

Hitachi Converged Infrastructure Solutions

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**On-demand
IT**



**Infrastructure
Sprawl**



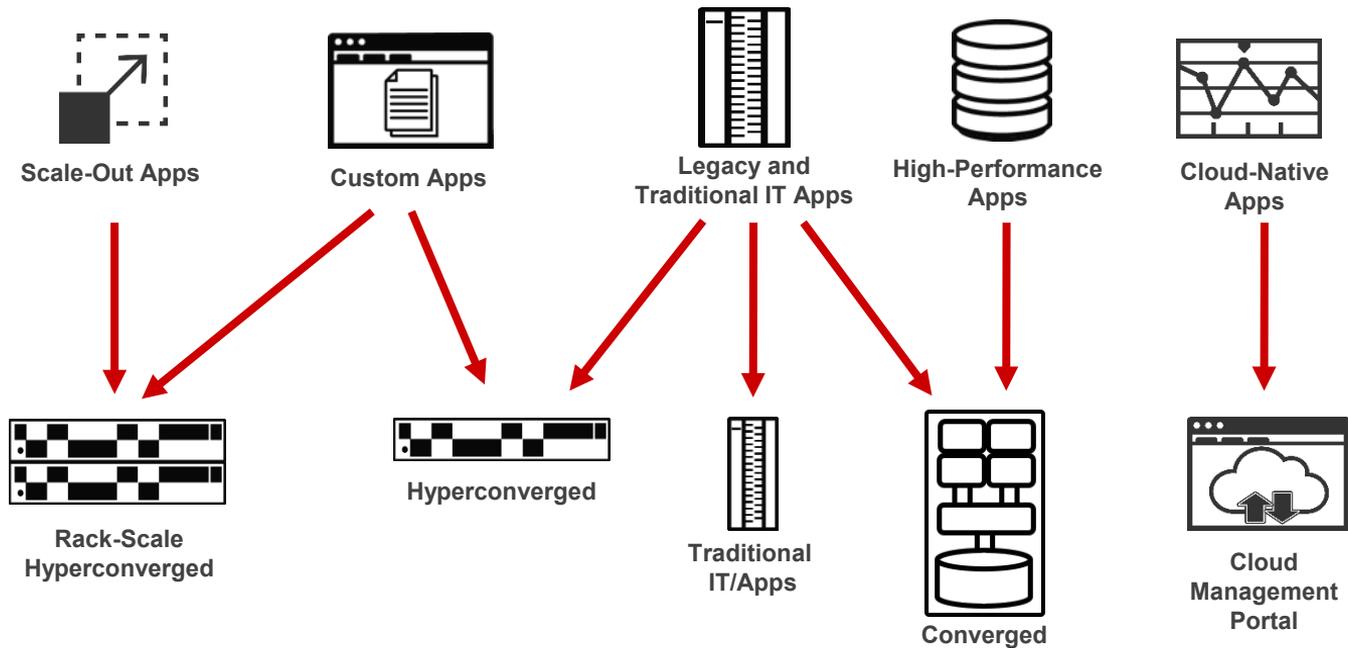
**Management
Complexity**



**Minimize
Risk**



Transition to a Modern Data Center



FINANCE



HEALTHCARE



ENERGY



MINING



RETAIL



TRANSPORTATION

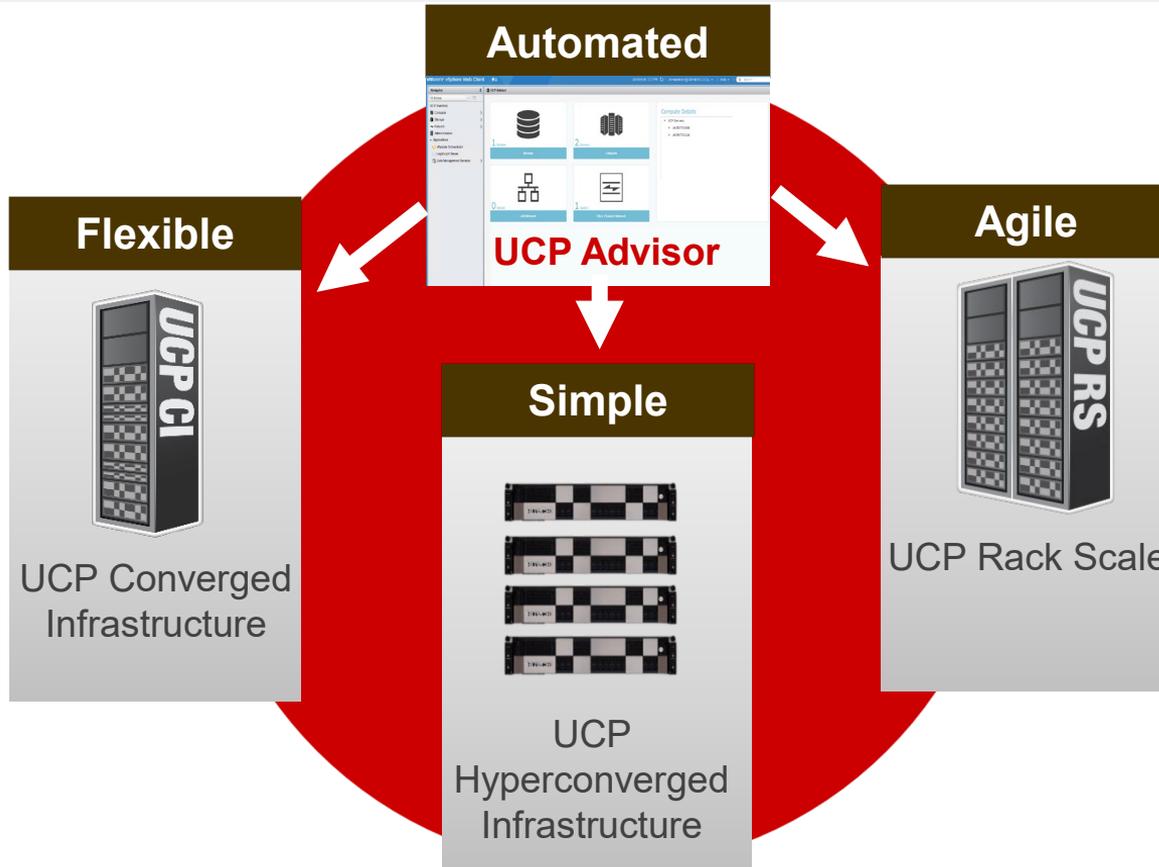


GOVERNMENT

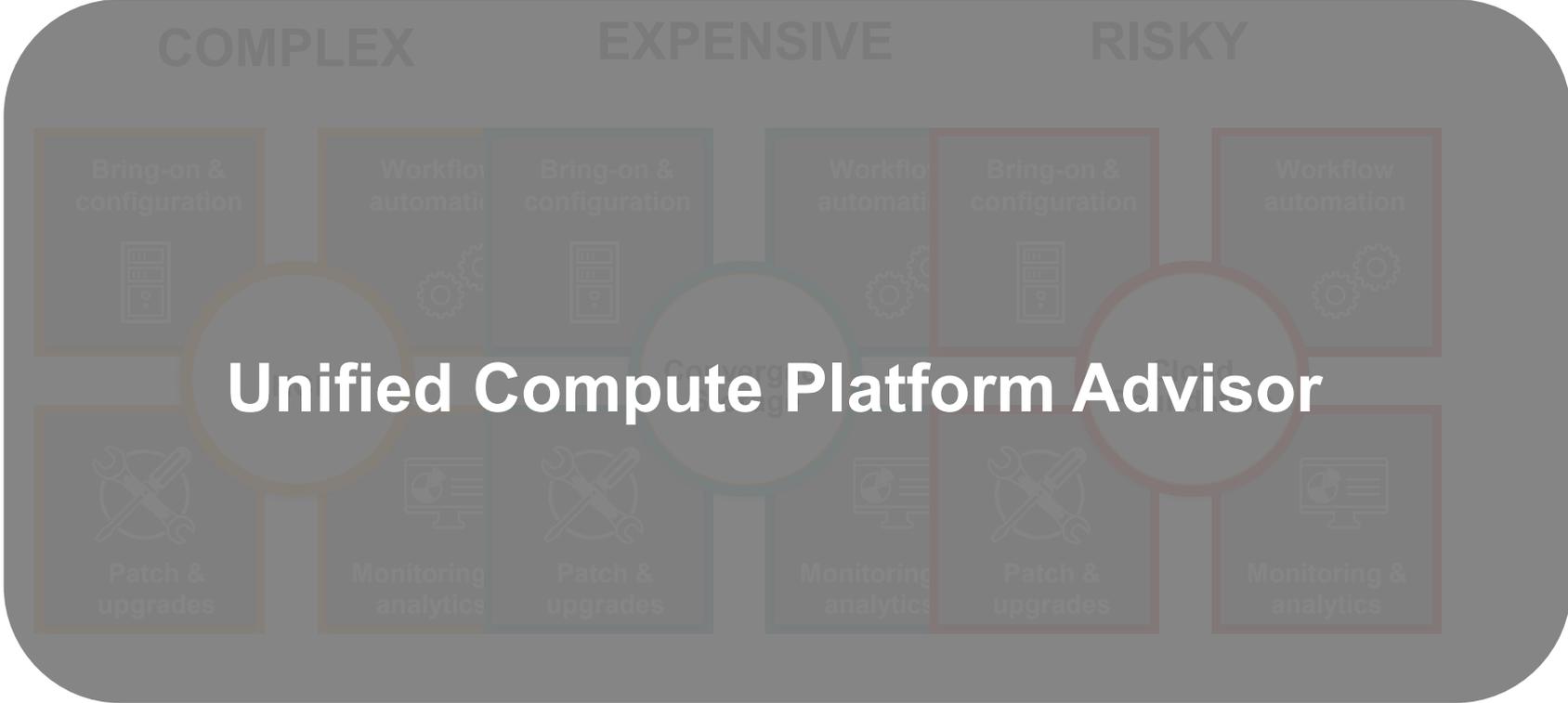


MANUFACTURING

Hitachi Unified Compute Platform Family

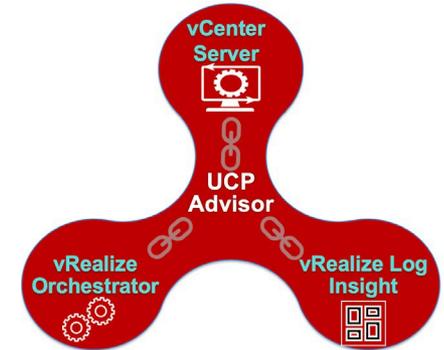
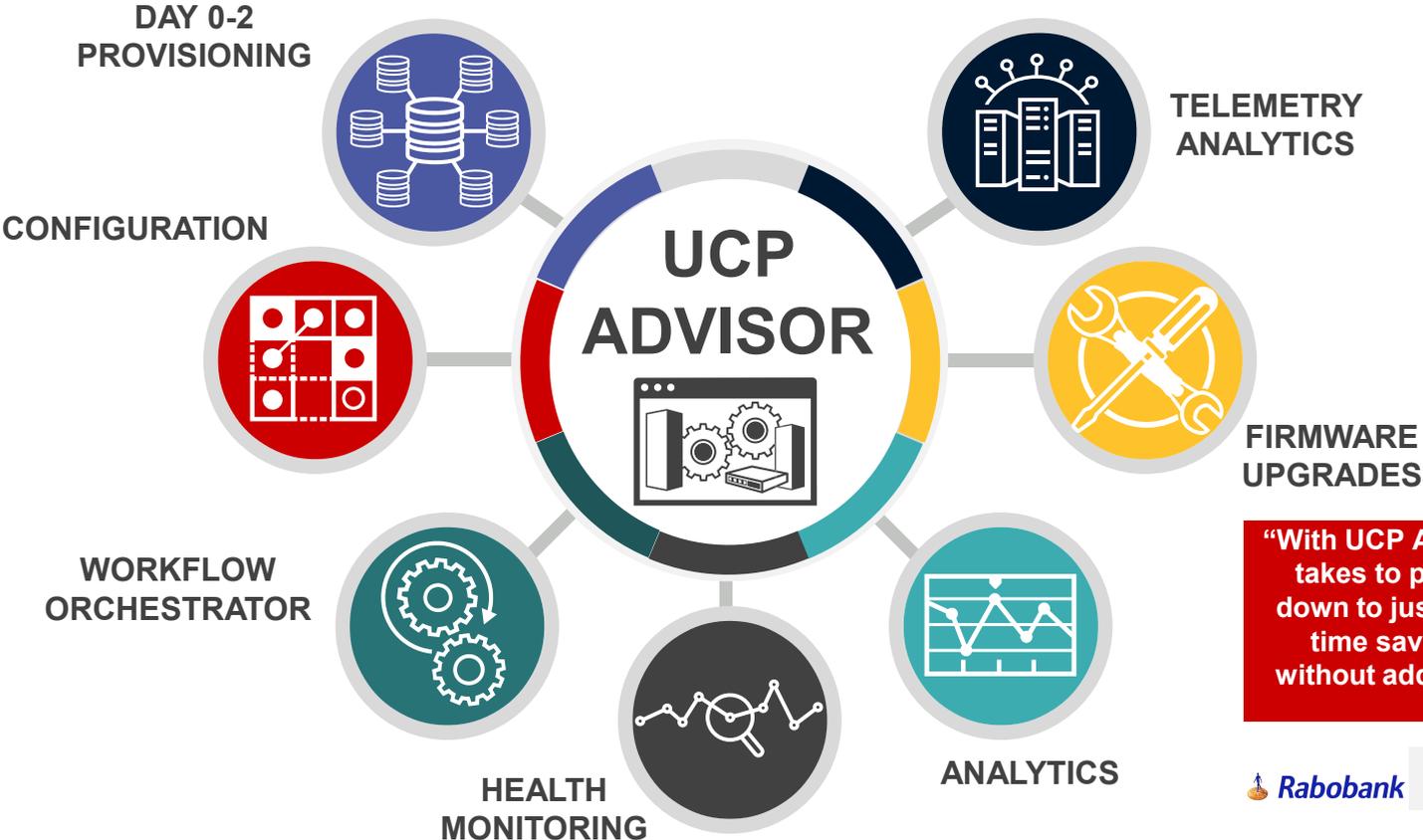


Software Sprawl Challenges



Unified Compute Platform Advisor

Unified SDDC Management

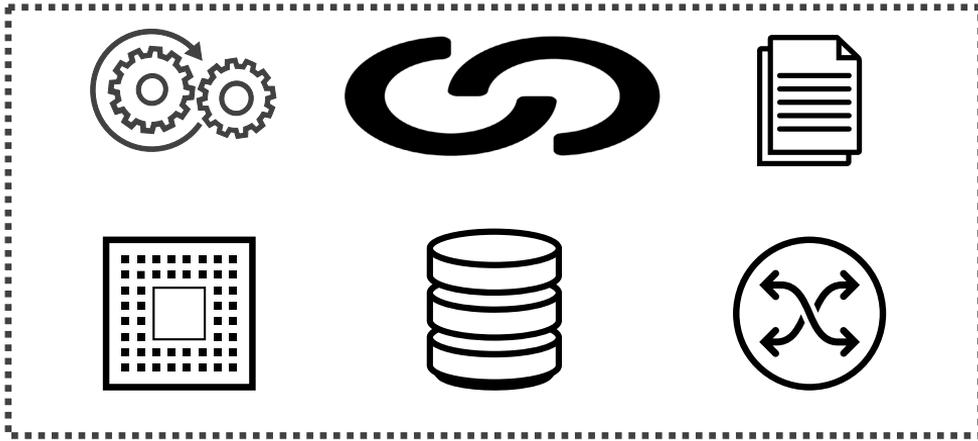


“With UCP Advisor, we can reduce the time it takes to provision a new physical server down to just seven or eight minutes. Those time savings mean we’re able to scale without adding a single new member to our team.”

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

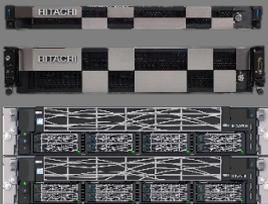
UCP Building Blocks

Unified Compute Platform Building Blocks



COMPUTE

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



Cisco UCS



STORAGE

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

vSAN



NETWORK



OPERATING ENVIRONMENT

Hypervisors, containers and bare metal



kubernetes



OPENSIFT



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



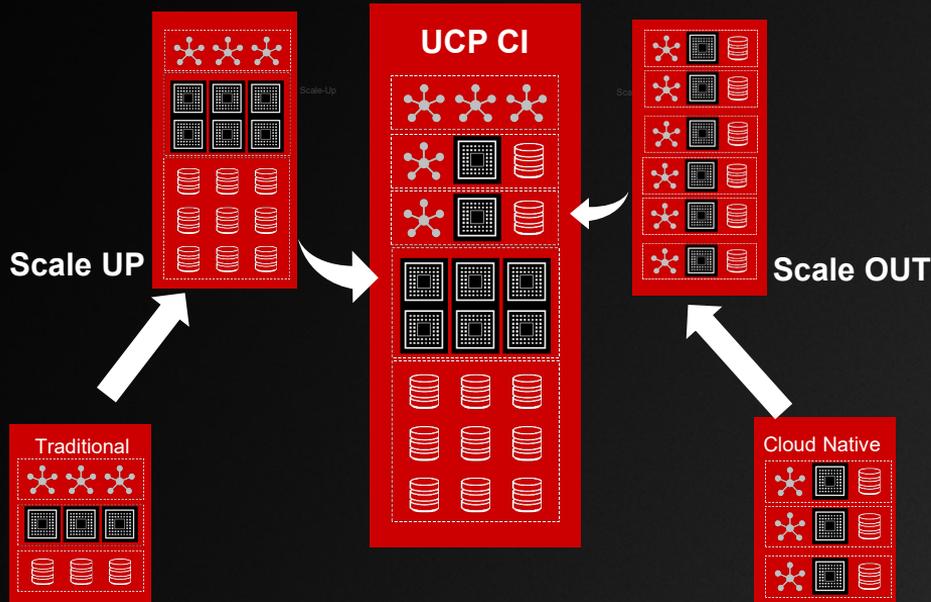
33M IOPS
240 Cores
6TB Memory

69PB MAX. RAW
18U Form Factor

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

UCP Use Cases

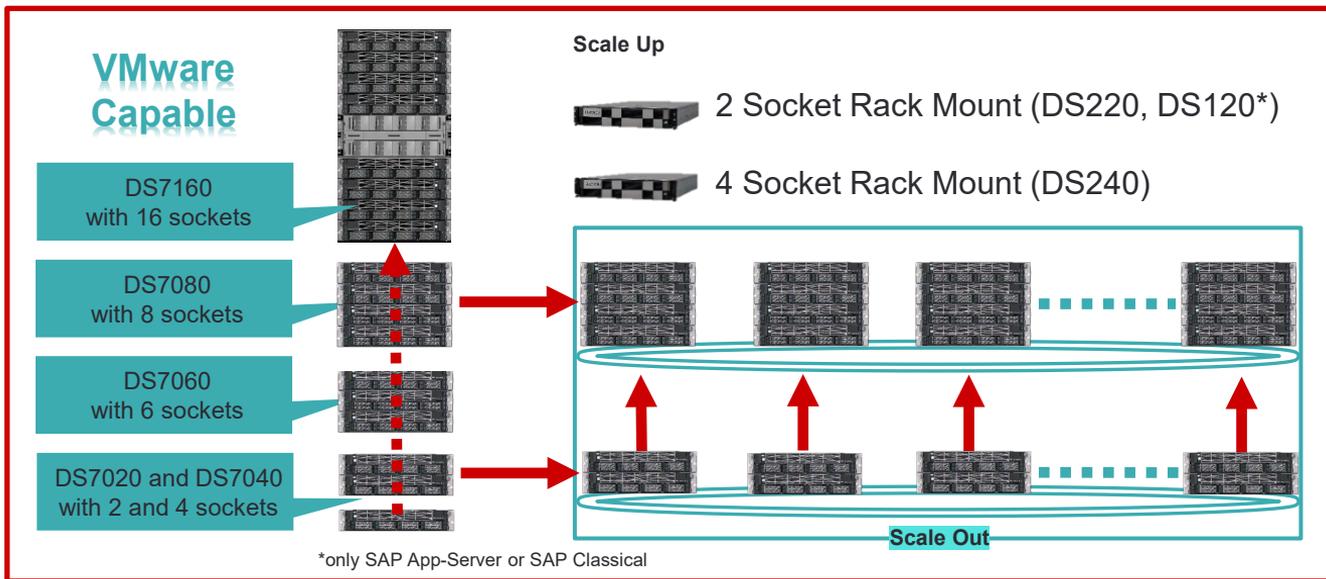
Agility and Scale for the Enterprise



- 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



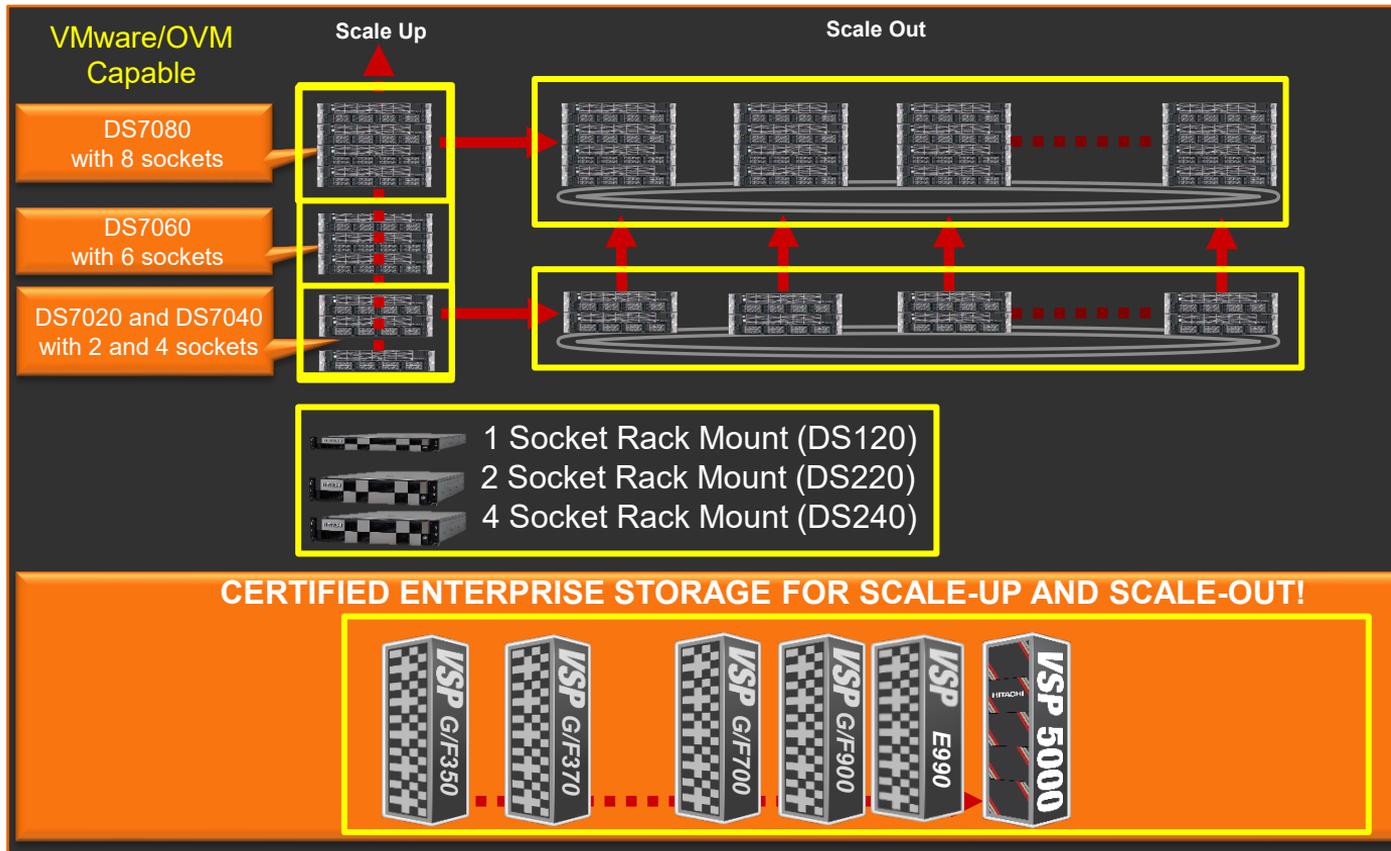
- Same HW Architecture for scale out and scale up with DS7000
- Modular scale w. 2 socket modules from 2 up to 16 sockets
- Best-in-class storage platform that scales up to 222 SAP HANA Nodes (VSP 5500)
- Highest Scalability per storage node for SAP HANA (up to 64 SAP HANA nodes per single frame)
- Extreme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

HITACHI
Inspire the Next



- 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

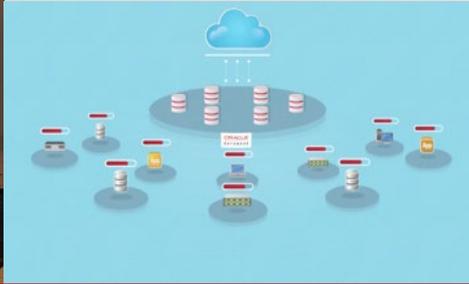
Increasing Oracle Database Costs

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)

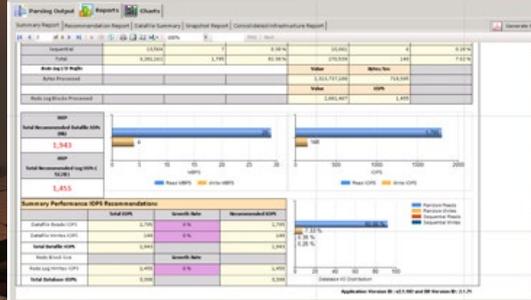
Optimize Oracle Database Costs

Identify opportunities for infrastructure and software right-sizing



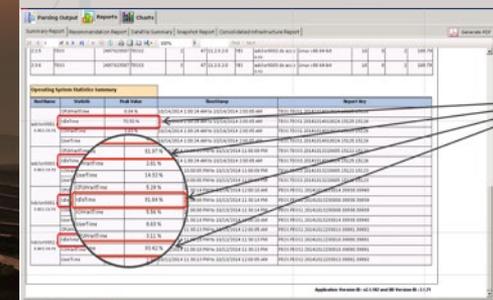
Improve Performance, Resilience and Efficiency

Increase utilization and reduce business risk with DIET health checks



Consolidate & Simplify Infrastructure

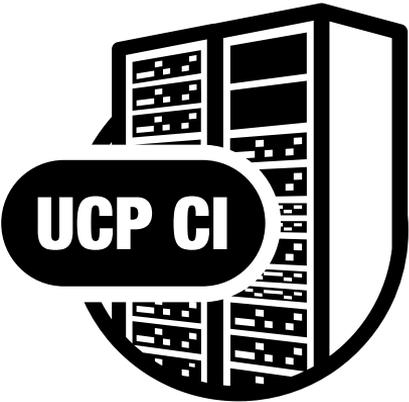
Reduce IT TCO and improve agility with modern infrastructure



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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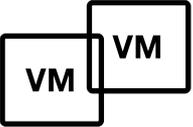


Any Application



Any infrastructure

Bare Metal



Any SLO

100% Data Availability

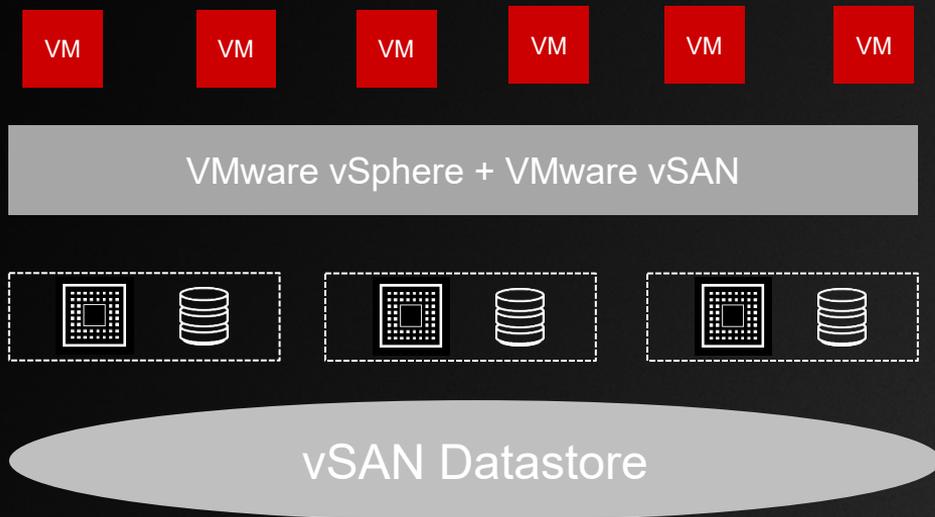
New Server in Minutes

Single Control Plane

Cloud Integration

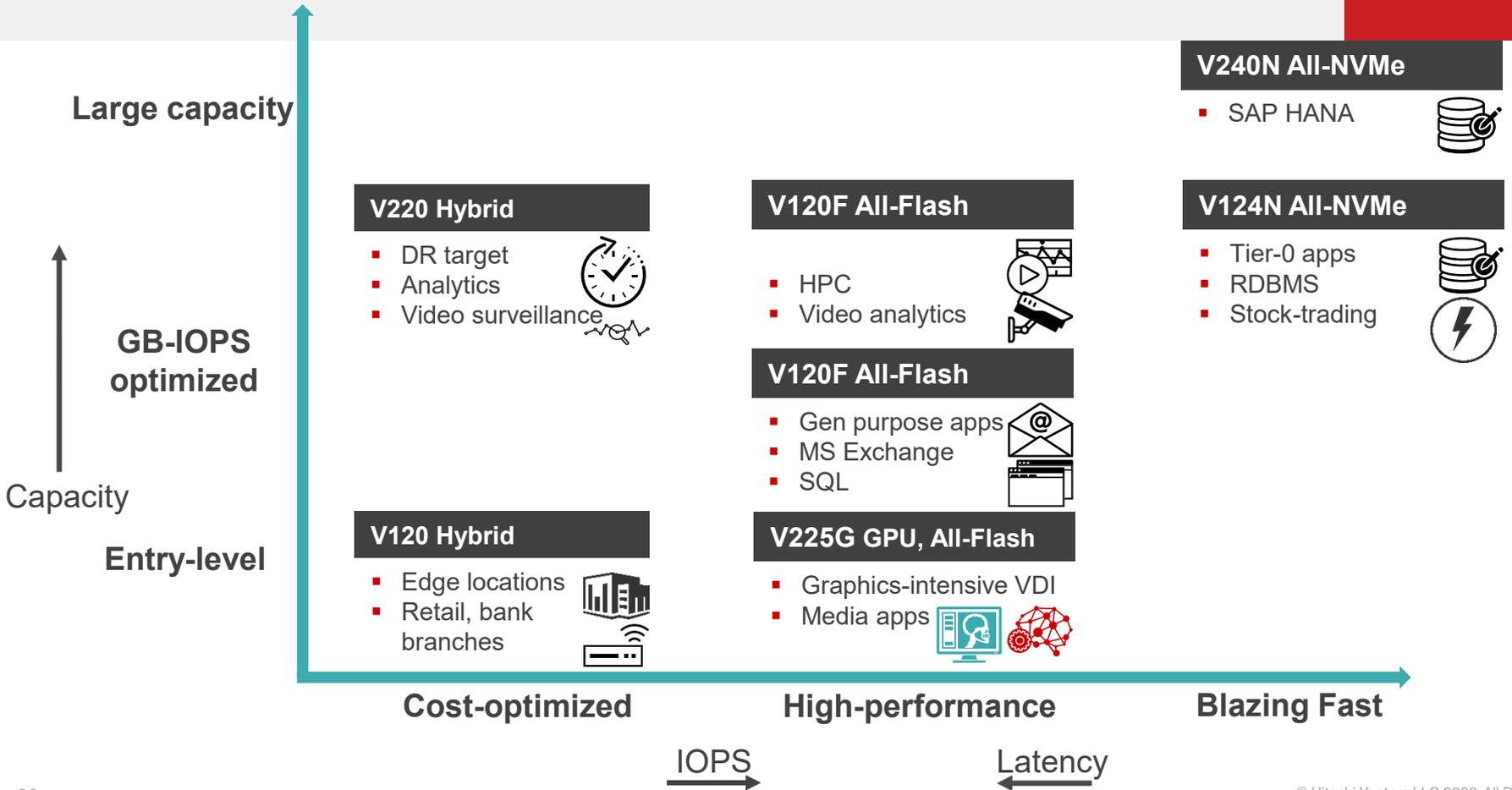
Consolidate for Agility and Efficiency

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

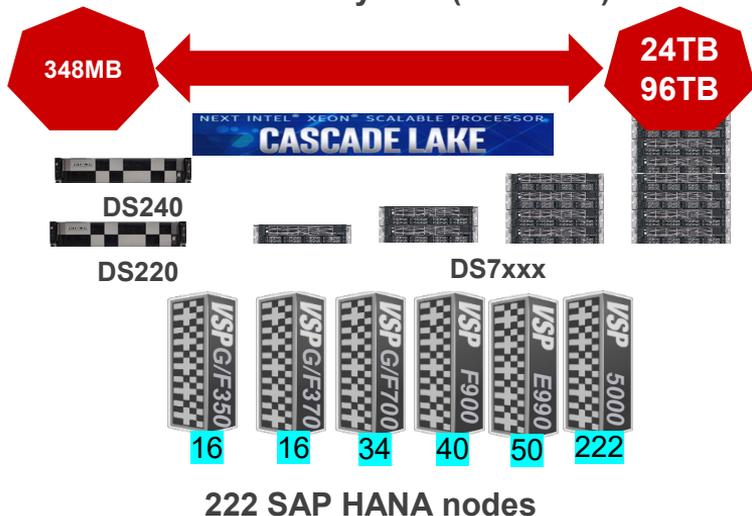


SAP HANA on Hitachi Unified Compute Platform HC - Crowns the SAP Portfolio



Bare Metal

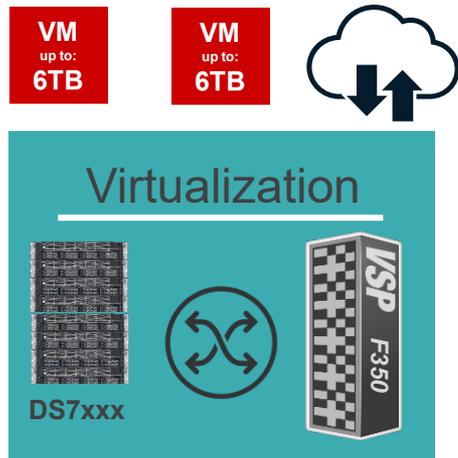
24 TB memory size (scale up)
96 TB memory size (scale out)



222 SAP HANA nodes

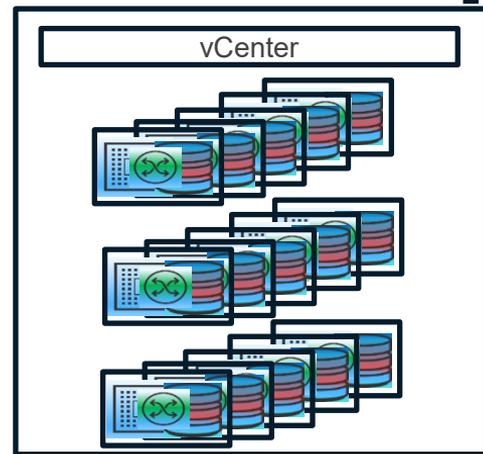
Virtualized

12 TB memory size

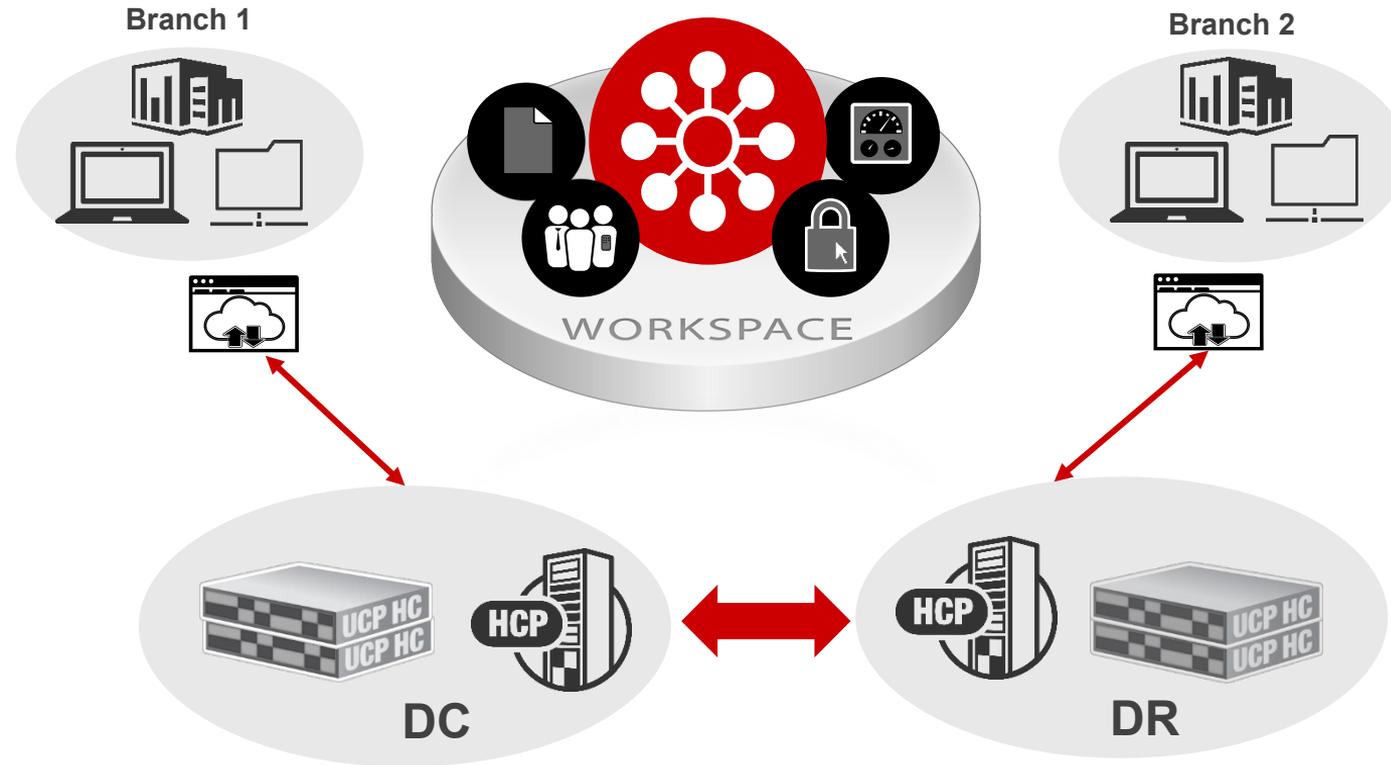


Hyperconverged

6 TB memory size
3 to 64 HANA Nodes

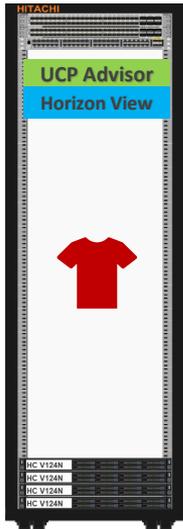


Highly Available Virtual Desktops



- 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

VDI Bundles



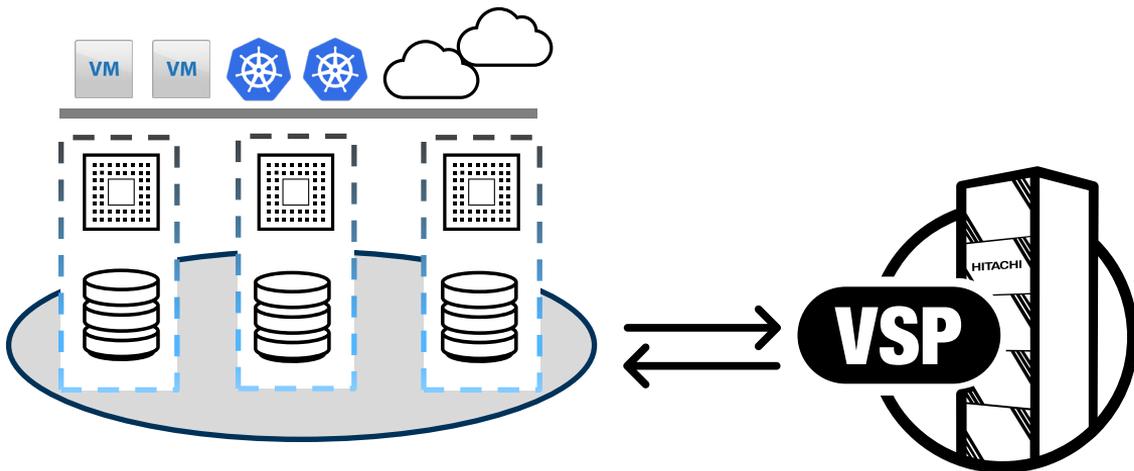
- 150-250 users
- 4-node UCP HC VDI bundle
- All-NVMe
- 350-500 users
- 6-node UCP HC VDI bundle
- All-NVMe
- 500-1,000 users
- 8-node+4 management
- All-NVMe + All-Flash

Easy to transact and
deploy without guesswork

Seamless experience for
all users without
compromise

Simple management and
flexible consumption

Disaggregated HCI (Enterprise)



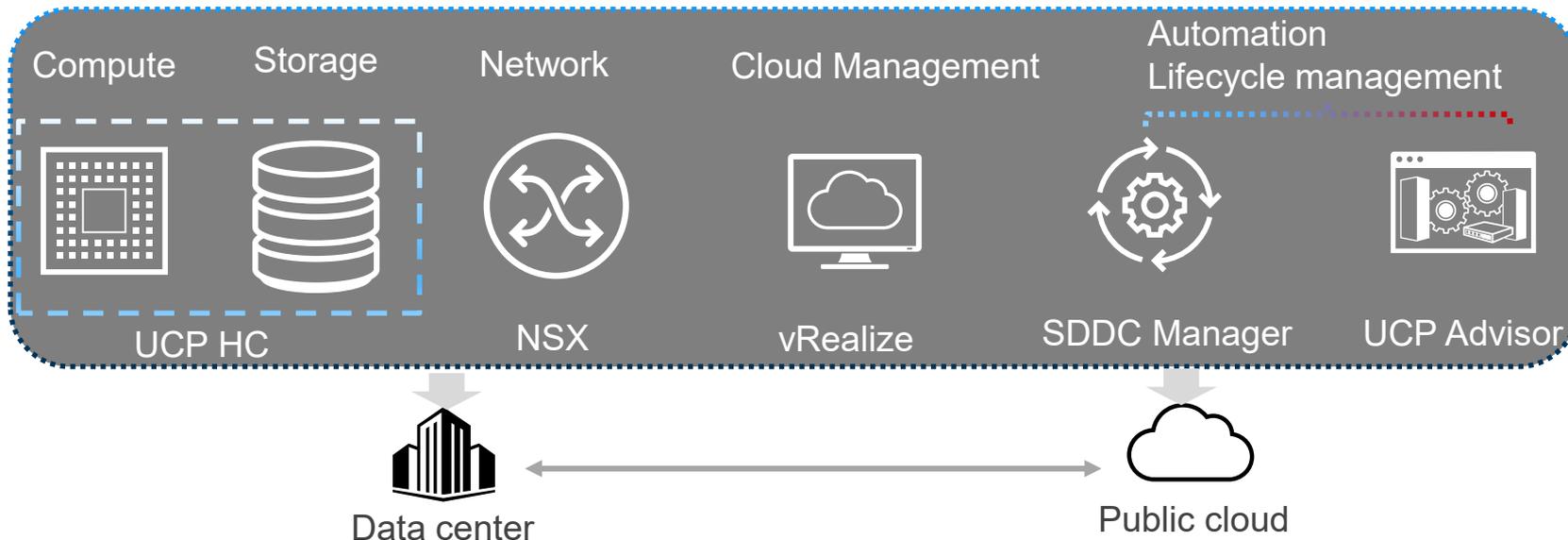
Unified Compute Platform HC
(UCP HC)

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

Maximize Investments with a Seamless Architecture

Automated Hybrid Cloud

Hitachi Unified Compute Platform RS powered by VMware Cloud Foundation



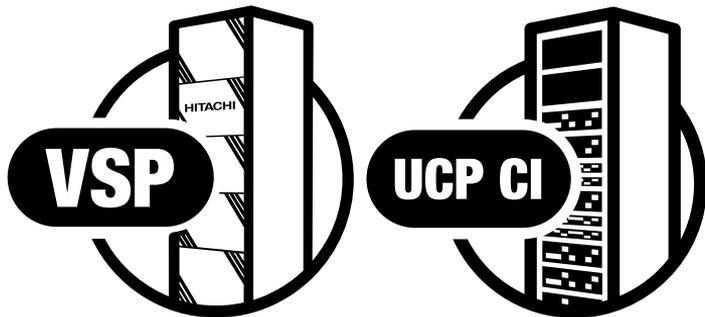
Turnkey full-stack
Pre-validated SDDC

Run Apps anywhere
Seamless mobility

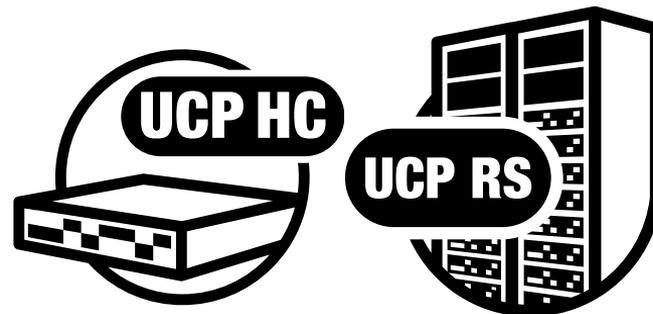
Consistent Operation
Unified management

Guided LCM
Automated upgrades

Several Paths to Nirvana

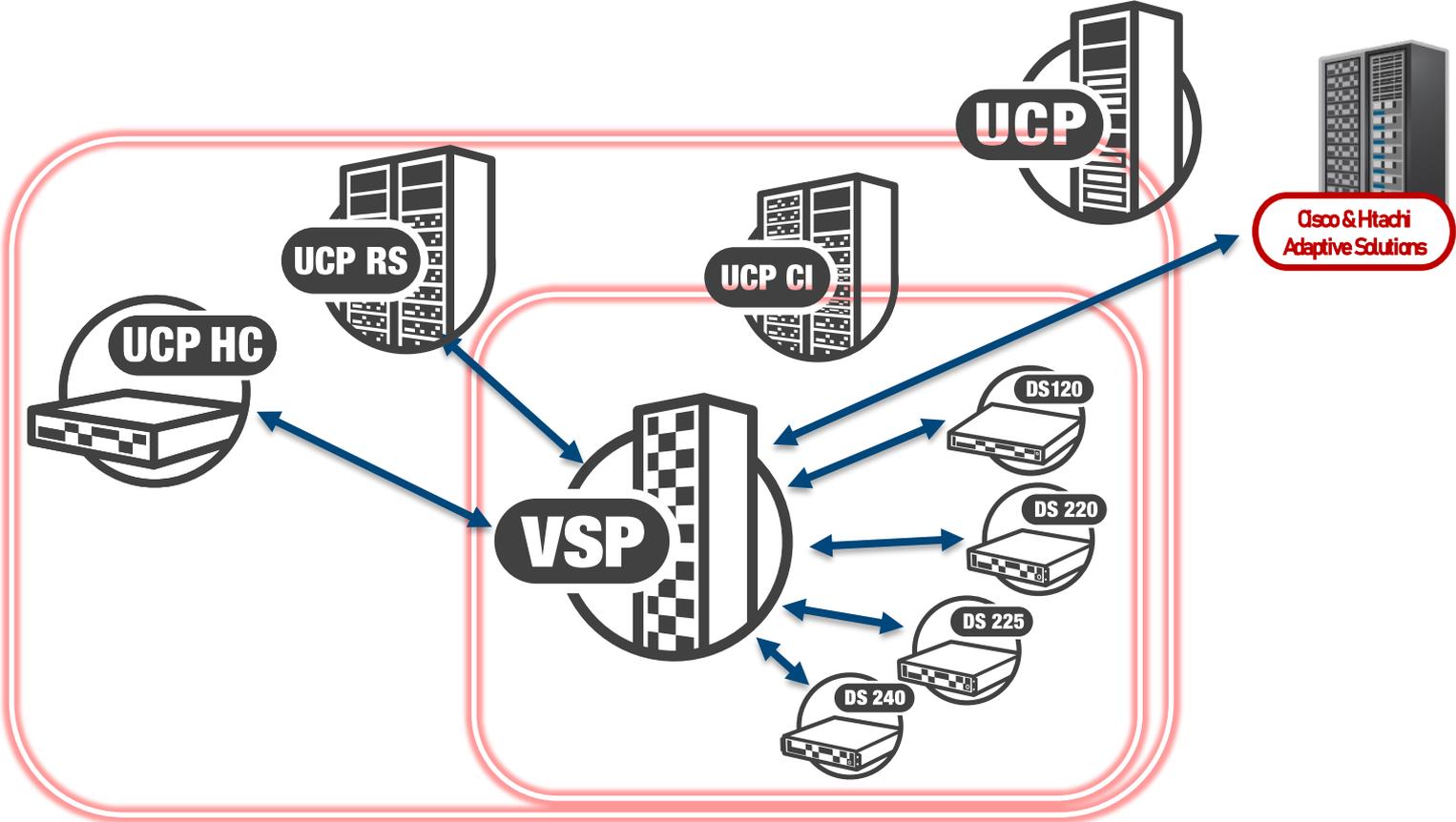


- ✓ The most powerful platform
- ✓ Eight 9s availability
- ✓ Best in class data protection
- ✓ Large install base

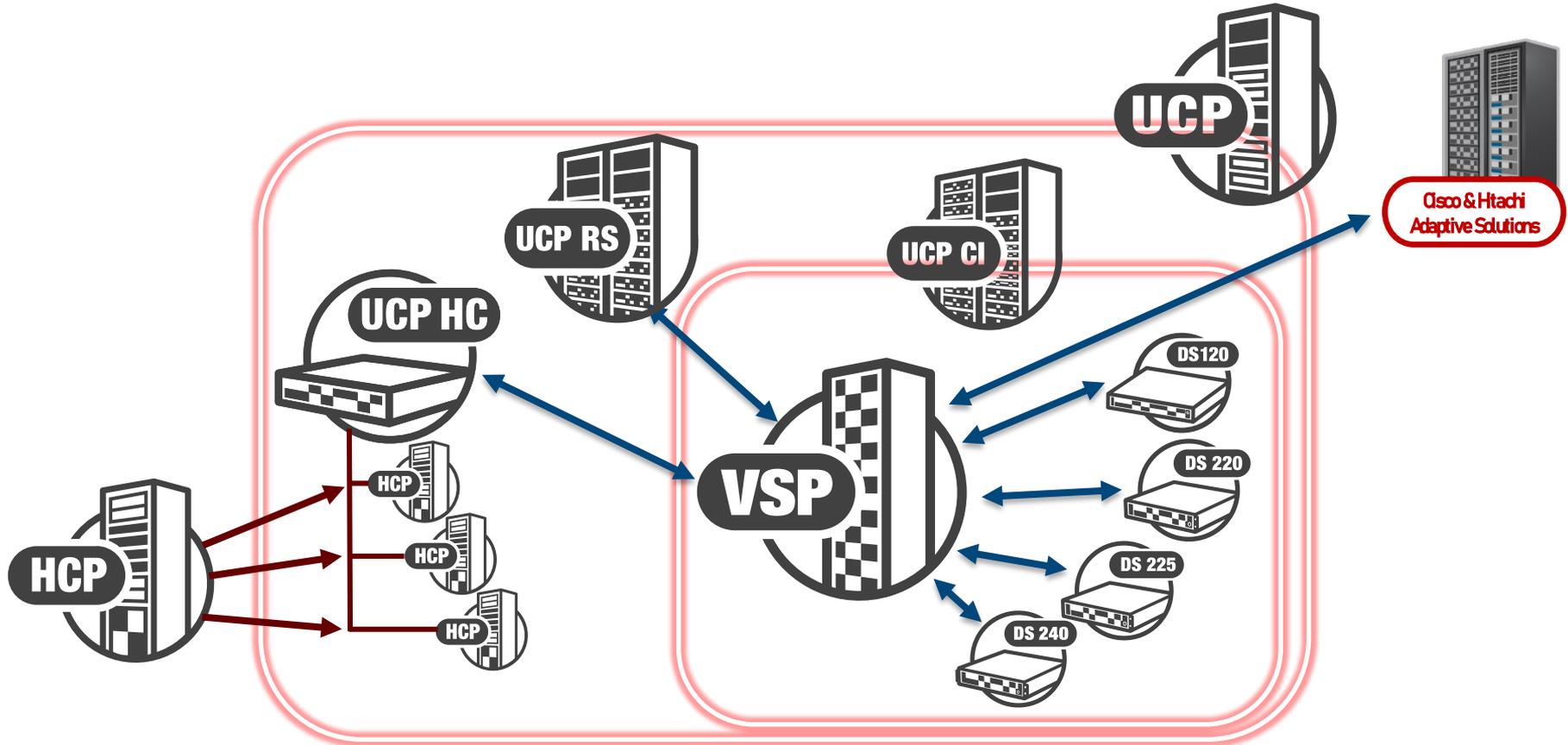


- ✓ The simplest path to cloud
- ✓ Scale as you grow
- ✓ SDDC flexibility
- ✓ Consistent management

UCP Advantage: One Platform for All Workloads



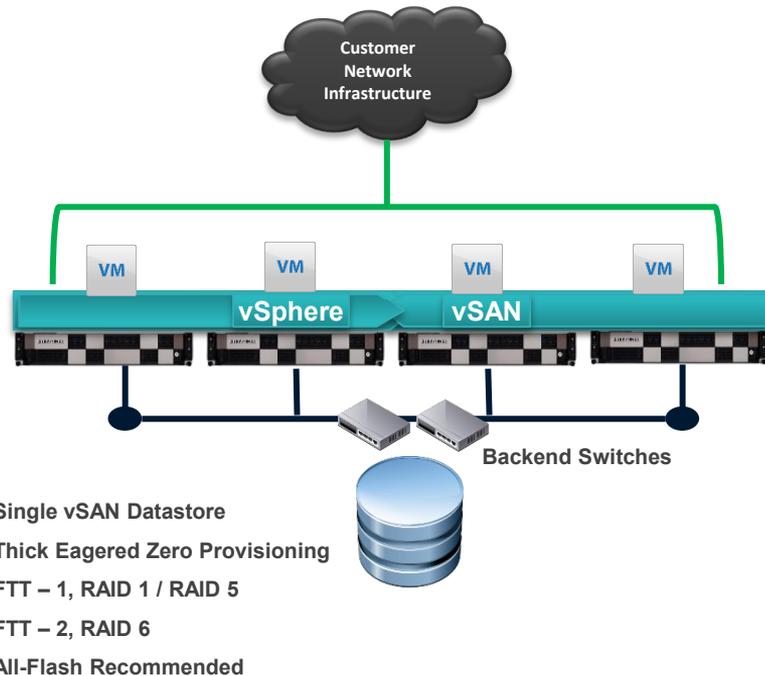
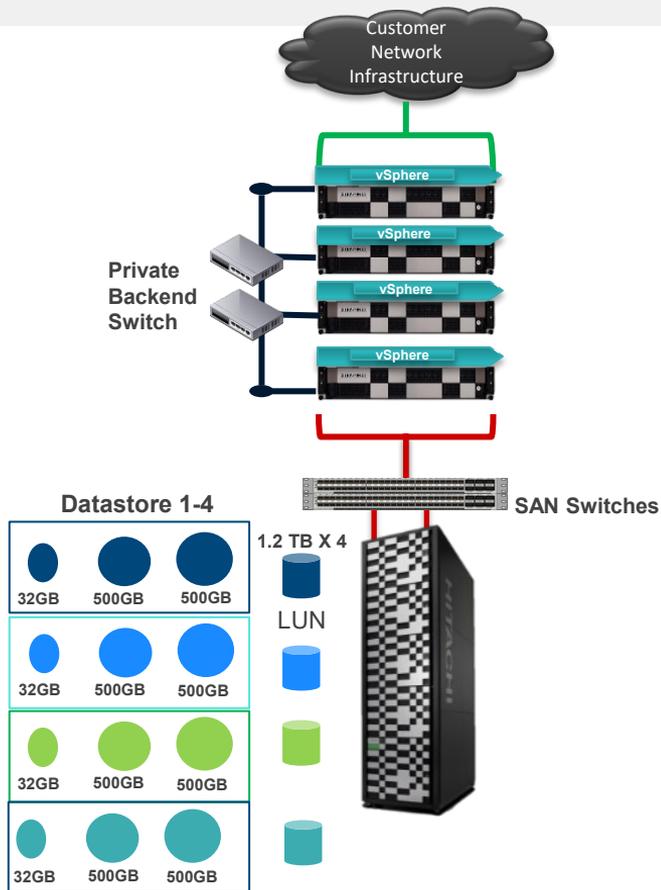
UCP Advantage: One Platform for All Workloads



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**



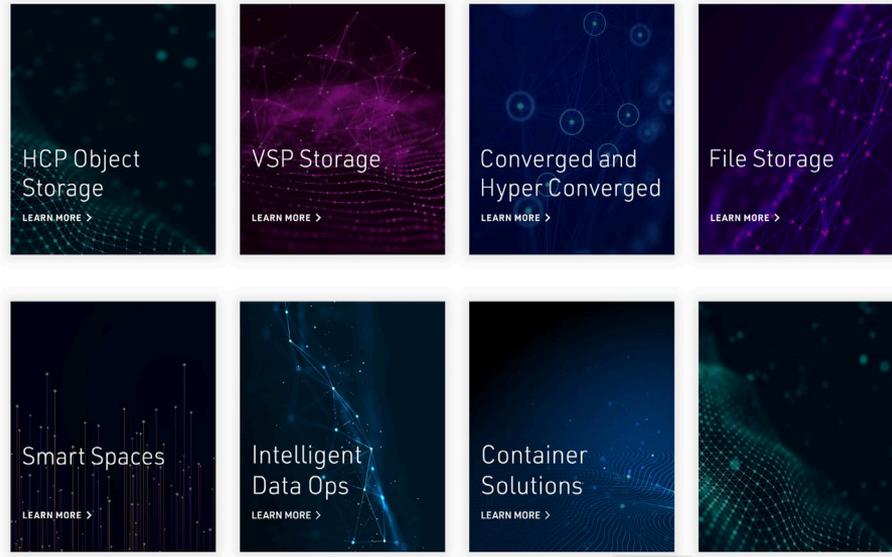
**Enterprise
Availability**



Leading IT Transformation

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Categories



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Seeing is Believing

Thank You

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