



VMUG  
**CONNECT**  
ST. LOUIS | APRIL 23-25

*Where Progress is Powered by Community*

# Welcome to VMUG Connect!



Link to Presentation on my GitHub

Matt Heldstab

Systems Engineer – Minnesota State Colleges and Universities

Tales from a Broadcom Customer in 2025

Architecture, Licensing Stories and Professional Development Planning

# Tales from a Broadcom Customer in 2025

Let's Connect!

Matt Heldstab

Current VMUG Vice President, Minneapolis VMUG Leader  
Systems Engineer – Minnesota State Colleges and Universities

Contact: [matt@tcwd.net](mailto:matt@tcwd.net) -- @mattheldstab on TwiX

LinkedIn: <https://www.linkedin.com/in/matt-heldstab-27387a6/>

BlueSky: @vmatt.net      Blog: [www.vmatt.net](http://www.vmatt.net)



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# Tales from a Broadcom Customer in 2025

## Level-Set

- Time permitting, I would like this to be interactive
- I am not a Broadcom employee
- This presentation has not been vetted or approved by VMUG, Broadcom, or Omnissa
- Examples in this presentation are real-world examples and might not be what you experience. As they say, your mileage may vary.



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# Tales from a Broadcom Customer in 2025

## Agenda

- Where we started at Minnesota State
- Discovering the new normal at Broadcom
  - Understanding the new product landscape
  - Choosing a level that works for your company
  - What NOT to do
- Architecture changes you can make to reduce the cost of your next agreement
- Using Broadcom and VMUG's new partnership to assist with Professional Development



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# Our Story

# Tales from a Broadcom Customer in 2025

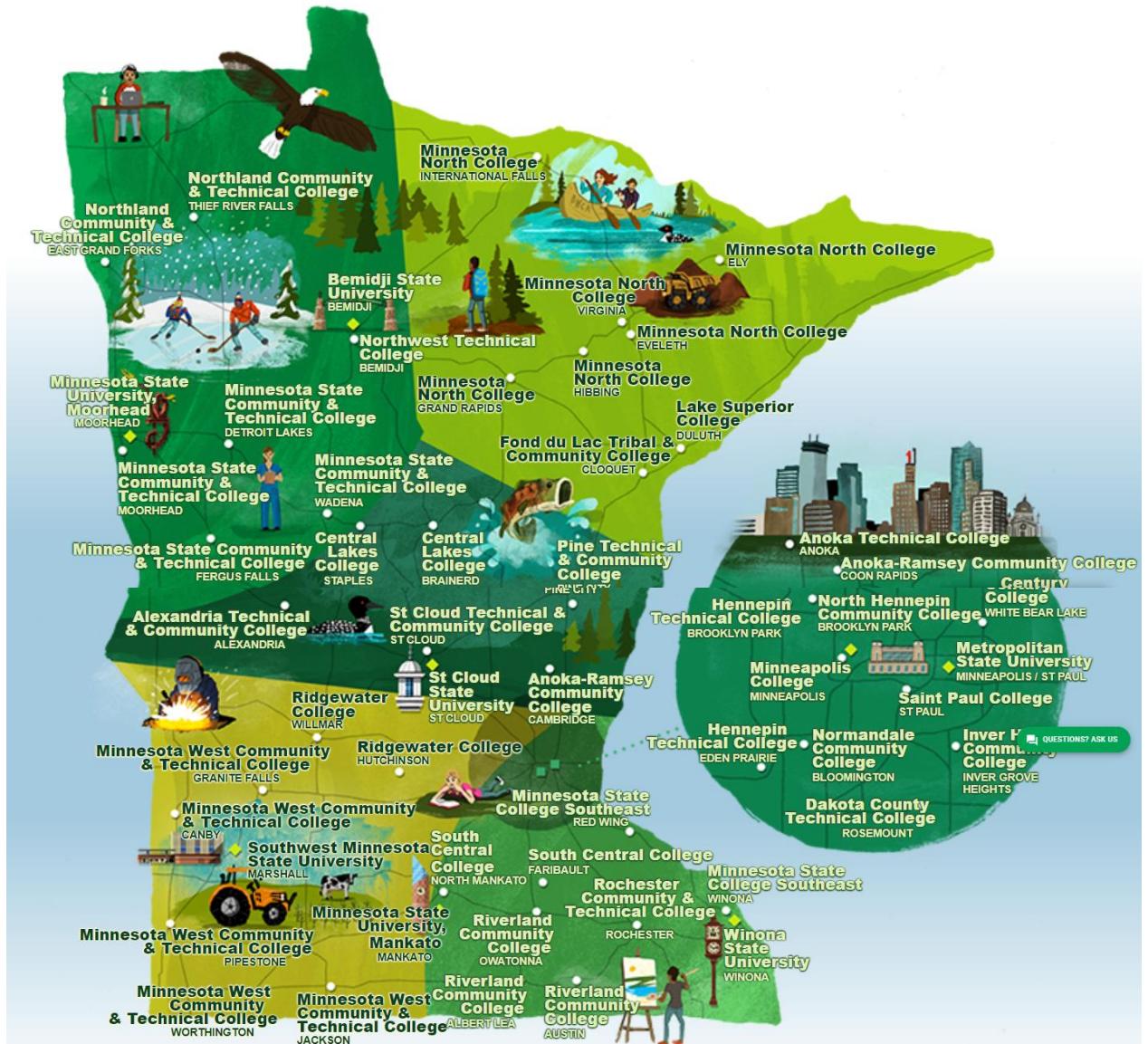
## Minnesota State Colleges and Universities system

Article Talk

From Wikipedia, the free encyclopedia

The **Minnesota State Colleges and Universities** system or **Minnesota State**, previously branded as **MnSCU**,<sup>[4]</sup> comprises 26 state **colleges** and 7 state **universities** with 54 campuses throughout **Minnesota**. The system is the largest **higher education system** in Minnesota (separate from the **University of Minnesota system**) and the third largest in the **United States**, educating more than 300,000 students annually.<sup>[5]</sup> It is governed by a 15-member board of trustees appointed by the governor, which has broad authority to run the system. The Minnesota State system office is located in the **Wells Fargo Place** building in **Saint Paul, Minnesota**.

In 2016, the Board of Trustees approved a rebranding of the system to the shortened **Minnesota State**. This change was met with criticism as this is also the nickname commonly attributed to **Minnesota State University, Mankato**.<sup>[6][7]</sup> The change affected branding but did not alter the legal name of the organization that is identified in state statute.<sup>[8]</sup> Commonly the system is now being referenced in media as the **Minnesota State System**, while the institution in Mankato is being referenced as **Minnesota State**.<sup>[9]</sup>



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# Tales from a Broadcom Customer in 2025

## **Right-sizing over the years at Minnesota State**

We began our Managed Service Practice in 2016

Our on-premises infrastructure included:

- 26 IBM Blades
  - 38 HP Blades
  - 17 HP Rack-mount Servers
  - 9 Datacenters
- 80 ESXi Hosts overall

From that first ELA in 2016 to present (approximately the same amount of workloads)

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- Better performing servers that run more dense
  - 64GB to 256GB to 1TB+ memory per host
  - Workloads not CPU-bound
- Online Learning System – migrate to SaaS
- Microsoft Exchange to Microsoft 365 migration
- Load Balancers – Migrated from dedicated to shared ESXi
- Public web presence – Migrated to Azure
- Upcoming Migration to Workday



- Increased Minimum Req'ss for server operating systems
- Increased Minimum Req's for desktop OS's XP to 7 to 10 to 11
- Remote Access post-pandemic (Horizon)
- Custom software appliance instances on the rise
- Exponential increase of Cisco, Palo Alto, VMware appliance specs
- Migration from SUSE Linux to MS Windows
- A few IaaS apps repatriated due to DBaaS performance issues

# Tales from a Broadcom Customer in 2025

## **Right-sizing over the years at Minnesota State**

Where we are at in 2025 – 9 years later

Our on-premises infrastructure includes:

- 21 Dell MX Blades
  - 4 Dell PowerEdge Rack-mount
  - 13 HP Rack-mount
  - 9 Datacenters
- 38 ESXi Hosts overall



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# Tales from a Broadcom Customer in 2025

## Entering your next contract agreement - tips

- Consider right-sizing
  - Compute vendors – but THIS CPU is only a little more!
  - **Make sure your first quote is post-right-sized!!!**
    - My campus stories
  - This is something we have all been doing for years



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# Tales from a Broadcom Customer in 2025

## Entering your next contract agreement - tips

- Show evidence of hardship if that is the case  
Especially if it is in the news.
- If you don't need VCF, consider asking for a quote anyway – it might actually be cheaper
- Play the “partnership card”
  - Broadcom has been known to reward those who view them as a strategic partner.
- Understand the product and feature set well



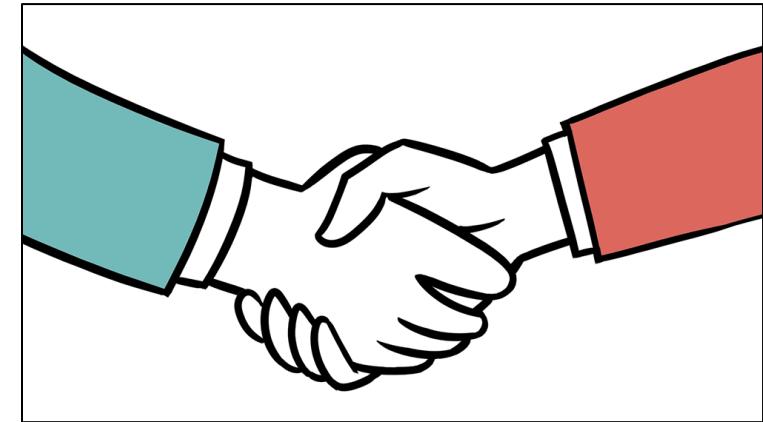
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# Tales from a Broadcom Customer in 2025

## Where WE started at Minnesota State

- Start the conversation early and stay positive
- Seriously consider your attitude when you start negotiating
  - Should be a no-brainer that a civil conversation can only help the situation
- Broadcom looks favorably upon those who participate in the vCommunity
  - If you have presented at a VMUG let your team know!



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# Tales from a Broadcom Customer in 2025

## Do your homework

- Some redditors are vendors trying to generate FUD
- Some are actual customers not telling the whole story
- Some negative stories are actually true but the fake ones are often easy to identify
- Reddit is a “venting” platform not unlike much social media. Customers won’t be as apt to post success stories but you can find some gems.

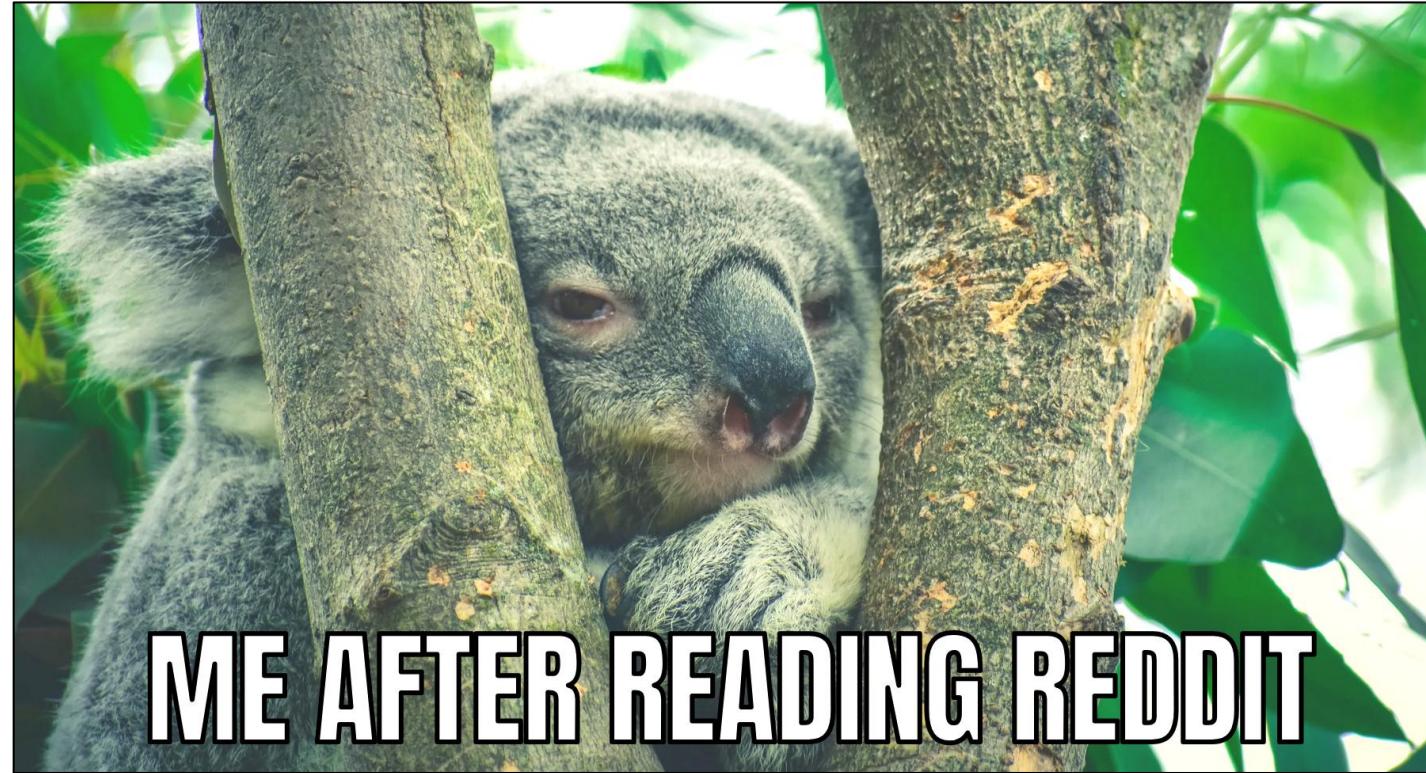


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# Tales from a Broadcom Customer in 2025

Did someone  
say Reddit?



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# Tales from a Broadcom Customer in 2025

## Do your homework

- Industry chaos is an opportunity for many
- Work with your account team
- Find out what is possible
- Ask your reseller about deployment credits
- Speaking of Reddit – I found this tidbit there  
Ohio OARnet – (Some contracts are publicly available)  
[https://www.oar.net/content/product\\_details\\_and\\_pricing](https://www.oar.net/content/product_details_and_pricing)



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# Tales from a Broadcom Customer in 2025

## Ohio Contract Details

**Positives:** VCF at \$115/core/yr  
33% of retail price

**Negatives:** Standard, Enterprise  
plus and VVF not available

## About OARnet

OARnet delivers technology-based solutions that reduce costs, increase productivity and improve customer service – and has done so since 1987. As a division of the Ohio Department of Higher Education's Ohio Technology Consortium, OARnet serves Ohio's education, health care, public broadcasting and government communities.



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[Home](#) / [Services](#) / [Application Services](#) / [VMware](#) / Product Details and Pricing

## Product Details and Pricing

### Product Price List

A complete price list is no longer published. You may contact Carahsoft directly to request a quote at [oarnetvmware@carahsoft.com](mailto:oarnetvmware@carahsoft.com).

### VCF Payment Options

**Annual Ramp Payment Option** allows for budgeting annual increases of approximately 10% over the life of the agreement and minimizes the impact of a first-year increase.

- VCF Data Center
  - Year1: \$95/core; Year2 \$105/core; Year3 \$115/core; Year4 \$125/core; Year5 \$135/core
- VCF Edge 256
  - Year1 \$79/core; Year2 \$86/core; Year3 \$95/core; Year4 \$103/core; Year5 \$112/core
- VCF Edge 96
  - Year1 \$41/core; Year2 \$45/core; Year3 \$49/core; Year4 \$53/core; Year5 \$57/core

**Annual Fixed Price Payment Option** is based on the fixed core price for the full term of the contract. Customer will be responsible for the annual cost of the contract for the remaining years after the customer signs for the service.

- VCF Data Center - Annual Cost: \$115/Core
- VCF Edge 256 - Annual Cost: \$95/core
- VCF Edge 96 - Annual Cost: \$49/core

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Tales from a Broadcom Customer in 2025

# Current Products

- VMware Cloud Foundation (VCF)
- VMware Cloud Foundation - Edge
- VMware vSphere Foundation (VVF)
- VMware vSphere Enterprise Plus
- VMware vSphere Standard

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Tales from a Broadcom Customer in 2025

# Current Products

- VMware Cloud Foundation (VCF)
- VMware Cloud Foundation - Edge
- VMware vSphere Foundation (VVF)
- VMware vSphere Enterprise Plus
- VMware vSphere Standard
- **VMware vSphere Foundation for VDI (VVF for VDI)**

Attn Omnissa  
Customers!

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# Tales from a Broadcom Customer in 2025

William Lam is a fantastic resource – [www.williamlam.com](http://www.williamlam.com)

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About    VMware Cloud Foundation    Tanzu    Home Lab    Nested Virtualization    Apple



Automate the deployment & initial configuration of Aria Suite Lifecycle Manager (formally vRSLCM)

02.15.2024 by William Lam // Leave a Comment

I love writing automation, especially for deploying a consistent and repeatable environment for testing or learning purposes. I recently deployed the latest [Aria Suite Lifecycle Manager 8.14](#) (formally vRealize Suite Lifecycle Manager or vRSLCM) manually using the graphical Easy Installer method, which was easy and straight forward.

Unlike the vCenter Server Appliance (VCSA) installer, which includes both a UI and CLI option, the latter for automation purposes. I found that ASLCM only provides an interactive UI method for deployment and I was interested in an automated solution. Similar to the VCSA installer, the extracted contents of the ASLCM ISO is the installer

Search

Search this website

Author



William is Senior Staff Solution Architect in the VMware Cloud Foundation (VCF) Division at Broadcom. He

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# Tales from a Broadcom Customer in 2025

## How do I know how many cores I need to buy in my next agreement?

<https://williamlam.com/2024/02/updated-inventory-calculator-scripts-for-counting-cores-tibs-for-vmware-cloud-foundation-vcf-and-vmware-vsphere-foundation-vvf.html>

```
PS /Users/wlam/Desktop> Get-FoundationCoreAndTiBUsage -DeploymentType VCF
Querying all ESXi hosts, this may take several minutes...
Sizing Results for VMware Cloud Foundation (VCF) Instance:
Compute Usage Information
CLUSTER VMHOST NUM_CPU_SOCKETS NUM_CPU_CORES_PER_SOCKET FOUNDATION_LICENSE_CORE_COUNT
----- -----
esx-standalone-01 2 4 32
DB Cluster esx-db-01 1 6 16
DB Cluster esx-db-02 1 6 16
DB Cluster esx-db-03 1 6 16
ML Cluster esx-ml-01 2 20 40
ML Cluster esx-ml-02 2 20 40
ML Cluster esx-ml-02 2 20 40
ML Cluster esx-ml-02 2 20 40

vSAN Usage Information
CLUSTER NUM_HOSTS NUM_CPU_SOCKETS NUM_CPU_CORES FOUNDATION_LICENSE_CORE_COUNT ENTITLED_VSAN_LICENSE_TIB_COUNT REQUIRED_VSAN_TIB_CAPACITY VSAN_LICENSE_TIB_COUNT
----- -----
DB Cluster 3 3 18 48 48 25.178 -22.000
ML Cluster 4 8 160 160 160 17.893 -142.000

Total Required VCF Compute Licenses: 240
Total Required vSAN Add-on Licenses: -164
```

Updated Inventory & Calculator Scripts for counting Cores/TiBs for VMware Cloud Foundation (VCF) and VMware vSphere Foundation (VVF)

02.12.2024 by William Lam // 2 Comments

Here are two new tools to help our users understand and calculate the required subscription capacity for the new [VMware Cloud Foundation \(VCF\)](#) and [VMware vSphere Foundation \(VVF\)](#) offerings, which are licensed based on physical CPU Cores for compute and total raw physical storage (TiBs) for vSAN.

### Inventory Script

The PowerCLI script provided in [VMware KB 95927](#) is designed to help users inventory their existing vSphere environment (read-only account is sufficient) to assess the required VCF or VVF subscription capacity for compute and/or vSAN. The script has also been enhanced to incorporate the upcoming 100GiBs of vSAN storage entitlement for each VVF core that is provisioned to a vSAN cluster as well as the latest pricing and packaging for both VCF and VVF. For more details on how to download and use the inventory script, please check out the KB for more information.

**Note:** Make sure you are using the latest version of the script which had a minor update on 02/14/2024

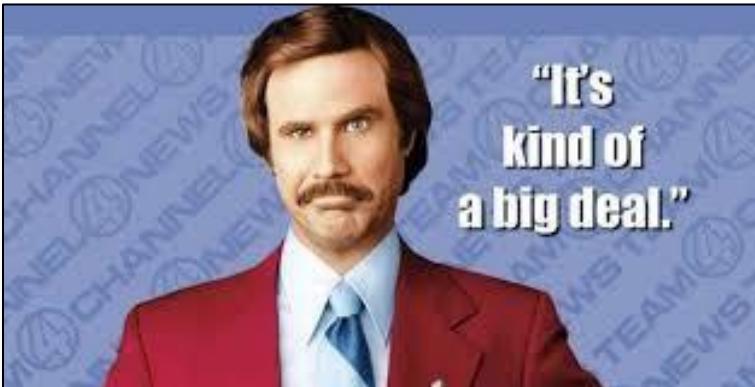
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# Tales from a Broadcom Customer in 2025

- Level-set -- VMware Cloud Foundation – YOU GUYS KNOW THE STORY
- VCF is a best-in class suite of products that comprise the Software-Defined Datacenter
- VCF will absolutely transform your datacenter, especially if you need to
  - Streamline the deployment of VMware products
  - Eliminate configuration inconsistencies that come with manual deployments
  - Standardize how infrastructure is deployed
  - Bring cloud methods into your on-premises datacenter
  - Integrate with other VMware Cloud products such as VMC on AWS, AVS, OCVS, GCVE
- If your organization can afford VCF, you won't be sorry. Just understand that the technology is more expensive than other editions of vSphere.
- This presentation will discuss what some of the differences are, and compare it to other products that are available.

## VCF you say?



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Tales from a Broadcom Customer in 2025

**Retail Price**  
\$350/core/year

# VMware Cloud Foundation (VCF)

- Entitles you to the entire Software-Defined Datacenter
- Included vSphere Enterprise Plus-level features plus vCenter Server Standard
- Entitles you to 1TiB/core RAW of VSAN
- Only licensing level that provides NSX, entire Aria Suite (Ops, Logs, Auto, Network) vCloud Director (available add-ons for Distributed FW, IDS/IPS)
- Direct-to-Broadcom support
- Annual Billing
- Free education / training in customer Broadcom portal
- Minimum 72 cores for primary contract

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# Tales from a Broadcom Customer in 2025

Retail Price  
\$350/core/year

## Measuring VSAN Entitlements

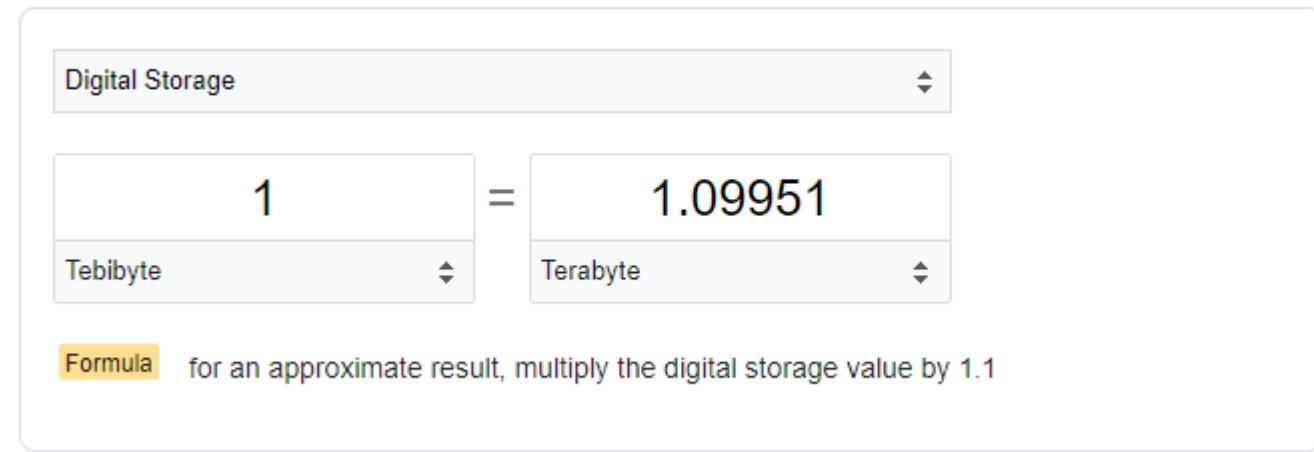
Minimum 16 cores  
Per socket

### Important stuff to know

**TiB not TB – Tebibytes not Terabytes**

**RAW not Usable**

1000 cores of VCF = 1099.51 TB



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## Tales from a Broadcom Customer in 2025

**Retail Price**  
\$190/core/year (1y)  
\$150/core/year (3y)

## VMware vSphere Foundation (VVF)

Minimum 16 cores  
Per socket

- Entitles you to 250GiB/core RAW of VSAN
- Included: vSphere Enterprise Plus-level features, vCenter, Aria Ops Standard and Logs
- Not Included: NSX, Aria Auto, Ops Enterprise, Network
- Third-Party Support only
- 3 year deal, paid up-front
- Education not included
- Pricing is minimally negotiable
- Minimum 72 cores for primary contract

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# Tales from a Broadcom Customer in 2025

**Retail Price**  
\$190/core/year (1y)  
\$150/core/year (3y)

## Measuring VSAN Entitlements

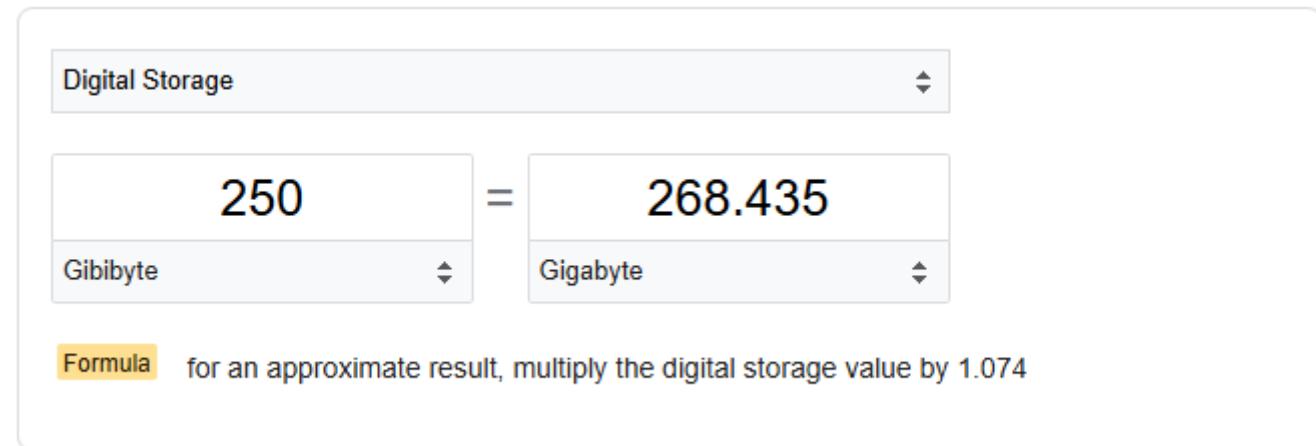
Minimum 16 cores  
Per socket

### Important stuff to know

**GiB not GB – Gibibytes not Gigabytes**

**RAW not Usable**

1000 cores of VVF = 268.435 TB



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Tales from a Broadcom Customer in 2025

**Retail Price**  
\$150/core/year (1y)  
\$120/core/year (3y)

# VMware vSphere Enterprise Plus

Minimum 16 cores  
Per socket

- Included: vSphere Enterprise Plus-level features plus vCenter Server Standard
- Not Included: VSAN, NSX, Aria Suite
- Third-Party Support only
- Three year plan is paid up-front
- Education not included
- Pricing is non-negotiable
- Minimum 72 cores per primary contract

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Tales from a Broadcom Customer in 2025

Retail Price  
\$50/core/year

# VMware vSphere Standard

Minimum 16 cores  
Per socket

- Included: vSphere Standard features plus vCenter Server Standard
- Not Included: VSAN, NSX, Aria Suite
- Features Included: vSphere HA, VMotion (incl Storage), FT, VVOLs, TPM, EVC, Replication
- Features Not Included: DRS, Distributed Switches, VM Encryption, Storage DRS, Host Profiles
- Third-Party Support only
- Multi-year plan is paid up-front
- Education not included
- Pricing is non-negotiable
- Minimum 72 cores for primary contract

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Tales from a Broadcom Customer in 2025

## VMware vSphere Foundation (VVF for VDI)

- Included with Omnissa Horizon License Agreement
- Entitles you to 100GiB/core RAW of VSAN
- Included: vSphere Enterprise Plus-level features, vCenter
- Not Included: NSX, Aria Suite
- Only valid for Omnissa Horizon Customers (formerly VMware EUC Division)
- Licenses will be in your Broadcom portal (vSphere and vCenter)

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## Tales from a Broadcom Customer in 2025

**Retail Price**  
\$225/core/year

## VMware Cloud Foundation Edge (VCF Edge)

- Entitles you to the entire Software-Defined Datacenter in Edge locations
- Included vSphere Enterprise Plus-level features plus vCenter Server Standard
- Entitles you to 1TiB/core RAW of VSAN
- Only licensing level that provides NSX, entire Aria Suite (Ops, Logs, Auto, Network) vCloud Director (available add-ons for Distributed FW, IDS/IPS)
- Direct-to-Broadcom support
- Annual Billing
- Free education / training in customer Broadcom portal

Minimum 8 cores  
Per socket

Minimum number  
of sites to qualify

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# Tales from a Broadcom Customer in 2025

If I purchase VCF, do I need to run the entire Software-Defined Datacenter?

The screenshot shows a Microsoft Excel spreadsheet titled "vmware" with several tabs visible at the top: A, B, C, D, E, F, G, H, I, J, and K. The main content area contains configuration details for a vSphere environment.

**Instructions:** Use the *Deployment Parameters* tab to input configuration details for physical infrastructure and the components used to implement the Management Domain.  
- Grey cells are for information purposes and cannot be modified.  
- Red cells mean the input data is either missing and mandatory or some type of validation of the input data has failed.  
- Yellow cells indicate input data, default values are included to help illustrate the formatting to be used and align to the VMware documentation. If a value is not required enter 'n/a', if it turns red then its mandatory.

**Existing Infrastructure Details**

Infrastructure	Value
DNS Server #1	192.168.202.1
DNS Server #2	192.168.202.2
NTP Server #1	192.168.202.1
NTP Server #2	192.168.202.2

**License Keys**

Use Keyless Licensing	No
Licensing	License Key
ESXi	7I
vSAN	6I
vCenter Server	J
NSX	KI

**vSphere Infrastructure**

vCenter Server	Hostname	IP Address
vCenter Server Hostname and IP Address	vcf-vcenter	192.168.201.25
vCenter Server Appliance Size (Default Small)	tiny	
vCenter Server Appliance Storage Size	default	

**vSphere Datastore**

vSAN Datastore Name	nestVSAN
Enable vSAN Deduplication and Compression	No
Enable vSAN-ESA	No

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# Tales from a Broadcom Customer in 2025

## What's no longer available?

- vSphere Essentials Plus Kit
- vSphere ROBO (all editions)
- vRealize ROBO (all editions)
- VSAN ROBO (all editions)
- vSphere for Desktop
  - Omnissa Customers use VVF for VDI
  - Citrix Customers may purchase other levels (VCF, VVF, Enterprise Plus, Standard)
- Enterprise License Agreement “Stated Out Years”

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# Tales from a Broadcom Customer in 2025

## Our products in our last perpetual agreement

### **Perpetual Products**

vSphere Enterprise Plus

vCenter Server

Aria Operations Suite Standard

VMware NSX Enterprise Plus

VMware vSphere for Desktop

vSphere ROBO Standard (per VM)

~1000 cores (not including VDI)

### **Replacement Products**

VCF, VVF

VCF, VVF

VCF, VVF

VCF (would lose NSX if we downgraded to VVF)

VVF for VDI (from Omnissa)

vSphere Standard (per core)

or VCF Edge (per core)

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# Tales from a Broadcom Customer in 2025

Contract Year	Type	Increase since 2016	Increase vs Inflation	Year over Year Increase
2016	ELA Year 1 (Added VROPS)	0.00%	0.00%	0.00%
2017	ELA Year 2	0.00%	-2.44%	0.00%
2018	ELA Year 3	0.00%	-4.42%	0.00%
2019	ELA Stated Out Year	0.00%	-5.88%	0.00%
2020	Off the shelf / Shrink Infra	18.52%	8.85%	18.52%
2021	ELA year 1 (Added NSX+Hor)	10.91%	0.45%	-6.42%
2022	ELA year 2	10.91%	-6.54%	0.00%
2023	ELA year 3	10.91%	-12.17%	0.00%
2024	ELA year 4	10.91%	-14.80%	0.00%
2025-2030	Subscription	-8.00%	-31.04%	-16.63%

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# Tales from a Broadcom Customer in 2025

## Finding the good in change

- Increased our Aria Operations to Enterprise
- Now entitled to Aria for Logs, Automation, Network, VSAN
- No longer need to purchase VMware Workstation or Fusion
- No longer required to sit a class to get certified
- VMware Education is now included for free

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# Tales from a Broadcom Customer in 2025

Help in getting access  
To the Broadcom eLibrary



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# Tales from a Broadcom Customer in 2025

Learning@ **BROADCOM**

Home Transcript Catalog My Profile eLibrary Enablement VMware Digital Entitlement VMware Subscriptions Connect



**vmware**  
by Broadcom

## VMware Cloud Foundation (VCF) eLibrary

Welcome to the VMware Cloud Foundation (VCF) eLibrary!

This learning portal contains free digital learning and fundamental courses covering the VMware Cloud Foundation (VCF) product portfolio. The eLibrary is ideal for entry-level learning that introduces the VCF platform and underlying technologies at your own pace.

---

- ▶ Automation and Operations
- ▶ Compute
- ▶ Kubernetes
- ▶ Networking
- ▶ Storage

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# Tales from a Broadcom Customer in 2025

The screenshot displays the Learning@Broadcom platform interface. At the top, there is a navigation bar with links: Home, Transcript, Catalog, My Profile, eLibrary, Enablement, VMware Digital Entitlement, VMware Subscriptions, and Connect. A search bar is located in the top right corner.

The main area shows a circular progress indicator with "0%" and the text "CURRICULUM PROGRESS". Below this, a dark grey box contains the title "VMware Data Center Virtualization: Core Technical Skills". To the right of the title is a red button labeled "TRAINING CONTENT".

On the right side of the screen, a detailed view of the course "VMware Data Center Virtualization: Core Technical Skills" is shown. The page title is "VMware Data Center Virtualization: Core Technical Skills" with an "Options" dropdown menu. The "Training Content" section indicates 0% completion, 0 completed items, and 55 total items required. It lists four lessons:

- Introduction to Virtual Machines**: Status: Registered, Due: No Due Date. Description: After completing this lesson, you will be able to meet the following objectives:  
- Describe how virtual machines work  
- Recognize the benefits of using...
- How Virtualization Works**: Status: Registered, Due: No Due Date. Description: After completing this lesson, you will be able to meet the following objectives:  
- Recognize the purpose of a hypervisor  
- Describe how VMs share...
- vSphere and the Software-Defined Data Center**: Status: Registered, Due: No Due Date. Description: After completing this lesson, you will be able to meet the following objectives:  
- Identify types of virtualization used in a software-defined data center
- Components of a vSphere Environment**: Status: Registered, Due: No Due Date. Description: After completing this lesson, you will be able to meet the following objectives:  
- Recognize the functions of the components in a vSphere environment

Each lesson item has a "Launch" button with a dropdown arrow.

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# Tales from a Broadcom Customer in 2025

0%

CURRICULUM PROGRESS

VMware Data Center  
Virtualization: Core  
Technical Skills

TRAINING CONTENT

The screenshot shows a learning management system interface. On the left, a large circular progress bar indicates 0% completion. Below it, the text "CURRICULUM PROGRESS" is displayed. A dark grey box contains the title "VMware Data Center Virtualization: Core Technical Skills". To the right of this box is a white box labeled "TRAINING CONTENT" with a red circular icon. On the right side of the screen, there is a list of training modules, each with a small blue computer icon, a title, a status, a due date, a brief description, and a "Launch" button.

- vSphere Graphical User Interfaces**  
Status : Registered Due : No Due Date  
After completing this lesson, you will be able to meet the following objectives:  
\n- Recognize the components that each vSphere GUI manages\n- Access and...
- VMware SDDC Solutions**  
Status : Registered Due : No Due Date  
After completing this lesson, you will be able to meet the following objectives:  
\n- Identify VMware solutions that integrate with vSphere in SDDC
- SDDC Business Continuity**  
Status : Registered Due : No Due Date  
After completing this lesson, you will be able to meet the following objectives:  
\n- Recognize high availability and disaster recovery solutions for the SDDC
- Getting Started with the vSphere Client**  
Status : Registered Due : No Due Date  
After completing this lesson, you will be able to meet the following objectives:  
\n- View and organize inventory objects managed by vCenter Server\n-...
- Organizing your vCenter Server Inventory**  
Status : Registered Due : No Due Date  
After completing this lesson, you will be able to meet the following objectives:  
\n- Organize vCenter Server inventory objects
- Managing the vSphere Configuration**  
Status : Registered Due : No Due Date  
After completing this lesson, you will be able to meet the following objectives:  
\n- Add and assign vSphere licenses using the vSphere Client\n- Change the...
- vCenter Server Roles and Permissions**  
Status : Registered Due : No Due Date  
After completing this lesson, you will be able to meet the following objectives:  
\n- Describe the vCenter Server roles and permissions\n- Describe the...

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THRIVING IN TECH

# Tales from a Broadcom Customer in 2025

CURRICULUM PROGRESS

VMware Data Center  
Virtualization: Core  
Technical Skills

0% TRAINING CONTENT

	<b>VM Virtual Hardware</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Describe the concept of virtual hardware\n- Add and remove virtual...	Launch ▾
	<b>Virtual Machine Configuration</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Describe the purpose of different VM files\n- Configure the VM settings	Launch ▾
	<b>Creating and Removing Virtual Machines</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Create a virtual machine\n- Delete a virtual machine	Launch ▾
	<b>Installing the Guest Operating System</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Install the Guest Operating System	Launch ▾
	<b>Installing VMware Tools</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Install VMware Tools	Launch ▾
	<b>Upgrading Virtual Machines</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Upgrade to a later version of VMware Tools\n- Upgrade the VM hardware...	Launch ▾
	<b>Virtual Switches Overview</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Describe the concept of a virtual network\n- Recognize ways that virtual...	Launch ▾

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# Tales from a Broadcom Customer in 2025

The screenshot shows a learning management system interface. On the left, a large circular progress bar indicates 0% completion. Below it, the text "CURRICULUM PROGRESS" is displayed. To the right, a dark grey sidebar lists the following categories:

- VMware Data Center**
- Virtualization: Core**
- Technical Skills**

Below this sidebar, a red button labeled "TRAINING CONTENT" is visible. To the right of the sidebar, there is a grid of eight training modules, each represented by a small computer icon and a title. Each module includes a status (Registered), due date (No Due Date), a brief description of objectives, and a "Launch" button.

Module Title	Status	Due Date	Description	Action
vSphere Standard Switches	Registered	No Due Date	After completing this lesson, you will be able to meet the following objectives: \n- Identify characteristics of vSphere standard switches\n- View components...	Launch
vSphere Distributed Switches	Registered	No Due Date	After completing this lesson, you will be able to meet the following objectives: \n- Describe the benefits of vSphere distributed switches\n- Compare...	Launch
Virtual Switch Networking: Security Policy	Registered	No Due Date	After completing this lesson, you will be able to meet the following objectives: \n-Recognize when and how to use the settings for the security networking...	Launch
Virtual Switch Networking: Traffic Shaping Policy	Registered	No Due Date	After completing this lesson, you will be able to meet the following objectives: \n-Recognize when and how to use the traffic shaping networking policy	Launch
Virtual Switch Networking Policy: NIC Teaming and Failover	Registered	No Due Date	After completing this lesson, you will be able to meet the following objectives: \n- Describe how the NIC teaming and failover policy helps maintain network...	Launch
VM Network Connectivity Checks	Registered	No Due Date	After completing this lesson, you will be able to meet the following objectives: \n- Perform vSphere checks to diagnose VM connectivity issues	Launch
vSphere Network Connectivity Checks	Registered	No Due Date	After completing this lesson, you will be able to meet the following objectives: \n- Perform networking checks to diagnose VM connectivity issues	Launch

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# Tales from a Broadcom Customer in 2025

<b>Datastores Overview</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Describe the function of a datastore\n-\n- Recognize types of vSphere...
<b>Viewing Datastore Information</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- View datastore information in the vSphere Client
<b>Monitoring Datastore Usage</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Use the vSphere client to monitor datastore usage
<b>Overview VM Templates</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Describe what a VM Template is\n-\n- Recognize the benefits of using VM...
<b>Creating VM Templates</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Create a VM template
<b>Updating VM Templates</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Update a VM Template
<b>Deploying VMs Using Templates</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Deploy a VM from a template
<b>Cloning Virtual Machines</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Clone a Virtual Machine

<b>Guest OS Customization</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Describe the purpose of guest OS customizations\n-\n- Recognize how to use...
<b>Content Library Overview</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Describe a content library\n-\n- Deploy virtual machines from a content library
<b>Virtual Appliance Overview</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Describe a virtual appliance\n-\n- Deploy a virtual appliance from an OVF...
<b>VM Migration Overview</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Recognize when to perform a virtual machine migration\n-\n- Perform a cold...
<b>Migrating VMs Using vSphere vMotion</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Identify requirements for using vSphere vMotion\n-\n- Perform a vSphere...
<b>Migrating VMs with vSphere Storage vMotion</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Perform a vSphere Storage vMotion migration
<b>Virtual Machine Snapshots</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Identify use cases for snapshots\n-\n- Differentiate snapshots from...
<b>Working with Virtual Machine Snapshots</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Identify the different virtual machine snapshot files\n-\n- Identify the purpose...
<b>Virtual Machine Resource Controls</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Describe virtual machine resource controls\n-\n- Configure Resources...
<b>Working with Virtual Machine CPU Shares</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Observe the behavior of virtual machines with different share values.
<b>Using vSphere Alarms</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Describe how vSphere alarms work\n-\n- Manage a triggered alarm
<b>Introduction to Performance Charts</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Recognize types of performance charts in vCenter Server\n-\n- Use...
<b>Monitoring vSphere Tasks and Events</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Describe tasks and events\n-\n- Monitor tasks and events in the vSphere Client
<b>Overview of vSphere Clusters</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Describe the features that a vSphere cluster offers\n-\n- View information...
<b>Overview of vSphere HA</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Recognize how vSphere HA responds to different types of failures
<b>Monitoring of vSphere HA</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- View a vSphere HA configuration\n-\n- Monitor vSphere HA activity during a...
<b>Overview of vSphere DRS</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Describe how vSphere DRS works\n-\n- Interpret DRS scores
<b>vSphere DRS Settings</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Recognize how to apply the appropriate vSphere DRS automation and...
<b>vSphere DRS Functionality</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Describe when and how to use DRS affinity and anti-affinity rules\n-\n...
<b>Overview of vSphere Fault Tolerance</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Describe how vSphere FT works\n-\n- Enable vSphere Fault Tolerance on a VM
<b>Overview of Enhanced vMotion Compatibility</b> Status : Registered Due : No Due Date After completing this lesson, you will be able to meet the following objectives: \n- Recognize hosts that are CPU-Compatible\n-\n- Explain how Enhanced...
<b>Certification Information</b> Status : Registered Due : No Due Date How to get certified with the VMware Certified Technical Associate - Datacenter Virtualization (VCTA-DCV) certification.

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THRIVING IN TECH

# Tales from a Broadcom Customer in 2025

## CURRICULUM

### VMware Virtual Cloud Network: Core Technical Skills

Last Updated 01/31/2025 Duration 29 minutes

#### Details

##### Overview

The Virtual Cloud Network: Core Technical Skills self-paced course targets candidates who are new to the industry or entry-level employees looking for opportunities to advance their knowledge, skills, and understanding of VMware NSX®, which is the VMware network virtualization platform. Through a series of targeted, self-paced modules, the student will learn how to perform standard and typically repeated tasks that are delegated by an administrator to an operator or junior administrator.

##### Objectives

- Explain the basic concepts and features of the software-defined data center and VMware vSphere®
- Define network virtualization and software-defined networking
- Describe the features, components, and basic architecture of VMware NSX-T™ Data Center
- Describe the networking and security capabilities of NSX-T Data Center, including switching, routing, and firewalling
- Explain the implementation of networking services such as DHCP, DNS, NAT, load balancing, and VPNs in NSX-T Data Center
- Monitor the NSX components and objects from the NSX user interface
- Explain the VMware Virtual Cloud Network vision

Provider VCF Learning

Version 2.0

Available Language(s) English (US)

Subject(s) [NSX](#)

#### Contents

##### TRAINING CONTENT

ONLINE CLASS	Software-Defined Data Center
ONLINE CLASS	VMware SDDC Solutions
ONLINE CLASS	VMware vSphere Components and Features
ONLINE CLASS	Network Virtualization
ONLINE CLASS	Virtual Switches Overview
ONLINE CLASS	vSphere Standard Switches
ONLINE CLASS	vSphere Distributed Switches
ONLINE CLASS	Management, Control and Data Plane
ONLINE CLASS	Software Defined Networking
ONLINE CLASS	Introduction to NSX-T Data Center
ONLINE CLASS	NSX-T Data Center Components
ONLINE CLASS	NSX-T Data Center Architecture
ONLINE CLASS	Benefits of NSX-T Data Center Logical Switching

ONLINE CLASS	NSX Logical Switching Components
ONLINE CLASS	NSX Logical Switching
ONLINE CLASS	Benefits of NSX-T Data Center Logical Routing
ONLINE CLASS	NSX Routing Components
ONLINE CLASS	NSX Logical Routing
ONLINE CLASS	Micro-segmentation
ONLINE CLASS	Zero-Trust Security
ONLINE CLASS	NSX Data Center Firewalls
ONLINE CLASS	NSX DHCP
ONLINE CLASS	NSX DNS
ONLINE CLASS	NSX NAT
ONLINE CLASS	NSX Load Balancing
ONLINE CLASS	NSX VPNs
ONLINE CLASS	Virtual Cloud Network
ONLINE CLASS	Certification Information

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# Tales from a Broadcom Customer in 2025

## CURRICULUM

### VMware Cloud Management and Automation: Core Technical Skills

Last Updated 10/31/2024

#### Details

##### Overview

This course is an introduction to VMware vRealize Suite, VMware's cloud management and automation solution. In this course, you acquire the skills needed to perform Day 2 operational tasks that are typically assigned to the roles of operator or junior administrator in a vRealize Suite environment.

##### Objectives

By the end of the course, you should be able to meet the following objectives:

- Describe vSphere components and the software-defined data center
- Describe cloud computing, cloud service models and cloud deployment Models
- Identify the benefits of vRealize Suite Products
- Manage vRealize Suite Products using vRealize Suite Lifecycle Manager
- Describe vRealize Automation services
- Assign user roles in vRealize Automation
- Deploy cloud templates using vRealize Automation
- Request services from the service catalog in vRealize Automation
- Monitor deployments in vRealize Automation
- Monitor infrastructure using vRealize Operation
- Analyze infrastructure using vRealize Log Insight
- Analyze infrastructure using vRealize Network Insight

##### Target Audience

Technical professionals with basic system administration skills and operators responsible for managing single or multicloud environments using vRealize Suite products.

#### Prerequisites

- Understanding of basic network, storage, basic cloud concepts and computer hardware concepts

#### Course Modules

##### 1 Software-Defined Data Center

- Describe the Software-Defined Data Center (SDDC)
- Identify the benefits of an SDDC when it compared to physical datacenter

##### 2 VMware SDDC Solutions

- Recognize the components of an SDDC
- Identify VMware SDDC Solutions

##### 3 vSphere Components and Features

- Describe core vSphere components
- Identify key vSphere features

##### 4 Cloud Computing

- Describe cloud computing and its benefits

##### 5 Cloud Service Models

- Identify the difference between Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS)

##### 6 Cloud Deployment Models

- Identify the difference between private cloud, public cloud, and hybrid cloud deployment models

##### 7 Cloud Management Solution

- Describe the vRealize Suite and its importance
- Describe how vRealize Suite products extend your SDDC capabilities.

##### 8 VMware Cloud Services

- Describe VMware Cloud Services

##### 9 On-Premises Compared to SaaS

- Identify when to use On-premises products and when to use SaaS offerings

##### 10 vRealize Suite Lifecycle Manager

- Manage vRealize Suite products using vRealize Suite Lifecycle Manager
- View and manage environments in vRealize Suite Lifecycle Manager

##### 11 Workspace One Access

- Describe authentication using Workspace One Access
- Use Workspace One Access as an enterprise SSO solution for vRealize Suite

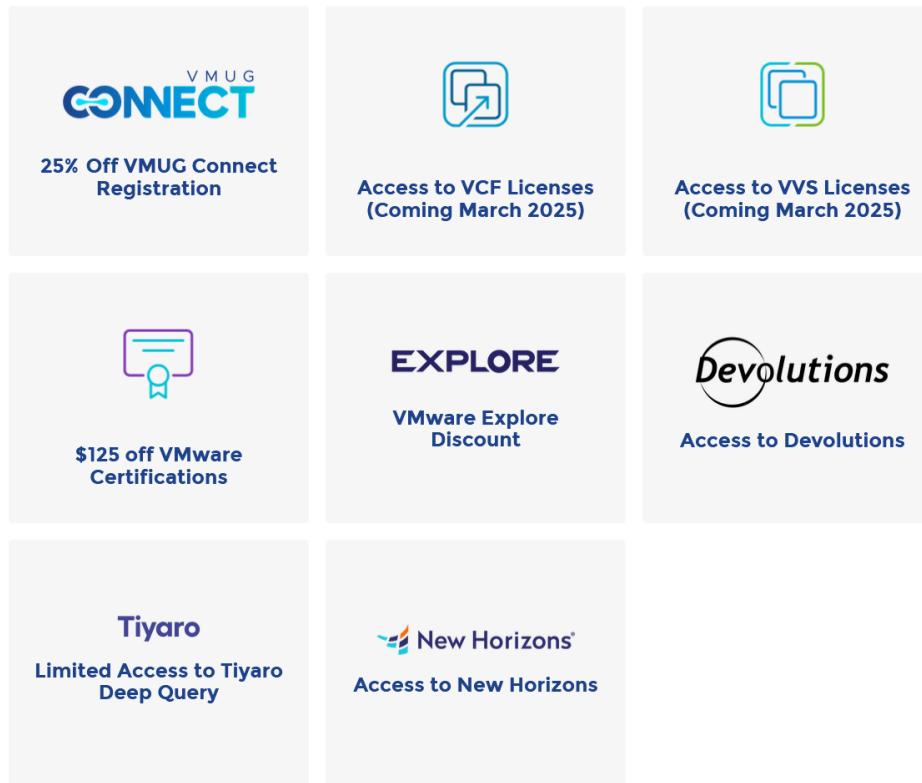
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# Tales from a Broadcom Customer in 2025

## Impacts to VMUG Advantage and EvalExperience

VMUG Advantage  
Information Page



Certifications  
Required

VCP-VCF Administrator  
VCP-VCF Architect  
128 cores of VCF

VCP-VVF Administrator  
32 cores of VVF

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# Tales from a Broadcom Customer in 2025

## Ways to help you get certified

VMware {code}  
12 days of Holiday  
Lab Cheer



- **Day 1: Introduction to VMware Cloud Foundation Components**
- **Day 2: Implementing Private Cloud Solutions**
- **Day 3: VMware Aria Suite and vSphere IaaS Control Plane**
- **Day 4: Data Services and Add-Ons**
- **Day 5: Installation and Configuration of VMware Cloud Foundation**
- **Day 6: Deploying and Configuring the Management Domain**
- **Day 7: Backup, Certificate, and Password Management**
- **Day 8: Deploying and Configuring NSX Edge Cluster**
- **Day 9: VMware Aria Suite Deployment**
- **Day 10: Troubleshooting VMware Cloud Foundation**
- **Day 11: Day 2 Operations and Lifecycle Management**
- **Day 12: Optimizing VMware Cloud Foundation**

Community

Your 12 Days of Holiday Lab Cheer – The VCP-VCF Administrator Exam Guide

© Franky Barragan

December 19, 2024

Share on:

VCP-VCF Administrator 2024 Community Exam Guide

Welcome to the 12 Days of Holiday Lab Cheer! Over the next 12 days, we'll guide you through essential VMware Cloud Foundation topics to prepare you for the VCP-VCF Administrator 2024 Exam. Each day is packed with curated content, hands-on challenges, and exam objectives to make your learning engaging and actionable.

Before we get started, remember that there is NO CLASS REQUIREMENT before attempting the exam. That being said, the VMware Cloud Foundation: Deploy, Manage, Configure class is highly recommended! If you're a VCF Customer, you should have access to the library. Reach out to your rep for any questions.

Update: Check out the study group -> [Session Recaps/Replays](#)

Let's Get Started:

1. Navigate to the Community Exam Guide – [VCP-VCF Administrator 2024 Community Exam Guide](#)
2. Launch a VMware Hands-on-Lab – [Link](#)
  - This is what I used, as I don't have a homelab or a test environment
  - Most of the VCF Labs have the entire VCF suite installed and ready to go
3. Follow the days below or go down the Exam guide.
4. Sign up for the Exam – [Link](#)

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# What about me?



## The Challenge

I forgot how great certification feels!

---



VMware by Broadcom is proud to  
award the title of

## VMware Certified Professional

VMware Certified Professional - VMware Cloud Foundation  
Administrator 2024

to

**MATT HELDSTAB**

in recognition of successful completion  
of all certification requirements.

---

Certification Date: Thursday, November 21, 2024  
Candidate ID: BDCM00531227

# END OF PRESENTATION



## ANY QUESTIONS?



Link to Presentation  
on my GitHub

# Thank You!



## Your Feedback Is Important

Please take a minute to complete the survey session in the mobile app.

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2. Take this survey
3. Enjoy your next session!

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[App Store](#)



# *From Connect to Community -*

# **What's Next?**



## **Make the Most of Your Time at Connect!**

- Visit the VMUG Lounge – Meet the team, grab swag, and discover what's next.
- Upgrade to VMUG Advantage – Unlock exclusive training, eval licenses, and more!
- Take a Certification Exam – Prove your skills and boost your career.
- Meet Your Local Leaders – Find out how to stay involved year-round.
- Explore Partner Solutions – Get hands-on with the latest VMware innovations.

## **Keep Exploring, Learning, and Networking!**

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- Follow VMUG on Social – Stay in the loop and share your experience! #VMUGConnect
- Mark Your Calendar for VMware Explore – Be part of the biggest VMware event of the year



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