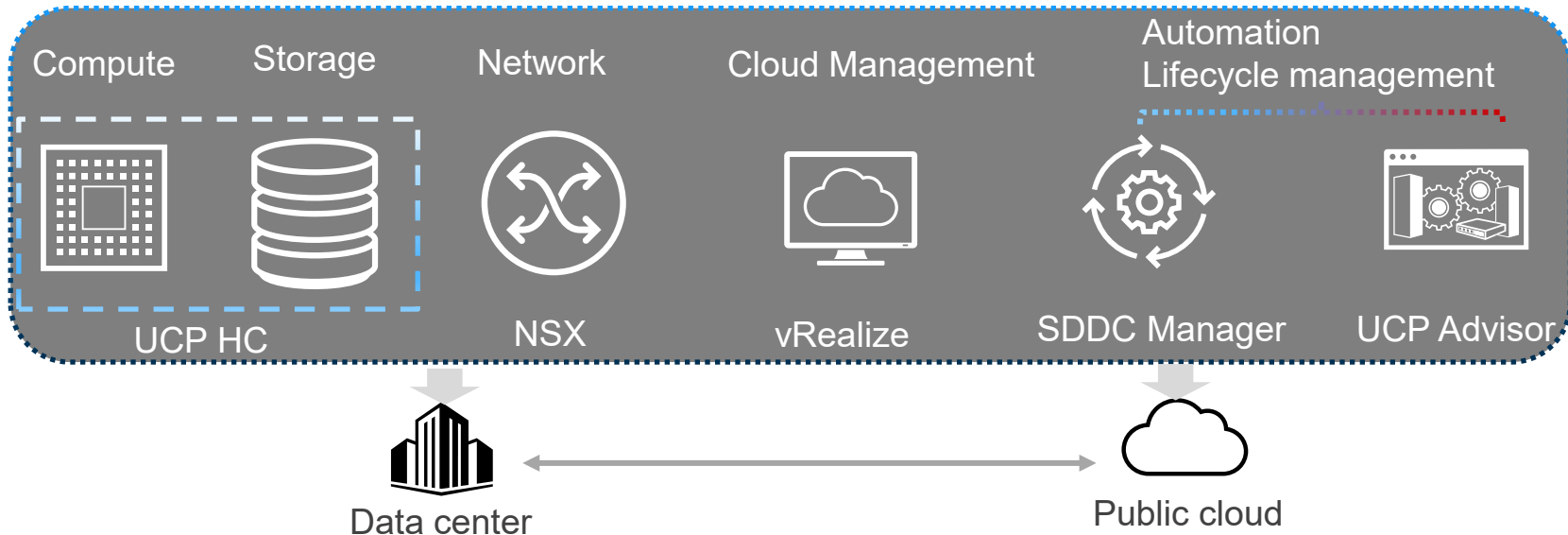
- ✓ Efficiency w/ tiered storage
- ✓ 8 '9s availability
- ✓ Enterprise-grade snapshots
- ✓ Unified management

**Maximize Investments with a Seamless Architecture**

# Automated Hybrid Cloud

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Hitachi Unified Compute Platform RS powered by VMware Cloud Foundation



**Turnkey full-stack**  
Pre-validated SDDC

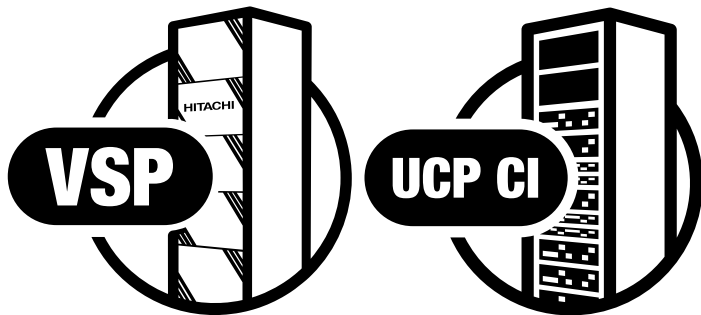
**Run Apps anywhere**  
Seamless mobility

**Consistent Operation**  
Unified management

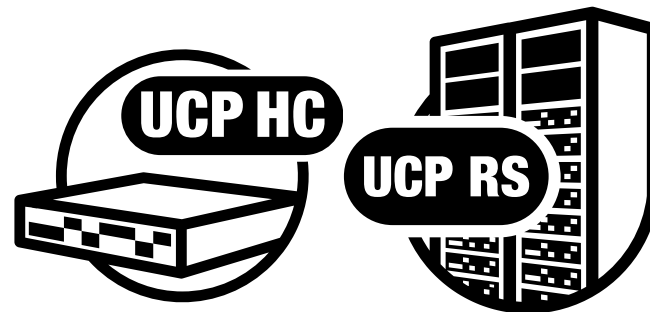
**Guided LCM**  
Automated upgrades



# Several Paths to Nirvana



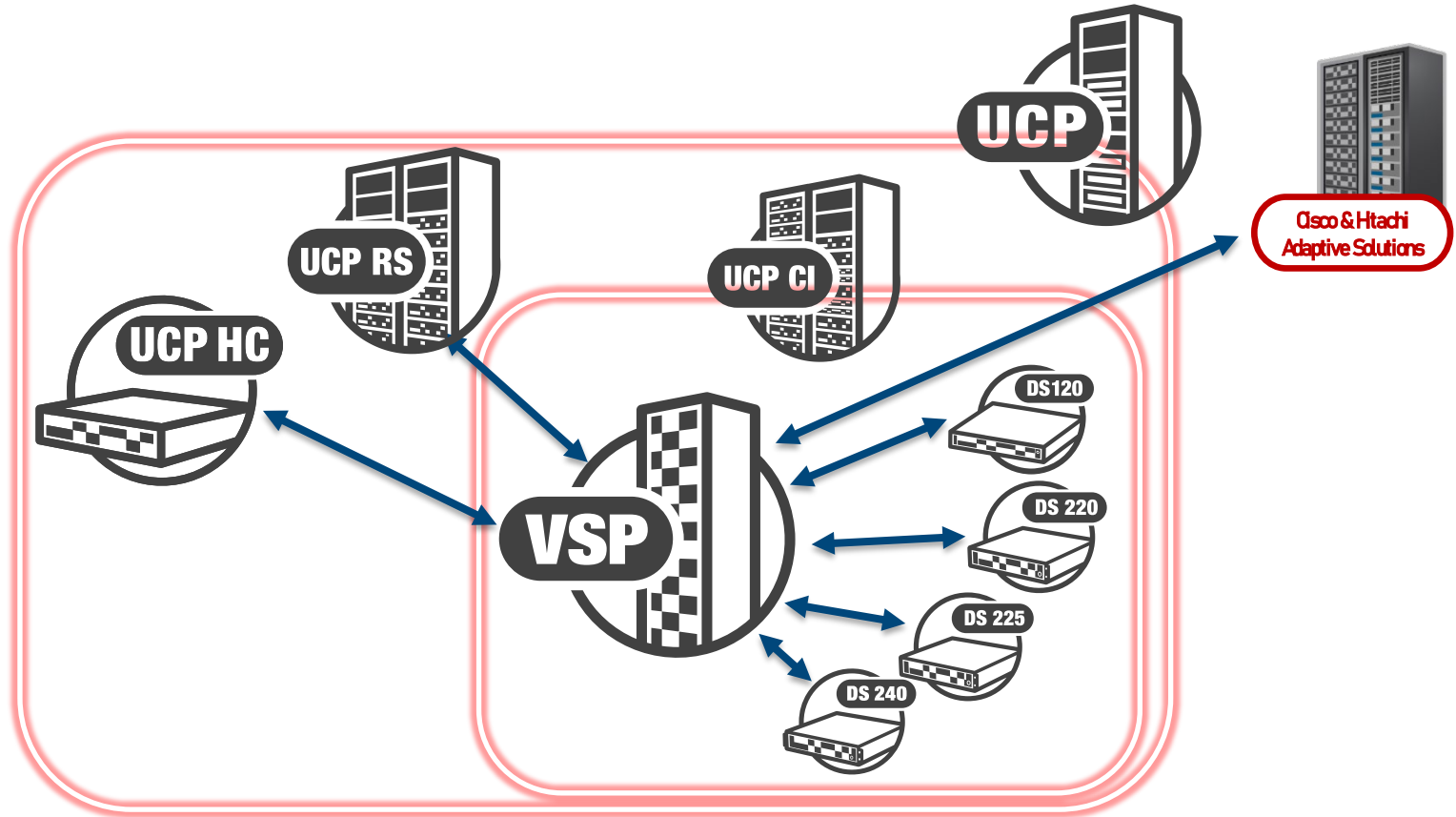
- ✓ The most powerful platform
- ✓ Eight 9s availability
- ✓ Best in class data protection
- ✓ Large install base



- ✓ The simplest path to cloud
- ✓ Scale as you grow
- ✓ SDDC flexibility
- ✓ Consistent management

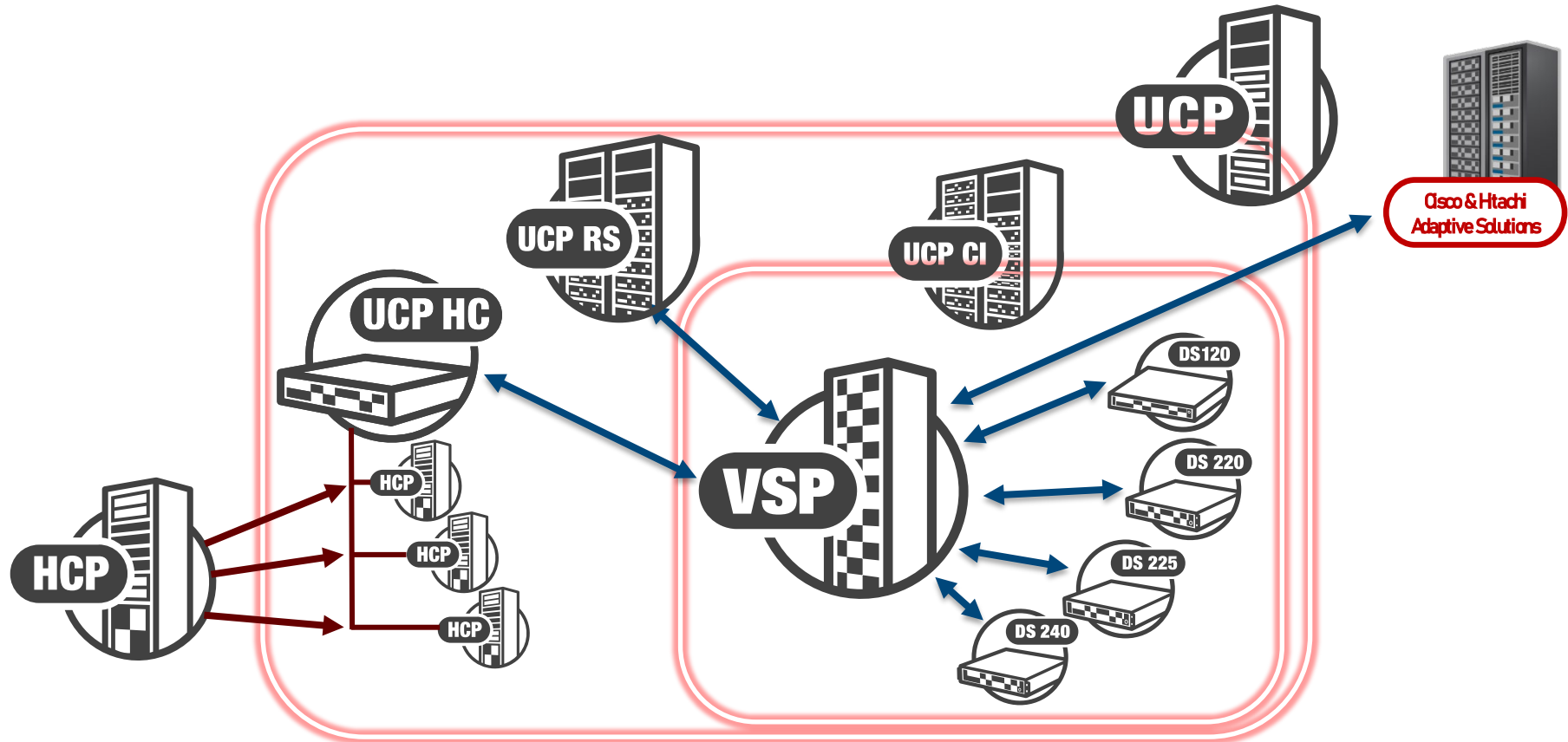
# UCP Advantage: One Platform for All Workloads

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# UCP Advantage: One Platform for All Workloads

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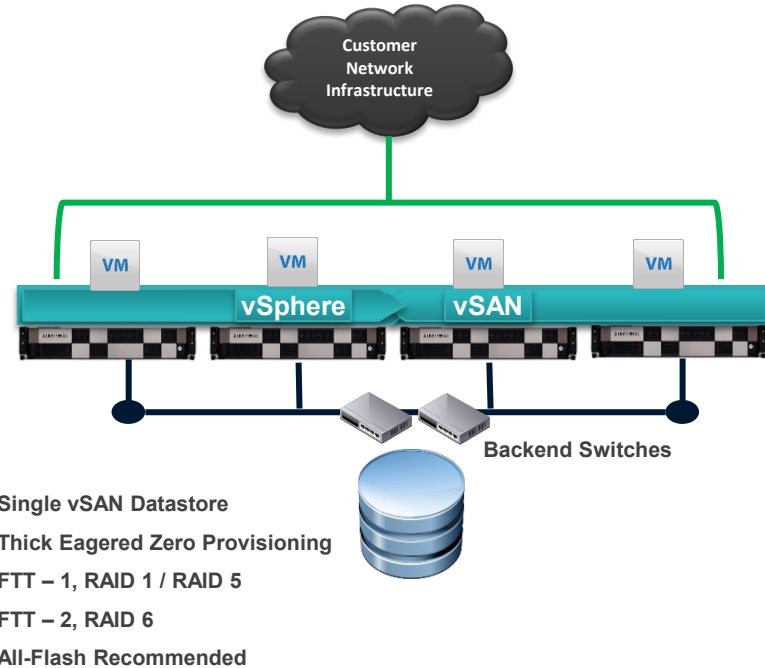
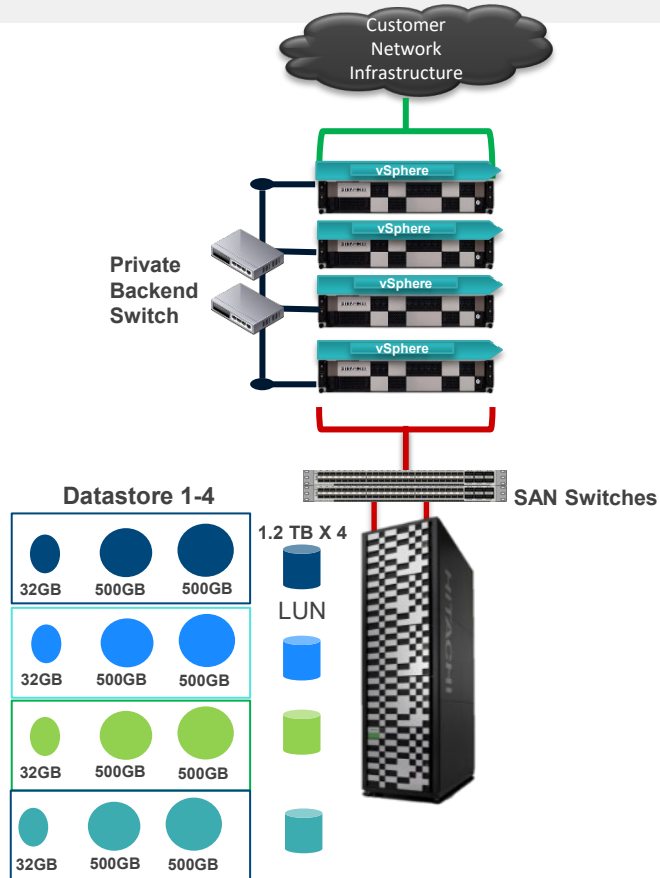


Cisco & Hitachi  
Adaptive Solutions

# Content Solution on Virtualization Platform

Sl.No.	Solution	Virtualization	vSAN	VSP (VMFS)
1.	HCP “classic”	VMware ESXi KVM	Yes	Yes
2.	HCP Gateway (Next-gen File Services)	VMware ESXi Hyper-V	Yes	Yes
3.	HCP Anywhere (File Sync & Share)	VMware ESXi	Yes	Yes
4.	HCP for Cloud Scale	VMware ESXi KVM	Yes	Yes

# Logical Architecture – UCP-CI / UCP-HC



# Summary

**HITACHI**  
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**Accelerated  
Production**



**Unified  
Management**



**Policy-based  
Automation**



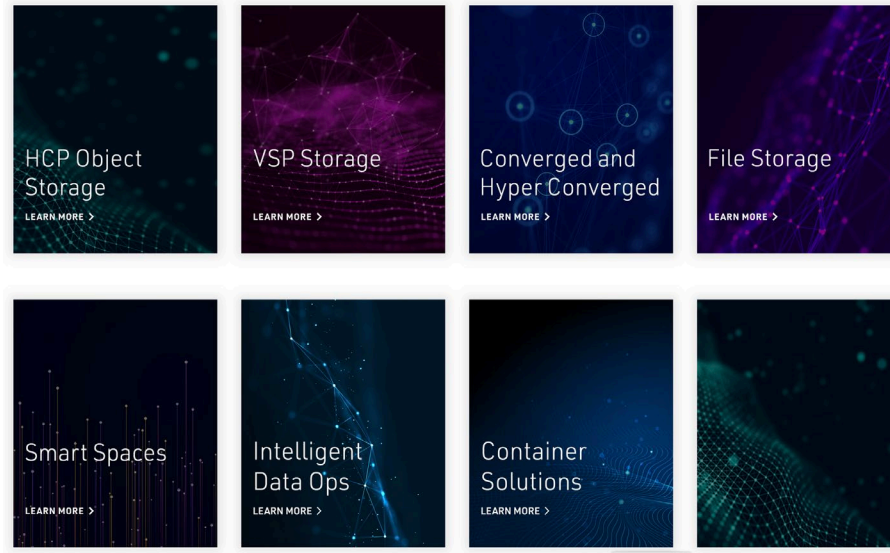
**Enterprise  
Availability**



**Leading IT Transformation**

## [demos.hitachivantara.com](https://demos.hitachivantara.com)

Categories



## [www.hitachivantara.com/converged](https://www.hitachivantara.com/converged)

# Seeing is Believing

# Thank You

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