VMware by Broadcom: QUO VADIS?

Bechtle IT Forum | 11.06.2024 | SwissTech Convention Center

Ralf von Gunten, Lead Systems Engineer, VMware
Cédric Mégroz, Team Leader Datacenter, Bechtle Suisse
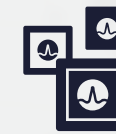
vmware®
by Broadcom

Disclaimer

- The information provided in this document is up to our best current knowledge (11.06.2024) and might not be 100% accurate as due to the integration into Broadcom a lot of details are being redefined as we speak.

Broadcom at a Glance

Net revenue of **$35.8B**

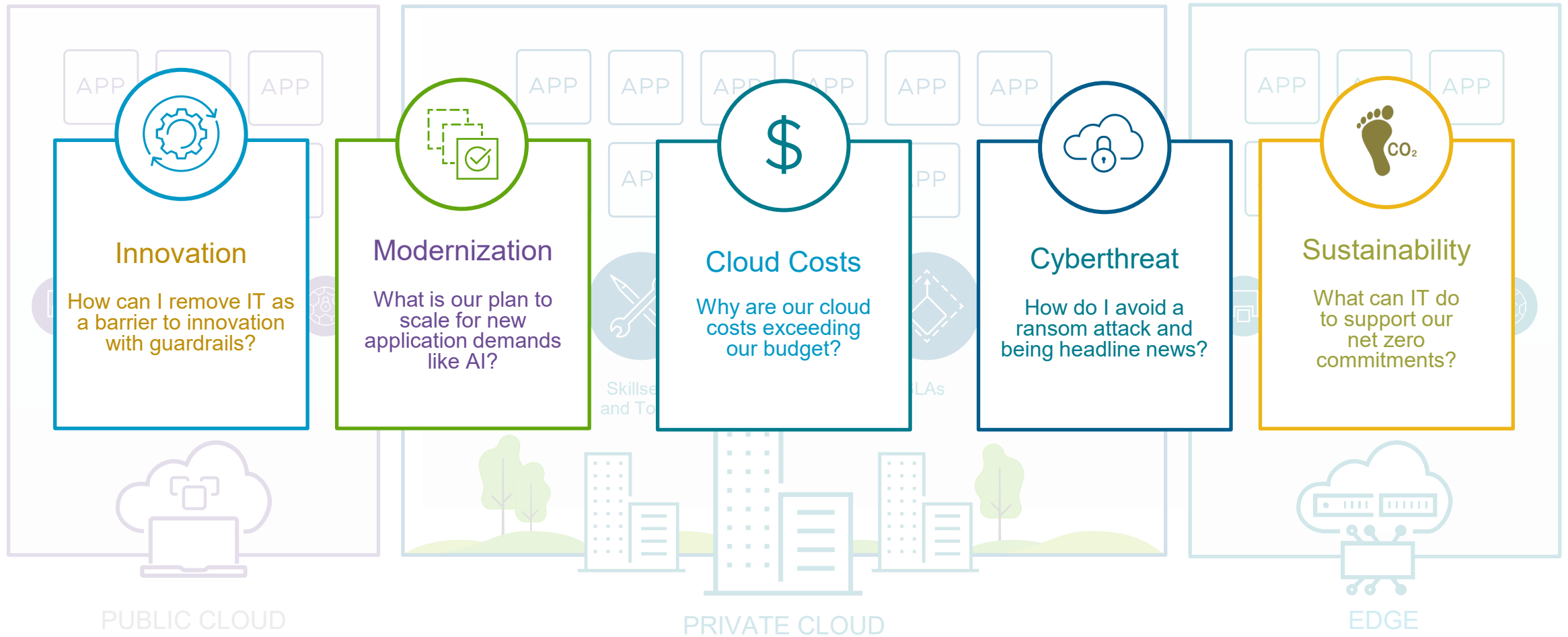One of the industry's broadest IP portfolios with **>23,000** patents

$5.3B investment in R&D in 2023

26 Category-Leading Semiconductor and Infrastructure Software Divisions
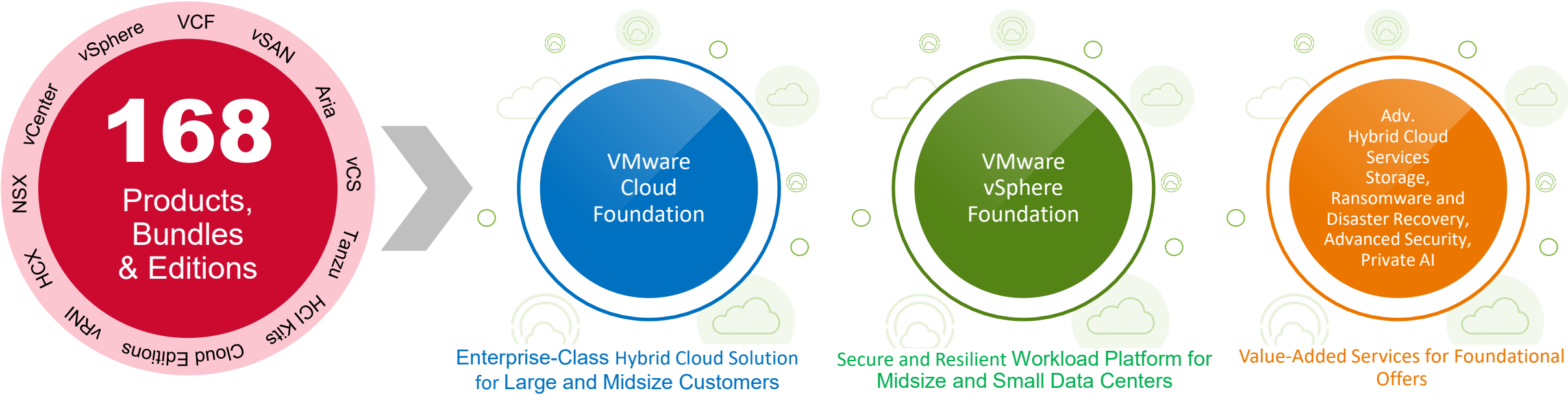
"Complexity is the Enemy of Execution"

Inconsistent operations stifle innovation, throttle productivity, and increase cost

Innovation

How can I remove IT as a barrier to innovation with guardrails?

Modernization

What is our plan to scale for new application demands like AI?

Cloud Costs

Why are our cloud costs exceeding our budget?

Cyberthreat

How do I avoid a ransom attack and being headline news?

Sustainability

What can IT do to support our net zero commitments?

PUBLIC CLOUD

PRIVATE CLOUD

EDGE

What Are We Announcing?

Accelerate Customers' Business Transformation to Cloud with Streamlined Product Offers and Simplified Go-To-Market

168 Products, Bundles & Editions

(vSphere, VCF, vSAN, Aria, vCS, Tanzu, HCI Kits, Cloud Editions, vRNI, HCX, NSX, vCenter)

VMware Cloud Foundation

Enterprise-Class Hybrid Cloud Solution for Large and Midsize Customers

VMware vSphere Foundation

Secure and Resilient Workload Platform for Midsize and Small Data Centers

Adv. Hybrid Cloud Services Storage, Ransomware and Disaster Recovery, Advanced Security, Private AI

Value-Added Services for Foundational Offers

Simplify to 2 foundational offers plus add-ons

Attractive pricing and upgrades to allow customers to benefit faster

Ease of doing business with improved customer experience

For small deployments, we continue to offer vSphere Standard and vSphere Essentials Plus

VCF Division

Primary Offerings

VMware Cloud Foundation

vSphere
(includes TKGs, vCenter)

vSAN (1 TiB / core)

NSX Networking / HCX / AON

Aria Suite Enterprise

SDDC Manager/DSM

Jumpstart Workshop for VCF³

vSphere Foundation

vSphere
(includes TKGs, vCenter)

vSAN¹ (100 GiB / core)

Aria Suite Standard

Advanced Services Add-Ons

vSAN	VLR	Private AI Foundation²

Firewall/FW w/ATP²	Avi Load Balancer	TAP/TAS

vSphere Standard

vSphere STD
(includes vCenter)

vSphere Essentials Plus

vSphere ESS+ (96 cores)
(includes vCenter)

Desktop Hypervisor

VMware Desktop Hypervisor Pro

Highlights

- Subscription, Disconnected
- Per core pricing
- 16 cores per CPU minimum
- **New SKUs and Product Descriptions**
- **Single SKU per Product w. single price per year**
- **Removal of 1, 3 and 5-year SKUs**
- **Term of subscription set in quote, w. a minimum 3-year term required**
- **Billing options: 100% Upfront, Yearly, Quarterly, or Monthly**
- **Broadcom Maintenance Support for all VCF products**
- Termination for Convenience (TFC)

https://via.vmw.com/EditionsComp

¹ vSAN 100 GiB entitlement is available in 8.0U2b release ² Add-on for VCF only

³ Entitled for any VCF customer with new purchases of VCF ACV > $500k

Counting Cores for vSphere Foundation and VMware Cloud Foundation and TiBs for vSAN Add-on

https://knowledge.broadcom.com/external/article?articleNumber=313548

There is a second KB article with a license calculator that can simulate different configurations for greenfield or expansion use

cases : **https://knowledge.broadcom.com/external/article?legacyId=96426**

Mixing: vSphere Licensing Expansion Scenario #1

Existing Perpetual/Term License

■ Existing Perpetual/Term License

■ New

Current State	Future State – Expand with One of New Offers

- vSphere perpetual or term license (CPU or Core)

- vSphere License Key is applied at the host level

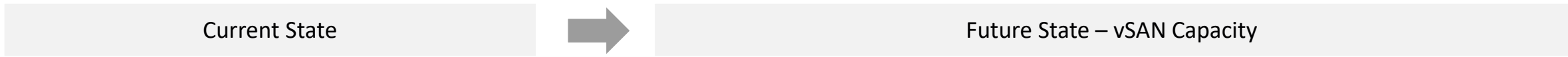- Can expand and apply new license keys to new hosts

Existing vCenter 1

Cluster #1

Host #1 | Host #2 | Host #3 | Host #4

Mixing: vSAN Licensing Expansion Scenario #1

Existing Perpetual/Term License

Legend:
- ■ Existing Perpetual/Term License
- ■ New

Current State	→	Future State – vSAN Capacity

Current State
- vSAN perpetual or term license (CPU or Core)

Future State – vSAN Capacity
- vSAN License Key is applied at the cluster level
- Required to create new Cluster; vSAN perpetual and subscription legacy license keys cannot be merged be with new license keys
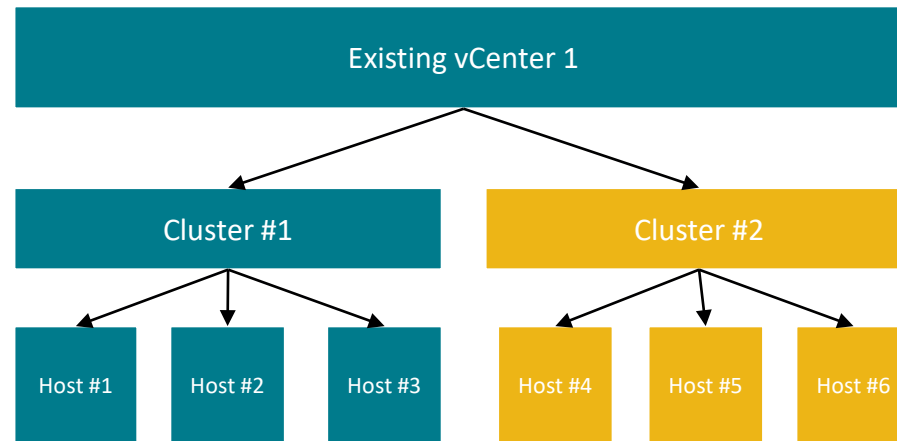
The primary options to use the new subscription offers in vSAN brownfield environments are: 1) create a net new cluster as illustrated above 2) insert more storage disks into existing hosts 3) purchase subscriptions to license existing and new hosts in the cluster.
As a last resort, see the following slide for the exception to expand the vSAN cluster, as long as the condition is met, and customers renew vSAN subscriptions when the legacy offer (SnS or subscription) expire. Reviewing the vSAN Q&A section in the FAQ for unique considerations on license key fulfillment and vSAN cluster expansion options with legacy offers is recommended.
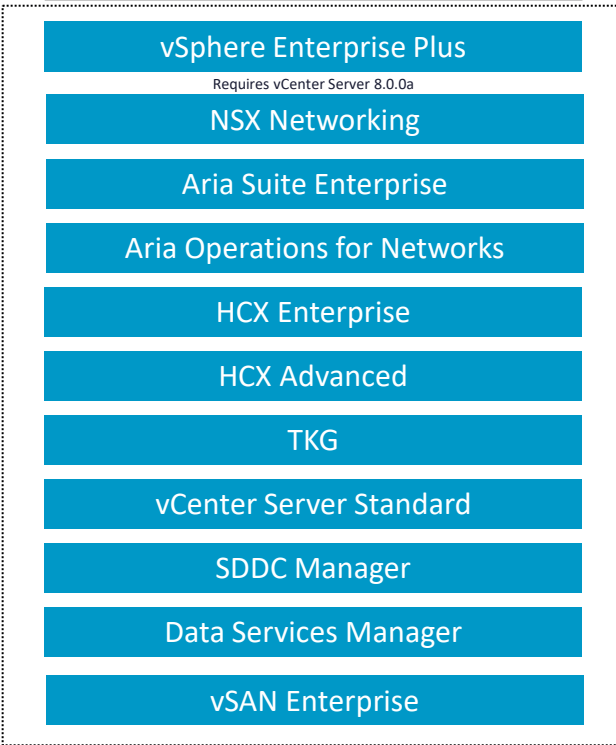
Solution License Key - VCF

VMware Cloud Foundation is sold and licensed as a single product. The introduction of a solution license key is a first step in the enablement of this single offering entitlement. For full licensing rules governing VCF as a single product, please see the <u>PnP Policy and FAQ</u>.

Beginning with VCF 5.1.1, the "vSphere 8 Enterprise Plus for VCF" license key is the Solution license key for VCF and unlocks all VCF component features (except for vSAN, which is still applied separately). All component license keys will continue to appear in the Customer Connect Portal so that brownfield customers are not forced to upgrade.
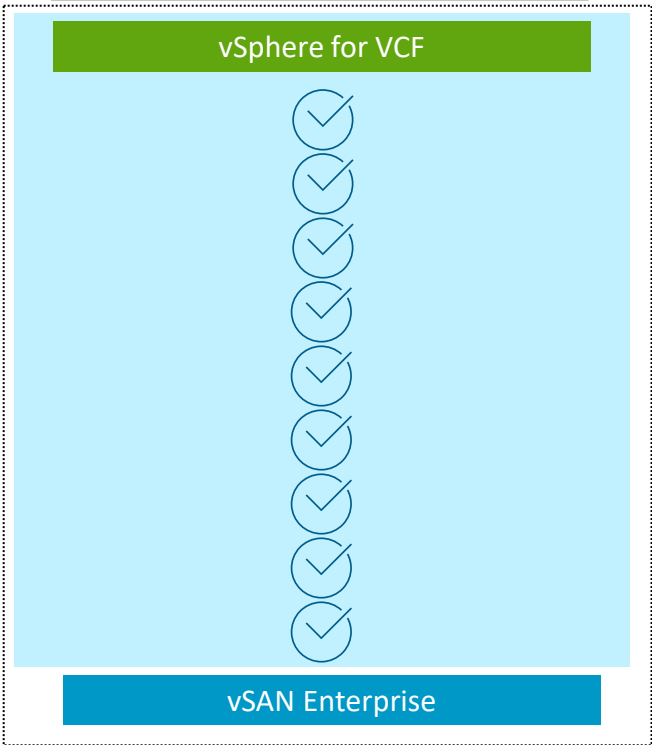
2-version downgrade enabled ←

5.1

vSphere Enterprise Plus
Requires vCenter Server 8.0.0a
NSX Networking
Aria Suite Enterprise
Aria Operations for Networks
HCX Enterprise
HCX Advanced
TKG
vCenter Server Standard
SDDC Manager
Data Services Manager
vSAN Enterprise

5.1.1

vSphere for VCF

| vSAN Enterprise |

Solution key for future versions →

Solution License Key
Component License Key

Solution License Key - VCF
Details

Greenfield Customers

- The customer will first add the "vSphere 8 Enterprise Plus for VCF" solution license key directly to vCenter

- The customer will manually assign the solution license key to the following: (however there is a bulk Licensing option in the vCenter UI.) --This step will be automated in future releases

  - vCenter

  - ESXi hosts

  - TKG Supervisor Clusters

  - The separate vSAN key will need to be applied to vSAN clusters

- Customer will add the VCF-enabled vCenter as Data Source/Integration to Aria, NSX, and HCX.
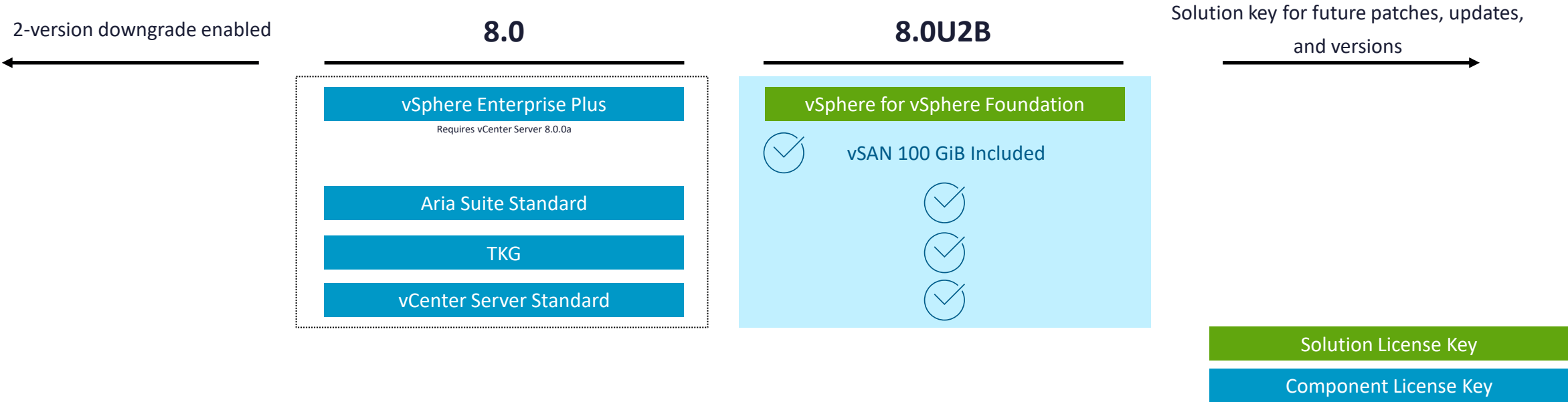
Brownfield Customers

- For a customer running a version prior to 5.1.1, this customer must downgrade the "vSphere 8 Enterprise Plus for VCF" license key

  - At this point, the license key will become a vSphere 8 Enterprise Plus component license key rather than the solution license key.

- The customer still receives all component license keys for use with versions prior to 5.1.1

- When the customer is ready to upgrade to 5.1.1, the customer can upgrade the vSphere license key back to being the solution license key

- The customer will manually assign the solution license key to ESXi hosts (the separate vSAN key is assigned to vSAN clusters); this step will be automated in a future release

- The customer will add this VCF-enabled vCenter as Data Source/Integration to Aria, NSX, and HCX.

Solution License Key – vSphere Foundation

VMware vSphere Foundation is sold and licensed as a single product. The introduction of a solution license key is a first step in the enablement of this single offering entitlement. For full licensing rules governing VVF as a single product, please see the PnP Policy and FAQ.

Beginning with vSphere 8.0U2b, the "vSphere 8 Enterprise Plus for vSphere Foundation" license key is the Solution license key for VVF and unlocks all VVF component features, including vSAN. All component license keys will continue to appear in the Customer Connect Portal so that brownfield customers are not forced to upgrade.

2-version downgrade enabled

8.0

8.0U2B

Solution key for future patches, updates, and versions

| vSphere Enterprise Plus |
| Requires vCenter Server 8.0.0a |

| Aria Suite Standard |

| TKG |

| vCenter Server Standard |

vSphere for vSphere Foundation

vSAN 100 GiB Included

Solution License Key

Component License Key

Solution License Key – vSphere Foundation

Details

Greenfield Customers

- The customer will apply the "vSphere 8 Enterprise Plus for vSphere Foundation" solution license key directly to vCenter

- The customer will assign the solution license key to ESXi hosts

- Customer will add the VVF-enabled vCenter as Data Source/Integration to Aria Ops and Logs.

Brownfield Customers

- For a customer running a version prior to 8.0U2b, this customer must downgrade the "vSphere 8 Enterprise Plus for vSphere Foundation" license key

  - At this point, the license key will become a vSphere 8 Enterprise Plus component license key rather than the solution license key.

- The customer still receives all component license keys for use with versions prior to 8.0U2b

- When the customer is ready to upgrade to 8.0U2b, the customer can upgrade the vSphere license key back to being the solution license key

- The customer will need to assign the solution license key to ESXi hosts

Complete Flexibility and Freedom with License Portability

VMware Cloud Foundation™

MANAGEMENT + ORCHESTRATION

COMPUTE   STORAGE   NETWORKING
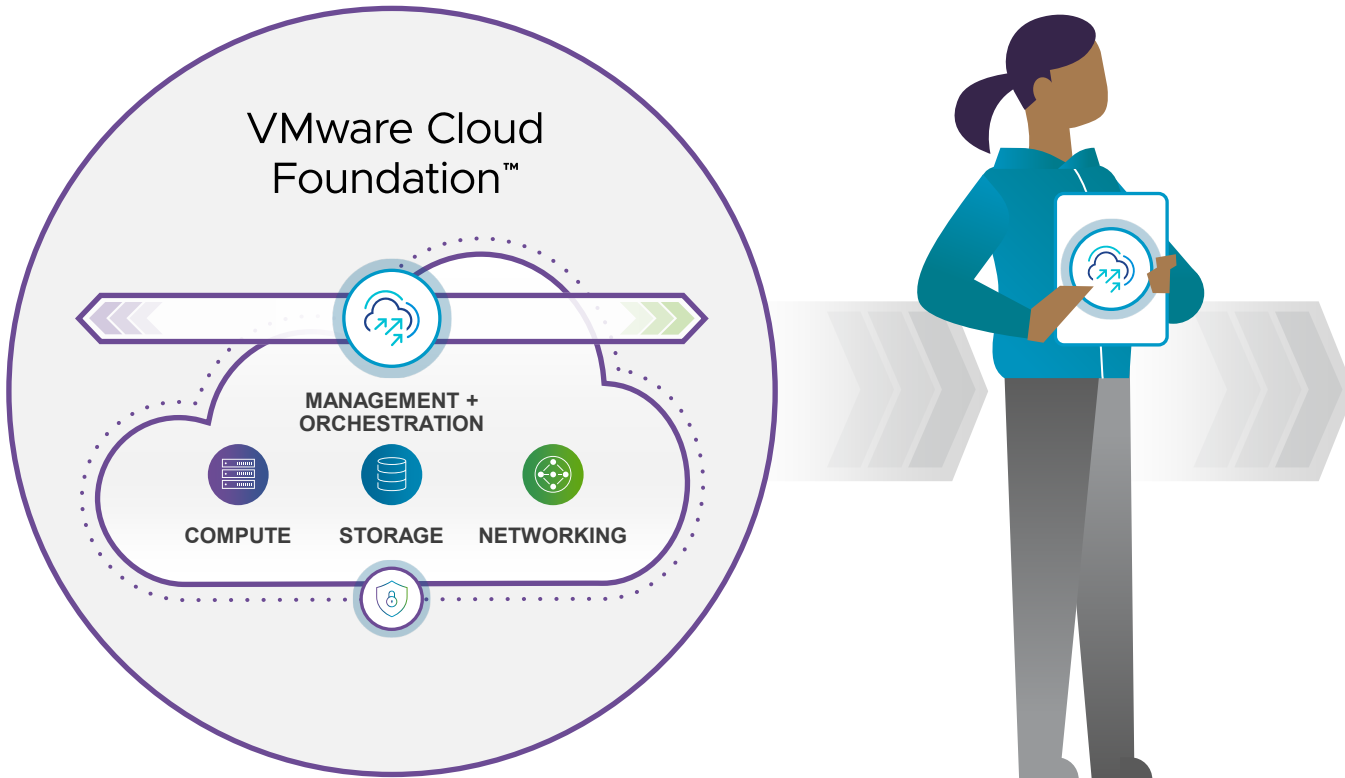
Subscription Portability
From end user private cloud deployments

Portability Extended to Add-ons
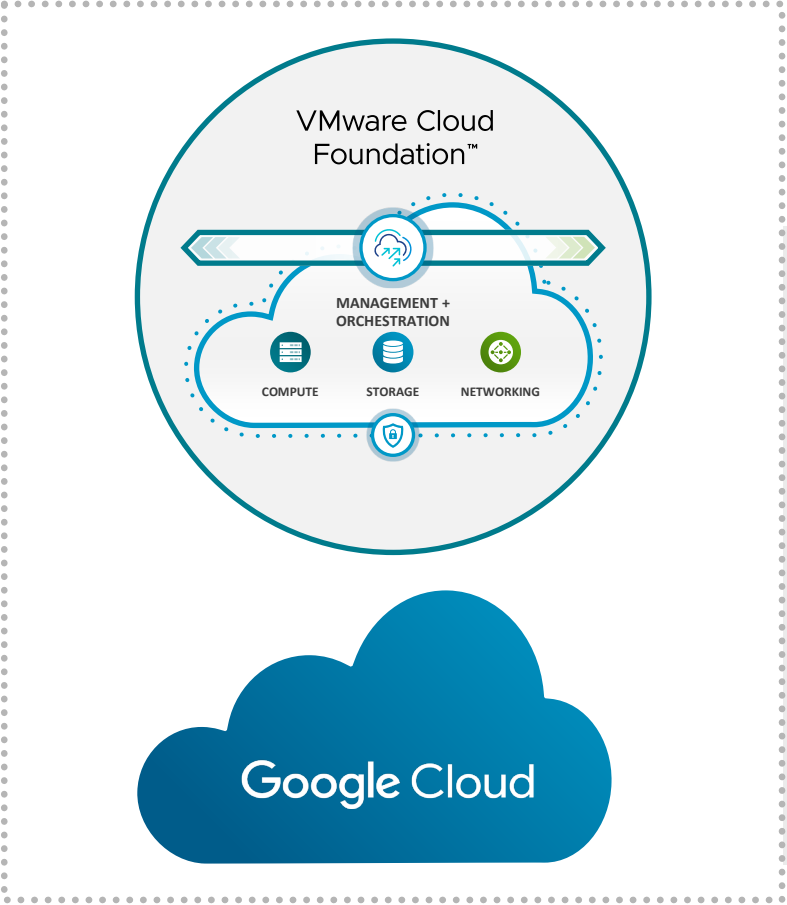Leverage your add-on subscriptions where needed

Hybrid Cloud Expansion
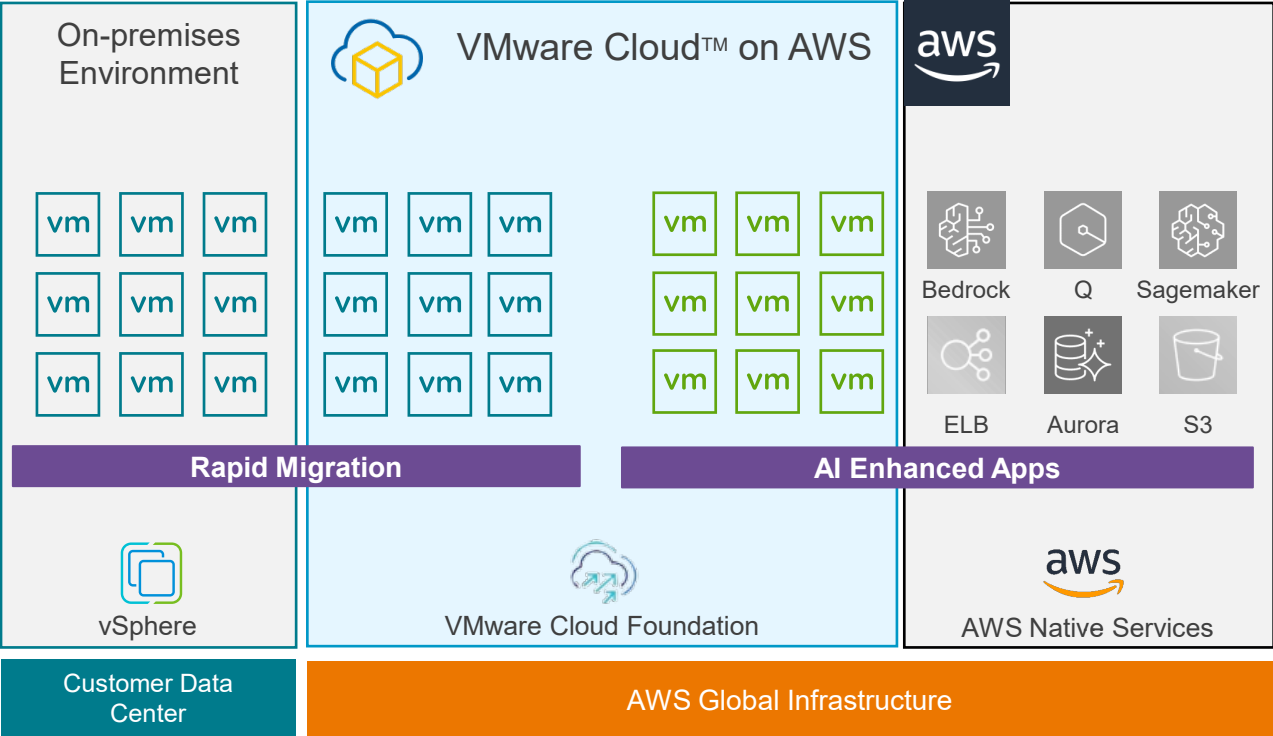Expand your private cloud to hybrid and public clouds easily

Microsoft Azure   aws   ORACLE Cloud   Google Cloud

Google First to Announce Plans for Cloud Destination Point for VMware Cloud Foundation 5.1 License Portability

Google Cloud VMware Engine

- Fully-managed by Google Cloud (no change)

- L1/L2 support from Google Cloud (no change)

- New VMware Cloud Foundation version 5.1 product additions available for customer usage (unmanaged)

VMware Cloud on AWS: What's Included

On-premises Environment

VMware Cloud™ on AWS

Rapid Migration

vSphere

Customer Data Center

VMware Cloud Foundation

AI Enhanced Apps

- Bedrock
- Q
- Sagemaker
- ELB
- Aurora
- S3

AWS Native Services

AWS Global Infrastructure

- VMware **VCF and NSX Firewall** running on dedicated AWS hardware.

- Three unique host types: **i3, i3en, i4i**

- Operated as a **managed IaaS service**, supported by VMware by Broadcom

- Customer self-service using the **VMC Console** vmc.vmware.com

VMware Cloud on AWS: Instance Types

Variety of bare metal instance types for different use cases

i3.metal

I3 — Xeon Broadwell v4
- 2.3GHz
- 36 physical cores
- 512 GB Memory
- ~10 TiB NVMe

General Purpose Clusters
- Traditional application
- Management services
- Disaster recovery pilot light
- Virtual desktops

vSAN Storage Capabilities
- 8 x 1.9 TB NVMe SSD
- 2 x Disk Groups
- Compression **Enabled**
- Deduplication **Enabled**

i3en.metal

I3en — Xeon Cascade Lake
- 2.5GHz
- 48 physical cores
- 96 logical cores
- 768 GB Memory
- ~45 TiB NVMe

Storage Bound Clusters
- Databases
- Large file systems
- CPU-bound / analytics
- High random I/O

vSAN Storage Capabilities
- In-Transit Hardware Encryption
- 8 x 7.5 TB NVMe SSD
- 4 x Disk Groups
- Compression **Enabled**
- Deduplication **Disabled**

i4i.metal

I4i — intel Xeon Ice Lake
- 2.9GHz / 3.5GHz
- 64 physical cores
- 128 logical cores
- 1 TB Memory
- ~20 TiB NVMe

General Purpose Clusters
- Resource optimized
- Latest Intel Xeon family
- Double the memory of I3
- 2 x storage capacity of I3

vSAN Storage Capabilities
- In-Transit Hardware Encryption
- 8 x 3.75 TB NVMe flash
- 2 x Disk Groups
- Compression **Enabled**
- Deduplication **Disabled**

Support Details From Day 2

Offer	Broadcom Software Maintenance
Support Level	Essential Support
Customer Access	By Product/Entitlement Account
Geo Coverage	Global
# of Individual Customer Administrators	Unlimited
Senior-Level Support Engineers	World Class Support Organization
SDK and API Guidance	With DTSE/SAM purchase
Root Cause Analysis	With DTSE/SAM purchase
Severity 1 Initial Response	30 minutes, 24x7
Severity 2 Initial Response	2 business hours, 10x5
Severity 3 Initial Response	4 business hours, 10x5
Severity 4 Initial Response	8 business hours, 10x5

Support Portal Landing Page / Pre-Login Page

https://support.broadcom.com
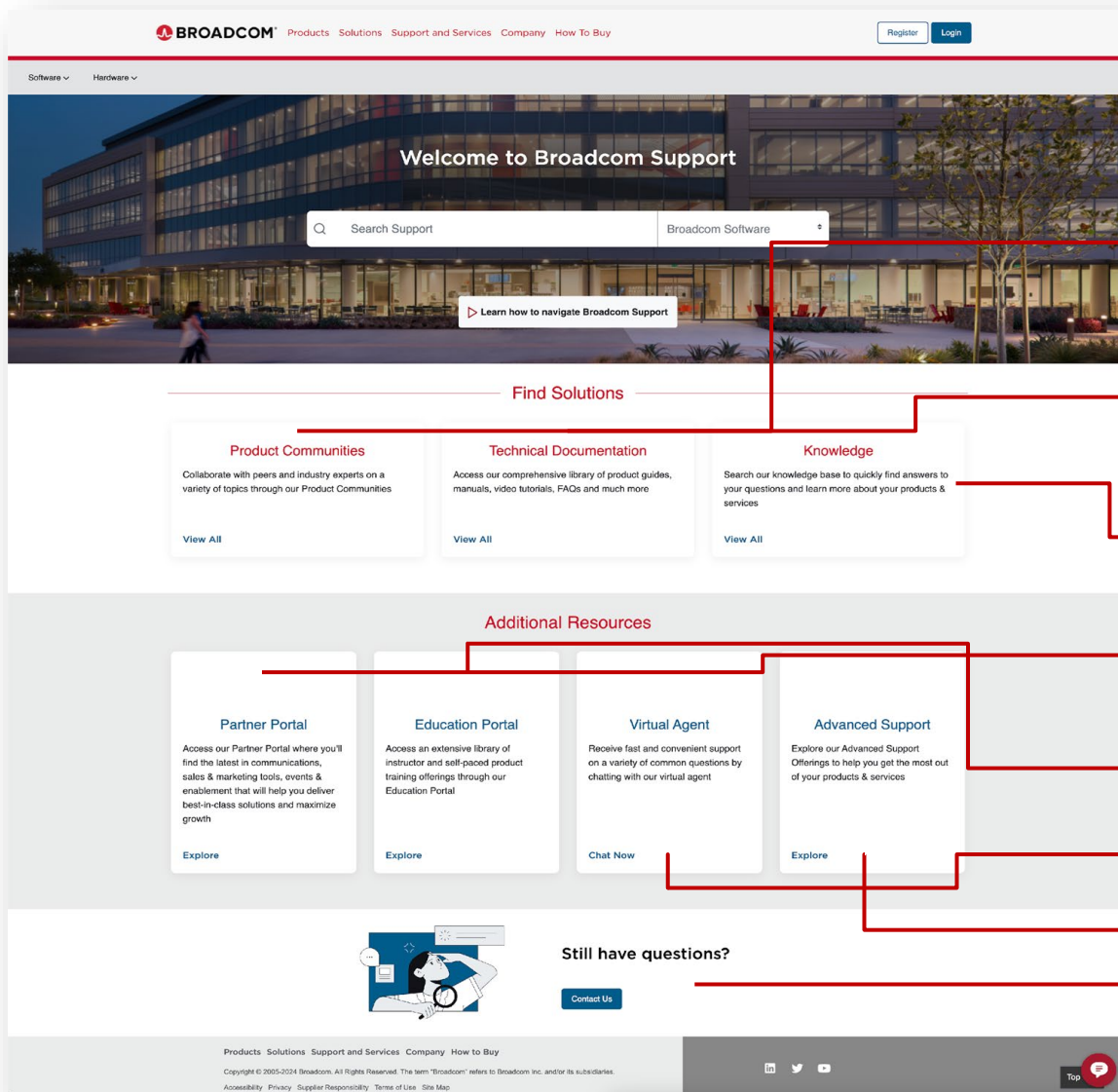
Getting Started with your Support Portal Account for VMware Customers:

https://knowledge.broadcom.com/external/article?articleNumber=282615

The Pre-Login page contains several product and support resources. In order of appearance:

Product Communities: Discussions, Blogs, and Upcoming Events. Click View All to be taken to the Broadcom Community site—designed by software division and organized by product.

Technical Documentation: Technical support documentation enhanced with search capability. Click View All to be taken to the Tech Docs portal—designed by software division and organized by product.

Knowledge: A self-service knowledge base of issues solved by the help desk. Click View All to be taken to the knowledge base search window.

Broadcom Software Partner Portal: Click Explore to be taken to the Agile Operations and Mainframe Software portal for Broadcom partners.

Education: Click Login to open the Enterprise Software Academy.

Ask our Virtual Agent: Click Chat Now to open a chat dialog with a virtual agent.

Need Personalized Support?: Click Login to access the Support Portal.

Contact Us: Open the global support portal with access to global support numbers and request forms.

My Dashboard / Dashboard Home

Product Division

- Entitled to multiple Broadcom Software products? Refresh your dashboard by selecting another product division from the menu. This will change the content displayed/accessible in your dashboard.

My Profile

- Access your profile details to update your Broadcom systems and services access as well as confirm and manage your subscription preferences.

Search, Notifications, Downloads

- Check any notifications you may have missed from the bell icon and view the Download Manager for your Download history or pending files. If you get lost, or want to jump to something else, use the search icon to get started.

Widgets

- Stay informed on support cases, download history, expiring contracts, and more. Click each widget to jump to the specific pages that contain more details on each item.

Misc Portals / Trial & Beta

New Learning Systems
Summary

Prior Systems		New Learning Systems
Mylearn	→	Learning @ Broadcom (CSOD)
Digital Learning Platform	→	Learning @ Broadcom (CSOD)
Partner University	→	Learning @ Broadcom (CSOD)
HIVE	→	Learning @ Broadcom (CSOD)
VMware Certification Manager	→	Broadcom Certification Manager
Learning Support Email Aliases	→	Broadcom Support Portal

Your Digital Learning Entitlement

Complimentary Access!

DIGITAL Learning Entitlement Details

- **"VMware Digital Learning Entitlement" launched on Feb 5, 2024**

- All access to digital training content from VMware Cloud Foundation (VCF), vSphere, vSAN, NSX, Aria, HCX, SRM, Cloud Director & Tanzu solutions

- Unlimited user access from your organization

- You must use your company email to login and access

- Just give us your access domain names (not individual email)

- Upgrade to Enterprise Learning Subscription (ELS) for unlimited lab access and certification vouchers
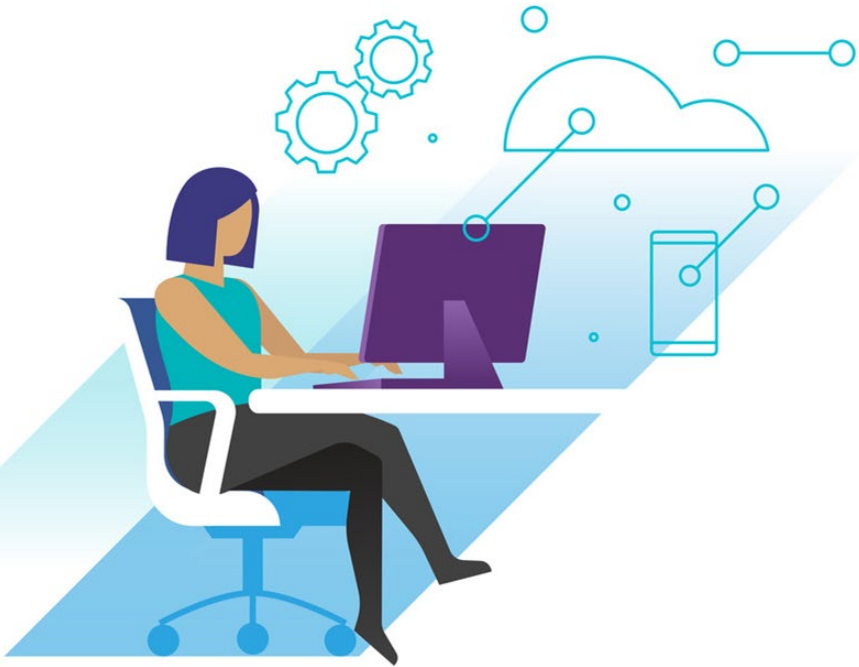
VCF vILT Open Enrollment Entitlement
Complimentary VCF vILT Training as of May 6, 2024

ILT Entitlement Details

- Classes will be conducted in English only. Exceptions of Chinese, Japanese and Korean for some classes.
- No limit on number of courses or seats, based on instructor availability.
- Entitled customers to self register through Learning@Broadcom LMS.
- Non VCF Corporate, Commercial, and lowered tiered partners not eligible.
- Dedicated Private Training classes are still be available for fee.

Eligible Customers/Partners

- Strategic Customers
- Pinnacle Partners
- Premier Partners - Up to 40k value in vILT Enrollments per calendar year
- **All customers who have active VCF licenses** regardless of their customer segment

Available Class Topics

- VMware vSphere
- VMware NSX
- VMware Aria
- VMware Cloud Foundation
- VMware vSAN
- VMware Cloud Director
- VMware HCX

OEM licences information

Dell Technologies and Broadcom Extend Commitment to Serving Customers and Partners with Broad Jointly Engineered Hyperconverged Solutions Portfolio

[Dell Technologies and Broadcom Extend Commitment to Serving Customers and Partners with Broad Jointly Engineered Hyperconverged Solutions Portfolio | Dell USA](#)

The Next Evolution of Broadcom Value-Added OEM Solutions (HPE and Lenovo)

[The Next Evolution of Broadcom Value-Added OEM Solutions (vmware.com)](#)

External Useful Resources (from William Lam)

Tips for navigating and downloading from new Broadcom Support Portal

https://via.vmw.com/BSPtips

Useful Links for VMware by Broadcom Day 2 Transition

https://via.vmw.com/VMwareDay2

No entitlements needed for these popular VMware downloads on Broadcom Support Portal (BSP)

https://via.vmw.com/BSPfreeDownloads

Merci!

Des questions? Contactez-nous: it-forum.ch@bechtle.com