

# Modernize your data center

Cisco's blueprint for success

December 3, 2024

Justin Blinn - DC Solutions Engineer



# Compute



# Server virtualization market disruption

**THE NEW STACK**  
Why Broadcom Is Killing off VMware's Standalone Products  
Jan 23rd, 2024 11:59am by Chris J. Preimesberger

**ars TECHNICA**  
VMWARE, BUT BY BROADCOM --  
VMware customers face uncertain future as Broadcom ends VMware partner programs  
Only Broadcom's favorites will be able to sell VMware-related offerings.  
SCHARON HARDING - 1/19/2024, 3:53 PM

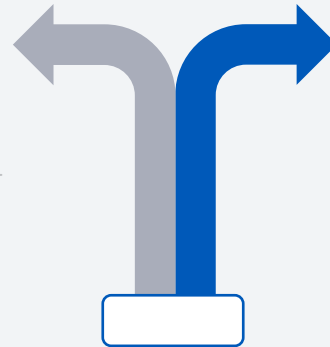
**THE CHANNEL CO. CRN**  
Virtualization ▶  
Broadcom Takes Top VMware Accounts Direct 'Effective Immediately'  
BY O'RYAN JOHNSON  
JANUARY 8, 2024, 8:42 AM EST

**The Register**  
Dell kills sweetheart distribution deal with Broadcom's VMware  
No longer willing to be a friend with benefits – perhaps thanks to Big B killing OEM licenses?  
Simon Stacewicz  
Tue 30 Jan 2024 - 23:35 UTC

**THE CHANNEL CO. CRN**  
Virtualization ▶  
Broadcom Is Making Shareholders Rich, Rivals Happy And VMware Partners Bitter  
BY O'RYAN JOHNSON  
JANUARY 28, 2024, 8:13 PM EST

# The crossroads...

*Stay with status quo*



*Explore opportunities for improvement*

## Asking:



Is our virtualization strategy supporting our goals?



Can we reduce costs by moving workloads to bare metal?

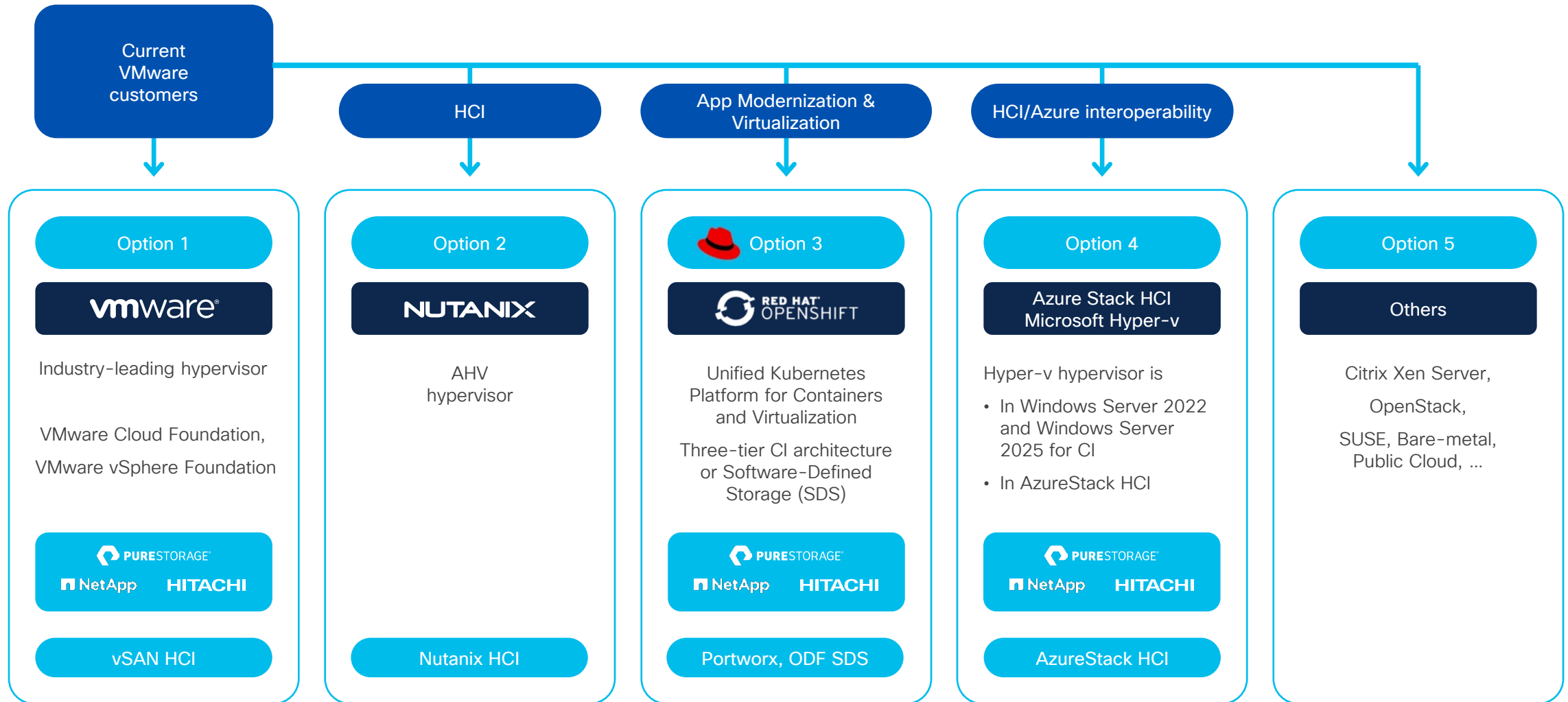


Does our containerization strategy support modern applications and new AI workloads?



Does our AI strategy complement our infrastructure and tooling or create more cost and complexity?

# Available paths



# Cisco Intersight - Cloud-Based Management As-a-Service Platform

Centralized Management  
Global Policies

Intuitive  
Experience



Enhanced  
Support



Proactive  
Guidance



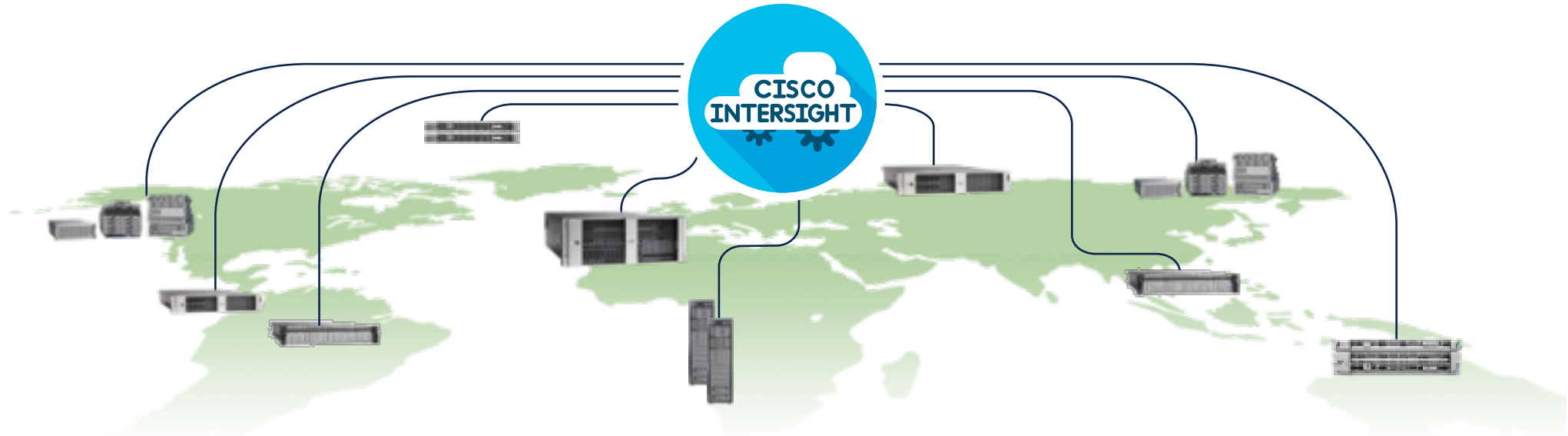
Secure and  
Extensible



SaaS  
Delivered



Comprehensive Automation  
Single Pane of Glass



Free customers from care and feeding of management tools and eliminate upgrade dependencies

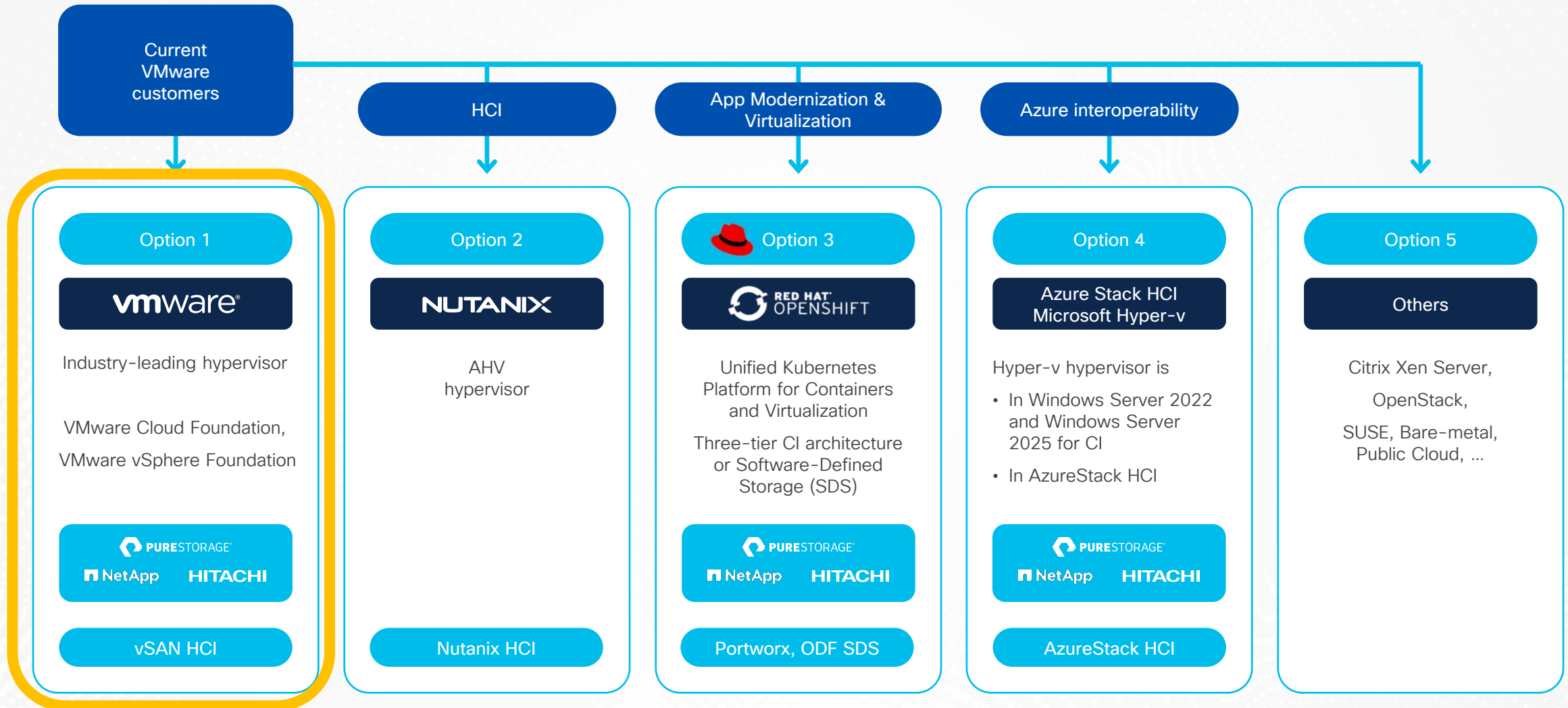


Simplify management across technologies and geography



Rapid development, delivery and customer feedback

# Available paths



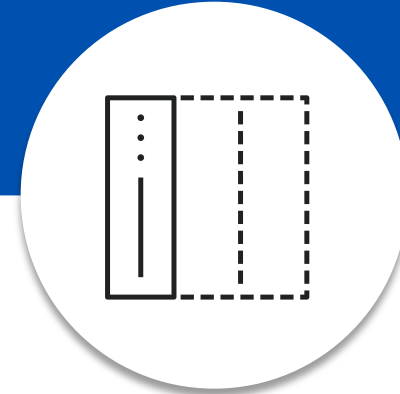
# Cisco & VMware



Deliver VMware on Cisco **Converged** and **Hyperconverged** infrastructure assured by Cisco validated designs.



Manage and optimize the VMware Software Defined data center with **VMware Cloud Foundation** deployed upon Cisco UCS series



**Optimize VMware licensing** costs through server refresh and consolidation



# Server Refresh to Optimize VMware

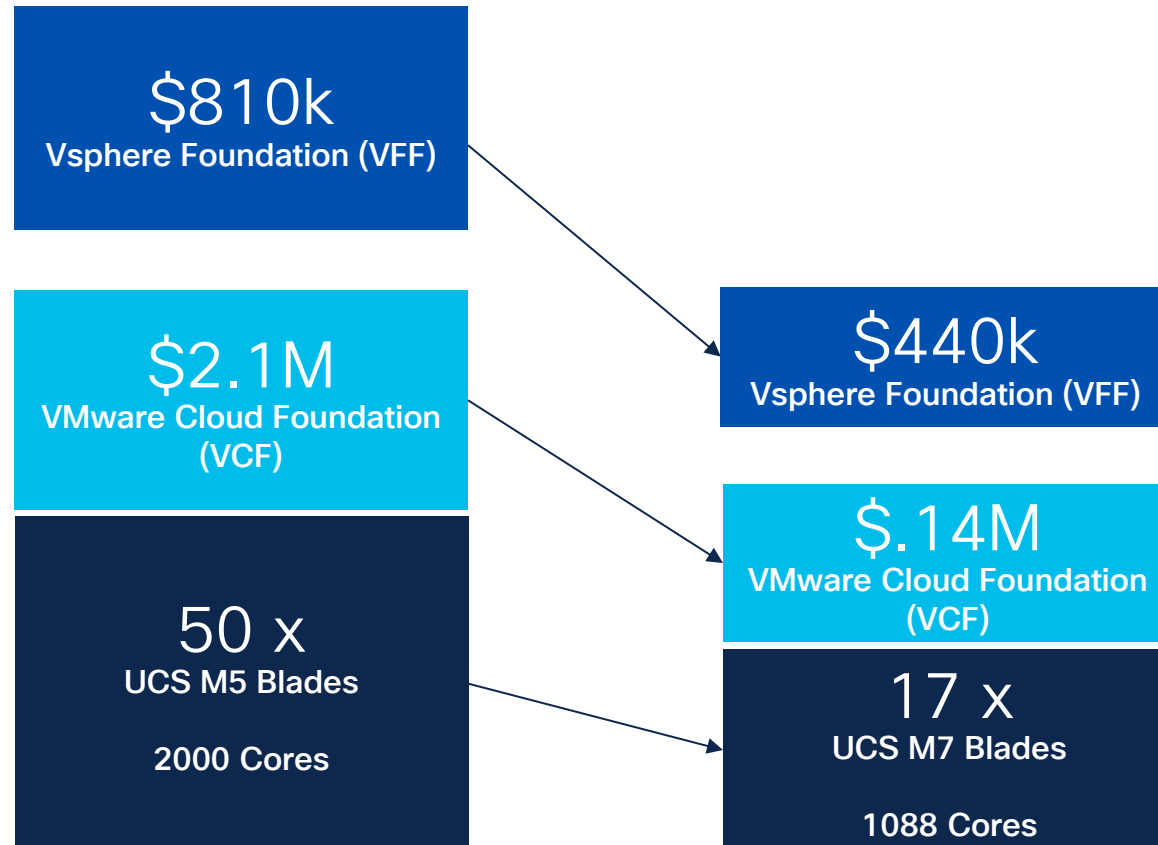
Reduce VMware licensing cost on latest gen UCS

3-year deal

## Example

Refreshing existing server estate with the latest generation of Cisco servers and CPUs allows for consolidation that can lead to reduced VMware licensing cost.

Additional cost and sustainability savings can be realized through reduced footprint and power and cooling

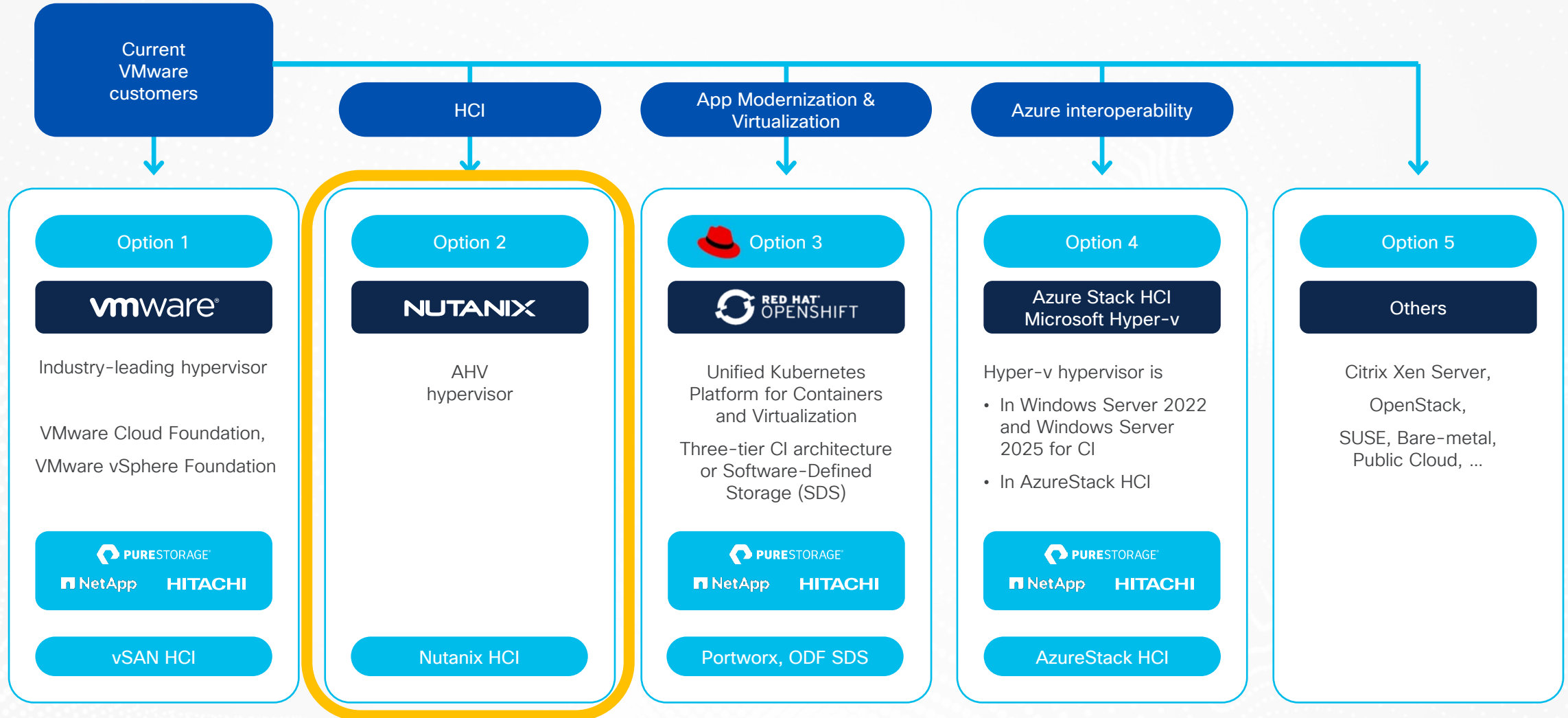


## Refreshing NOW

Saves the customer \$370K (VSF) or \$874.4K (VCF) list over 3 years without migrating away from VMware

Source: UCS TCO Advisor tool: <https://mainstayadvisor.com/signin.aspx>

# Available paths



# Cisco + Nutanix Partnership

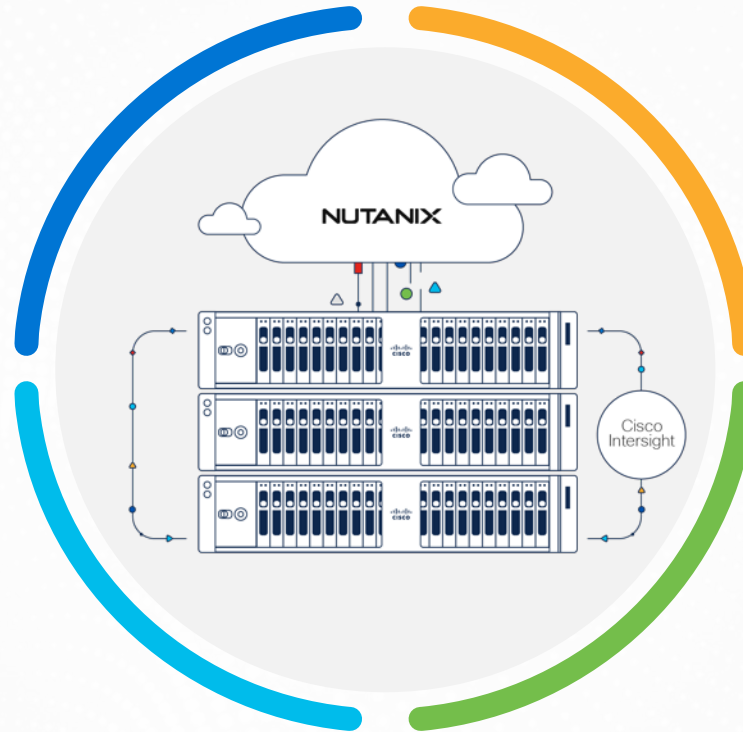
Shared Vision | Shared Intent | Cohesive Roadmap

## Strategy

Complete roadmap leveraging the strengths of both companies in service of our customers

## Go to market

Combined, expert sales teams and buying process focused on simplifying the customer experience



## Engineering

Built, managed, and supported holistically for a seamless end-to-end experience

## Support

A joint augmented support model built for information-sharing to ensure our customers' success

Operate  
at scale

More choice  
and flexibility

End-to-end  
security

Comprehensive  
support

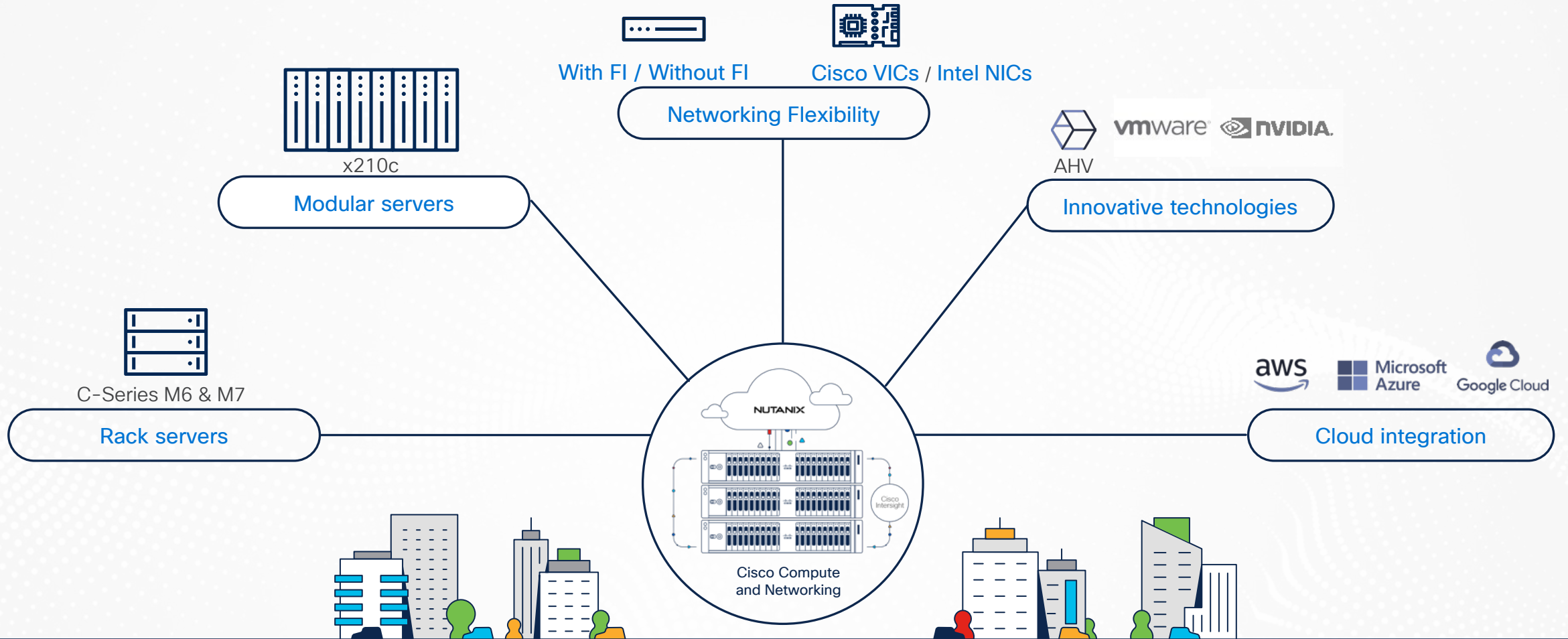
Easy  
to buy



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Cloud Infrastructure + Software Group

# Accelerate Transformation with More Choice



Virtual infrastructures

Hybrid cloud

Enterprise applications

**Solution portfolio**

AI/ML

Containers

Desktop virtualization

Data protection



# Simplify and Scale with cloud operations

IT Operations Simplified

Unified operations across your distributed environment with Cisco Intersight and Nutanix Prism Central

- Deploy, configure and maintain infrastructure in minutes – at scale – anytime – anywhere
- Unified storage and cluster management with Nutanix Prism Central
- Connected TAC
- Proactive Security advisories, field notices and RMAs.
- Augmented support and resiliency capabilities keep systems up and running at global scale



Cisco Intersight



Nutanix Prism Central



NUTANIX WITH INTERSIGHT



Ship to sites



Connect to Intersight and Prism Central



Deploy and manage remotely



# Capabilities

**vmware®**

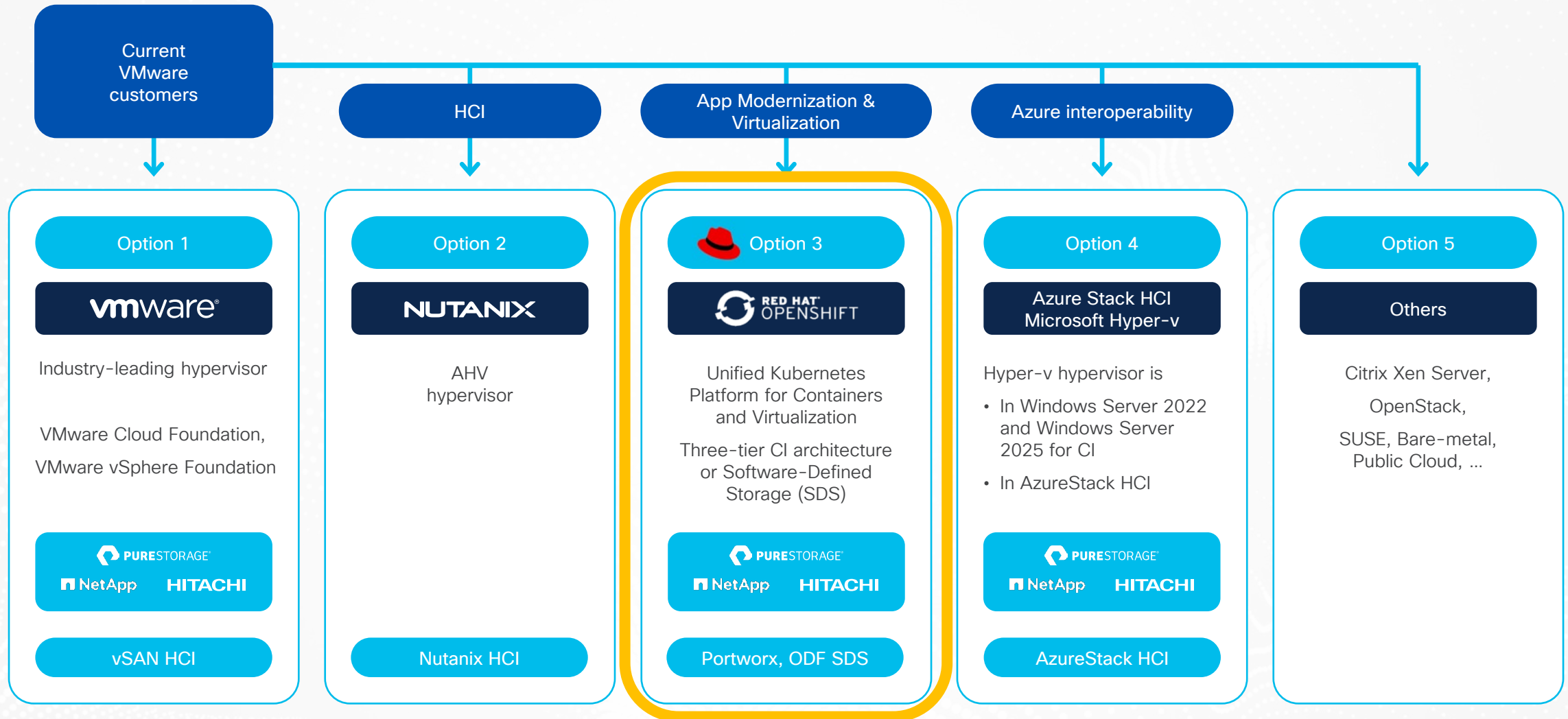
- VMC
- Horizon
- Data Services Manager
- Aria Migration/HCX
- Aria Cost by CloudHealth
- Aria Automation (vRA)
- Aria Operations (vROPS)
- Aria Insights
- vSAN File Services
- NSX
- Site Recovery Manager
- Tanzu Kubernetes Grid
- vSAN
- ESXi

- Hybrid Cloud
- End User Computing/Virtual Desktops
- Database Services
- App Mobility/Migration
- Cost/Governance
- Application Automation/Orchestration/Self Service
- Advanced Intelligent Operations
- Data Analytics
- Storage Services
- Micro Segmentation/App Firewalling
- Network Overlay
- Advanced Replication and DR
- Kubernetes
- Storage Operating System
- Hypervisor

**NUTANIX**

- Nutanix Cloud Clusters (NC2)
- NCP: Citrix, Frame, Horizon
- Nutanix Databases Service
- Move
- Nutanix Cloud Management (NCM)
- Nutanix Unified Storage (NUS)
- Nutanix Cloud Infrastructure (NCI)

# Available paths



# Cisco + Red Hat Partnership

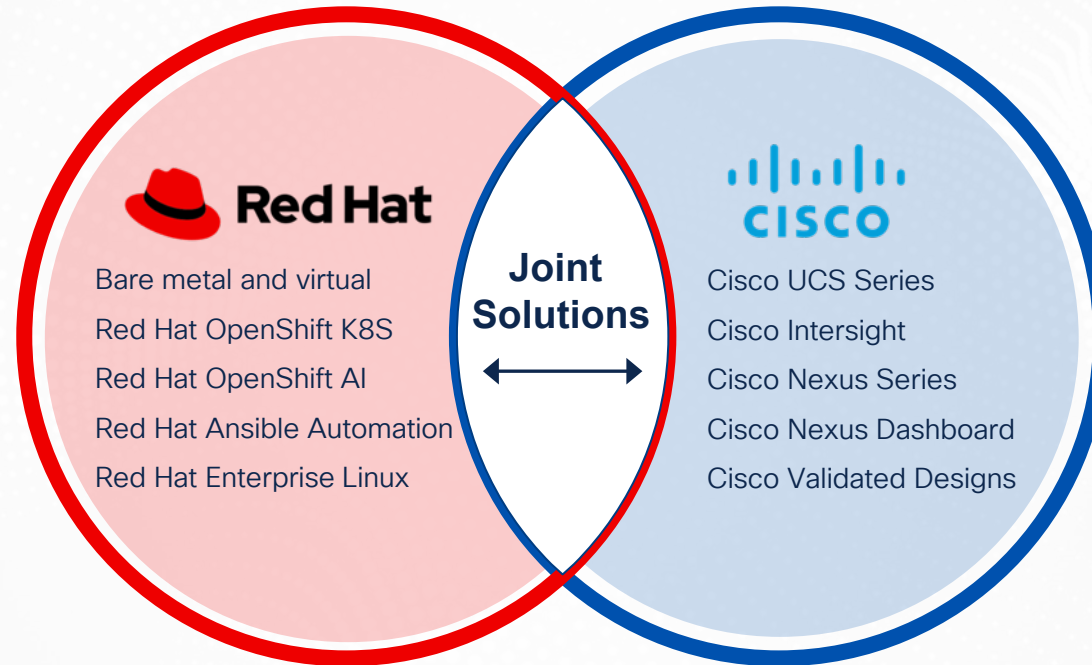
AI, Virtualization and Kubernetes across on-premise and cloud

## Open Cloud Infrastructure

platform built on open-source innovation

## Accelerated time to value

with turnkey experience and integrated automation  
For VMs and C



## Simplified Operations and Support

with Cloud managed infrastructure and Cisco Solution Support across Red Hat on converged infrastructure stacks

## Reduced Risk

with Cisco Validated Designs, delivering tested architectures for standardized, repeatable deployments.

Operate across hybrid multicloud

More choice and flexibility

20+ Cisco Validated Designs

Consistent app dev experience

Increased sustainability



# Cisco & Red Hat Solutions

Backed by Cisco Validated Designs and Solution Support

## Application Platform Modernization



VM Options

Helping our customer with Cisco Validated Designs that provide alternative virtualization technologies as they struggle with the current disruption in the virtualization marketplace

## AI Ready Infrastructure



AI Ready

Providing AI Ready Infrastructure based on Cisco Validate Designs allowing our customers to quickly and confidently order, build and deploy full stack AI solutions.

## Edge Workload Platforms



Edge

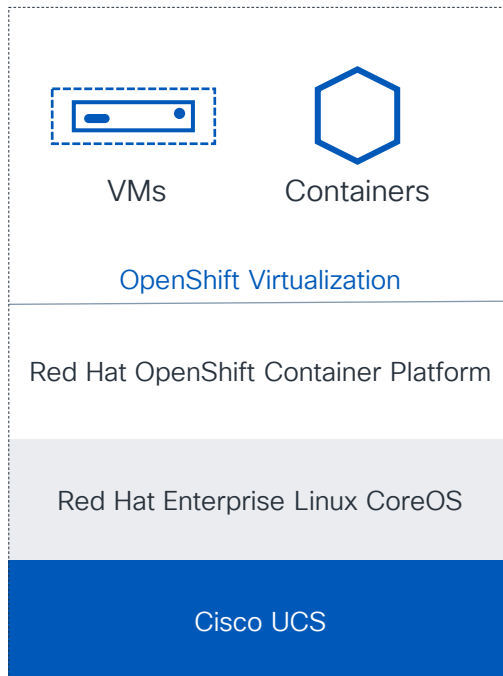
Harness the power of edge workloads with the new purpose-built edge infrastructure running the industry leading container platform. All managed at scale from the cloud

**\*\*FUTURE\*\***

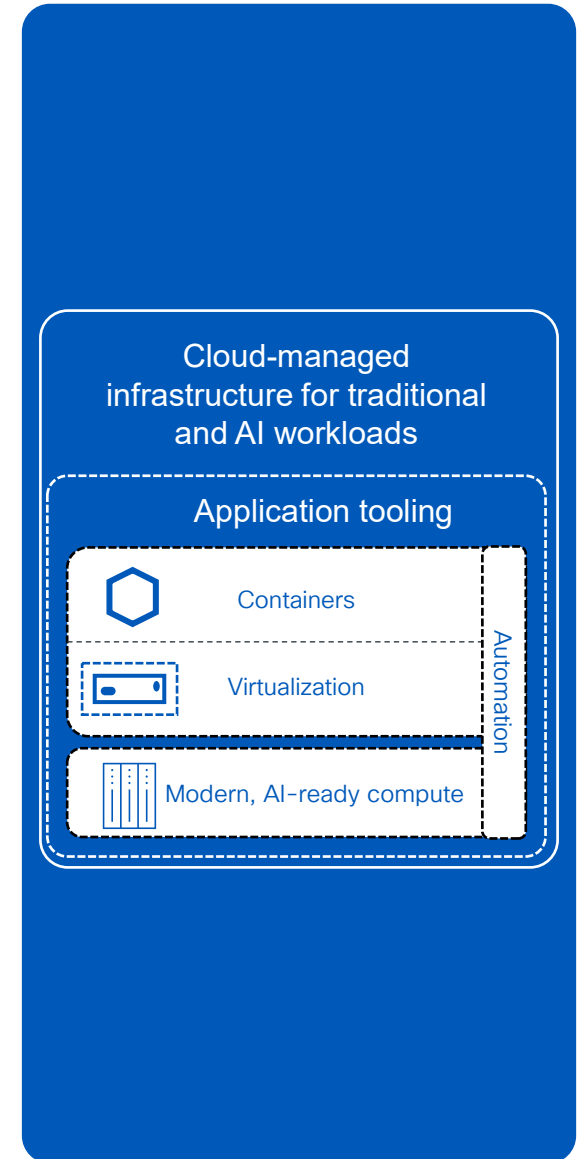
# Containers + virtualization

## Red Hat OpenShift and OpenShift Virtualization

A unified solution for running virtual machines and containers



- ▶ **Unified platform**  
For virtual machines and containers
- ▶ **Consistent management tools, interfaces, and APIs**
- ▶ **Performance and stability** of Linux, KVM, and qemu
- ▶ **Healthy open source community**  
the KubeVirt project is a top 10 CNCF active project, with 200+ contributing companies
- ▶ **Includes Red Hat Enterprise Linux Guest entitlements**
- ▶ **Supports Microsoft Windows guests through Microsoft SVVP**
- ▶ **Inbound guest migration**  
using Ansible Automation Platform + Migration Toolkit for Virtualization, Training, and consulting



# Cisco Validated Designs



## FlexPod Datacenter with Red Hat OCP Bare Metal Manual Configuration with Cisco UCS X-Series Direct

Updated: September 19, 2024

A screenshot of a web page for a Cisco Validated Design. The page title is "FlexPod Datacenter with Red Hat OCP Bare Metal Manual Configuration with Cisco UCS X-Series Direct". It includes a "Table of Contents" sidebar on the left with items like "Executive Summary", "Solution Overview", "Deployment Hardware and Sof...", "Network Switch Configuration", "NetApp ONTAP Storage Confi...", "Cisco Intersight Managed Mod...", "OpenShift Container Platform I...", "Deploy a Sample Containerize...", "About the Authors", "Appendix", and "Feedback". The main content area shows the Cisco logo, "Validated Design" text, the FlexPod logo, and the NetApp logo with the text "In partnership with:". There are also navigation options like "Save", "Download", and "Print" at the top right of the content area.

Red Hat OpenShift is now supported on bare metal UCS/UCSX servers! Cisco CVD's will no longer require VMware to remove layers and simplify our solutions.

Just released:

[Flexpod Datacenter with Red Hat OpenShift Bare Metal](#)

[FlexPod for Accelerated RAG Pipeline with NVIDIA NIM and Cisco Webex](#)

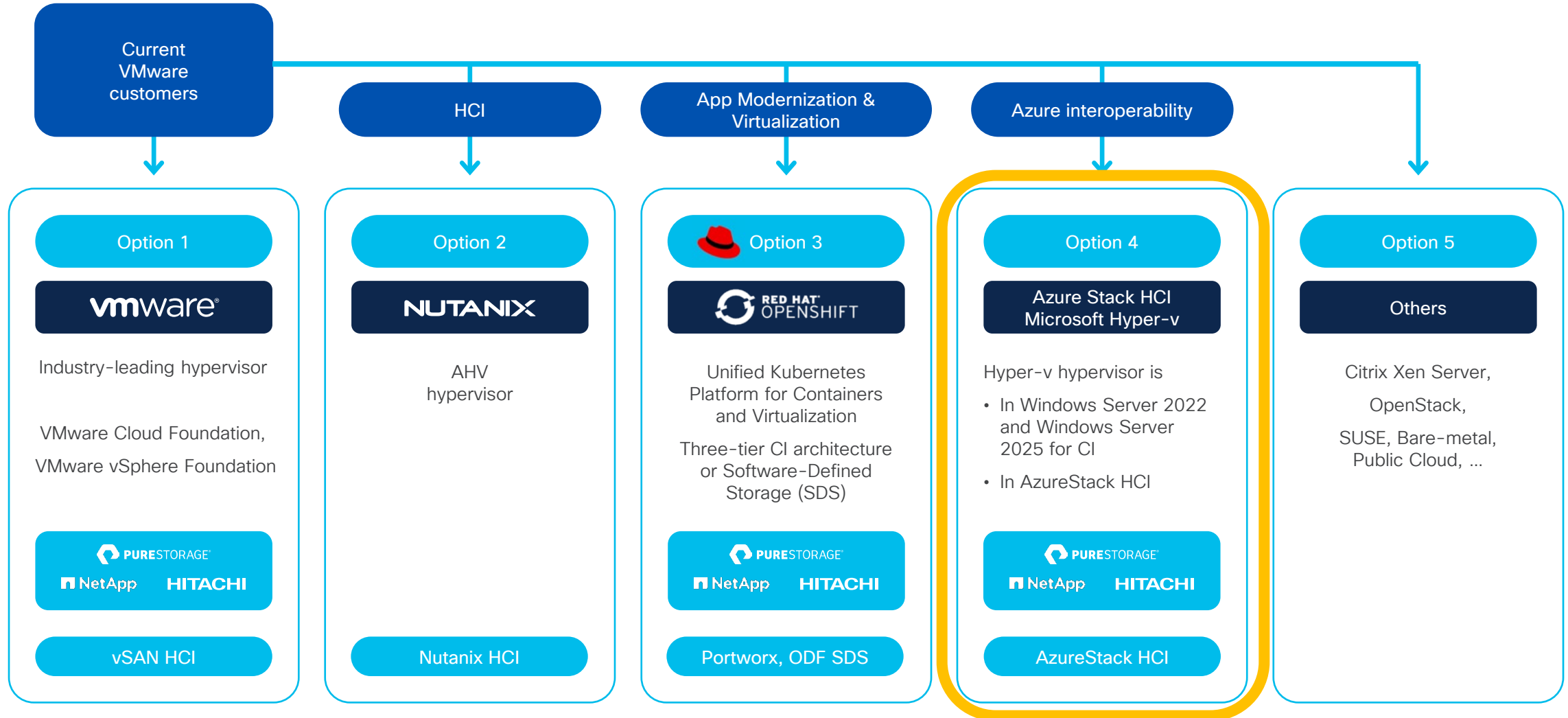
More OpenShift on bare metal CVD's coming soon:

FlexPod with OpenShift Virtualization  
FlexPod with OpenShift AI

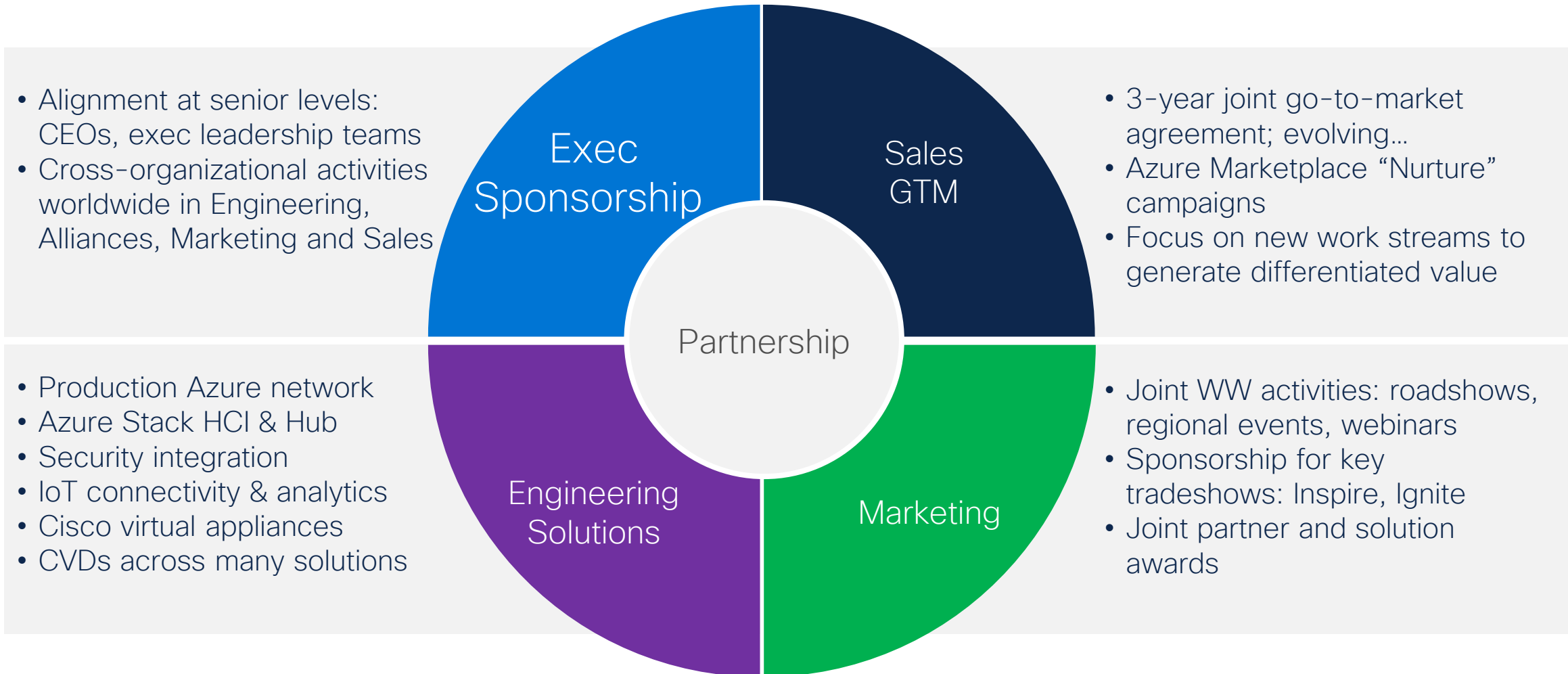
FlashStack with OpenShift Virtualization  
FlashStack with OpenShift AI

[Datacenter Cisco Validated Design Center](#)

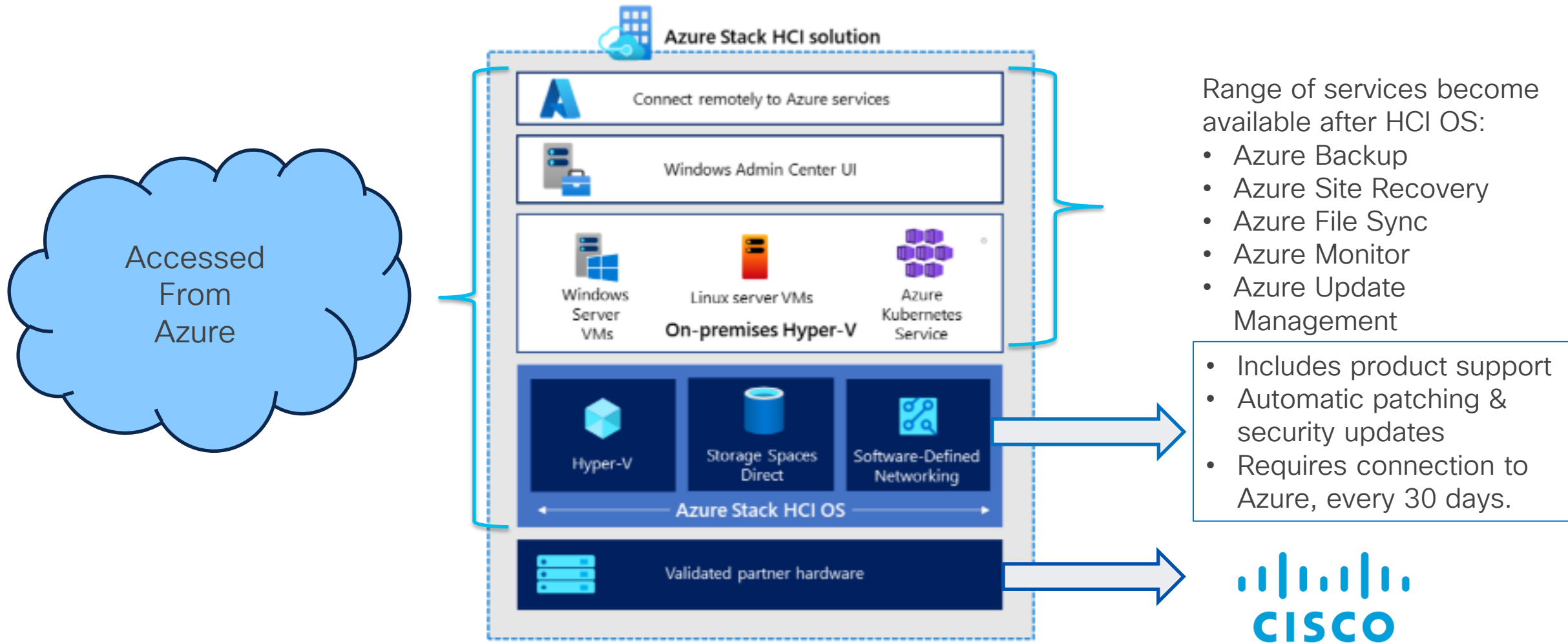
# Available paths



# Cisco & Microsoft




# Azure Stack HCI Software Architecture



# Azure Stack HCI: All Solutions Validated


## Microsoft Validation Kit Helps Ensure Worry-Free Solutions




Architecture,  
hardware,  
and topology



Deployment,  
configuration,  
provisioning



Validation




WS testing  
requirements




NICs




Storage  
devices




1 Year  
of activity



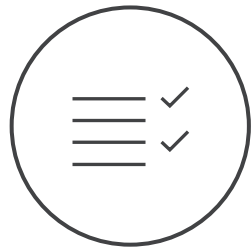
Failure  
injection



Management  
activities



Storage  
stress test



**Validated  
Solutions**

- ✓ All system elements are fully tested and validated
- ✓ Systems cannot be marketed to run Azure Stack HCI without validation
- ✓ Any issues identified and addressed with HW vendor, Microsoft, Partners
- ✓ Configurations must be fully orderable
- ✓ HW vendor has to provide 5 years of product support
- ✓ HW support processes must be defined to ensure customer success
- ✓ Basic marketing/technical documents must be posted on-line
- ✓ HW vendors can apply for Microsoft logos defining optimal use cases



