vmware Partner Network

VMWARE CLOUD PROVIDER PROGRAM Q4 CY2019

Product Usage Guide is effective for program product usage as of November 15, 2019. This VMware Cloud Provider Program Product Usage Guide replaces all previous VCPP Product Usage Guides or vCloud Air Network Product Usage Guides. The information provided in this Product Usage Guide applies to all of the program products and bundles that are available in the VMware Cloud Provider Program (the "Products") as listed below in the VMware Cloud Provider Program Pricing Model, and may be updated by VMware at any time. To have access to these Products, a Service Provider must have a valid rental agreement with a VMware Aggregator as of or after July, 2019 for the applicable reporting and purchase of VMware Cloud Provider Program.

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What's New CY19 Q4

The following products have been added to the VMware Cloud Provider Program:

- 1. VMware HCX FLEX Add-On
- 2. VMware vCloud Director Stand-Alone (RESTRICTED)
- 3. VMware vCloud Director Object Storage Extension (with Cloudian Hyperstore)
- 4. VMware NSX Advanced Load Balancer (Avi Networks Load Balancer)
- 5. VMware vCloud Usage Insight

The following products have been updated in the VMware Cloud Provider Program:

- 1. VMware Cloud Provider Program Reporting Requirements
- 2. VMware vSAN Reporting

The following products have been placed on "Special Terms" in the VMware Cloud Provider Program:

- 1. VMware vCloud SP Standard Bundle (5 points) reached End of Availability (EOA) on April 15, 2018 and is no longer available. Existing customers using the VMware vCloud SP Standard Bundle (5 points) as of April 2018 may continue to report through March 13, 2020, at which time, the product will be removed from the program.
- 2. Existing partners, as of May 1, 2019 may continue to use current bundles for up to 18 months. Current bundles are <u>not</u> available to new partner contracts signed after April 30, 2019. Current bundles will be discontinued after Oct 31, 2020.
- End of General Support (EOGS) for Usage Meter 3.5 was March 31, 2019. To maintain full level of compliance, VMware
 requires upgrading to Usage Meter 3.6.1, which is also necessary to automate reporting using vCloud Usage Insight
 service.
- 4. End of General Support (EOGS) for vSphere 5.5 and vSAN 5.5 was September 19, 2018. To maintain full-level Support and Subscription Services, VMware recommends upgrading to vSphere 6.5. Note: by upgrading to vSphere 6.5 you not only get all the latest capabilities of vSphere but also the latest vSAN release and capabilities.
- 5. End of Availability (EOA) of vRealize Business for Cloud was on November 1, 2019. VMware recommends customers transitioning to vRealize Operation Chargeback for cloud cost metering and visibility for tenants.
- 6. End of Availability (EOA) and End of General Support (EOGS) of vCloud Availability 2.X was on October 19, 2019. VMware recommends upgrading to vCloud Availability 3.0.
- 7. Chargeback Manager is on "Special Terms" until December 31, 2019, when it will reach End of Support (EOS) and it will be removed from the VCPP program. Service Providers with completed contracts prior to September 2015 may request additional licenses of Chargeback Manager to be used with any new VCPP bundle, until December 31, 2019.
- 8. VMware vRealize Business for Cloud reached End of Availability (EOA) and is no longer available.

vSAN is a product that is embedded in the vSphere 5.5 kernel and by upgrading vSphere you will also upgrade vSAN to a newer release. You will need to upgrade your vSAN 5.5 license key to a newer release

vSphere 5.5 and vSAN 5.5 should be considered placed on "Special Terms" until the End of General Support. Please confirm hardware compatibility by referencing the <u>vSAN Compatibility Guide</u> and if necessary, make appropriate hardware upgrades as needed to maintain compatibility.

You can find the most current information about VMware Cloud Provider Program Products on VMware Cloud Provider Program Edge

VMware Cloud Provider Program Edge is dedicated to VMware Cloud Provider Program solutions, products, and the latest information available to service providers and aggregators, driving the success of public and hybrid clouds. Visit VMware Cloud Provider Program Edge to find the most current information you need - technical whitepapers, vCloud architecture toolkit, and customer case studies - in one location on an easy-to-use website. https://cloudsolutions.ymware.com/



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Terms and Conditions

Support Overview

Support coverage provided for VMware Cloud Provider Program products is listed in this guide for each product. Product Support renewal is automated without any required action by Service Providers or Aggregators. Production Support is automatically extended for any Service Provider with an effective VMware Cloud Provider Program Agreement ("VMware Cloud Provider Program Agreement") that is not delinquent in monthly reporting or payment as of the VMware Cloud Provider Program agreement anniversary date. All support is governed by the VMware Support Policies set forth on

https://www.vmware.com/support/policies/policy_index.html

For further technical assistance, please contact VMware Global Support Services at: http://www.vmware.com/support/contacts, or call the hotline at 1-877-4VMWARE(use Option 4 for Technical Support).

Product Lifecycle

VMware manages product availability in accordance with its Lifecycle Policies described at Lifecycle Policies. Unless otherwise indicated in this guide, the VMware Cloud Provider Program products and services will follow VMware's general Lifecycle Policies. For the VMware Cloud Provider Program, a product or service is considered on "Special Terms" when it has reached the End of Availability under the Lifecycle Policies. While a product or service is on Special Terms, Service Providers using the product or service prior to the End of Availability may continue to use (and report usage of) the product or service and request additional licenses, but usage by new Service Providers is not allowed. When a product or service has reached either the End of Support Life or the End of Technical Guidance, then all Service Providers must stop using the applicable product or service. For a complete list of the lifecycles for VMware products and services, please refer to:

https://www.vmware.com/files/pdf/support/Product-Lifecycle-Matrix.pdf

Sign up for VMware Security Advisories

VMware takes security seriously. VMware Security Advisories notify partners and customers of known security vulnerabilities in VMware products. To receive new and updated VMware security notifications, sign up for VMware Security Advisories at VMware Security Response Center.

https://lists.vmware.com/mailman/listinfo/security-announce

Translation

To the extent that this guide has been translated into any language besides English, the English version of the guide will prevail over any inconsistencies with a non-English version of the guide.



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VMware Cloud Provider Program Reporting Requirements

The VMware vCloud Usage Meter must be used to monitor vCloud Service Provider Bundles as well as stand-alone products. Separate license keys must be identified by the Usage Meter in order to meter the Cloud Test Demonstration Environment. In order to report the VMware Cloud Provider bundles, Service Providers must utilize a version of vCloud Usage Meter that is still under General Support (currently 3.6.1 with hotpatch 3 and 4.1). Older vCloud Usage Meter versions must be upgraded to a supported version in order to have accurate metering and to avoid compliance issues.

Service Providers must report their monthly usage of products to VCPP Business Portal (https://VMware.iasset.com) using the following methods:

- Partners must deploy one or more Usage Meter appliance per Contract. If a partner is utilizing site reporting in the Business Portal, they must deploy one or more Usage Meter appliance per site
- Partners that utilize vSphere for hosting and Horizon View for VDI workloads must deploy the workloads in separate vCenter Servers to accurately report usage through Usage Meter
- Service Providers must deploy Demo environments on separate physical hosts in either another cluster or vCenter Server to accurately meter their Production Hosting environments
 For automatic reporting, Service Providers must utilize vCloud Usage Insight service for aggregation of the usage data and pre-population of the data into the VCPP Business Portal for Service Provider acceptance.
- For manual reporting, Service Providers must use the "Monthly Usage Report" from Usage Meter and manually aggregate and report usage.
- A copy of monthly usage report may be sent to the Aggregator based on accordance of the contract between the Aggregator and the Partner.
- VMware Site Recovery Manager (SRM) servers must be identified and linked to vCenter Servers in order to report on protected virtual machines.
- Partners using older editions of standalone vSphere Standard, vSphere Advanced or vSphere Enterprise should report as follows: Point Value: 7 points per 1 GB Reserved RAM (based on average monthly usage) (GB = 1024 MB). Total points capped at 24 GB RAM per virtual machine (see Reporting and Operational Details) any version of vSphere other than vSphere Enterprise with Distributed Network Switch will be metered by Usage Meter at the 7point bundle rate.

The total of these submissions will be used by the Aggregator to calculate the total point usage for the month. See the VMware Cloud Provider Program Guide for information on the Cloud Test Demonstration Environment.



vCloud Usage Meter

For all products in this VMware Product Usage Guide, unless otherwise stated, monthly usage total consists of the total of all products used. The Service Provider Program Agreement requires Service Providers to retain certain records relating to usage. Those records include all data used for reporting, including but not limited to the Usage Meter data and reports, and manually reported points. All data must be maintained for a minimum of 3 years (see backup instructions in the Usage Meter 3.6 Guide for Usage Meter). When reporting manually, save a screenshot of reported points in a folder. Each file should be labeled with the month reported and product name. When migrating to new versions of vCloud Usage Meter, make sure to backup data from previous versions.

Supported versions of UM required (UM 3.6.1 and higher) and Usage Insight recommended. Download and sign-up here.

Note: Service Providers must be registered users of the MyVMware.com site to download vCloud Usage Meter.

This section is a summary of the required information for the vCloud Usage Meter. The complete documentation is available on Partner Central at the following locations:

- 1. Usage Meter User Guide and Release Notes
- 2. Usage Insight User Guide
- 3. Usage Meter API Guide

vCloud Usage Meter collects the following information:

- 1. Time at which data is collected
- 2. Host DNS name
- 3. Host RAM (physical memory)
- 4. vSphere license type
- 5. Virtual machine vCenter name (optional field for Service Providers)
- 6. Virtual machine host name (optional field for Service Providers)
- vRAM (allocated virtual memory)
 Billing vRAM (calculation based of
- 8. Billing vRAM (calculation based on reserved virtual memory and memory cap per virtual machine)
- 9. Virtual machine CPU (count of virtual CPUs)
- 10. Virtual machine instance UUID (universal unique identifier)
- 11. Virtual machine location in vSphere inventory
- 12. Horizon Workspace disk usage
- 13. Used Storage Capacity for vSAN Deployments (GB)

Collected data is stored in the vPostgres database of the virtual appliance itself. For more information about the data collected by Usage Meter and for the Usage Meter Guidelines, please visit:

https://VMware.mv.salesforce.com/sfc/#version?id=06934000002FN7L

By installing vCloud Usage Meter (version 3.6 or above), you acknowledge that you will automatically send data to VMware. This data 1) <u>confirms</u> your installation of vCloud Usage Meter Version 3.6 and 2) includes Monthly Usage, Customer Usage, VM History and anonymized metering event data. All data collected will <u>only</u> be used for the purpose of improving usage meter support and automation of reporting the billing data available if the partner utilizes vCloud Usage Insight Service.



vCloud Usage Meter Billing vRAM Calculation

vCloud Usage Meter 3.6 calculates billing RAM for the powered on VM by taking the greater value of:

- Reserved RAM
- 2. ½ of the allocated RAM

Billed RAM is billing RAM x Time in hours. The billed RAMs are summed, converted to GB and then divided by the number of hours in the month to give the Average Billed RAM (GB) that can be found on the Monthly Usage Report.

Once the value is taken from the two calculates above, all GB above 24 will be capped at 24GB

Example:

During a one 30-day calendar month, a Service Provider uses the vCloud Service Provider Bundle – Advanced Edition to configure her virtual machine with 16 vGB for 15 days and 48 vGB for the remaining 15 days. The reservation level for the virtual machine is set at 75 percent for the entire month (if no reservation is set, use 0.5 instead).

- 15 days x 24 hours x 16 vGB x 0.75 = 4,320 vGB hours
- 15 days x 24 hours x 24 vGB (48 vGB x 0.75 but capped at 24 GB) = 8,640 vGB hours
- Total vGB hours = 12,960 vGB hours
- Total points = 12,960 vGB hours ÷ 720 hours/month x 7 points (for Advanced) = 126 points

How Information is sent to Aggregators for Billing Purposes

Service Providers report to their Aggregators in the agreed to method between them and the Aggregator. Reports generated by the vCloud Usage Meter can be sent to Aggregators, if requested, but are not required to be sent as part of the Program Reporting requirements.

Note: All data is due to the Aggregator by the date specified in the Aggregator contract. Service Providers must adhere to reporting requirements that are designated in their Aggregator contract. Additionally, Service Providers must use the vCloud Usage Meter to generate their Monthly Usage Report for billing purposes and enter their monthly usage into the VMware Cloud Provider Business Portal.

Information that is Available in the Reports

The report includes customer name, vSphere license type, if the usage is billable, and the amount of billed vRAM—including memory cap per virtual machine—consumed for the month.

Service Providers also have the ability to filter reports as follows:

- 1. By customer:
 - a. Names: Filter based on a single customer, multiple customers, or all customers
 - b. Country: Filter based on a single country, multiple countries, or all countries
 - c. Postal Code: Filter based on a postal code, multiple postal codes, or all postal codes
- 2. By license set: Filter based on one or more user-defined license sets
- 3. By month/year: Filter based on a single month and year as well as the option to provide a range limited to month and year



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How to Manage Customer Information

In order to prevent an excessive amount of manual data entry, the vCloud Usage Meter enables users to import and export customer lists. Users can also create, read, update, and delete customers and customer relationships to virtual machines with the vCloud Usage Meter.

vCloud Usage Meter 3.6 reports on the following products:

- VMware vCloud Service Provider Bundles
- VMware vCloud Director
- VMware vCenter Server
- VMware Site Recovery Manager
- VMware ESXi
- VMware vRealize Automation
- VMware vRealize Operations
- VMware NSX
- VMware vSAN
- VMware Horizon DaaS Bundle VDI Edition
- VMware Horizon DaaS Bundle RDSH Edition
- vCloud Availability for vCloud Director

vCloud Usage Meter is included, at no additional cost, in the Flex Model Core.



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vCloud Usage Insight

vCloud Usage Insight is a SaaS based product used for automatically filling out monthly usage reports in the Business Portal. The service also provides data retention for monthly usage files for Usage Meter appliances that are registered. Partners can signup and receive an invitation to onboard at https://cloud.vmware.com/vcloud-usage-meter

Features of vCloud Usage Insight:

• Automatic Aggregation of Usage Data

- Usage Insight will aggregate data when more than one Usage Meter is used
- Usage Insight service supports partners with:
 - Multiple contracts per Partner ID
 - Sites within Contracts
 - Aggregation of multiple Usage Meters per Contract or Site

Automatic Reporting to Business Portal

Monthly Reports in the Business Portal (vmware.iasset.com) will be automatically filled out. Partners no longer need to export Usage Reports then copy their usage to the portal. Partners only need to report any additional manually reported products, add their PO number and submit their report.

Data Retention

- Partners utilizing the vCloud Usage Insight service will have their monthly reports saved in their instances so that they can download all usage data from a central location for the entire 3 year data retention requirement.
- o For any months that a partner is using the service, they will not need to archive the same months data from the Usage Meter appliance.



VMware Flex Model

VMware Flex Model delivers simplicity, flexibility and value. Flex One Core brings unification allowing both Service Providers and Cloud Providers, as applicable, the option to add-on products while eliminating complex decisions. This model promotes predictability and consistency that is built from solutions most commonly used today. With Flex One Core standardization, add-on products in Management, Metering and Billing, Networking, and Compute offer more value to you at a 7 point / month baseline.

All Service Providers currently able to license under VMware Cloud Provider Program may utilize VMware Flex Model. All products used must be reported to the Aggregator on a monthly basis. Service Providers with valid VMware Cloud Provider Agreements will have the products with points value listed below delivered in their MyVMware license portals automatically, unless indicated otherwise.

Flex Model Core* (7 Points per Month)		
Category Included Products		
Management	vCloud Director	
Management	vRealize Log Insight	
Metering/Billing	vRealize Operations Chargeback	
	vCloud Usage Meter	
Networking	NSX Data Center SP Base	
Compute	vSphere Enterprise Plus	
	vCenter Server Standard	
Support	Production Level Support	

The Flex Model Pricing FAQ can be found on Partner Central. If you have additional questions, please reach out to your aggregator or VMware Business Development Manager.

^{*} Existing partners, as of May 1, 2019 may continue to use current bundles for up to 18 months. Current bundles are not available to new VCPP partners that joined after April 30, 2019. Current bundles will be discontinued after Oct 31, 2020.



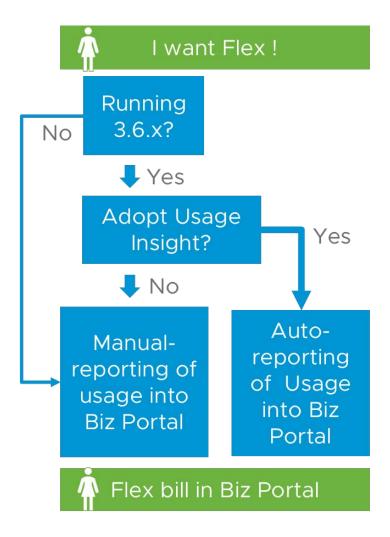
VMware Flex Model Add-Ons*					
Product Name	Points/Month	Charged Per			
VMware vRealize Operations Standard	1.00				
VMware vRealize Operations Advanced	1.75				
VMware vRealize Operations Enterprise	3.00				
VMware vRealize Automation Advanced	1.75				
VMware vRealize Automation Enterprise	2.75				
VMware vRealize Network Insight Advanced	0.75	1 GB Reserved RAM (based on average monthly usage)			
VMware vRealize Network Insight Enterprise	1.50				
Integrated OpenStack DC edition	1.00				
VMware vRealize Suite Standard	2.00				
VMware vRealize Suite Advanced	3.50				
VMware vRealize Suite Enterprise	4.25				
VMware NSX DC SP Professional	2.00				
VMware NSX DC SP Advanced	3.00				
VMware NSX DC SP Enterprise+	4.50				
VMware HCX	2.00				

vRealize Operations and NSX-V add-ons are part of Bundle-to-Flex translation built into the Business Portal. To manually report add-on products in a monthly usage report, refer to Appendix A.



VMWARE FLEX MODEL FOR USAGE METER

There are no changes needed to the Usage Meter instances that are deployed in your datacenter in order to adopt Flex.



VMWARE CHARGEBACK MANAGER FOR FLEX MODEL

If you have vROps 7.5 installed, no change to metering is required in order to use vROPS Chargeback Edition. If you instead use vROPS version 7 or earlier for tenant facing chargeback functions only, you should not report its usage as vROPS Chargeback as it is included in Flex Core at no additional cost. For Usage Meter to not include it into metering, please perform the following action: on the Usage Meter product screen, do not submit vROPS credentials when prompted.



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VMware Cloud Provider Program Pricing Model*

Service Providers currently able to license under VMware Cloud Provider Program may utilize the following products. All products used must be reported to the Aggregator on a monthly basis. Service Providers with valid VMware Cloud Provider Agreements will have the products with points value listed below delivered in their MyVMware license portals automatically, unless indicated otherwise.

VMware Cloud Provider Program Service Provider Current Bundles*				
Product Name	Points/Month	Charged Per		
VMware vCloud SP Advanced Bundle w/ Management & Networking*	12			
VMware vCloud SP Advanced Bundle w/ Management*	10			
VMware vCloud SP Advanced Bundle w/ Networking*	9	1 GB Reserved RAM (based on average monthly usage)		
VMware vCloud SP Advanced Bundle*	7			
VMware vCloud SP Standard Bundle w/ Management*	8			
VMware vCloud SP Standard Bundle w/ Networking*	8			
VMware vCloud SP Standard Bundle ^{1 2 *}	5			

^{*} Existing partners, as of May 1, 2019 may continue to use current bundles for up to 18 months. Current bundles are not available to new VCPP partner contracts signed after April 30, 2019. Current bundles will be discontinued after Oct 31, 2020. Existing partners as will also be granted price protection on Bundle to Flex Translation for 36 months, starting with May 2019 reporting period.

² Existing partners still using the VMware Standard Bundle (5 points) as of April 2018 may continue to report through March 13, 2020, if they have not moved to the Flex Pricing Model.



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¹ VMware vCloud SP Standard Bundle (5 points) has reached End of Availability (EOA) as of April 15, 2018 and is no longer available for new contracts.

Complete Product List	Points / Month	Charged Per		
Management				
VMware vCloud Availability for vCloud Director - Disaster Recovery	10	Protected Virtual Machine (VM)		
VMware vCloud Availability for vCloud Director - Migration	0	Protected Virtual Machine (VM)		
VMware Cloud Provider Pod	0	Protected Virtual Machine (VM)		
VMware vRealize Automation Advanced	5	Virtual Machine or OSI		
VMware vRealize Automation Enterprise	8	Virtual Machine or OSI		
VMware vRealize Business for Cloud Advanced	2	1 GB Reserved RAM (based on average monthly usage)		
VMware vRealize Log Insight	4.5	Virtual Machine or OSI		
VMware vRealize Network Insight Advanced	3	Virtual Machine per month		
VMware vRealize Operations Standard	2.5	Managed Virtual Machine or OSI		
VMware vRealize Operations Advanced	6	Managed Virtual Machine or OSI		
VMware vRealize Operations Enterprise	12	Managed Virtual Machine or OSI		
VMware vRealize Hyperic	15	Machine		
Networking & Security Management				
VMware NSX Enterprise		Managed Virtual Machine or OSI		
Storage and Availability				
VMware Site Recovery Manager	24	Protected Virtual Machine (VM)		
VMware vSAN Standard	0.02*	GB per month for Used Capacity		
VMware vSAN Advanced	0.03*	GB per month for Used Capacity		
VMware vSAN Standard + Enterprise Add-on 0.03* GB per month for Used Cap		GB per month for Used Capacity		
VMware vSAN Advanced + Enterprise Add-on	0.04*	GB per month for Used Capacity		
Desktop & Application	n Virtual	ization		
VMware App Volumes Standard	4	Concurrent Connection		
VMware App Volumes Advanced	7	Concurrent Connection		
VMware App Volumes Enterprise	9	Concurrent Connection		
VMware Horizon Standard	12	Concurrent Connection		
VMware Horizon Advanced	19	Concurrent Connection		
VMware Horizon Enterprise	28	Concurrent Connection		
VMware Horizon for Linux	7	Concurrent Connection		
VMware Horizon Apps Standard	11	Concurrent Connection		



VMware Horizon Apps Advanced	18	Concurrent Connection
VMware ThinApp Client	2	ThinApp Client
VMware ThinApp Packager	1	ThinApp Packager
VMware User Environment Manager	2	Named User
VMware vSAN Standard for Desktop	2	Concurrent Connection
VMware vSAN Advanced for Desktop	4	Concurrent Connection
VMware vSAN Enterprise Add-on for Desktop	1	Concurrent Connection
VMware NSX Advanced for Desktop	5	Concurrent Connection
VMware NSX Enterprise for Desktop	8	Concurrent Connection
Third-Party P	roducts	
OnApp™ for VMware Cloud Provider Program***	1.5	1 vBG Reserved RAM
Blue Medora True Visibility for vRealize Operations Standard	1.25	VM or OSI** per month
Blue Medora True Visibility for vRealize Operations Advanced	3	VM or OSI**per month
Blue Medora True Visibility for vRealize Operations Enterprise	6	VM or OSI** per month
Blue Medora True Visibility for vRealize Operations Manager of Managers	1.25	VM or OSI** per month
Caveonix RiskForesight Standard	15	VM***
Caveonix RiskForesight Extended	13.5	VM***
Caveonix RiskForesight Classic	12.8	VM***
Caveonix RiskForesight Premium	12.2	VM***
Caveonix RiskForesight Global	11.6	VM***
vCloud Director Data Domain Virtual Edition Standard	23.47	VM***
vCloud Director Data Domain Virtual Edition Extended	9.15	VM***
vCloud Director Data Domain Virtual Edition Classic	8.68	VM***
vCloud Director Data Domain Virtual Edition Premium	7.98	VM***
vCloud Director Data Domain Virtual Edition Global	7.04	VM***
vCloud Director Data Protection Suite Standard	8.87	VM***
vCloud Director Data Protection Suite Extended	3.46	VM***
vCloud Director Data Protection Suite Classic	3.28	VM***
vCloud Director Data Protection Suite Premium	3.02	VM***
vCloud Director Data Protection Suite Global	2.66	VM***



Restricted Products (Requires special qualification - see details on product specific pages)			
VMware Cloud Foundation for Cloud Providers - Basic	90	Per Core Per Month	
VMware Cloud Foundation for Cloud Providers - Standard	99		
VMware Cloud Foundation for Cloud Providers - Enterprise	129		
VMware vCloud SP Hyper-Converged Infrastructure Bundle	6	GB Reserved RAM per month	
VMware vSAN Standard + Enterprise Add-on for Hyper-Converged Infrastructure	.06	GB per month for Used Capacity	
VMware vSAN Advanced + Enterprise Add-on for Hyper-Converged Infrastructure	.08	GB per month for Used Capacity	
VMware Horizon Advanced for Hyper-Converged Infrastructure	21	Concurrent Connection	
VMware Horizon Enterprise for Hyper-Converged Infrastructure	30	Concurrent Connection	
VMware Horizon DaaS Bundle – RDSH Edition	13	Total Allocated Quota for RDSH Connections	
VMware Horizon DaaS Bundle – VDI Edition	16	Total Allocated Quota for VDI Connections	
VMware Desktop Disaster Recovery for Horizon DaaS Bundle(s)	4	Total Allocated Insurance Quota for VDI and RDSH Connections per month	

^{*} Effective August 1, 2019



^{**}OSI stands for OS Instance. This measure is used for non-VMware environments, including physical.

See product-specific details on page 70. Also note: Price per point for third party products VM is different to your contracted VCPP price per point

Product Specific Usage Information

VMware Cloud Provider Program Specific Licensing Usage Information

The VMware Cloud Provider Program Partner Agreement provides a VMware EULA exception for Service Providers to install and use VMware Products as part of a Hosted IT Service. Prior written approval is required from the VMware Cloud Provider Program Office for any deviation from the requirements outlined below.

VMware Cloud Provider Program partners can only leverage VMware perpetual licenses, including OEM versions, to support internal IT operations. Internal IT operations are any IT function that exclusively supports a system that is not connected, either directly or in an ancillary manner, to the partner's hosting environment. In addition, VMware perpetual licenses may not be used to support the management or operations of an environment utilized to host for unaffiliated third parties. Virtual machines running on hosts with perpetual license keys should be tagged in the vCloud Usage Meter and are not considered billable.

In the VMware Cloud Provider Program, a Hosted IT Service means the provision of services created by a Service Provider for its tenants that:

- 1. Provide access to compute, storage, network resources or software applications ("hosting infrastructure") from systems that are installed and operated by Service Provider among its customers; and
- 2. May be accessed via the Internet, telephone or private network based.

There are two categories of Hosted IT Service architectures:

- **Multi-tenant:** The hosting infrastructure is hosted by Service Provider at the Service Provider's premise(s) and shared between multiple tenants.
- **Single-tenant:** The hosting infrastructure is dedicated to a particular tenant and not shared with other tenant(s). Single-tenant Hosted IT services may be delivered by the Service Provider at their premise(s) or offered as a managed service at the tenant's premise(s).

The VMware Cloud Provider Program allows for Service Providers to install and use VMware products as part of a Hosted IT Service. "Hosted IT Services" means Service Provider's internet, telephone or private network based, subscription computing service that allows third party companies to access the processing power, computing, or software applications from systems that are installed and operated by Service Provider. Except as expressly approved by VMware in writing, Service Providers may install software only on hardware systems that are (a) owned or leased by Service Provider for its dedicated use, or owned or leased by the End User for the Service Provider's dedicated use to provide Hosted IT Services solely to the End User and (b) located either within datacenter space owned or leased by Service Provider or on an End User's premises solely to provide Hosted IT Services to the End User, provided that the Service Provider maintains day-to-day management and administrative control of the systems.

Upon request, Service Provider will promptly identify the license keys installed on the systems located at each End User site. Service Provider shall not permit End User (or any third-party agent providing service to the End User) to access, maintain, or otherwise use the software, except for the sole purpose of accessing the functionality of the software in the form of hosted IT Services in accordance with the terms of the VMware Cloud Provider Program Guide. The Service Provider is responsible for usage reporting and all obligations of the VMware Cloud Provider Program Guide regardless of the physical location of the servers. Service Provider will be responsible to VMware for any unauthorized installation, use, copying or distribution of the software by the End User.



VMware vCloud SP Bundles*

VMware Cloud Provider Program partners can report the following bundles (refer to Table 1):

- VMware vCloud SP Advanced Bundle with Management & Networking
- VMware vCloud SP Advanced Bundle with Management
- VMware vCloud SP Advanced Bundle with Networking
- VMware vCloud SP Advanced Bundle
- VMware vCloud SP Standard Bundle with Management
- VMware vCloud SP Standard Bundle with Networking
- VMware vCloud SP Standard Bundle^{1 2}

Features		Standard ¹²	Standard w/Networking	Standard w/Management	Advanced	Advanced w/Networking	Advanced &Management	Advanced w/Networking &Management
	Points (per GB reserved vRAM/month)	5	8	8	7	9	10	12
nent	vRealize Operations Enterprise			✓			✓	✓
Management	vRealize Log Insight (vRLi)		✓	✓	✓	✓	✓	✓
Mar	vCloud Director for Service Provider (vCD)	✓			✓	vCD	✓	vCD or
	VMware Integrated Open Stack (VIO)					or vIO		vIO
Metering	vRealize Business for Cloud Advanced3	✓						
vCenter Chargeback Manager		✓						
NSX – SP Enterprise								✓
NSX – SP Advanced NSX – SP Base (vCNS mode)			✓			✓		
NSX – SP Base (vCNS mode)					✓		✓	
vSphere Enterprise Plus			✓	✓	✓	✓	✓	✓
Compute	vSphere Enterprise w/ Distributed Network Switch	√						
<u> </u>	vCenter Server Standard	✓	✓	✓	✓	√	✓	✓
Support	Production Level Support	✓	✓	✓	✓	√	✓	✓

Table 1

eached End of Availability (EOA) and are no longer

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^{*} Existing partners, as of May 1, 2019 may continue to use current bundles for up to 18 months. Current bundles are not available to new partner contracts signed after April 30, 2019. Current bundles will be discontinued after Oct 31, 2020.

¹ VMware vCloud SP Standard Bundle (5 points) and

² Existing partners still using VMware Standard Bundle (5 points) as of April, 2018 may continue to report thru March 13, 2020.

VMware vCloud SP Advanced Bundle with Management & Networking*

Description	The VMware vCloud SP Advanced Bundle with Management & Networking provides the key components required to deliver an enterprise-class Cloud service together with management, automation and advanced networking capabilities. It is targeted at Service Providers who want to enable enterprises to extend their data centers to the public cloud with agility, compatibility and security in a multi-tenant infrastructure, while providing improved Service Level Agreement ("SLA") and capturing new revenue streams through add-on services to customers. Service Providers have the option to deploy either VMware vCloud Director or VMware Integrated OpenStack ("VIO").
Point Value /	12 points per 1 GB Reserved RAM (based on average monthly usage)
Charged Per	(GB = 1024 MB)
	Total points capped at 24 GB of Reserved RAM per VM (see Reporting and Operational Details in Appendix A).
Components	VMware vRealize Operations Enterprise, including vRealize Operations Manager and vRealize Configuration Manager (Note: Optional Management Packs providing Tenant-Facing operational information are now available on the VMware Marketplace for vCD and vROPs integration https://marketplace.vmware.com) VMware vRealize Log Insight VMware vSphere Enterprise Plus VMware vCenter Server Standard VMware vCloud Director OR VMware Integrated OpenStack (VIO) VMware NSX Enterprise
Reporting	vCloud Usage Meter 3.6 (or later versions) supports reporting of the vCloud SP Advanced Bundle with Management & Networking.
Support	Production Level Support

^{*} Existing partners, as of May 1, 2019 may continue to use current bundles for up to 18 months. Current bundles are not available to new VCPP partner contracts signed after April 30, 2019. Current bundles will be discontinued after Oct 31, 2020.



VMware vCloud SP Advanced Bundle with Management*

Description	The VMware vCloud SP Advanced Bundle with Management provides the key components required to deliver an enterprise-class Cloud service together with management and automation capabilities. It is targeted at Service Providers who want to enable enterprises to extend their data centers to the public cloud with agility, compatibility and security in a multi-tenant infrastructure, while providing improved SLAs and capturing new revenue streams through add-on services to customers.
Point Value /	10 points per 1 GB Reserved RAM (based on average monthly usage) (GB = 1024 MB)
Charged Per	Total points capped at 24 GB of Reserved vRAM per VM
Components	VMware vRealize Operations Enterprise, including vRealize Operations Manager and vRealize Configuration
	Manager
	(Note: Optional Management Packs providing Tenant-Facing operational information are now available on the
	VMware Marketplace for vCD and vROPs integration https://marketplace.vmware.com)
	VMware vRealize Log Insight
	VMware vSphere Enterprise Plus
	VMware vCenter Server Standard
	VMware vCloud Director
	VMware NSX Base (vCNS mode)
Reporting	Latest version of vCloud Usage Meter registered in vCloud Usage Insight will automatically pre-populate usage
	data in the Business Portal for vCloud SP Advanced Bundle with Management. For manual reporting, please rely on Monthly Usage Report of any generally available vCloud Usage Meter
	version. Non-supported versions of Usage Meter will result in incorrect metering and compliancy issues.
Support	Production Level Support

^{*} Existing partners, as of May 1, 2019 may continue to use current bundles for up to 18 months. Current bundles are not available to new VCPP partner contracts signed after April 30, 2019. Current bundles will be discontinued after Oct 31, 2020.



VMware vCloud SP Advanced Bundle with Networking*

Description	The VMware vCloud SP Advanced Bundle with Networking provides the key components required to deliver an enterprise-class Cloud service. It is targeted at Service Providers who want to enable enterprises to extend their data centers to the public cloud with agility, compatibility and security in a multi-tenant infrastructure with robust networking capabilities. Service Providers have the option to deploy either VMware vCloud Director or VMware Integrated OpenStack (VIO).
Point Value /	9 points per 1 GB Reserved RAM (based on average monthly usage)
Charged Per	(GB = 1024 MB)
	Total points capped at 24 GB of Reserved RAM per virtual machine (see Reporting and Operational Details)
Components	VMware vRealize Log Insight
	VMware vSphere Enterprise Plus
	VMware vCenter Server Standard
	VMware vCloud Director <u>OR</u> VMware Integrated OpenStack (VIO)
	VMware NSX Advanced
D	Laboratoria of Claud Harris Materia sistematics Claud Harris Insight will act an absolute or a single-
Reporting	Latest version of vCloud Usage Meter registered in vCloud Usage Insight will automatically pre-populate usage data in the Business Portal for vCloud SP Advanced Bundle with Management.
	For manual reporting, please rely on Monthly Usage Report of any generally available vCloud Usage Meter
	version. Non-supported versions of Usage Meter will result in incorrect metering and compliancy issues.
Support	Production Level Support

^{*} Existing partners, as of May 1, 2019 may continue to use current bundles for up to 18 months. Current bundles are not available to new VCPP partner contracts signed after April 30, 2019. Current bundles will be discontinued after Oct 31, 2020.



VMware vCloud SP Advanced Bundle*

Description	The VMware vCloud SP Advanced Bundle provides the key components required to deliver an enterprise- class Cloud service. It is targeted at Service Providers who want to enable enterprises to extend their data centers to the public cloud with agility, compatibility and security in a multi-tenant infrastructure.
Point Value / Charged Per	7 points per 1 GB Reserved RAM (based on average monthly usage) (GB = 1024 MB) Total points capped at 24 GB of Reserved RAM per virtual machine (see Reporting and Operational Details)
Components	 VMware vRealize Log Insight VMware vSphere Enterprise Plus VMware vCenter Server Standard VMware vCloud Director VMware NSX Base (vCNS mode)
Reporting	Latest version of vCloud Usage Meter registered in vCloud Usage Insight will automatically pre-populate usage data in the Business Portal for vCloud SP Advanced Bundle with Management. For manual reporting, please rely on Monthly Usage Report of any generally available vCloud Usage Meter version. Nor-supported versions of Usage Meter will result in incorrect metering and compliancy issues.
Support	Production Level Support

^{*} Existing partners, as of May 1, 2019 may continue to use current bundles for up to 18 months. Current bundles are not available to new VCPP partner contracts signed after April 30, 2019. Current bundles will be discontinued after Oct 31, 2020.



VMware vCloud SP Standard Bundle with Management*

Description	The VMware vCloud SP Standard Bundle with Management provides the key components required to deliver a competitive Cloud service together with management and automation capabilities. It is designed to enable organizations of all types and sizes to quickly and easily provision public cloud resources, or securely extend their internal virtualized infrastructure into the public cloud, delivering a robust, interoperable and enterprise-class experience.
Point Value /	8 points per 1 GB Reserved RAM (based on average monthly usage) (GB = 1024 MB)
Charged Per	Total points capped at 24 GB of Reserved RAM per virtual machine (see Reporting and Operational Details)
Components	VMware vRealize Operations Enterprise, including vRealize Operations Manager and vRealize Configuration Manager VMware vRealize Log Insight VMware vSphere Enterprise Plus VMware vCenter Server Standard
Reporting	Latest version of vCloud Usage Meter registered in vCloud Usage Insight will automatically pre-populate usage data in the Business Portal for vCloud SP Advanced Bundle with Management. For manual reporting, please rely on Monthly Usage Report of any generally available vCloud Usage Meter version. Non-supported versions of Usage Meter will result in incorrect metering and compliancy issues.
Support	Production Level Support

^{*} Existing partners, as of May 1, 2019 may continue to use current bundles for up to 18 months. Current bundles are not available to new VCPP partner contracts signed after April 30, 2019. Current bundles will be discontinued after Oct 31, 2020.



VMware vCloud SP Standard Bundle with Networking*

Description	The VMware vCloud SP Standard Bundle with Networking provides the key components required to deliver a competitive Cloud service. It is designed to enable organizations of all types and sizes to quickly and easily provision public cloud resources, or securely extend their internal virtualized infrastructure into the public cloud, delivering a robust, interoperable and enterprise-class experience with robust networking capabilities.
Point Value / Charged Per	8 points per 1 GB Reserved RAM (based on average monthly usage) (GB = 1024 MB) Total points capped at 24 GB of Reserved RAM per virtual machine (see Reporting and Operational Details)
Components	 VMware vRealize Log Insight VMware vSphere Enterprise Plus VMware vCenter Server Standard VMware NSX Advanced
Reporting	Latest version of vCloud Usage Meter registered in vCloud Usage Insight will automatically pre-populate usage data in the Business Portal for vCloud SP Advanced Bundle with Management. For manual reporting, please rely on Monthly Usage Report of any generally available vCloud Usage Meter version. Non-supported versions of Usage Meter will result in incorrect metering and compliancy issues.
Support	Production Level Support

^{*} Existing partners, as of May 1, 2019 may continue to use current bundles for up to 18 months. Current bundles are not available to new VCPP partner contracts signed after April 30, 2019. Current bundles will be discontinued after Oct 31, 2020.



VMware vCloud SP Standard Bundle^{1 *}

Description	The VMware vCloud SP Standard Bundle ¹ provides the key components required to deliver a competitive Cloud service. It is designed to enable organizations of all types and sizes to quickly and easily provision public cloud resources, or securely extend their internal virtualized infrastructure into the public cloud, delivering a robust, interoperable and enterprise-class experience.
Point Value / Charged Per	5 points per 1 GB Reserved RAM (based on average monthly usage) (GB = 1024 MB) Total points capped at 24 GB of Reserved RAM per virtual machine (see Reporting and Operational Details)
Components	VMware vSphere Enterprise with vNetwork Distributed Switch (shows as VMware vSphere for vCloud Service Provider Standard in myVMware) enabled (Note: The vSphere edition on installation may display as vSphere Standard with vNetwork Distributed Switch; however, this enables the same features as vSphere Enterprise with vNetwork Distributed Switch.) • VMware vCenter Server Standard • VMware vCloud Director • VMware vCenter Chargeback Manager • VMware vRealize Business for Cloud Advanced¹
Reporting	If vCloud Usage Meter 3.6.1 states that you are using the "Starter Bundle", report this in the VMware Cloud Provider Program Business Portal as the <u>Standard Bundle</u> . Latest version of vCloud Usage Meter registered in vCloud Usage Insight will automatically pre-populate usage data in the Business Portal for vCloud SP Advanced Bundle with Management. For manual reporting, please rely on Monthly Usage Report of any generally available vCloud Usage Meter version. Non-supported versions of Usage Meter will result in incorrect metering and compliancy issues.
Support	Production Level Support

¹ VMware vCloud SP Standard Bundle (5 points) and available.

eached End of Availability (EOA) and are no longer



^{*} Existing partners, as of May 1, 2019 may continue to use current bundles for up to 18 months. Current bundles are not available to new VCPP partner contracts signed after April 30, 2019. Current bundles will be discontinued after Oct 31, 2020.

MANAGEMENT PRODUCTS

VMware vCloud Availability

Description	VMware vCloud Availability provides unified architecture for migration and failover of VMs from on-prem to vCloud Director cloud and between different vCloud Director clouds.	
	What's changing:	
	Previously VMware Cloud Provider Program provided three different products for different Availability use cases as below:	
	vCloud Availability 2.x for on-prem to Cloud DR	
	vCloud Availability – Cloud to Cloud DR 1.5 for Cloud to Cloud DR and Migration	
	vCloud Extender for on-prem to Cloud migration (and Layer 2 Extension)	
	vCloud Availability 3.0 has introduced a new unified architecture to replace above three products (except for Layer 2 extension) with one single product going forward. vCloud Availability 3.x and above provides on-prem to Cloud DR and migration and Cloud to Cloud DR and migration in a single platform and introduce other architectural simplifications such as simplified user-interface, combined/converged RBAC portal, unified on-prem vSphere plug-in UI etc.	
	vCloud Availability 2.x and all other older versions are EOS as of October 19 th , 2019. Existing vCloud Availability 2.x, vCloud Availability Cloud to Cloud DR 1.5 and vCloud Extender customers should plan to migrate or upgrade to vCloud Availability 3.0 asap to get support.	
Point Value /		
Charged Per	-Disaster Recovery: <u>10 points</u> per protected virtual machine per month. A protected VM is any virtual machine that is replicated from the primary site to the recovery site, regardless of whether the VM is powered on or off.	
	-Migration: <u>0 points</u> per migration. A migration must be completed within 30 days; that is, the vApp that is being migrated must be fully replicated and the replication must be fully detached within 30 days.	
Components	vCloud Availability	
Reporting	vCloud Availability 3.0 Disaster recovery reporting consists of:	
	 The number of VMs under protection by the destination cloud environment The number of VMs migrated (no charge) 	
	Usage of vCloud Availability 3.0 is reported using Usage Meter latest 3.6.1 HP3	
	vCloud Availability 3.x reporting does not include any usage of vCenter Server, vSphere, or vCloud Director. Use of those products must be reported separately, in addition to the usage of the vCloud Availability for vCloud Director product.	
Support	Production Level Support	
More Information	For more information, go to https://cloudsolutions.vmware.com/products/vcloud-availability.html or https://cloudsolutions.vmware.com	



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VMware vCloud Director for Service Providers

Description	VMware vCloud Director SP, the strategic cloud management platform for the VMware Cloud Provider Program, enables Service Providers to rapidly build and monetize cloud-scale, agile, differentiated cloud environments. vCloud Director enables services providers to deliver multi-tenant, self-service, NSX-based networking services, thus deriving additional revenue from their vCloud Director environment.	
Point Value / Charged Per	 Current Bundles^{12*} vCloud Director is included, without additional charge, in the following bundles: Advanced Bundle (7 points) Advanced w/Networking Bundle (9 points) Advanced w/Management Bundle (10 points) Advanced w/Networking & Management Bundle (12 points) Flex Model vCloud Director is included, without additional charge, in the Flex Core 	
Components	vCloud Director	
Reporting	vCloud Director must be used with a VMware Cloud Provider Program SP Bundle. See <u>bundle reporting</u> <u>guidelines.</u> The standalone option is restricted and only available for certain use cases.	
Support	Production Level Support	
More Information	More information is available at VMware Cloud Provider Program vCloud Director or https://cloudsolutions.vmware.com	



VMware vCloud Director Extender

Description	VMware vCloud Director Extender is to connect customers' on-premise data center to a multi-tenant cloud environment based on vCloud Director. It provides a secure platform that ensures a seamless migration of on-premise workloads and extension of virtual networks to the cloud.
Point Value / Charged Per	Current Bundles ^{12*}
	vCloud Director Extender is a helper application to vCloud Director and is included without additional charge in all bundles with that have vCloud Director:
	 Flex Model (Included at no additional chardge) Advanced Bundle (7 points)
	 Advanced w/Networking Bundle (9 points) Advanced w/Management Bundle (10 points)
	Advanced w/Networking & Management Bundle (12 points)
Components	vCloud Director
Reporting	vCloud Director Extender is not available standalone; it must be used with a VMware Cloud Provider Program SP Bundle. See <u>bundle reporting guidelines.</u>
Support	Production Level Support
More Information	VMware Cloud Provider Program vCloud Director

¹ VMware vCloud SP Standard Bundle (5 points) reached End of Availability (EOA) as of April 15, 2018 and is no longer available to new contracts.



² Existing partners still using VMware Standard Bundle (5 points) as of April, 2018 may continue to report through March 13, 2020. After this date, the reporting for Standard Bundle (5 points) will no longer be available.

^{*} Existing partners, as of May 1, 2019 may continue to use current bundles for up to 18 months. Current bundles are not available to new VCPP partner contracts signed after April 30, 2019. Current bundles will be discontinued after Oct 31, 2020.

VMware Cloud Provider Pod

Description	Cloud Provider Pod comes in only one edition. It allows Cloud Providers to automatically deploy a new Cloud Provider environment based on vCloud Director.	
	Cloud Provider Pod is a self-contained package that includes all software components needed to deploy a full Cloud Provider Stack consistent with VVD for Cloud Providers. It works in conjunction with Cloud Provider Pod Designer to customize the environment based on user input.	
	Cloud Provider Pod Designer is available as a service at https://cloudsolutions.vmware.com/pod-designer/overview/	
Point Value / Charged Per	No cost	
Components	Cloud Provider Pod	
Reporting	Cloud Provider Pod is not subject to reporting or billing at this time.	
Support	Production Level Support	
More Information	More information is available at https://www.vmware.com/products/cloud-provider-pod.html .	
	Cloud Provider Pod Designer is available as a service at https://cloudsolutions.vmware.com/pod-designer/overview/	



VMware vRealize Automation

VMware vRealize Automation is available to VMware Cloud Provider Program Service Providers in two editions (refer to Table 2):

- vRealize Automation Advanced
- vRealize Automation Enterprise

Features	Advanced	Enterprise
Points per Managed VM or OSI per Month	5	8
VMware Infrastructure Services, Cloning Only, VMware vRealize Orchestrator Integration	✓	✓
Multi-Vendor, Multi-Cloud Infrastructure and Multi-Vendor SW Provisioning	✓	✓
Custom Services (Xaas), Approvals, Reclamation, Chargeback, Multi-Tenancy	✓	✓
Application Services, Release Automation, DevOps Integration		✓

Table 2



VMware vRealize Automation Advanced

Description	VMware vRealize Automation provides business agility to service providers by automating the delivery of	
	personalized IT services to end customers. The VMware vRealize Automation, through a self-service catalog,	
	enables end customers to request and manage a wide range of multi-vendor, multi-cloud, applications,	
	infrastructure, and custom services. Policy-based governance assures that users receive the right size resources	
	for a given task across the service lifecycle. To learn more about vRealize Automation visit:	
	http://www.vmware.com/products/vrealize-automation/	
Point Value /	Stand Alone	
Charged Per	5 Points per Managed VM or OSI per month	
	Flex Model Add-On	
	1.75 Pionts per 1 GB Reserved Ram (based on average monthly usage)	
Components	VMware vRealize Automation Advanced	
Reporting	As vRealize Automation does <u>not</u> include vCenter Server or vSphere licensing; all use of those products must be	
	reported separately, in addition to the usage of the vRealize Automation (based on edition).	
	Latest version of vCloud Usage Meter registered in vCloud Usage Insight will automatically pre-	
	populate usage data in the Business Portal for VMware vRealize Automation.	
	For manual reporting, please rely on Monthly Usage Report of any generally available vCloud Usage	
	Meter version. Non-supported versions of Usage Meter will result in incorrect metering and compliancy	
	issues.	
Support	Production Level Support	
More Information	https://cloudsolutions.vmware.com	



VMware vRealize Automation Enterprise

Description	VMware vRealize Automation provides business agility to service providers by automating the delivery of personalized IT services to end customers. The VMware vRealize Automation, through a self-service catalog, enables end customers to request and manage a wide range of multi-vendor, multi-cloud, applications, infrastructure, and custom services. Policy-based governance assures that users receive the right size resources for a given task across the service lifecycle. To learn more about vRealize Automation visit: http://www.vmware.com/products/vrealize-automation/
Point Value /	<u>Current Bundles</u>
Charged Per	8 Points per Managed VM or OSI per month
	Flex Model Add-On 2.75 Pionts per 1 GB Reserved Ram (based on average monthly usage)
Components	VMware vRealize Automation Enterprise
Reporting	As vRealize Automation does not include vCenter Server or vSphere licensing; all use of those products must be reported separately, in addition to the usage of the vRealize Automation (based on edition).
	Latest version of vCloud Usage Meter registered in vCloud Usage Insight will automatically prepopulate usage data in the Business Portal for VMware vRealize Automation. For manual reporting, please rely on Monthly Usage Report of any generally available vCloud Usage Meter version. Non-supported versions of Usage Meter will result in incorrect metering and compliancy issues.
Support	Production Level Support
More Information	https://cloudsolutions.vmware.com



VMware vRealize Business for Cloud Advanced Edition¹

Description	vRealize Business for Cloud Advanced Edition enables service providers to gain transparency and control over the cost and quality of IT services. The product meters and tracks costs across key cost drivers such as compute, memory and storage. There are numerous ways of allocating cost and usage: Rules to categorize vCenter hierarchy (by folders, tags, regular exp.) Manually upload a .csv file describing hierarchy vRealize Automation categorization vCloud Director categorization
Point Value / Charged Per	Standalone When purchased standalone and used in conjunction with VMware Cloud Provider Program bundles, the point value is 2 Points per 1 GB of Reserved vRAM (based on average monthly usage) (GB = 1024 MB) Total points capped at 24 GB of Reserved vRAM per VM
Components	VMware vRealize Business for Cloud Advanced
Reporting	When used as part of the VMware Cloud Provider Program bundles, vRealize Business for Cloud Advanced must be reported as a separate product at the point value and metric listed above. Monthly reporting is manual to the VMware Cloud Provider Program Business Portal
Support	Production Level Support
More Information	https://cloudsolutions.vmware.com

¹ VMware vRealize Business for Cloud Advanced reached End of Availability (EOA) and is no longer available.



VMware vRealize Log Insight

Description Point Value /	VMware vRealize Log Insight delivers automated log management through aggregation, analytics and search, providing operational intelligence and enterprise-wide visibility in hybrid cloud environments. It collects and analyzes all types of machine-generated log data (such as application logs, network traces, configuration files, messages, and performance data and system state dumps). By using vRealize Log Insight with vRealize Operations, service providers can extend operational visibility and proactive management capabilities across their cloud. The product provides flat pricing for unlimited amounts of data per VM or OSI. Stand Alone
Charged Per	4.5 points per managed virtual machine or OSI* per month. Flex Model vRealize Log Insight is included, without additional charge, in the Flex Core
Components	VMware vRealize Log Insight
Reporting	As vRealize Log Insight does not include vCenter Server or vSphere licensing; all use of those products must be reported separately, in addition to the usage of the vRealize Log Insight.
	When vRealize Log Insight is used as a component of the VMware Cloud Provider Program bundle, ESXi host monitoring is included in the bundle pricing for hosts using the bundles.
	When used as a component of the VMware Cloud Provider Program bundles, reporting may consist of two parts, depending on whether the log sources ingested by vRealize Log Insight are vRAM-based or non-vRAM-based.
	 Monthly reporting (via Usage Meter) will be provided on the VMware Cloud Provider Program bundle that is installed and being utilized as the basis for vRealize Log Insight. Refer to the instructions on bundle usage reporting in Appendix A. vRealize Log Insight usage will be included in the VMware Cloud Provider Program bundle usage reporting for logs ingested from VMware vSphere-based log sources, using bundle-based pricing and usage reporting. Additional monthly manual reporting is required for the number of virtual machines or OS instances being monitored for non-vSphere- based log sources, using the standalone product pricing above.
Support	Production Level Support
More Information	 When used with the VMware Cloud Provider Program bundles: The vRealize Log Insight license included in the VMware Cloud Provider Program bundles is a "full" Log Insight license. vRealize Log Insight is priced per "pipe" of data. This means that vRealize Log Insight may be used to ingest log files from any source in the Service Providers environment – some of those sources may be VMware vSphere-based and some may not be vSphere-based. Examples of vSphere-based log sources include: VMs, vCenter Servers running on hosts using vCloud SP bundles. Examples of non-vSphere-based log sources include: ESX host logging, switches/routers, ILO/iDRAC in ESX hosts, ESXi host or a firewall.



- When reported as part of the VMware Cloud Provider Program bundles, pricing is included for the
 vRealize Log Insight usage within the bundle, but only for vSphere-based log sources because the
 bundle usage is measured by GB Reserved RAM. As such, the pricing for vRealize Log Insight covers
 log sources such as VMs and vCenter Servers running on hosts using vCloud SP bundles which are
 utilized on a per GB Reserved RAM basis.
- However, if you are using vRealize Log Insight as part of a VMware Cloud Provider Program bundle
 but ingesting logs from non-vSphere-based log sources, you must report this incremental nonvSphere-based usage using the standalone product pricing at 4.5 points per managed virtual machine
 or OSI* per month (but only for the non-vSphere-based log sources). For OSI, we use the hostname
 fields of ingested events.
- *OSI stands for Operating System Instance, which includes any server with an IP address that generates logs, including network devices and storage arrays.

To learn more about vRealize Log Insight visit:

http://www.vmware.com/products/vrealize-log-insight or https://cloudsolutions.vmware.com

*OSI stands for Operating System Instance. This measure is used for non-VMware environments, including physical.



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VMware vRealize Network Insight

VMware vRealize Network Insight delivers intelligent operations for software-defined networking and security, optimizes network performance and availability with visibility and analytics across virtual and physical networks, and provide planning and recommendations for implementing micro-segmentation security, plus operational views to quickly and confidently manage and scale VMware NSX deployments.

Plan Micro-Segmentation and Deployment and Ensure Compliance

Comprehensive net flow assessment and analysis lets you model security groups and firewall rules. vRealize Network Insight collects and analyzes network flows in real time and puts them in the context of the source and destination of the VMs and applications. Users can easily understand who is talking to whom and what flows need to be allowed or blocked. Recommendations make microsegmentation easier to deploy and continuous monitoring keeps configurations in compliance over time.

Optimize Network Performance with 360 Visibility

Get converged visibility across overlay and underlay, virtual and physical, private and public clouds. Integration with virtual (NSX) and physical layers (physical switches, routers, firewalls) connects the dots across vendors and clouds.

Ensure Health and Availability of NSX Deployment

The simple search and intuitive UI lets admins and operators easily manage and troubleshoot NSX. Best practice checks guide users through their VXLAN and firewall implementation and alerts them to any pitfalls in their design and implementation of NSX.

Deliver Audit and Compliance

A data center time machine tracks all changes for audit and compliance purpose. Customers can go back in time and look at historical changes and see how each change impacted the security of a virtual machine.

VMware vRealize Network Insight is available to Service Providers in two editions (refer to Table 3):

- vRealize Network Insight Advanced
- vRealize Network Insight Enterprise

Features/Editions	vRNI Advanced	vRNI Enterprise
Standalone Points (per VM or OSI per Month)	3	5
Flex Model Points (per GB per Month)	0.75	1.5
Flow Analysis (vDS IPFIX)	✓	✓
NSX Firewall M-SEG Planning and Operations (NSX IPFIX)	✓	✓
NSX Day 2 Ops	✓	✓
VM to-VM Path Analysis	✓	✓
3rd Party Firewall Visibility		✓
Public API	✓	✓
Plan Security for AWS	✓	✓
AWS Visibility and Troubleshooting	✓	✓
PCI Compliance Dashboard	✓	✓
Netflow from Physical Devices		✓
Flow Analytics		✓
Configurable and Extended Period for Data		✓
Infoblox Integration		✓

Table 3



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VMware vRealize Network Insight Advanced

Description	VMware vRealize Network Insight Advanced delivers intelligent operations for software-defined networking and security, optimizes network performance and availability with visibility and analytics across virtual and physical networks, and provide planning and recommendations for implementing micro-segmentation security, plus operational views to quickly and confidently manage and scale VMware NSX deployments.
Point Value / Charged Per	Standalone 3 points per managed Virtual Machine (VM) per month Flex Model Add-On 0.75 Pionts per 1 GB Reserved Ram (based on average monthly usage)
Components	VMware vRealize Network Insight Advanced
Reporting	Service Providers must manually report the number of virtual machines or Operating System Instances (OSIs) being monitored by vRealize Network Insight Advanced using standalone product pricing in the VMware Cloud Provider Program Business Portal. There is no automated report that keeps track of the number of managed VMs at this time, so it is the Service Provider's responsibility to accurately track and report this information each month.
Support	Production Level Support
More Information	For more detailed product information on vRealize Network Insight Advanced go to the VMware web site: http://www.vmware.com/products/vrealize-network-insight.html or https://cloudsolutions.vmware.com



VMware vRealize Network Insight Enterprise

Description	VMware vRealize Network Insight Enterprise delivers intelligent operations for software-defined networking and security, optimizes network performance and availability with visibility and analytics across virtual and physical networks, and provide planning and recommendations for implementing micro-segmentation security, plus operational views to quickly and confidently manage and scale VMware NSX deployments.
Point Value / Charged Per	Standalone 5 points per managed Virtual Machine (VM) per month Flex Model Add-On 1.5 Pionts per 1 GB Reserved Ram (based on average monthly usage)
Components	VMware vRealize Network Insight Enterprise
Reporting	Service Providers must manually report the number of virtual machines or Operating System Instances (OSIs) being monitored by vRealize Network Insight Enterprise using standalone product pricing in the VMware Cloud Provider Program Business Portal. There is no automated report that keeps track of the number of managed VMs at this time. It is the Service Provider's responsibility to accurately track and report this information each month.
Support	Production Level Support
More Information	For more detailed product information on vRealize Network Insight Enterprise go to the VMware web site: http://www.vmware.com/products/vrealize-network-insight.html or https://cloudsolutions.vmware.com



VMware vRealize Operations

VMware vRealize Operations delivers Self-Driving operations management across physical, virtual, and cloud infrastructures – from onpremises VMware vSphere management to planning migration and capacity what-if scenarios across VMware Cloud on AWS, Microsoft Azure, Google Cloud Platform, IBM Cloud, and more. It correlates data from enterprise applications to storage utilization in a unified, easy-to-use management console that provides actionable recommendations over performance, capacity, and configuration, with predictive analytics driving proactive action and policy-based automation.

vCenter servers that are not monitored by vCloud Usage Meter using vRealize operations will always be reported as a standalone line item on the monthly usage report. vCloud Usage Meter 3.6 counts the average number of VMs for each

vCenter server managed by vRealize Operations.

Actual capabilities of vRealize Operations Manager vary by edition. License keys for vRealize Operation 8.x will also work for vRealize Operations 7.x.

VMware vRealize Operations is available to Service Providers in four editions (refer to Table 4):

- · vRealize Operations Chargeback
- · vRealize Operations Standard
- · vRealize Operations Advanced
- vRealize Operations Enterprise

Features/Editions	vROPS Chargeback	vROPs Standard	vROPs Advanced	vROPs Enterprise
Standalone Points per Managed VM or OSI per Month	N/A	2.5	6	12*
Flex Model Points per GB per Month	Part of Flex Core	1.00	1.75	3.00
Pricing and chargeback billing for vCloud Director and vCenter	✓	✓	✓	✓
Scale Out Operations Platform		✓	✓	✓
Single Sign-On		✓	✓	✓
Remote Collectors		✓	✓	✓
Visualization: Out-of-the Box Dashboards, Views, Reports, Heat Map, Performance Charts		✓	✓	✓
Performance Monitoring and Analytics		✓	✓	✓
vSphere Security and Compliance, including DISA, FISMA, ISO, CIS, PCI and HIPAA		✓	✓	✓
Real-Time Predictive Capacity Management Including Trending, Metering, Right-Sizing, Optimization		✓	✓	✓
Overall Data Center Cost Views		✓	✓	✓
What-If Scenarios for Adding / Removing VMs		✓	✓	✓
Business-Intent Based Manual Workload Optimization		✓	✓	✓
Predictive DRS and DRS management		✓	✓	✓
Guided Remediation		✓	✓	✓
vRealize Log Insight Integration		✓	✓	✓
vSAN Overview and Migration Dashboard		✓	✓	✓
Wavefront Integration			✓	✓



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Built-in High Availability (Automated Failover of Platform Nodes)	✓	✓
Customizable Dashboards, Reports and Views	✓	✓
Super Metrics, Metric Correlation, Relationship Mapping	✓	✓
Advanced APIs: Resource/Data Addition, Report Generation, etc.	✓	✓
Fine-Grained Cost Analytics for Reclamation, Planning and Public Cloud Cost Comparison	✓	✓
What-If Scenarios: - Hardware Procurement and Decommission - Adding vSAN Capacity - Migration to VMware Cloud on AWS; AWS, Azure, Google, IBM or VCPP and custom clouds	✓	√
Custom VM Profiles	✓	✓
Multiple What-If Stacked Scenarios	✓	✓
Business-Intent Based Automated and Schedulable Workload Balancing	✓	✓
Integration with vRealize Automation for Initial and Ongoing Placement	✓	✓
vSAN-Aware Workload Balancing	✓	✓
Host-Based Placement	✓	✓
Automated Actions	✓	✓
vSAN Performance, Capacity, and Troubleshooting	✓	✓
Monitoring of OS Resources (CPU, Disk, Memory, Network)	✓	✓
SDDC and CloudPod Health Management Pack	✓	✓
vRealize Orchestrator™ Management Pack	✓	✓
Custom Compliance Templates	✓	✓
Automated Compliance Drift Remediation	✓	✓
Service Discovery and Application Dependency Mapping	✓	✓
ServiceNow Integration	✓	✓
VMware Skyline Integration	✓	✓
Third-Party Infrastructure Management Packs: Storage, Networking, Converged/Hyper Converged as well as Non-vSphere Hypervisors	✓	✓
Out-of-the-Box Discovery, Monitoring and Troubleshooting for Packaged Applications		✓
Multi-Cloud and Container Monitoring Management Packs: AWS, Azure, OpenStack, Kubernetes		✓
Care System Analytics Management Pack		✓
Third-Party Database, Middleware, Application Management Packs		✓



vRealize Operations Chargeback

Description	VMware vRealize Operations Chargeback is applicable to Service Providers who want cost visibility and chargeback functions for their tenants.
Point Value /	Standalone/Current Bundles
Charged Per	Not Available
	Flex Model Core
	Included at no cost
Components	VMware vRealize Operations Manager Chargeback Edition
Reporting	vCloud Usage meter 3.6.1 and vRealize Operations 7.5 recognize the Chargeback edition as part of the Flex core and there is no change to metering.
	If you have vRealize Operations 7.0 for tenant facing chargeback functions only, you need not report its usage as its included in Flex core. In order for vCloud Usage Meter to not include it into metering, on Usage Meter product screen, do not submit vRealize Operations credentials.
	There is no license key required for the Tenant App appliance. There is a license key required for the vRealize Operations appliance - the required license is "vRealize Operations for Chargeback Per Processor". This license will enable the Tenant App to access metrics from vRealize Operations. The vRealize Operations appliance will not be directly accessible. All configuration, management, and user access is via the Tenant App appliance. There is no cost associated with this license type when using the Flex Model.
	If you already use any other vRealize Operations license type (Standard, Advanced or Enterprise), there is no requirement to add the "vRealize Operations for Chargeback Per Processor" license. The Tenant App can be enabled based on the existing license.
	For detailed configuration instructions, see the "Using vRealize Operations Tenant App as a Service Provider" document.
Support	Production Level Support



vRealize Operations Standard

Description	VMware vRealize Operations Standard is applicable to Service Providers who need monitoring, performance, compliance and capacity optimization for their need enterprise applications and virtual machines,		
Point Value /	Standalone		
Charged Per	2.5 points per managed VM or OSI per month		
	Flex Model Add-On		
	1 Piont per 1 GB Reserved Ram (based on average monthly usage)		
Components	VMware vRealize Operations Manager Standard Edition		
Reporting	As vRealize Operations does not include vCenter Server or vSphere licensing; all use of those products must be reported separately, in addition to the usage of the vRealize Operations. The standalone version of vRealize Operations Standard Edition is reported based on monthly average of hourly count of VMs being managed in the month.		
	vCenter servers using vRealize operations will always be reported as a standalone line item on the monthly usage report, unless they are monitored by Usage Meter. vCloud Usage Meter 3.6 counts the average number of VMs for each vCenter server managed by vRealize Operations.		
Support	Production Level Support		
More Information	Get more out of vRealize Operations with third-party integrations and product extensions that enable comprehensive visibility across applications and infrastructure in one place with dashboards, reports, alerts and remediation actions. Refer to the VMware vRealize Operations Guide to Third-Party Solutions for information on vRealize Operations Management Packs. Additional information on vRealize Operations can be found here: https://cloudsolutions.vmware.com		



vRealize Operations Advanced

Description	VMware vRealize Operations Advanced is applicable to Service Providers who need virtual and physical infrastructure operations management capabilities including monitoring, performance, compliance and capacity optimization for their enterprise applications and virtual machines.
Point Value / Charged Per Components	Standalone 6 points per managed VM or OSI per month Flex Model Add-On 1.75 Pionts per 1 GB Reserved Ram (based on average monthly usage) VMware vRealize Operations Advanced Edition
Reporting	As vRealize Operations does not include vCenter Server or vSphere licensing; all use of those products must be reported separately, in addition to the usage of the vRealize Operations. The standalone version of vRealize Operations Advanced Edition is reported based on monthly average of hourly count of VMs being managed in the month. vRealize operations will always be reported as a standalone line item on the monthly usage report. vCloud Usage Meter 3.6 counts the average number of VMs for each vCenter server managed by vRealize Operations.
Support	Production Level Support
More Information	Get more out of vRealize Operations with third-party integrations and product extensions that enable comprehensive visibility across applications and infrastructure in one place with dashboards, reports, alerts and remediation actions. Refer to the VMwarevRealize Operations Guide to Third-Party Solutions for information on vRealize Operations Management Packs. Additional information on vRealize Operations can be found here: https://cloudsolutions.vmware.com



vRealize Operations Enterprise

Description	VMware vRealize Operations Enterprise is applicable to Service Providers who want hybrid cloud infrastructure operations management capabilities including operating system and application level monitoring, performance, compliance and capacity optimization.
Point Value /	<u>Standalone</u>
Charged Per	12 points per managed VM or OSI per month.
	Flex Model Add On
	3 Pionts per 1 GB Reserved Ram (based on average monthly usage)
Components	VMware vRealize Operations Enterprise Edition
Reporting	As vRealize Operations does not include vCenter Server or vSphere licensing; all use of those products must be reported separately, in addition to the usage of the vRealize Operations. The standalone version of vRealize Operations Enterprise Edition is reported based on monthly average of hourly count of VMs being managed in the month. Non-UM-monitored vCenter servers using vRealize operations will always be reported as a standalone line item on the monthly usage report. vCloud Usage Meter 3.6 counts the average number of VMs for each vCenter server managed by vRealize Operations.
Support	Production Level Support
More Information	Get more out of vRealize Operations with third-party integrations and product extensions that enable comprehensive visibility across applications and infrastructure in one place with dashboards, reports, alerts and remediation actions. Refer to the VMwarevRealize Operations Guide to Third-Party Solutions for information on vRealize Operations Management Packs. Additional information on vRealize Operations can be found here: https://cloudsolutions.vmware.com



VMware vRealize Hyperic

Description	VMware vRealize Hyperic is an application management product. Through automatic discovery of infrastructure changes and handling of high volumes of metrics, vRealize Hyperic monitors the dynamics and elasticity of cloud applications. vRealize Hyperic provides visibility into the entire virtualized application stack, detects problems as soon as they occur and provides information to resolve these problems. To learn more about VMware vRealize Hyperic visit: http://www.vmware.com/products/vrealize-hyperic/
Point Value / Charged Per	Standalone 15 points per Machine (as defined below) per month
Components	VMware vRealize Hyperic
Reporting	"Machine" means, solely with respect to vRealize Hyperic products, a license to install and use on a server, a virtual machine or a network device. Therefore, the reporting from the Service Provider needs to be a combination of those three items gathered manually and entered monthly into the VMware Cloud Provider Program Business Portal.
Support	Production Level Support
More Information	Installation guides and supported configurations for this product should be reviewed and followed prior to installing vRealize Hyperic. The information is posted at http://support.hyperic.com . There is no automated usage reporting tool available for this product. Service Providers must gather and report all usage manually.



VMware vRealize Suite

Description	VMware vRealize® Suite is an enterpriseready cloud management platform that helps enterprise IT teams and service providers enable developers to quickly and easily build VM and container-based applications in any private, public, or hybrid cloud with secure and consistent operations. It provides a comprehensive management for IT services on VMware vSphere® and other hypervisors, physical infrastructure, containers, OpenStack, and external clouds such as VMware Cloud™ on AWS, Azure, and Google Cloud Platform, all with a unified management experience. VMware vRealize Suite delivers an enterprise proven hybrid cloud managementplatform which includes the following products: includes the following products: vRealize Automation, vRealize Operations, vRealize Log Insight, vRealize Business for Cloud¹ and vRealize Lifecycle Manager. vRealize Suite is available in 3 editions ■ Standard ■ Advanced ■ Enterprise Each edition includes different products. Service Provider should refer to Compare section here https://www.vmware.com/products/vrealize-suite.html to choose from the three vRealize Suite editions to meet their specifc needs.	
Point Value /	Flex Model Add-On	
Charged Per	 vRealize Suite Standard: 2 Points per 1 GB of reserved RAM (based on average monthly usage) vRealize Suite Advanced: 3.5 Points per 1 GB of reserved RAM (based on average monthly usage) 	
	vRealize Suite Advanced: 3.5 Points per 1 GB of reserved RAM (based on average monthly usage) vRealize Suite Enterprise: 4.25 Points per 1 GB of reserved RAM (based on average monthly usage)	
Components	VMware vRealize Suite	
Reporting	Service Providers must manually report the number of GB of reserved RAM being monitored by vRealize Suite. There is no automated report that keeps track of the number of GB of reserved RAM monitored by vRealize Suite at this time. It is the Service Provider's responsibility to accurately track and report this information each month.	
Support	Production Level Support	
More Information	For more detailed product information on vRealize Suite, go to the VMware web site: https://www.vmware.com/products/vrealize-suite.html or https://cloudsolutions.vmware.com/products/vrealize-suite.html or https://cloudsolutions.vmware.com/products/vrealize	

 $^{^{\}rm 1}\,\mbox{VM}\mbox{ware}\mbox{ vRealize}$ Business for Cloud reached End of Availability (EOA) and is no longer available.



VMware Integrated OpenStack Data Center Edition

Description	VMware Integrated OpenStack is a VMware-supported OpenStack distribution that makes it easy for IT to run and manage an enterprise-grade OpenStack cloud on top of VMware infrastructure. With VMware Integrated OpenStack, you can boost developer productivity and flexibility by providing a simple, vendor-neutral OpenStack API access to VMware best-of-breed infrastructure technologies.
	VMware Integrated OpenStack is available in 2 editions, Data Center and Carrier. Only Data Center edition is available in VMware Cloud Provider Program.
Point Value / Charged Per	Flex Model Add-On 1 Points per 1 GB Reserved Ram (based on average monthly usage)
Components	VMware Integrated OpenStack
Reporting	Service Providers must manually report the number of GB of reserved RAM being managed by Integrated OpenStack. There is no automated report that keeps track of the number of GB of reserved RAM managed by Integrated Openstack at this time. It is the Service Provider's responsibility to accurately track and report this information each month.
Support	Production Level Support
More Information	For more detailed product information on Integrated Openstack, go to the VMware web site https://www.vmware.com/products/openstack.html or https://cloudsolutions.vmware.com



NETWORKING AND SECURITY MANAGEMENT

VMware NSX

VMware NSX is the network virtualization platform for the Software-Defined Data Center, delivering the operational model of a virtual machine for entire networks.

VMware NSX editions are available to Service Provider in two sets:

- 1. Current Bundles provides 3 editions (NSX SP Enterprise, NSX SP Advanced & NSX SP Base)
- Flex Model provides 4 editions (NSX Data Center SP Enterprise Plus, NSX Data Center SP Advanced, NSX Data Center SP Professional & NSX Data Center SP Base

Current Bundles* - VMware NSX is available to Service Providers in three editions:

- NSX SP Enterprise (standalone or bundled)
- NSX SP Advanced (bundle only)
- NSX SP Base (bundle only)

The table below shows features of different NSX Editions specific to the VMware Cloud Provider Program:

Features	NSX-SP Base	NSX-SP Advanced	NSX-SP Enterprise
Points per Managed VM or OSI per Month	(not available standalone)	(not available standalone)	25
Distributed switching and routing	✓	✓	✓
NSX Edge Firewall	✓	✓	✓
NAT	✓	✓	✓
SW L2 Bridging to Physical environment	✓	✓	✓
Dynamic Routing with ECMP (Active-Active)	✓	✓	✓
Integration with vRealize and OpenStack	✓	✓	✓
NSX Edge Load Balancing	✓	✓	✓
VPN (IPSEC and SSL)	✓	✓	✓
Distributed Firewalling		✓	✓
Active Directory Integrated Firewall		✓	✓
Service Insertion (3rd party integration)		✓	✓
Server Activity Monitoring		✓	✓
Multi-Site NSX Optimizations			✓
Integration with HW VTEPs			✓
Remote Gateway (L2VPN)			✓

Table 5

^{*} Existing partners, as of May 1, 2019 may continue to use current bundles for up to 18 months. Current bundles are not available to new partner contracts signed after April 30, 2019. Current bundles will be discontinued after Oct 31, 2020.



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Flex Model - VMware NSX Data Center is available to Service Providers in four editions:

- NSX Data Center SP Enterprise Plus (Add-on): 4.5 Points per 1 GB Reserved Ram (based on average monthly usage)
- NSX Data Center SP Advanced (Add-on): 3 Points per 1 GB Reserved Ram (based on average monthly usage)
- NSX Data Center SP Professional (Add-on): 2 Points per 1 GB Reserved Ram (based on average monthly usage)
- NSX Data Center SP Base (Part of Core): No additional cost

The new NSX Data Center SP editions are only available in Flex model. The NSX Data Center SP editions are only effective with NSX-v 6.4.1 or later and NSX-T 2.2 or later.

The table below shows features of different NSX Editions specific to the VMware Cloud Provider Program in Flex.

Features	NSX DC SP Base	NSX DC SP Prof.	NSX DC SP Adv.	NSX DC SP Ent. Plus
Flex Points per GB per Month*	Part of Core	Add-on to Flex 2 Points	Add-on to Flex 3 Points	Add on to Flex 4.5 Points
Distributed Switching and Routing	✓	✓	✓	✓
NSX Edge Firewall	✓	✓	✓	✓
NSX Edge NAT	✓	✓	✓	✓
SW L2 Bridging to Physical environment	✓	✓	✓	✓
Dynamic Routing with ECMP (Active-Active)	✓	✓	✓	✓
Integration with Cloud Management Platforms	~	✓	~	✓
VPN - L3 (IPsec VPN and SSL VPN**)	✓	✓	✓	✓
NSX Edge Load Balancing	✓	✓	✓	✓
VPN - L2 (L2VPN)		✓	✓	✓
Distributed Firewalling for VMs and Workloads Running on Bare Metal		✓	✓	✓
Integration with NSX Cloud for AWS and Azure Support***		✓	✓	✓
Integration with Distributed Firewall (Active Directory, VMware AirWatch, and Third- Party Service Insertion)			✓	✓
Container Networking and Security			✓	✓
Multi-site Networking and Security			✓	√
IPv6			√	✓
Context-aware Micro-Segmentation (Application Identification, RDSH)				✓
URL Filtering				✓



+vRealize Network Insight Advanced	
Traffic (IPFIX) Visibility and Network Monitoring)	✓
Firewall Planning and Management	✓
NSX Operations and Troubleshooting	✓
HCX Advanced	
Large-Scale Workload Migration	•
Large-Scale Workload Migration WAN Optimization for Workload Migration	·

Note: Service Providers can download either NSX-v or NSX-T with any of the NSX editions. Before downloading NSX-T please review the requirement criteria and detailed feature set supported by NSX-T with your VMware Cloud Provider Program BDM or aggregator.



^{*}Per 1 GB Reserved Ram (based on average monthly usage)

^{**} SSL VPN support in the NSX Data SP Base edition is limited to SSL VPN on NSX-v only.

^{***} NSX Cloud is not included in VCPP NSX

VMware HCX

Description	For Service Providers that are looking for			
	Zero downtime Bulk Mobility of Enterprise Workloads			
	No-IP change, Encrypted high-performance tunnel for migration traffic. Migrate pap VM ware workloads to VM ware.			
	Migrate non-VMware workloads to VMware Extend Network from Source to Target			
	5. Multi-Cloud with Hybridity			
	6. Hybrid DR with no IP Change.	6. Hybrid DR with no IP Change.		
	Read More <u>here</u>			
Point Value /	FLEX Model Add-On			
Charged Per	2 .0 Points per GB of VRAM			
	Others			
	No additional cost for HCX when included in other bu	undles, unless explicitely stated otherwise.		
	Currently VMware HCX comes in two Editions –			
	HCX Advanced			
	HCX Enterprise Upgrade (Add-on)			
	VCPP Bundles HCX	K Edition Included		
Components and	HCX For Cloud Providers via Flex Incl	udes both HCX Advanced and HCX Enterprise Upgrade		
Packages of HCX	Model			
	VCF for Cloud Porviders Incl	udes HCX Advanced		
	NSX Enterprise Plus via Flex Model Incl	ludes HCX Advanced		
	NSX Effet prise Plus via Flex iviouei	udes nex Advanced		
Ordering HCX for	Use One-off Order Form to get access.			
FLEX Model	 Automated retrieval of HCX activation keys 	via API.		
	Applying activation keys enable's HCX. Applying activation keys enable displaying API according to the displaying to the			
	Activation key can be disabled via API as we	en.		
Ordering Through	When bundled-in, HCX does not require additional ordering process.			
Others				
Meetering	 HCX is installed on the Destination and Source Landing Pads. Billable vRAM of VMs only on the Destination Landing Pad. 			
	All Powered-on VMs and Powered-off VMs	-		
	All VMs under HCX-Enabled VCs and HCX-Enabled Tenants under VCD.			
Reporting	See page 10 for Billable vRAM definition	WG and WGD		
	HCX Manager have a 1:1 relationship with			
	For VC – All VMs under VC are counted for			
	For VCD – All VMs under that VCD are counted for reserved ram or allocated ram calculation.			



	Example Usage
	 VM A - Powered on, 8GB RAM, Reservation Level 20%. Monthly Charge for VM A - Max (20% of 8GB RAM or 50% of 8 GB RAM) = 4GB RAM * 4.5 Points = 18 Points. VM B - Powered on, 8GB RAM, Reservation Level 100% Monthly Charge for VM B - Max (100% of 8GB RAM or 50% of 8 GB RAM) = 8GB RAM * 4.5 Points = 72 Points. VM C - Powered off, 8GB RAM, Reservation Level 100% Monthly Charge for VM C - Max (100% of 8GB RAM or 50% of 8 GB RAM) = 4GB RAM * 4.5 Points = 18 Points.
Billing	Currently, it is manual.
	Usage will need to be manually uploaded to Billing Portal.
	Roadmap – Usage Meter integration in CY'20 Q1/Q2.
Support	Production Level Support
Additional Support	Support for vCenter and VCD Destination Landing Pads.
Information	Currently, VCD Support is only via Design Partnership.
	 Roadmap – CY'20 Q2 for potential wider availability.
	 Reach out to CPSBU and HCSBU for participation in Design Partnership.
	Current Limitations:
	1) Number of Tenants
	 HCX can support 1:1 Site Pairings between End-Customer On-premise environment and End-Customer Tenant on SP VCD instance.
	HCX can support Max Site-Pairings upto 25 Tenants per VCD instance
	Max of 100 Simultaneous Migrations per HCX Manager.
	 Infrastructure, Level 1 and Level 2 issues need to be handled by SP.
	 HCX can support upto a Max of 25 Service Mesh Instance.
	 A Service Mesh is required for every PVDC.
	2) Support for newer VCD features
	HCX does not support the following
	– CPoM
	 NSX-V VDR Org VDC Edge Gateway
	– NSX-T
	Flex VDCs and Compute Profiles



VMware NSX Enterprise

Description	For Service Providers needing NSX Advanced, plus networking and security features across multiple domains and data centers.
Point Value / Charged Per	Stand Alone 25 Points per managed virtual machine or OSI per month Legacy Bundle 2 12.0 Points
Components	VMware NSX Enterprise
Reporting	As VMware NSX Enterprise does not include vCenter Server or vSphere licensing; all use of those products must be reported separately, in addition to the usage of VMware NSX Enterprise. Edge Services Gateway, DLR and UDLR VMs are not counted towards vRAM consumption for NSX reporting.
	There are two options for metering and reporting NSX Enterprise: 1. Standalone: Monthly reporting of consumption via Usage Meter 2. Bundled: Monthly reporting of consumption via Usage Meter
	VMware Cloud Provider Program partners are only entitled to features within their respective NSX Edition (Base, Advanced, and Enterprise). Please refer to the NSX feature matrix for a list of features that are available for each edition.
	 The use of NSX Enterprise standalone (standalone means not part of a VMware Cloud Provider Program bundle), or as a component of VMware Cloud Provider Program bundles, shall be reported with Usage Meter. NOTE: NSX Base and NSX Advanced must be used as part of a VMware Cloud Provider Program bundle. The only version of NSX that can be used standalone is NSX Enterprise. vCloud Usage Meter 3.6.1 will detect NSX Editions based on features. When bundling NSX: Usage Meter 3.6.1 will detect mixed editions of NSX in a single vCenter
	 environment. Reporting of NSX Edge Features: Some NSX features are deployed in the edge gateway (not on ESXi host) and will not be metered by Usage Meter unless the hosts are prepared for NSX. In this case, you must make sure hosts are prepared such that they are metered by Usage Meter. If you do not configure hosts on NSX Edge, you must manually report vRAM consumption for NSX Edge features.
	Note: Usage Meter currently does not support NSX-T reporting. Service Providers on NSX-T shall do manual reporting on NSX usage instead.
Support	Production Level Support
More Information	The standalone NSX Edge client is a virtual appliance that provides connectivity between the end customers on premises data center and the VMware Cloud Provider Program cloud. Please note that adoption of NSX at the end customers on premises data center is not a requirement to avail this functionality.
	Standalone NSX Edge clients for NSX-v 6.2.4, 6.3.0 and 6.4.0 are now available for download at no additional charge (i.e. included in VMware NSX Enterprise) under the "Drivers & Tools" sections of their respective NSX releases.
	For additional information on the standalone NSX Edge gateway, please refer to KB 2150142.
	For more information on NSX Editions, please refer to:
	https://www.vmware.com/products/nsx.html or https://cloudsolutions.vmware.com

¹ Existing partners still using VMware NSX Enterprise (25 points Stand Alone or 12 points Legacy Bundle) as of April, 2018 may continue to report thru March 13, 2020. However, after this date, VMware NSX Enterprise will no longer be available.

² Existing partners, as of May 1, 2019 may continue to use current bundles for up to 18 months. Current bundles are not available to new VCPP partner contracts signed after April 30, 2019. Current bundles will be discontinued after Oct 31, 2020.



VMware NSX Advanced Load Balancer (Avi Networks Load Balancer)

Enterprises wanting to automate L4-L7 services and enable self-service for their developers find that appliance-based load balancers slow down application rollouts, cause overprovisioning, and increase their operational costs. IT teams lack comprehensive visibility into the end-user experience and application performance. Legacy application delivery controllers (ADCs) offer little more than traffic counters; they lack analytics and insights, which makes troubleshooting application problems slow and complex. These legacy solutions also lack native integration with VMware vCenter, making it complex to deploy and manage applications, requiring manual virtual machine setup and networking configuration.

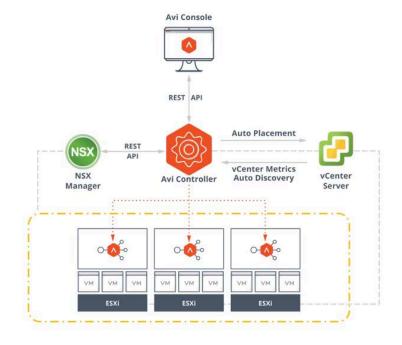
NSX Advanced Load Balancer is built on software-defined architectural principles delivering the flexibility and simplicity expected by IT and lines of business. Unlike legacy ADCs, which carry forward the disadvantages of their hardware appliances into their virtual software balancers, NSX Advanced Load Balancer separates the data and control planes to deliver application services in on-premises or cloud environments. This provides a centrally managed dynamic pool of load balancing resources for individual applications. Native integration with VMware vCenter automates configuration and deployment of application delivery, analytics, and autoscaling services.

KEY LOAD BALANCING CAPABILITIES

- **30-second Load Balancer:** Integrates with VMware vCenter to:
 - o Discover networks, pool members, and server configurations from vCenter
 - Spin up/download balancers by querying vCenter images
 - Horizontally autoscale load balancers
- Pinpoint Analytics: End-to-end traffic visibility delivers:
 - Real-time insights into network traffic
 - Network-DVR capabilities to record-and-replay network incidents
 - Rapid troubleshooting in under a minute
- Multi-cloud Load Balancing: Infrastructure-agnostic load balancing supports:
 - Multiple hypervisors in an environment
 - Multi-cloud deployments across public and private clouds
 - Distributed data plane to deploy load balancers close to applications
- **Predictive Autoscaling:** Autoscales resources to support:
 - Zero-touch scaling via rate thresholds without requiring manual configurations
 - Load balancer autoscaling on VM tier with vCenter APIs
 - Trigger autoscaling of applications based real time traffic patterns
- Multitenancy: Provides complete isolation to:
 - Prevent service disruptions across multiple tenants
 - Deploy load balancers per-application
 - Deploy distributed load balancers and manage centrally



NSX Advanced Load Balancer (Avi LB) Architecture & Components



NSX Advanced Load Balancer Components:

- Controller
- Service Engine (VM, Container, BM)



Avi Load Balancer Metering and Reporting of Service Engines:

- You only pay for the Service Engines, Controllers are free
- Avi Service Engine runs as a VM in ESXi (Containers and BM are also options)
- Each Avi Service Engine consumes one or more Service Cores (vCPUs)
- Total consumption is the number of active Service Cores (highest number) for that month

Description	VMware NSX Advanced Load Balancer for Cloud Providers offers the ability to consume NSX Advanced Load Balancer through VCPP points. Please see below for more information about the features in NSX Advanced Load Balancer.
	For more information about VMware NSX Advanced Load Balancer please refer to https://www.vmware.com/products/nsx-advanced-load-balancer.html
Point Value / Charged Per	Stand Alone 917 Points per Service Core per month Partners consume VMware NSX Advanced Load Balancer on a per Service Core / per month basis. Please see table below for pricing information. A Service Core is a vCPU and each Service Engine can be allocated one or more Service Cores.



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Components	VMware NSX Advanced Load Balancer for Cloud Providers editions include the following products • VMware NSX Advanced Load Balancer	
Reporting	Service Providers must manually report points consumption based on the number of Service Cores across all Service Engines and across all Controllers.	
	How to report NSX Advanced Load Balancer in VCPP:	
	 Count the number of active Service Engine VMs deployed (as reported by each NSX Advanced Load Balancer Controller for that month) 	
	 Sum up the vCPUs assigned to all the Service Engine VMs. (with a Service Engine VM mapped to one or more vCPUs) 	
	Report this number of vCPUs as Service Cores	
	You are billed only for this number of active Service Cores for that month	
Support	Pricing reflects production level support	
Eligibility	VMware NSX Advanced Load Balancer for Cloud Providers is available to all VCPP Cloud Providers.	
More Information	https://www.vmware.com/products/nsx-advanced-load-balancer.html	

NSX Advanced Load Balancer Features

Features	Feature Description	NSX Advanced Load Balancer
Standalone Points (per Service Core per Month)		917
Enterprise-class load balancing	SSL termination, default gateway, GSLB, DNS, and other L4-L7 services	✓
Multi-cloud load balancing	Intelligent traffic routing across multiple sites and across private or public clouds	✓
Application performance monitoring	Monitor performance and record and replay network events like a Network DVR	✓
Predictive autoscaling	Application and load balancer scaling based on real-time traffic patterns	✓
Self-service	For app developers with REST APIs to build services into applications	✓
Cloud connectors	VMware Cloud on AWS, SDN/NFV controllers, OpenStack, AWS, GCP, Azure, Linux Server Cloud, OpenShift/Kubernetes	✓
Distributed application security fabric	Granular app insights from distributed service proxies to secure web apps in real time	✓
SSO / Client Authentication	SAML 2.0 authentication for back-end HTTP applications	✓
Automation and programmability	REST API based solution for accelerated application delivery; extending automation from networking to developers	✓
Application Analytics	Real-time telemetry from a distributed load balancing fabric that delivers millions of data points in real time	✓



STORAGE AND AVAILABILITY

VMware Site Recovery Manager

Description	VMware Site Recovery Manager ("SRM") is a disaster recovery solution that provides automated orchestration and non-disruptive testing of centralized recovery plans for all virtualized applications. It allows
	Service Providers to offer reliable, automated protection for workloads hosted on their own cloud infrastructure and being replicated to another cloud destination (DR of the cloud) or workloads running on customer premises and being replicated to the cloud infrastructure (DR to the Cloud). It integrates natively with VMware vSphere® Replication™ or with a broad range of array-based replication solutions available from all major VMware storage partners. A deployment founded on vSphere and complemented with SRM can dramatically lower the cost of DR through management and testing automation that eliminates the complexity of legacy processes, while ensuring fast and highly predictable recovery time objectives (RTO) to maintain business continuity.
	To learn more about Site Recovery Manager visit: http://www.vmware.com/products/site-recovery-manager/features.html
Point Value / Charged Per	24 points per protected virtual machine per month
Chargeare	A protected VM is any virtual machine that is part of an SRM protection group, regardless of whether the VM is powered on or off. A license is only required for the VM on the active site, no license is required at the failover site.
Components	VMware Site Recovery Manager Enterprise
Reporting	As SRM does not include vCenter Server or vSphere licensing, all use of those products must be reported separately, in addition to the usage of the SRM product. The vCloud Usage Meter must monitor Service Provider licensing on either the protected or failover site. Typically, Service Providers will monitor SRM licenses on the failover site when protecting a customer's private cloud resources. Site Recovery Manager or a Disaster Recovery system reporting consists of three parts:
	 Monthly reporting on the vCloud Service Provider Bundle that is installed and being utilized as the basis for SRM or Disaster Recovery on the <u>protected</u> side via Usage Meter. Monthly reporting of SRM usage – number of VMs on the protected side via Usage Meter 3.6.
	 Monthly reporting on the vCloud Service Provider Bundle that is installed and being utilized as the basis for SRM or Disaster Recovery on the <u>recovery</u> side via Usage Meter Reporting for SRM usage is done via vCenter 5 or later (required for SRM 5 and later.)
	The Service Provider needs to access the vCenter License Reporting Manager. That screen provides information on "License Capacity" as well as "Average Usage". The Average Usage can be used as the number of virtual machines on the protected side for SRM versions not supported by the vCloud Usage Meter.
Support	VMware Production Level support
More Information	For more information, go to https://cloudsolutions.vmware.com or https://cloudsolutions.vmware.com or https://www.vmware.com/products/site-recovery-manager/features.html
Interoperability	SRM / vCenter Compatibility:
	SRM / Storage Array interop: http://www.vmware.com/pdf/srm storage partners.pdf SRM is not compatible with vCloud Director. See vCloud Availability.



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VMware vSAN

VMware vSAN is a Hyper-Converged storage software that Hyper-Converged delivers immense value to datacenter storage with simple management, high performance and low cost.

vSAN is available in four editions to VMware Cloud Provider Program Service Providers:

- vSAN Standard
- vSAN Advanced
- vSAN Standard + Enterprise Add-on
- vSAN Advanced + Enterprise Add-on

The table below shows features of each edition.

Table 6

Features	vSAN Standard	vSAN Advanced	vSAN Standard + Enterprise Add-On	vSAN Advanced + Enterprise Add-On
Point for Server Version (per GB per Month for Used Capacity)	0.02	0.03	0.03	0.04
Point Value for Desktop Version (per Concurrent Connection per Month)	2	4*	3	5
Storage Policy-Based Management	✓	✓	✓	✓
Read/Write SSD Caching	✓	✓	✓	✓
Distributed RAID	✓	✓	✓	✓
vSphere Distributed Switch	✓	✓	✓	✓
vSAN Snapshots and Clones	✓	✓	✓	✓
Rack Awareness	✓	✓	✓	✓
Replication (5min PRO)	✓	✓	✓	✓
All-Flash Support	✓	✓	✓	✓
Block Access (iSCSI)	✓	✓	✓	✓
QoS-IOPS Limits	✓	✓	✓	✓
Deduplication & Compression (All Flash Only)		✓		✓
Erasure Coding (All Flash Only)		or ✓		or ✓
Stretched Cluster and Nested Fault Domains			✓	✓
Flash Class Encryption			or ✓	or ✓



VMware vSAN Standard

Description	VMware vSAN Standard supports all-flash (SSD) and hybrid SSD/HDD ² configurations. To learn more about vSAN, visit: http://www.vmware.com/products/virtual-san/compare.html
Point Value / Charged Per	0.02 points per GB per month for Used Capacity
Components	VMware vSAN Standard
Reporting	As vSAN Standard does not include vCenter Server or vSphere licensing; all use of those products must be reported separately, in addition to the usage of the vSAN Standard product.
	Latest version of vCloud Usage Meter registered in vCloud Usage Insight will automatically pre-populate usage data in the Business Portal for VMware vSAN.
	For manual reporting, please rely on Monthly Usage Report of any generally available vCloud Usage Meter version. Non-supported versions of Usage Meter will result in incorrect metering and compliancy issues.
	VMware vSAN Standard reporting consists of two parts:
	 Monthly reporting on the vCloud Service Provider Bundle that is installed and being utilized as the basis for vSAN Standard via Usage Meter. Monthly reporting of vSAN Standard per Used Capacity via Usage Meter 3.6.1.
	NOTE: "Used Capacity" means the storage capacity consumed by vSAN Overhead (deduplication and compression metadata reservation) and all VM Objects (like VMDK, SWAP files, VMX, Snapshots, etc.) and not available for new allocations. The point values set forth above shall be reported for each GB of Used Capacity at any time during the applicable reporting period. Service Provider shall report the average amount of consumed capacity for each reporting month.
Support	Production Level Support
More Information	A hardware independent solution, vSAN Standard can be deployed on a wide range of servers. Service Providers have two options for deploying vSAN Standard – a) vSAN Ready Nodes (pre-validated configurations of servers) and b) a component-based hardware compatibility list that enables Service Providers to pick and choose the components they prefer.
	For the latest information on vSAN Ready Nodes and supported hardware components (I/O controllers, HDDs and SSDs), refer to the VMware Compatibility Guide for vSAN at: http://www.vmware.com/resources/compatibility/search.php?deviceCategory=vsan https://www.vmware.com/products/vsan.html



VMware vSAN Advanced

Description	VMware vSAN Advanced supports all-flash configuration and data efficiency features such as deduplication, compression and erasure coding, in addition to all functionalities of VMware vSAN Standard. VMware vSAN Advanced enables a two-tier all-flash architecture in which flash devices are intelligently used for both caching and data persistence to deliver high, predictable performance and submillisecond response times, making it ideal for tier-1 or business-critical workloads. To learn more about VMware vSAN Advanced, visit: http://www.vmware.com/products/virtual-san/compare.html
Point Value / Charged Per	0.03 points per GB per month for Used Capacity
Components	VMware vSAN Advanced
Reporting	As vSAN Advanced does not include vCenter Server or vSphere licensing; all use of those products must be reported separately, in addition to the usage of the vSAN Advanced product.
	VMware vSAN Advanced system reporting consists of two parts:
	Monthly reporting on the vCloud Service Provider Bundle that is installed and being utilized as the basis for vSAN Advanced via Usage Meter.
	Monthly reporting of vSAN Advanced per Used Capacity via Usage Meter 3.6.1. Latest version of vCloud Usage Meter registered in vCloud Usage Insight will automatically pre-populate usage data in the Business Portal for VMware vSAN.
	For manual reporting, please rely on Monthly Usage Report of any generally available vCloud Usage Meter version. Non-supported versions of Usage Meter will result in incorrect metering and compliancy issues.
	NOTE: "Used Capacity" means the storage capacity consumed by vSAN Overhead (deduplication and compression metadata reservation) and all VM Objects (like VMDK, SWAP files, VMX, Snapshots, etc.) and not available for new allocations. The point values set forth above shall be reported for each GB of Used Capacity at any time during the applicable reporting period. Service Provider shall report the average amount of consumed capacity for each reporting month.
Support	Production Level Support
More Information	A hardware independent solution, vSAN Advanced can be deployed on a wide range of servers. Service Providers have two options for deploying vSAN Advanced – a) vSAN Ready Nodes (pre-validated configurations of servers) and b) a component-based hardware compatibility list that enables Service Providers to pick and choose the components they prefer.
	For the latest information on vSAN Ready Nodes and supported hardware components (I/O controllers, HDDs and SSDs), refer to the VMware Compatibility Guide for vSAN at: http://www.vmware.com/resources/compatibility/search.php?deviceCategory=vsan
	https://www.vmware.com/products/vsan.html



VMware vSAN Standard + Enterprise Add-on

Description	VMware vSAN Standard supports all-flash (SSD) and hybrid SSD/HDD ₂ configurations. vSAN Enterprise Add-on provides support for Stretched Clusters and Nested Fault Domains, as well as Flash-Class Encryption.
Point Value / Charged Per	0.03 points per GB per month for Used Capacity
Components	VMware vSAN Standard+Enterprise Add-on
Reporting	VMware vSAN Standard+Enterprise Add-on reporting consists of two parts: • Monthly reporting on the vCloud Service Provider Bundle that is installed and being utilized as the
	 basis for vSAN Standard + Enterprise Add-on via Usage Meter. Monthly reporting of vSAN Standard+Enterprise Add-on per Used Capacity via Usage Meter 3.6.1.
	Latest version of vCloud Usage Meter registered in vCloud Usage Insight will automatically pre-populate usage data in the Business Portal for VMware vSAN.
	For manual reporting, please rely on Monthly Usage Report of any generally available vCloud Usage Meter version. Non-supported versions of Usage Meter will result in incorrect metering and compliancy issues.
Support	Production Level Support
More Information	A hardware independent solution, vSAN Standard+Enterprise Add-on can be deployed on a wide range of servers. Service Providers have two options for deploying vSAN Standard+Enterprise Add-on – a) vSAN Ready Nodes (pre-validated configurations of servers) and b) a component-based hardware compatibility list that enables Service Providers to pick and choose the components they prefer. For the latest information on vSAN Ready Nodes and supported hardware components (I/O controllers, HDDs and SSDs), refer to the VMware Compatibility Guide for vSAN at:
	http://www.vmware.com/resources/compatibility/search.php?deviceCategory=vsan
	https://www.vmware.com/products/vsan.html



VMware vSAN Advanced + Enterprise Add-on

Description	VMware vSAN Advanced supports all-flash configurations and data efficiency features such as deduplication, compression, and erasure coding, in addition to all functionalities of vSAN Standard. vSAN Advanced enables a two-tier all-flash architecture in which flash devices are intelligently used for both caching and data persistence to deliver high, predictable performance and sub-millisecond response times, making it ideal for tier-1 or business-critical workloads. The vSAN Enterprise Add-on provides support for Stretched Clusters and QoS Limits in vSAN 6.2 and provides support for Stretched Clusters and Nested Fault Domains, as well as Flash-Class Encryption in vSAN 6.6.
Point Value / Charge per	0.04 points per GB per month for Used Capacity
Components	VMware vSAN Advanced + Enterprise Add-on
Reporting	VMware vSAN Advanced + Enterprise Add-on reporting consists of two parts:
	 Monthly reporting on the vCloud Service Provider Bundle that is installed and being utilized as the basis for vSAN Advanced + Enterprise Add-on via Usage Meter. Monthly reporting of vSAN Advanced + Enterprise Add-on per Used Capacity via Usage Meter 3.6.1
	Latest version of vCloud Usage Meter registered in vCloud Usage Insight will automatically prepopulate usage data in the Business Portal for VMware vRealize Automation. For manual reporting, please rely on Monthly Usage Report of any generally available vCloud Usage Meter version. Non-supported versions of Usage Meter will result in incorrect metering and compliancy issues.
	NOTE: "Used Capacity" means the storage capacity consumed by vSAN Overhead (deduplication and compression metadata reservation) and all VM Objects (like VMDK, SWAP files, VMX, Snapshots, etc.) and not available for new allocations. The point values set forth above shall be reported for each GB of Used Capacity at any time during the applicable reporting period. Service Provider shall report the average amount of consumed capacity for each reporting month.
Support	Production Level Support
More Information	A hardware independent solution, vSAN Advanced + Enterprise Add-on can be deployed on a wide range of servers. Service Providers have two options for deploying vSAN Advanced + Enterprise Add-on – a) vSAN Ready Nodes (pre-validated configurations of servers) and b) a component-based hardware compatibility list that enables Service Providers to pick and choose the components they prefer. For the latest information on vSAN Ready Nodes and supported hardware components (I/O controllers, HDDs and SSDs), refer to the VMware Compatibility Guide for vSAN at: https://www.vmware.com/products/vsan.html



Hyper-Converged Infrastructure for VxRail Appliance

Review Table 7 (below) for Hyper-Converged Infrastructure product comparison:

Features	vCloud SP Hyper- Converged Infrastructure Bundle*	vSAN Standard + Enterprise Add-On for Hyper-Converged Infrastructure**	vSAN Advanced + Enterprise Add-On for Hyper-Converged Infrastructure**
Points per Month	6 GB Reserved RAM per month	0.06 per 1 GB of Used Capacity	0.08 per 1 GB of Used Capacity
vSphere Enterprise Plus	✓		
vCenter Server Standard	✓		
vRealize Log Insight	✓		
Storage Policy-Based Management		√	√
Distributed RAID		✓	✓
vSphere Distributed Switch		✓	✓
vSAN Snapshots & Clones		✓	✓
Rack Awareness		✓	✓
Replication (5min RPO)		✓	✓
All-Flash Support		✓	✓
Block Access (iSCSI)		✓	✓
Read/Write SSD Caching		✓	✓
Hybrid SSD/HDD2 configurations		✓	✓
Stretched Cluster & Nested Fault Domains		✓	✓
QoS – IOPS Limits		✓	✓
Flash Class Encryption		✓	✓
Deduplication & Compression (All Flash Only)			✓
Erasure Coding (All Flash Only)			✓

Table 7

^{*}Required
**Choose either/or



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VMware vCloud SP Bundle for Hyper-Converged Infrastructure (RESTRICTED)

Description	VMware vCloud SP Bundle for Hyper-Converged Infrastructure provides the compute virtualization and
	logging components required to deliver a vSphere-based Hyper-Converged Infrastructure solution, on
	authorized Dell EMC VxRail appliances only.
Point Value /	6 points per 1 GB Reserved RAM per month (based on average monthly usage) (GB = 1024 MB)
Charged Per	Total points capped at 24 GB of Reserved RAM per virtual machine (see Reporting and Operational Details)
Components	VMware vSphere Enterprise Plus
	VMware vCenter Server Standard
	VMware vRealize Log Insight
Reporting	Service Providers must manually report to their Aggregator all vCloud SP Bundle for Hyper-Converged Infrastructure usage each month. Run the License Summary Report and capture the total usage for vSphere Enterprise Plus. Apply the formula (6 points per GB Reserved vRAM). See Reporting and Operational Details When the vCloud SP Bundle for Hyper-Converged Infrastructure is deployed on a Dell EMC VxRail Appliance, the Dell EMC VxRail Appliance also comes with vSAN Enterprise pre-installed, and pre-licensed. vSAN Enterprise usage is reported separately, in addition to the vCloud SP Bundle for Hyper-Converged Infrastructure (see vSAN Standard + Enterprise Add-on for Hyper-Converged Infrastructure).
Support	Production Level Support
More Information	https://cloudsolutions.vmware.com/solutions/hci
Limitations	The VMware vCloud SP Bundle Hyper-Converged Infrastructure is a "restricted" product and only qualifying Service Providers can rent the product from VMware. Only Service Providers with a valid 360 point or higher contract, and who will be deploying the software on authorized Dell EMC VxRail appliances only, are eligible to start the qualification process. Contact your local Business Development Manager or partnernetwork@vmware.com for requirements on qualification and additional details to use the product through the VMware Cloud Provider Program.
	When deployed on a Dell EMC VxRail Appliance, the following terms apply:
	VxRail Appliances are sold and provided directly by a Third-Party VxRail Appliance Provider. The terms and conditions applicable to the VxRail Appliance (but not the vCloud SP Bundle for Hyper-Converged Infrastructure) are available from the VxRail Appliance Provider. The VMware end user license agreement applies to Service Provider's use of the vCloud SP Bundle for Hyper-Converged Infrastructure, but does not apply to Service Provider's usage of the VxRail Appliance.
	Service Provider's use of the vCloud SP Bundle for Hyper-Converged Infrastructure is governed by VMware's EULA located at: http://www.vmware.com/download/eula.html .
	Service Provider agrees that VMware may share Service Provider's information (including reported usage of VxRail Appliances and vCloud SP Bundle for Hyper-Converged Infrastructure) to the VxRail Appliance Provider for purposes of providing the VxRail Appliances and vCloud SP Bundle for Hyper-Converged Infrastructure through the VMware Cloud Provider Program.
	VxRail Appliances are supported directly by the VxRail Appliance Provider. The support contact information is provided by the VxRail Appliance Provider. VMware does not provide support for VxRail Appliances.
	The Service Provider agrees that VxRail Support will be provided for the VxRail Appliance by the VxRail Appliance Provider only to those Service Providers with a valid, active VMware Cloud Provider Program Agreement. If the VMware Cloud Provider Program Agreement is terminated, all rights to both the vCloud SP Bundle for Hyper-Converged Infrastructure and Support for the VxRail Appliance are terminated without refund.
	VxRail Appliances are not provided by VMware and such appliances are therefore "AS IS" without warranty, support or indemnification from VMware. Any product warranty, support or indemnification is provided solely by the VxRail Appliance Provider.



VMware vSAN Standard + Enterprise Add-on for Hyper-Converged Infrastructure (RESTRICTED)

Description	VMware vSAN Standard + Enterprise Add-on for Hyper-Converged Infrastructure is designed to facilitate usage reporting for vSAN when deployed only on authorized Dell EMC VxRail appliances that ship with vSAN Enterprise licenses. VMware vSAN Standard supports all-flash (SSD) and hybrid SSD/HDD ₂ configurations. The vSAN Enterprise Add-on provides support for Stretched Clusters and QoS Limits in vSAN 6.2 and provides support for Stretched Clusters and Nested Fault Domains, as well as Flash-Class Encryption in vSAN 6.6.
Point Value / Charged Per	.06 points per GB per month for Used Capacity
Components	VMware vSAN Standard+VMware vSAN Enterprise Add-on for Hyper-Converged Infrastructure
Reporting	As vSAN Standard + Enterprise Add-on for Hyper-Converged Infrastructure does not include vCenter Server or vSphere licensing, all use of those products must be reported separately using the vCloud SP Bundle for Hyper-Converged Infrastructure, in addition to the usage of vSAN Standard + Enterprise Add-on for Hyper-Converged Infrastructure. Latest version of vCloud Usage Meter registered in vCloud Usage Insight will automatically prepopulate usage data in the Business Portal for VMware vRealize Automation. For manual reporting, please rely on Monthly Usage Report of any generally available vCloud Usage Meter version. Non-supported versions of Usage Meter will result in incorrect metering and compliancy issues.
	If the Service Provider is not using the space efficiency features of vSAN (e.g. Deduplication, compression, erasure coding), the usage detected by Usage Meter for vSAN Enterprise must be reported in the Business Portal as: vSAN Standard + Enterprise Add-on for Hyper-Converged Infrastructure.
	Reporting consists of two parts:
	Monthly reporting on the VMware vCloud SP Bundle for Hyper-Converged Infrastructure that is installed and being utilized as the basis for vSAN Standard + Enterprise Add-on for Hyper-Converged Infrastructure Monthly reporting of vSAN Standard + Enterprise Add-on for Hyper-Converged Infrastructure per Used Capacity
	NOTE: "Used Capacity" means the storage capacity consumed by all virtual machine disks (VMDK) and not available for new allocations. The point values set forth above shall be reported for each GB of Used Capacity at any time during the applicable reporting period. Service Provider shall report the average amount of consumed capacity for each reporting month.
Support	Production Level Support
More Information	https://cloudsolutions.vmware.com/
Limitations	The VMware vSAN Standard + Enterprise Add-on for Hyper-Converged Infrastructure is a "restricted" product and only qualifying Service Providers can rent the product from VMware. Only Service Providers with a valid 360 point or higher contract, and whom will be deploying the software on an on authorized Dell EMC VxRail appliances only, are eligible to start the qualification process. Contact your local Business Development Manager or partnernetwork@vmware.com for requirements on qualification, and additional details to use the product through the VMware Cloud Provider Program.



When deployed on a Dell EMC VxRail Appliance, the following terms apply:

VxRail Appliances are sold and provided directly by a Third-Party VxRail Appliance Provider. The terms and conditions applicable to the VxRail Appliance (but not the vSAN Standard + Enterprise Add-on for Hyper-Converged Infrastructure) are available from the VxRail Appliance Provider. The VMware end user license agreement applies to Service Provider's use of the vSAN Standard + Enterprise Add-on for Hyper-Converged Infrastructure but does not apply to Service Provider's usage of the VxRail Appliance. Service Provider's use of the vSAN Standard + Enterprise Add-on for Hyper-Converged Infrastructure is governed by VMware's EULA located at: http://www.vmware.com/download/eula.html

Service Provider agrees that VMware may share Service Provider's information (including reported usage of VxRail Appliances and vSAN Standard + Enterprise Add-on for Hyper-Converged Infrastructure) to the VxRail Appliance Provider for purposes of providing the VxRail Appliances and vSAN Standard + Enterprise Add-on for Hyper-Converged Infrastructure through the VMware Cloud Provider Program.

VxRail Appliances are supported directly by the VxRail Appliance Provider. The support contact information is provided by the VxRail Appliance Provider. VMware does not provide support for VxRail Appliances. The Service Provider agrees that VxRail Support will be provided for the VxRail Appliance by the VxRail Appliance Provider only to those Service Providers with a valid, active VMware Cloud Provider Program Agreement. If the VMware Cloud Provider Program Agreement is terminated, all rights to both the vSAN Standard + Enterprise Add-on for Hyper-Converged Infrastructure and Support for the VxRail Appliance are terminated without refund.

VxRail Appliances are not provided by VMware and such appliances are therefore "AS IS" without warranty, support or indemnification from VMware. Any product warranty, support or indemnification is provided solely by the VxRail Appliance Provider.



VMware vSAN Advanced + Enterprise Add-on for Hyper-Converged Infrastructure (RESTRICTED)

Description	VMware vSAN Advanced + Enterprise Add-on for Hyper-Converged Infrastructure is designed to facilitate usage reporting for vSAN when deployed only on authorized Dell EMC VxRail appliances that ship with vSAN Enterprise licenses. VMware vSAN Advanced supports all-flash configurations and data efficiency features such as deduplication, compression, and erasure coding, in addition to all functionalities of vSAN Standard. vSAN Advanced enables a two-tier all-flash architecture in which flash devices are intelligently used for both caching and data persistence to deliver high, predictable performance and sub-millisecond response times, making it ideal for tier-1 or business-critical workloads. The vSAN Enterprise Add-on provides support for Stretched Clusters and QoS Limits in vSAN 6.2 and provides support for Stretched Clusters and Nested Fault Domains, as well as Flash-Class Encryption in vSAN 6.6.
Point Value / Charged Per	.08 points per GB per month for Used Capacity
Components	VMware vSAN Advanced + VMware vSAN Enterprise Add-on for Hyper-Converged Infrastructure
Reporting	As vSAN Advanced+Enterprise Add-on for Hyper-Converged Infrastructure does not include vCenter Server or vSphere licensing, all use of those products must be reported separately using the vCloud SP Bundle for Hyper-Converged Infrastructure, in addition to the usage of vSAN Advanced + Enterprise Add-on for Hyper-Converged Infrastructure. Latest version of vCloud Usage Meter registered in vCloud Usage Insight will automatically pre-populate usage data in the Business Portal for VMware vRealize Automation. For manual reporting, please rely on Monthly Usage Report of any generally available vCloud Usage Meter version. Non-supported versions of Usage Meter will result in incorrect metering and compliancy issues. If the Service Provider is using the space efficiency features of vSAN (e.g. deduplication, compression, erasure coding), the usage detected by Usage Meter for vSAN Enterprise must be reported in the Business Portal as: vSAN Advanced + Enterprise Add-on for Hyper-Converged Infrastructure. Reporting consists of two parts: Monthly reporting on the VMware vCloud SP Bundle for Hyper-Converged Infrastructure that is installed and being utilized as the basis for vSAN Advanced + Enterprise Add-on for Hyper-Converged Infrastructure. Monthly reporting of vSAN Advanced + Enterprise Add-on for Hyper-Converged Infrastructure per Used
	Capacity.
Support	Production Level Support
More Information	https://cloudsolutions.vmware.com/



Limitations

The VMware vSAN Advanced + Enterprise Add-on for Hyper-Converged Infrastructure is a "restricted" product and only qualifying Service Providers can rent the product from VMware. Only Service Providers with a valid 360 point or higher contract, and whom will be deploying the software on an authorized on authorized Dell EMC VxRail appliances only, are eligible to start the qualification process. Contact your local Business Development Manager or partnernetwork@vmware.com for requirements and additional details to use the product through the VMware Cloud Provider Program.

When deployed on a Dell EMC VxRail Appliance, the following terms apply:

VxRail Appliances are sold and provided directly by a Third-Party VxRail Appliance Provider. The terms
and conditions applicable to the VxRail Appliance (but not the vSAN Advanced + Enterprise Add-on for
Hyper-Converged Infrastructure) are available from the VxRail Appliance Provider. The VMware end user
license agreement applies to Service Provider's use of the vSAN Advanced + Enterprise Add-on for HyperConverged Infrastructure, but does not apply to Service Provider's usage of the VxRail Appliance.

Service Providers of the vSAN Advanced + Enterprise Add-on for Hyper-Converged Infrastructure is governed by VMware's EULA located at: http://www.vmware.com/download/eula.html

- Service Provider agrees that VMware may share Service Provider's information (including reported usage
 of VxRail Appliances and vSAN Advanced + Enterprise Add-on for Hyper-Converged Infrastructure) to the
 VxRail Appliance Provider for purposes of providing the VxRail Appliances and vSAN Advanced + Enterprise
 Add-on for Hyper-Converged Infrastructure through the VMware Cloud Provider Program.
- VxRail Appliances are supported directly by the VxRail Appliance Provider. The support contact information is provided by the VxRail Appliance Provider. VMware does not provide support for VxRail Appliances.

The Service Provider agrees that VxRail Support will be provided for the VxRail Appliance by the VxRail Appliance Provider only to those Service Providers with a valid, active VMware Cloud Provider Program Agreement. If the VMware Cloud Provider Program Agreement is terminated, all rights to both the vSAN Advanced + Enterprise Add-on for Hyper-Converged Infrastructure and Support for the VxRail Appliance are terminated without refund.

VxRail Appliances are not provided by VMware and such appliances are therefore "AS IS" without
warranty, support or indemnification from VMware. Any product warranty, support or indemnification is
provided solely by the VxRail Appliance Provider.



VMware Horizon Advanced for Hyper-Converged Infrastructure (RESTRICTED)

Description	VMware Horizon Advanced for Hyper-Converged Infrastructure is ideal for Cloud Providers looking to deliver virtual or remote desktops and applications through a single platform to end users – deployed on an authorized Dell EMC VxRail appliance . These desktop and application services – including RDS hosted applications, packaged applications with VMware ThinApp, SaaS applications, and even virtualized applications from Citrix – can all be accessed from one unified workspace to provide end users with all of the resources they want, at the speed they expect, with the efficiency the business demands. VMware Horizon Advanced for Hyper-Converged Infrastructure offers Service Providers all of the benefits of Horizon View Standard, and additional extends the power of virtualization with virtual compute and virtual storage to drive down costs, enhance the user experience, and deliver greater business agility.
Point Value / Charged Per	21 points per concurrent connection per month
Components	VMware Horizon Advanced (includes View, RDS Hosted Applications, and Identity Manager Standard Edition VMware vSAN Advanced for Desktop VMware vSAN Enterprise Add-on for Desktop VMware ThinApp Client VMware ThinApp Packager VMware Workstation VMware vCenter Server for Desktop VMware vSphere Enterprise Plus for Desktop VMware vRealize Log Insight
Reporting	Service Providers must manually report Horizon Advanced for Hyper-Converged Infrastructure usage each month in the VMware Cloud Provider Program Business Portal. Information on the total number of concurrent connections is available through the Horizon Administrator Management Web UI (under View Configuration > Product Licensing and Usage) as shown below. To report the Total Concurrent Connections for a given month, Service Providers shall use the Highest Count and reset the count at the end of each month. Alternatively, Service Providers can query the Horizon View AP ³ and obtain the same data using the ConnectionServerHealth service. The sample PowerCLI commands to query the View Connection Server are as follows:
	 Open PowerCLI and run the following: Import-Module VMware.VimAutomation.HorizonView Establish Connection to Horizon (Connect-HVServer): Connect-HVServer -server <connection-server-fqdn> -User <username> -Password <password> -Domain <domain></domain></password></username></connection-server-fqdn> Query Horizon for the connection statistics \$global:DefaultHVServers.ExtensionData.ConnectionServerHealth.ConnectionServerHealth_List().ConnectionData It is the Service Provider's responsibility to track and report the maximum concurrent connections accurately each month. VMware ThinApp Packager and VMware Workstation are for administrator use only.

³ The API module for Horizon requires PowerCLI 6.5 R1 and it is compatible with vSphere 5.5 and higher, and Horizon 7.0.2 and higher. For more information on Horizon View API and PowerCLI, refer to VMware EUC blog at https://blogs.vmware.com/euc/2017/01/VMware-horizon-7-powercli-6-5.html



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Support	Production Level Support
More Information	https://cloudsolutions.vmware.com/
Limitations	The VMware Horizon Advanced for Hyper-Converged Infrastructure is a restricted product and only qualifying Service Providers can rent the product from VMware. Only Service Providers with a valid 360 point or higher contract, and whom will be deploying the software on authorized Dell EMC VxRail appliances only, are eligible to start the qualification process. Contact your local Business Development Manager or partnernetwork@vmware.com for requirements on qualification and additional details to use the product through the VMware Cloud Provider Program.
	When deployed on a Dell EMC VxRail Appliance, the following terms apply:
	 VxRail Appliances are sold and provided directly by a Third-Party VxRail Appliance Provider. The terms and conditions applicable to the VxRail Appliance (but not the Horizon Advanced for Hyper-Converged Infrastructure) are available from the VxRail Appliance Provider. The VMware end user license agreement applies to Service Provider's use of the Horizon Advanced for Hyper-Converged Infrastructure, but does not apply to Service Provider's usage of the VxRail Appliance. Service Provider's use of the Horizon Advanced for Hyper-Converged Infrastructure is governed by VMware's EULA located at: http://www.vmware.com/download/eula.html.
	 Service Provider agrees that VMware may share Service Provider's information (including reported usage of VxRail Appliances and Horizon Advanced for Hyper-Converged Infrastructure) to the VxRail Appliance Provider for purposes of providing the VxRail Appliances and Horizon Advanced for Hyper-Converged Infrastructure through the VMware Cloud Provider Program.
	 VxRail Appliances are supported directly by the VxRail Appliance Provider. The support contact information is provided by the VxRail Appliance Provider. VMware does not provide support for VxRail Appliances.
	The Service Provider agrees that VxRail Support will be provided for the VxRail Appliance by the VxRail Appliance Provider only to those Service Providers with a valid, active VMware Cloud Provider Program Agreement. If the VMware Cloud Provider Program Agreement is terminated, all rights to both the Horizon Advanced for Hyper-Converged Infrastructure and Support for the VxRail Appliance are terminated without refund.
	 VxRail Appliances are not provided by VMware and such appliances are therefore "AS IS" without warranty, support or indemnification from VMware. Any product warranty, support or indemnification is provided solely by the VxRail Appliance Provider.



VMware Horizon Enterprise for Hyper-Converged Infrastructure (RESTRICTED)

Description	VMware Horizon Enterprise for Hyper-Converged Infrastructure is ideal for Service Providers looking to automate the management and delivery of virtual or remote desktops and applications, through a single platform to end users – deployed on authorized Dell EMC VxRail appliances only. VMware Horizon Enterprise for Hyper-Converged Infrastructure offers Service Providers all of the benefits of Horizon Advanced for Hyper-Converged Infrastructure and additionally streamlines management and provisioning with advanced self-service and monitoring capabilities to reduce operating costs and provide IT organizations with the tools to be more responsive to changing business requirements. Horizon Enterprise supports RHEL, Ubuntu, CentOS and NeoKylin Linux in addition to Microsoft Windows operating system.
Point Value / Charged Per	30 points per concurrent connection per month
Components	VMware Horizon Enterprise (includes View for Windows and Linux, RDS Hosted Applications, , Identity Manager Standard Edition, vRealize Operations for Horizon Adapter and Instant Clones) • VMware App Volumes Enterprise and User Environment Manager • VMware vSAN Advanced for Desktop • VMware vSAN Enterprise Add-on for Desktop • VMware Fusion Professional • VMware ThinApp Client • VMware ThinApp Packager • VMware Workstation • VMware vSenter Server for Desktop • VMware vSphere Enterprise Plus for Desktop • VMware vRealize Log Insight
Reporting	Service Providers must manually report Horizon Enterprise for Hyper-Converged Infrastructure usage each month in the VMware Cloud Provider Program Business Portal. Information on the total number of concurrent connections is available through the Horizon Administrator Management Web UI (under View Configuration > Product Licensing and Usage) as shown below. To report the Total Concurrent Connections for a given month, Service Providers shall use the Highest Count and reset the count at the end of each month. Alternatively, Service Providers can query the Horizon View API³ and obtain the same data using the ConnectionServerHealth service. The sample PowerCLI commands to query the View Connection Server are as follows: Open PowerCLI and run the following: Import-Module VMware.VimAutomation.HorizonView Establish Connection Horizon (Connect-HVServer): Connect-HVServer - server < connection-Server-fqdn> -User < username> -Password < password> - Domain < domain> Query Horizon for the connection statistics Sglobal:DefaultHVServers.ExtensionData.ConnectionServerHealth.ConnectionServerHealth_List().ConnectionData It is the Service Provider's responsibility to track and report the maximum concurrent connections accurately each month. VMware ThinApp Packager and VMware Workstation are for administrator use only. Service Providers must manually report to their Aggregator all Horizon Enterprise for Hyper-Converged Infrastructure usage each month. Information on the total number of concurrent connections is available through the Horizon Administrator Management Web UI (under View Configuration > Product Licensing and Usage) as shown below. To report the Total Concurrent Connections for a given month, Service Providers shall use the Highest Count and reset the count at the end of each month.
Support	Production Level Support
More Information	https://cloudsolutions.vmware.com/



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VMware Cloud Foundation for Cloud Providers (RESTRICTED)

Description Point Value /	VMware Cloud Foundation for Cloud Providers offers the ability to VMware Cloud Foundation consumable through VCPP points. VMware Cloud Foundation for Cloud Providers is offered at three levels: Basic, Standard, and Enterprise. Please see below for more information about the editions. All the bundles also require a Professional Services engagement commitment: VCF Deploy Service (Standard SOW for 3.7 or later), plus additional services applicable for the specific Cloud Provider. For more information about VMware Cloud Foundation please refer to https://www.vmware.com/products/cloud-foundation.html Partners consume VMware Cloud Foundation bundles on a per core / per month basis. Please see table below
Charged Per	for pricing information for each bundle.
Components	VMware Cloud Foundation for Cloud Providers editions include the following products VMware vSphere Enterprise Plus VMware Cloud Foundation SDDC Manager VMware vRealize Network Insight Advanced (only in Enterprise bundle) VMware HCX VMware NSX vSAN
Reporting	Service Providers must manually report points consumption based on the number of physical cores across all hosts running VMs in an VMware Cloud Foundation for Cloud Providers environment. HOW TO REPORT: Calculate the number of physical cores across all hosts that are running VMs in an VMware Cloud Foundation for Cloud Providers environment Report the number of cores in the business portal Report against the SKU associated with the VMware Cloud Foundation for Cloud Providers edition you are running
Support	Pricing reflects production level support
Eligibility	VMware Cloud Foundation for Cloud Providers is a restricted product and is only available to qualified Cloud Providers. The requirements include a minimum commit of 250k points per month and a Professional Services engagement for deployment. Professional Services will provide the VCF Deploy Service (Standard SOW for 3.7 or later), plus additional services applicable for the specific Cloud Provider. Cost for Professional Services is based on amount of work needed, with a minimum of a 1 week engagement. Please reach out to your VMware account team or aggregator for more information on eligibility requirements.
More Information	https://www.vmware.com/products/cloud-foundation.html



VMware Cloud Foundation for Cloud Providers Editions	VMware Cloud Foundation for Cloud Providers Basic	VMware Cloud Foundation for Cloud Providers Standard	VMware Cloud Foundation for Cloud Providers Enterprise
Points per Core per Month	90 per core per month	99 per core per month	129 per core per month
vSphere Enterprise Plus	√	✓	✓
SDDC Manager	√	✓	✓
vRealize Network Insight Advanced			✓
нсх	✓	✓	✓
NSX DC Professional	✓		
NSX DC Advanced		✓	
NSX DC Enterprise +			✓
vSAN Advanced	✓	✓	
vSAN Enterprise			√



VMware vCloud Director Stand-Alone (RESTRICTED)

Description	VMware vCloud Director SP, the strategic cloud management platform for the VMware Cloud Provider Program, enables Service Providers to rapidly build and monetize cloud-scale, agile, differentiated cloud environments. vCloud Director enables services providers to deliver multi-tenant, self-service, NSX-based networking services, thus deriving additional revenue from their vCloud Director environment.
Point Value / Charged Per	12 points per core per month
Components	vCloud Director
Reporting	Service Providers must manually report points consumption based on the number of physical cores across all hosts running VMs under management by vCloud Director for Cloud Providers environment.
	HOW TO REPORT:
	 Calculate the number of physical cores across all hosts that are running VMs under management by vCloud Director.
	Report the number of cores in the business portal
	Report against the SKU associated with the VMware vCloud Director Stand-Alone.
Support	Production Level Support
Eligibility	VMware vCloud Director Stand-Alone is a restricted product and is only available to qualified Cloud Providers. Service Providers that are using VMware Cloud Foundation for Cloud Providers are eligible to use the stand-alone option.
	Please reach out to your VMware account team or aggregator for more information on eligibility requirements.
More Information	More information is available at VMware Cloud Provider Program vCloud Director or https://cloudsolutions.vmware.com



DESKTOP AND APPLICATION VIRTUALIZATION

VMware App Volumes

VMware App Volumes is a portfolio of integrated application and user management solutions for VMware Horizon, Citrix XenApp and XenDesktop, and RDSH virtual environments. These solutions take desktop and application environments to the next level by providing faster application delivery, unified application and user management, while reducing IT costs by up to 70%. To learn more about VMware App Volumes visit: http://www.vmware.com/products/appvolumes/ VMware App Volumes is available to service providers in three editions (refer to Table 8):

- App Volumes Standard
- App Volumes Advanced
- App Volumes Enterprise

Features	Standard	Advanced	Enterprise
Point Value / Charged Per	4	7	9
VMware App Volumes Standard & User Environment Manager	✓	✓	✓
VMware ThinApp Client		✓	✓
VMware ThinApp Packager		✓	✓
VMware Workstation		✓	✓
VMware vRealixe Operations Adaptor for Published Applications			✓
VMware vRealixe Operations Manager for Published Applications			✓

Table 8

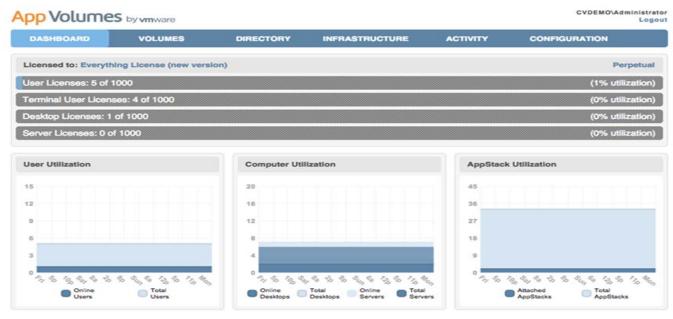


Figure 1



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VMware App Volumes Standard

Description	VMware App Volumes Standard is an application and user management solution for small and medium tenants with virtual environments powered by Horizon, Citrix XenApp and XenDesktop, and RDSH.
Point Value / Charged Per	4 points per concurrent connection per month
Components	VMware App Volumes Standard and User Environment Manager
Reporting	Service Providers must manually report App Volumes Standard usage each month in the VMware Cloud Provider Program Business Portal. Information on the number of concurrent connections is available through the App Volumes Manager interface via the Dashboard Primary tab shown above. To report number of concurrent connections for a given month, Service Providers shall use maximum "Online Users" in the "User Utilization" chart and/or maximum "Online Desktops" and "Online Servers" in the "Computer Utilization" chart depending on what they attach AppStack to – i.e. user, machine, or both. An AppStack is a virtual disk containing applications, disks, and folders. There is no automated report that keeps track of the maximum concurrent connections at this time, so it is the Service Provider's responsibility to track and report this information accurately each month.
Support	Production Level Support
More Information	https://www.vmware.com/products/appvolumes.html or https://cloudsolutions.vmware.com/



VMware App Volumes Advanced

Description	VMware App Volumes Advanced is an integrated application and user management solution for enterprise customers with virtual environments powered by Horizon, Citrix XenApp and XenDesktop, and RDSH.
Point Value / Charged Per	7 points per concurrent connection per month
Components	 VMware App Volumes Advanced and User Environment Manager VMware ThinApp Client VMware ThinApp Packager VMware Workstation
Reporting	Service Providers must manually report VMware App Volumes Advanced in the VMware Cloud Provider Program Business Portal. Information on the number of concurrent connections is available through the App Volumes Manager interface via the Dashboard Primary tab shown above. To report number of concurrent connections for a given month, Service Providers shall use maximum "Online Users" in the "User Utilization" chart and/or maximum "Online Desktops" and "Online Servers" in the "Computer Utilization" chart depending on what they attach AppStack to – i.e. user, machine, or both. An AppStack is a virtual disk containing applications, disks, and folders. There is no automated report that keeps track of the maximum concurrent connections at this time, so it is the Service Provider's responsibility to track and report this information accurately each month. ThinApp Packager and Workstation are for administrator use only.
Support	Production Level Support
More Information	https://www.vmware.com/products/appvolumes.html or https://cloudsolutions.vmware.com/



VMware App Volumes Enterprise

Description	VMware App Volumes Enterprise is a complete enterprise application and user management solution that provides application delivery, isolation, and end-to-end monitoring for Citrix XenApp and XenDesktop environments.
Point Value / Charged Per	9 points per concurrent connection per month
Components	 VMware App Volumes Enterprise and User Environment Manager VMware ThinApp Client VMware ThinApp Packager VMware Workstation VMware vRealize Operations Adapter for Published Applications VMware vRealize Operations Manager for Published Applications
Reporting	Service Providers must manually report App Volumes Enterprise usage each month in the VMware Cloud Provider Program Business Portal. Information on the number of concurrent connections is available through the App Volumes Manager interface via the Dashboard Primary tab shown in figure 1. To report number of concurrent connections for a given month, Service Providers shall use maximum "Online Users" in the "User Utilization" chart and/or maximum "Online Desktops" and "Online Servers" in the "Computer Utilization" chart depending on what they attach AppStack to – i.e. user, machine, or both. An AppStack is a virtual disk containing applications, disks, and folders. There is no automated report that keeps track of the maximum concurrent connections at this time, so it is the Service Provider's responsibility to track and report this information accurately each month. ThinApp Packager and Workstation are for administrator use only.
Support	Production Level Support
More Information	https://www.vmware.com/products/appvolumes.html or https://cloudsolutions.vmware.com/



VMware Desktop and Application Virtualization

VMware desktop and application virtualization solutions provide service providers with a new approach to deliver, protect, and manage Windows or Linux virtualized desktops and applications, while containing costs and ensuring end users can work anytime, anywhere across any device. Review Table 9 for features details.

Features & Editions	Horizon Bundle RDSH Edition	Horizon DaaS Bundle – VDI Edition	Horizon Standard	Horizon Advanced	Horizon Enterprise	Horizon for Linux	Horizon Apps Standard	Horizon Apps Advanced
Points per Month	13 per Total Allocated Quota	16 per Total Allocated Quota	12 per Concurrent Connection	19 per Concurrent Connection	28 per Concurrent Connection	7 per Concurrent Connection	11 per Concurrent Connection	18 per Concurrent Connection
VDI (Windows Desktops only)		✓	✓	✓	✓			
View Manager			✓	✓	✓	✓	✓	✓
View Composer			✓	✓	✓	✓		
Persona		√	✓	✓	✓	✓		
ThinApp	✓	✓	√	√	✓		√	✓
VMware Workstation			✓	✓	✓		✓	✓
vCenter for Desktop	✓	√	√	✓	✓	✓	√	√
vSphere Ent plus for Desktop	✓	✓	✓	✓	✓	✓	✓	✓
RDS Published Apps	✓			✓	✓		✓	✓
Identity Manager Standard				✓	✓		✓	✓
vSAN Adv. For Desktop				✓	✓			
Linux Desktops					✓	✓		
vRealize Operations for Horizon					√			
App Volumes					✓			✓
User Environment Manager					✓		✓	✓
Instant Clones					✓			✓
ThinApp Client	✓	✓						
ThinApp Packager (admin use only)	✓	✓						
VMware Workstation (admin use only)	√	√						

Table 9 **M**Ware

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VMware Horizon DaaS Bundles

VMware Horizon DaaS is the market leading solution providing Service Provider with a low cost, subscription-based, multi-tenant, and secure Desktop-as-a-Service (DaaS) platform solution. Designed to address enterprise-class scale, the solution also provides simplicity and ease-of-use from large to small customers. Horizon DaaS Bundle allows enterprises to create or extend their Virtual Desktop Infrastructure (VDI) footprint without increasing the financial burden of infrastructure management and ownership. Horizon DaaS certified Service Providers can provide enterprises with a fully customizable desktop service accessible via the Internet or dedicated network from any location, on any compatible device and with the same user experience as traditional on premises PCs.

There are two Horizon DaaS Bundles available to VMware Cloud Provider Program Service Providers:

- VMware Horizon Bundle VDI Edition
- VMware Horizon Bundle RDSH Edition

VMware Horizon DaaS 8.0.0 Bundles

Description	VDI Edition: VDI Edition applies to VDI Desktop workloads and includes the RDSH Edition rights. RDSH Edition: RDSH Edition applies to Remote Desktop Session Host (RDSH) Desktop and Application (i.e. Terminal Services Session-based) workloads.
Point Value / Charged Per	VDI Edition: 16 points per created desktop per month RDSH Edition: 13 points per created desktop or application session per month
Components (BOM)	 VMware Horizon DaaS Platform which includes right to host VDI desktop and applications (Windows Client OS, Windows Server OS) VMware Identity Manager Standard Edition VMware vCenter Server for Desktop VMware vSphere Enterprise Plus for Desktop VMware User Environment Manager
Reporting	Log into Service Center as Super Admin for each Horizon DaaS datacenter in place. In the main menu, select the 'configuration tab, then select "standard capacity'. Ensure you are in the 'Desktop Capacity & Model Definition' option, then select 'Download Usage Report' From the downloaded .CSV file for each datacenter, the follow metrics should be extracted: VDI Edition consumption: Sum of all desktop VMs created (column: No. of VMs) RDSH Edition: Sum of all sessions created (Column: Total Sessions)
Support	Production Level Support. GSS will answer SP support request. (Pricing reflects prod level support)
More Information	https://www.vmware.com/products/daas-vspp.html or https://cloudsolutions.vmware.com/ The Horizon DaaS Bundle are restricted products and only. Qualifying Service Providers can rent the product from VMware. Only Service Providers with a valid 10,800 point or higher contract are eligible to start the qualification process. Contact your local Business Development Manager or partnernetwork@vmware.com on requirements and additional details to use the product through the VMware Cloud Provider Program. For VMware and 3 rd party component compatibility, refer to the Horizon DaaS Service Provider administration documentation: https://docs.vmware.com/en/VMware-Horizon-DaaS/index.html



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VMware Horizon Bundle RDSH Edition

Description	RDSH Edition applies to Remote Desktop Session Host (RDSH) Desktop and Application (i.e. Terminal Services Session-based) workloads.
Point Value / Charged Per	13 points per Total Allocated Quota for RDSH Connections per month
Components	 VMware Horizon DaaS Platform which includes right to host session desktop and applications (Windows Server OS with RDSH) VMware Identity Manager Standard Edition VMware ThinApp Client VMware ThinApp Packager for administrator use only VMware Workstation for administrator use only VMware vCenter Server for Desktop VMware vSphere Enterprise Plus for Desktop
Reporting	Service Providers must report the total allocated quota for RDSH connections associated with the use of the Horizon DaaS Bundle – RDSH Edition to their Aggregator each month using Usage Meter 3.6. meters total allocated quota for RDSH for the month and it resets at start of each month.
Support	Production Level Support
More Information	https://www.vmware.com/products/daas-vspp.html or https://cloudsolutions.vmware.com/ The Horizon DaaS Bundle – RDSH Edition is a restricted product and only qualifying Service Providers can rent the product from VMware. Only Service Providers with a valid 10,800 point or higher contract are eligible to start the qualification process. Contact your local Business Development Manager or partnernetwork@vmware.com on requirements and additional details to use the product through the VMware Cloud Provider Program. For VMware and 3 rd party component compatibility, refer to the Horizon DaaS Platform blueprint.



VMware Horizon DaaS Bundle - VDI Edition

Description	VDI Edition applies to VDI Desktop and Application workloads.
Point Value / Charged Per	16 points per Total Allocated Quota for VDI Connections per month
Components	VMware Horizon DaaS Platform which includes right to host VDI desktop and applications (Windows Client OS, Windows Server OS, Linux OS)
	 VMware Identity Manager Standard Edition VMware ThinApp Client VMware ThinApp Packager for administrator use only VMware Workstation for administrator use only VMware vCenter Server for Desktop VMware vSphere Enterprise Plus for Desktop
Reporting	Service Providers must report the total allocated quota for VDI connections associated with the use of the Horizon DaaS Bundle – VDI Edition to their Aggregator each month using Usage Meter 3.6. Usage Meter 3.6 meters total allocated quota for VDI for the month and it resets at start of each month.
Support	Production Level Support
More Information	https://www.vmware.com/products/daas-vspp.html or https://cloudsolutions.vmware.com/ The Horizon DaaS Bundle – VDI Edition is a restricted product and only qualifying Service Providers can rent the product from VMware. Only Service Providers with a valid 10,800 point or higher contract are eligible to start the qualification process. Contact your local Business Development Manager or partnernetwork@vmware.com on requirements and additional details to use the product through the VMware Cloud Provider Program. For VMware and 3 rd party component compatibility, refer to the Horizon DaaS Platform blueprint.



VMwareDesktop Disaster Recovery for Horizon DaaS Bundle(s)

Description	VMware Desktop Disaster Recovery (DR) for Horizon DaaS Bundle(s) enables Service Providers to easily protect their tenants' business and ensure workforce continuity with cloud-hosted desktops and apps at a fraction of the cost.
	It opens new opportunities for Service Providers to offer cloud-based virtual desktop and apps as insurance to enterprises that use:
	 on premises physical desktop infrastructure on premises virtual desktop infrastructure or, cloud-hosted desktop and apps for their normal business operation
	In the event of a disaster, Service Providers can get tenant users up and running quickly with the speed of the cloud and predictable cloud economics. Tenants can be productive instantly, from any device, anywhere, with a secure workspace connected to corporate resources.
Point Value /	4 points per Total Allocated Insurance Quota for VDI and RDSH Connections per month ("insurance rate")
Charged Per	The Desktop DR option allows partners to deploy Horizon DaaS bundle(s) in either reservation mode or active (i.e. normal) mode as follows:
	 Partner offers desktop "reservation" capacity and pays "insurance rate" to VMware. Desktop reservation capacity gives the tenant the right to take the reserved desktop capacity out of standby for a disaster event.
	 When tenants declare a disaster, partner "activates" desktops and reports "regular rate" of Horizon DaaS Bundle(s) to VMware during the disaster period with a minimum monthly commitment. For information on "regular rate" for VDI and RDSH Editions of VMware Horizon DaaS Bundle(s), refer to the "VMware Horizon DaaS Bundle – VDI Edition" and "VMware Horizon DaaS Bundle – RDSH Edition" sections respectively.
	Partner can select any mix of reserved and active desktops.
Components	VMware Desktop DR for "Horizon DaaS Bundle – VDI Edition" and "Horizon DaaS Bundle – RDSH Edition"
Reporting	For reserved cloud-hosted desktops and apps, Service Providers must manually report the total allocated insurance quota for VDI and RDSH connections associated with the use of the "Horizon DaaS Bundle – VDI Edition" and "Horizon DaaS Bundle – RDSH Edition" respectively to their Aggregator each month.
	This data shall include the aggregate total insurance quota allocation of the "Horizon DaaS Bundle – VDI Edition" and "Horizon DaaS Bundle – RDSH Edition" as well as the name, total insurance quota allocation, and zip code or country code for each Hosting Customer. For "Horizon DaaS Bundle – VDI Edition", it is the total number of VMs that can be powered on for all tenants based on Desktop Model insurance quotas.
	For "Horizon DaaS Bundle – RDSH Edition", it is the total number of RDSH sessions allocated to all tenants based on Session Model insurance quotas. There is no automated report that keeps track of the total insurance allocated quota for VDI or RDSH connections at this time, so it is the Service Provider¹s responsibility to track and report this information accurately each month.
Support	Production Level Support
More Information	The Desktop DR for Horizon DaaS Bundle(s) is a restricted product and only qualifying Service Providers can use the product from VMware. Only Service Providers with a valid 10,800 point or higher contract are eligible to start with qualification process. Contact your local Business Development Manager or partnernetwork@vmware.com on requirements and additional details to use the product through the VMware Cloud Provider Program. Also see: https://cloudsolutions.vmware.com/



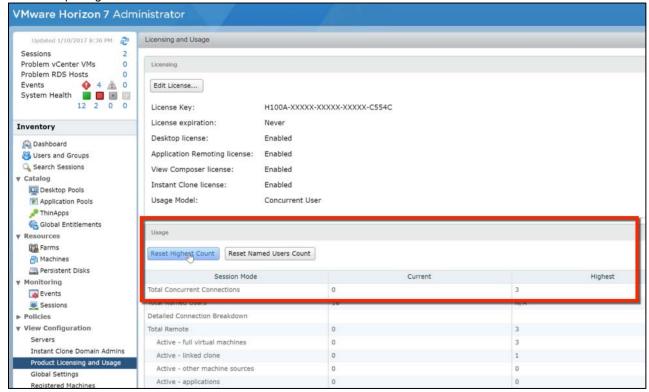
VMware Horizon

VMware Horizon 7 provides a streamlined approach to delivering, protecting and managing virtual desktops (VDI) and apps while containing costs and ensuring that end users can work anytime, anywhere, across any device. To learn more about VMware Horizon visit: https://www.vmware.com/products/horizon.html.

VMware Horizon 7 is available to VMware Cloud Provider Service Providers in three editions:

- VMware Horizon Standard
- VMware Horizon Advanced
- VMware Horizon Enterprise

Manual Reporting for Horizon Screenshot:





VMware Horizon Standard

Description	VMware Horizon Standard is an ideal solution to deliver simple powerful Virtual Desktop Infrastructure (VDI) with great user experience. VMware Horizon Standard hosted desktops eliminate the burden for customers of running and managing their desktops in-house. Service Providers can use VMware Horizon Standard to provide their customers with access (through a secure Internet connection) to a fully customizable desktop from any location, or on any compatible device, with the same user experience as on traditional PCs.
Point Value / Charged Per	12 points per concurrent connection per month
Components	 VMware Horizon (includes View Manager, View Composer and Persona Management) VMware ThinApp Client VMware ThinApp Packager VMware Workstation VMware vCenter Server Desktop VMware vSphere Enterprise Plus for Desktop
Reporting	Service Providers must manually report Horizon Standard usage each month in the VMware Cloud Provider Program Business Portal. Information on the total number of concurrent connections is available through the Horizon Administrator Management Web UI (under View Configuration > Product Licensing and Usage) as shown above. To report the Total Concurrent Connections for a given month, Service Providers shall use the Highest Count and reset the count at the end of each month. Alternatively, Service Providers can query the Horizon View API ³ and obtain the same data using the ConnectionServerHealth service. The sample PowerCLI commands to query the View Connection Server are as follows:
	Open PowerCLI and run the following:
	 Connect-HVServer -server <connection-server-fqdn> -User <username> -Password <password> -Domain <domain></domain></password></username></connection-server-fqdn> Query Horizon for the connection statistics \$global:DefaultHVServers.ExtensionData.ConnectionServerHealth.ConnectionServerHealth_List().ConnectionData
	It is the Service Provider's responsibility to track and report the maximum concurrent connections accurately each month. VMware ThinApp Packager and VMware Workstation are for administrator use only.
Support	Production Level Support
More Information	https://www.vmware.com/products/horizon.html or https://cloudsolutions.vmware.com/



VMware Horizon Advanced

Description	VMware Horizon Advanced is ideal for customers looking to deliver virtual or remote desktops and applications through a single platform to end users. These desktop and application services – including RDS hosted applications, packaged applications with VMware ThinApp, SaaS applications, and even virtualized applications from Citrix – can all be accessed from one unified workspace to provide end users with all of the resources they want, at the speed they expect, with the efficiency business demands. VMware Horizon Advanced offers customers all the benefits of the Horizon View Standard and additionally extends the power of virtualization with virtual compute and virtual storage to drive down costs, enhance the user experience, and deliver greater business agility.
Point Value / Charged Per	19 points per concurrent connection per month
Components	 VMware Horizon Advanced (includes View, RDS Hosted Applications, , and Identity Manager Standard Edition) VMware vSAN Advanced for Desktop VMware Fusion Professional VMware ThinApp Client VMware ThinApp Packager VMware Workstation VMware vCenter Server for Desktop VMware vSphere Enterprise Plus for Desktop
Reporting	Service Providers must manually report Horizon Advanced usage each month in the VMware Cloud Provider Program Business Portal. Information on the total number of concurrent connections is available through the Horizon Administrator Management Web UI (under View Configuration > Product Licensing and Usage) as shown above. To report the Total Concurrent Connections for a given month, Service Providers shall use the Highest Count and reset the count at the end of each month.
	Alternatively, Service Providers can query the Horizon View API ³ and obtain the same data using the ConnectionServerHealth service. The sample PowerCLI commands to query the View Connection Server are as follows:
	 Open PowerCLI and run the following: Import-Module VMware.VimAutomation.HorizonView
	 Establish Connection to Horizon (Connect-HVServer): Connect-HVServer -server <connection-server-fqdn> -User <username> -Password <password> -Domain <domain></domain></password></username></connection-server-fqdn>
	 Query Horizon for the connection statistics \$global:DefaultHVServers.ExtensionData.ConnectionServerHealth.ConnectionServerHealth_List ().ConnectionData
	It is the Service Provider's responsibility to track and report the maximum concurrent connections accurately each month. VMware ThinApp Packager and VMware Workstation are for administrator use only.
Support	Production Level Support
More Information	https://www.vmware.com/products/horizon.html or https://cloudsolutions.vmware.com/



VMware Horizon Enterprise

Description	VMware Horizon Enterprise is ideal for customers looking to automate the management and delivery of virtual or remote desktops and applications, through a single platform to end users. VMware Horizon Enterprise offers customers all of the benefits of the Horizon Advanced and additionally streamlines management and provisioning with advanced self-service and monitoring capabilities to reduce operating costs and provide IT organizations with the tools to be more responsive to changing business requirements. Horizon Enterprise supports RHEL, Ubuntu, CentOS and NeoKylin Linux in addition to Microsoft Windows operating system.
Point Value / Charged Per	28 points per concurrent connection per month
Components	 VMware Horizon Enterprise (includes View for Windows and Linux, RDS Hosted Applications, , Identity Manager Standard Edition, vRealize Operations for Horizon Adapter, and Instant Clones) VMware App Volumes Enterprise and User Environment Manager VMware vRealize Operations for Horizon VMware vSAN Advanced for Desktop VMware Fusion Professional VMware ThinApp Client VMware ThinApp Packager VMware Workstation VMware vCenter Server for Desktop VMware vSphere Enterprise Plus for Desktop
Reporting	Service Providers must manually report Horizon Advanced usage each month in the VMware Cloud Provider Program Business Portal. Information on the total number of concurrent connections is available through the Horizon Administrator Management Web UI (under View Configuration > Product Licensing and Usage) as shown above. To report the Total Concurrent Connections for a given month, Service Providers shall use the Highest Count and reset the count at the end of each month. Alternatively, Service Providers can query the Horizon View API ³ and obtain the same data using the ConnectionServerHealth service. The sample PowerCLI commands to query the View Connection Server are as
	follows: Open PowerCLI and run the following: Import-Module VMware.VimAutomation.HorizonView Establish Connection to Horizon (Connect-HVServer):
	 Connect-HVServer -server <connection-server-fqdn> -User <username> -Password <password> - Domain <domain></domain></password></username></connection-server-fqdn> Query Horizon for the connection statistics Sglobal:DefaultHVServers.ExtensionData.ConnectionServerHealth.ConnectionServerHealth List(
).ConnectionData It is the Service Provider's responsibility to track and report the maximum concurrent connections accurately each month. VMware ThinApp Packager and VMware Workstation are for administrator use only.
Support	Production Level Support
More Information	https://www.vmware.com/products/horizon.html or https://cloudsolutions.vmware.com/



VMware Horizon for Linux

Description	VMware Horizon for Linux extends the benefits of VDI to Linux users. Providing centralized, secure and simplified management for Linux desktops, Horizon for Linux allows organizations to help reduce their capital expenditures, eliminate Microsoft desktop licensing costs and save on day-to-day operational expenses. In addition, VMware Horizon for Linux support send users with easy access to Linux applications and the same great user experience across devices and locations. Horizon for Linux supports RHEL, Ubuntu, CentOS and NeoKylin operating systems.
Point Value / Charged Per	7 points per concurrent connection per month
Components	VMware Horizon for Linux (includes View Manager, View Composer and Persona Management for Linux) VMware vCenter Server Desktop VMware vSphere Enterprise Plus for Desktop
Reporting	Service Providers must manually report Horizon for Linux usage each month in the VMware Cloud Provider Program Business Portal. Information on the total number of concurrent connections is available through the Horizon Administrator Management Web UI (under View Configuration > Product Licensing and Usage) as shown above. To report the Total Concurrent Connections for a given month, Service Providers shall use the Highest Count and reset the count at the end of each month.
	Alternatively, Service Providers can query the Horizon View API³ and obtain the same data using the ConnectionServerHealth service. The sample PowerCLI commands to query the View Connection Server are as follows: Open PowerCLI and run the following: Import-Module VMware.VimAutomation.HorizonView Establish Connection to Horizon (Connect-HVServer): Connect-HVServer -server <connection-server-fqdn> -User <username> -Password <password> -Domain <domain> Query Horizon for the connection statistics Sglobal:DefaultHVServers.ExtensionData.ConnectionServerHealth_</domain></password></username></connection-server-fqdn>
Support	List().ConnectionData It is the Service Provider's responsibility to track and report the maximum concurrent connections accurately each month. VMware ThinApp Packager and VMware Workstation are for administrator use only. Production Level Support
More Information	https://www.vmware.com/products/horizon.html or https://cloudsolutions.vmware.com/



VMware Horizon Apps

VMware Horizon Apps enables Service Providers to deliver virtual apps securely to any device, anywhere with centralized management and rich, adaptive user experience. It improves end users' productivity with quick and easy access to their Windows applications alongside SaaS applications, and mobile applications through a single unified digital workspace. Based on Horizon 7, it is a great choice for customers who need published applications (i.e. Remote Desktop Services – RDS) but don't need VDI desktops. Refer to Table 8 for feature details. To learn more about VMware Horizon visit: http://www.vmware.com/products/horizon-apps.html.

VMware Horizon Apps is available to VMware Cloud Provider Program Service Providers in two editions:

- VMware Horizon Apps Standard
- VMware Horizon Apps Advanced

VMware Horizon Apps Standard

5	
Description	VMware Horizon Apps Standard offers reliable and secure published applications delivery with tools and features that simplify management and provide a great user experience.
Point Value /	11 points per concurrent connection per month
Charged Per	11 points per concurrent connection per month
Components	VM views Havings Anna Ctandard (includes BDC Hastad Applications and Identity Manager
Components	VMware Horizon Apps Standard (includes RDS Hosted Applications and Identity Manager Standard Edition but not biplied Clance)
	Standard Edition but not Linked Clones)
	VMware User Environment Manager
	VMware ThinApp Client
	VMware ThinApp Packager
	VMware Workstation
	VMware vCenter Server for Desktop
	VMware vSphere Enterprise Plus for Desktop
Reporting	Service Providers must manually report Horizon Apps Standard usage each month in the VMware Cloud Provider Program Business Portal. Information on the total number of concurrent connections is available through the Horizon Administrator Management Web UI (under View Configuration > Product Licensing and Usage) as shown above. To report the Total Concurrent Connections for a given month, Service Providers shall use the Highest Count and reset the count at the end of each month.
	Alternatively, Service Providers can query the Horizon View API and obtain the same data using the ConnectionServerHealth service. The sample PowerCLI commands to query the View Connection Server are as follows: Open PowerCLI and run the following: Import-Module VMware.VimAutomation.HorizonView
	 Establish Connection to Horizon (Connect-HVServer): Connect-HVServer -server <connection-server-fqdn> -User <username> -Password <password> -Domain <domain></domain></password></username></connection-server-fqdn>
	Query Horizon for the connection statistics Sglobal:DefaultHVServers.ExtensionData.ConnectionServerHealth.ConnectionServerHealth_List().ConnectionData
	It is the Service Provider's responsibility to track and report the maximum concurrent connections accurately each month. VMware ThinApp Packager and VMware Workstation are for administrator use only.
Support	Production Level Support
More Information	https://www.vmware.com/products/horizon-apps.html or https://cloudsolutions.vmware.com/



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VMware Horizon Apps Advanced

Description	VMware Horizon Apps Advanced includes everything in Horizon Apps Standard and further raises the bar with just-in-time app delivery powered by VMware's Instant Clone technology and complete application lifecycle management powered by VMware App Volumes. It brings speed, scale, savings, and simplicity to app delivery,
	while enabling access to apps on any device, anywhere.
Point Value / Charged Per	18 points per concurrent connection per month
Components	 VMware Horizon Apps Advanced (includes RDS Hosted Applications, Identity Manager Standard Edition, and Instant Clones but not Linked Clones) VMware App Volumes Enterprise (product) and User Environment Manager VMware ThinApp Client VMware ThinApp Packager VMware Workstation VMware vCenter Server for Desktop VMware vSphere Enterprise Plus for Desktop
Reporting	Service Providers must manually report Horizon Apps Standard usage each month in the VMware Cloud Provider Program Business Portal. Information on the total number of concurrent connections is available through the Horizon Administrator Management Web UI (under View Configuration > Product Licensing and Usage) as shown above. To report the Total Concurrent Connections for a given month, Service Providers shall use the Highest Count and reset the count at the end of each month. Alternatively, Service Providers can query the Horizon View API ³ and obtain the same data using the ConnectionServerHealth service. The sample PowerCLI commands to query the View Connection Server are as follows:
	 Open PowerCLI and run the following: Import-Module VMware.VimAutomation.HorizonView Establish Connection to Horizon (Connect-HVServer): Connect-HVServer -server <connection-server-fqdn> -User <username> -Password <password> -Domain <domain></domain></password></username></connection-server-fqdn>
	 Query Horizon for the connection statistics \$global:DefaultHVServers.ExtensionData.ConnectionServerHealth.ConnectionServerHealth_List ().ConnectionData It is the Service Provider's responsibility to track and report the maximum concurrent connections accurately
	each month. VMware ThinApp Packager and VMware Workstation are for administrator use only.
Support	Production Level Support
More Information	https://www.vmware.com/products/horizon-apps.html or https://cloudsolutions.vmware.com/



VMware ThinApp Client

Description	With ThinApp Client, an entire application and its settings can be packaged into a single executable that Service Providers can deploy to a range of Windows operating environments on either a physical desktop or a virtual machine. The applications are isolated from each other and the Operating System to ensure there are no application-to-application conflicts or application-to-operating system conflicts. This solution fits into any environment and allows Service Providers to help customers run legacy and new applications side by side. For example, older applications on Windows XP can be packaged and deployed by the Service Provider on Windows 7.
Point Value / Charged Per	2 points per ThinApp Client per month
Components	VMware ThinApp Client
Reporting	The Service Provider must manually report ThinApp Client usage each month in the VMware Cloud Provider Program Business Portal. The maximum number of clients used in the month must be included in the report.
Support	Production Level Support
More Information	https://www.vmware.com/products/thinapp.html or https://cloudsolutions.vmware.com/
	ThinApp Client does not include the ThinApp Packager or Workstation. Service Providers will need to install and report usage for at least one seat of VMware Horizon View Standard Edition or VMware Horizon DaaS Bundle(s) in order to use ThinApp Client licenses. All the limitations of Horizon View Standard Edition or VMware Horizon DaaS Bundle(s) listed in the VMware Cloud Provider Program Product Usage Guide shall apply to that installation.



VMware ThinApp Packager

Description	VMware ThinApp Packager is a tool for the administrator to help package applications into ThinApp executables.
Point Value / Charged Per	1 point per ThinApp Packager per month
Components	VMware ThinApp Packager
Reporting	The Service Provider must manually report ThinApp Packager usage each month in the VMware Cloud Provider Program Business Portal. The maximum number of Packagers used in the month must be included in the report.
Support	Production Level Support
More Information	https://www.vmware.com/products/thinapp.htm or https://cloudsolutions.vmware.com/ ThinApp Packager is for administrator use only and does not include the ThinApp Client or Workstation. Service Providers will need to install and report usage for at least one seat of VMware Horizon View Standard Edition or VMware Horizon DaaS Bundle(s) in order to use ThinApp Packager licenses. All the limitations of Horizon View Standard Edition or VMware Horizon DaaS Bundle(s) listed in the VMware Cloud Provider Program Product Usage Guide shall apply to that installation.



VMware User Environment Manager

Description	VMware User Environment Manager offers personalization and dynamic policy configuration across any virtual, physical and cloud-based environment. It simplifies end-user profile management by providing organizations with a single and scalable solution that leverages existing infrastructure. Service Providers can simply map infrastructure (including networks and printer mappings) and dynamically set policies for end users to securely support more use cases. With this solution, end users can also enjoy quick access to their Windows workspace and applications, with a personalized and consistent experience across devices and locations. The net effect – organizations leveraging User Environment Manager can increase workplace productivity while driving down the cost of acquisition and day-to-day desktop support and operations.
Point Value / Charged Per	2 points per named user per month
Components	VMware User Environment Manager
Reporting	Service Providers must manually report User Environment Manager usage each month in the VMware Cloud Provider Program Business Portal. There is no automated report that keeps track of the maximum named users at this time, so it is the Service Provider's responsibility to track and report this information accurately each month.
Support	Production Level Support
More Information	https://www.vmware.com/products/user-environment-manager.html or https://cloudsolutions.vmware.com/



VMware vSAN for Desktop

VMware vSAN for Desktop is the software-defined storage platform that powers VMware Hyper-Converged Software solutions and delivers one of the industry's best storage value with simple management, high performance, low cost and a robust roadmap intended to support any app, at any scale.

VMware vSAN for Desktop is available to VMware Cloud Provider Program Service Providers in two editions, and an addon:

- VMware vSAN Standard for Desktop
- VMware vSAN Advanced for Desktop
- VMware vSAN Enterprise Add-on for Desktop

VMware vSAN Standard for Desktop

Description	VMware vSAN Standard for Desktop supports both All-Flash and a hybrid SSD/HDD configuration. vSAN Standard for Desktop is an a-la-carte option that can be used with other End User Computing products in the VMware Cloud Provider Program.
Point Value / Charged Per	2 points per concurrent connection per month
Components	VMware vSAN Standard for Desktop
Reporting	Service Providers must manually report vSAN Standard for Desktop usage each month in the VMware Cloud Provider Program Business Portal. Information on the number of concurrent connections is available through the vCenter Server virtual machine count.
	There is no automated report that keeps track of the maximum concurrent connections at this time, so it is the Service Provider's responsibility to track and report this information accurately each month. As vSAN Standard for Desktop does not include vCenter Server for Desktop or vSphere for Desktop licensing; all use of those products must be reported separately, in addition to the usage of the vSAN Standard for Desktop product.
Support	Production Level Support
More Information	A hardware independent solution, vSAN Standard for Desktop can be deployed on a wide range of servers. Service Providers have two options for deploying vSAN Standard for Desktop – a) vSAN Ready Nodes (prevalidated configurations of servers) and b) a component-based hardware compatibility list that enables Service Providers to pick and choose the components they prefer.
	For the latest information on vSAN Ready Nodes and supported hardware components (I/O controllers, HDDs and SSDs), refer to the VMware Compatibility Guide for vSAN at: http://www.vmware.com/resources/compatibility/search.php?deviceCategory=vSAN.
	Also see: https://cloudsolutions.vmware.com/



VMware vSAN Advanced for Desktop

Description	VMware vSAN Advanced for Desktop supports all-flash configuration and data efficiency features such as deduplication, compression and erasure coding, in addition to all functionalities of vSAN Standard for Desktop. vSAN Advanced for Desktop enables a two-tier all-flash architecture in which flash devices are intelligently used for both caching and data persistence to deliver high, predictable performance and sub-millisecond response times, making it ideal for tier-1 or business-critical workloads.
	vSAN Advanced for Desktop is an a-la-carte option that can be used with other End User Computing products in the VMware Cloud Provider Program.
Point Value / Charged Per	4 points per concurrent connection per month
Components	VMware vSAN Advanced for Desktop
Reporting	Service Providers must manually report vSAN Advanced for Desktop usage each month in the VMware Cloud Provider Program Business Portal. Information on the number of concurrent connections is available through the vCenter Server virtual machine count. There is no automated report that keeps track of the maximum concurrent connections at this time, so it is the Service Provider's responsibility to track and report this information accurately each month. As vSAN Advanced for Desktop does not include vCenter Server for Desktop or vSphere for Desktop licensing;
	all use of those products must be reported separately, in addition to the usage of the vSAN Advanced for Desktop product.
Support	Production Level Support
More Information	A hardware independent solution, vSAN Advanced for Desktop can be deployed on a wide range of servers. Service Providers have two options for deploying vSAN for Desktop – a) vSAN Ready Nodes (pre-validated configurations of servers) and b) a component-based hardware compatibility list that enables Service Providers to pick and choose the components they prefer. For the latest information on vSAN Ready Nodes and supported hardware components (I/O controllers, HDDs and SSDs), refer to the VMware Compatibility Guide for vSAN at: http://www.vmware.com/resources/compatibility/search.php?deviceCategory=vSAN
	Also see: https://cloudsolutions.vmware.com/



VMware vSAN Enterprise Add-on for Desktop

Description	VMware vSAN Enterprise Add-on for Desktop offers Quality of Service and Stretched Cluster features on top of vSAN Standard for Desktop and vSAN Advanced for Desktop at incremental point value. It requires VMware Cloud Provider Program partners to install and utilize vSAN Standard for Desktop or vSAN Advanced for Desktop as the basis for vSAN Enterprise Add-on for Desktop. The Quality of Service control allows Service Providers to set up IOPS limit per VM to ensure mission-critical applications receive the necessary service level agreements. The Stretched Cluster allows Service Providers to create vSAN cluster between two geographically separate sites, synchronously replicating data between sites. It enables Service Providers to offer enterprise-level availability where an entire site failure can be tolerated, with zero Recovery Point Objective (RPO) and 99.999% uptime. vSAN Enterprise Add-on for Desktop is an a-la-carte option that can be used with other End User Computing products in the VMware Cloud Provider Program.		
Point Value / Charged Per	1 point per concurrent connection per month		
Components	VMware vSAN Enterprise Add-on for Desktop		
Reporting	Service Providers must manually report vSAN Enterprise Add-on for Desktop usage on top of vSAN Standard for Desktop or vSAN Advanced for Desktop each month in the VMware Cloud Provider Program Business Portal. The manually reported concurrent connections of vSAN Enterprise Add-on for Desktop shall match the concurrent connections of vSAN Standard for Desktop or vSAN Advanced for Desktop. Information on the number of concurrent connections is available through the vCenter Server virtual machine count. There is no automated report that keeps track of the maximum concurrent connections at this time, so it is the Service Provider's responsibility to track and report this information accurately each month. As vSAN Enterprise Add-on for Desktop does not include vCenter Server, vSphere, vSAN Standard for Desktop or vSAN Advanced for Desktop licensing; all use of those products must be reported separately, in addition to the usage of the vSAN Enterprise Add-on for Desktop product.		
Support	Production Level Support		
More Information	A hardware independent solution, vSAN Enterprise Add-on can be deployed on a wide range of servers. Service Providers have two options for deploying vSAN Enterprise Add-on – a) vSAN Ready Nodes (prevalidated configurations of servers) and b) a component-based hardware compatibility list that enables Service Providers to pick and choose the components they prefer. For the latest information on vSAN Ready Nodes and supported hardware components (I/O controllers, HDDs and SSDs), refer to the VMware Compatibility Guide for vSAN at: http://www.vmware.com/resources/compatibility/search.php?deviceCategory=vSAN . Also see: https://cloudsolutions.vmware.com/		



VMware NSX for Desktop

VMware NSX is the network virtualization platform for the Software-Defined Data Center, delivering the operational model of a virtual machine for entire networks.

VMware NSX for Desktop is available to VMware Cloud Provider Program Service Providers in two editions:

- VMware NSX Advanced for Desktop
- VMware NSX Enterprise for Desktop

VMware NSX Advanced for Desktop

Description	VMware NSX Advanced for Desktops is the network virtualization platform for Horizon, XenApp, and XenDesktop environments	
Point Value / Charged Per	5 points per concurrent connection per month	
Components	VMware NSX Advanced for Desktop	
Reporting	Service Providers must manually report NSX Advanced for Desktop usage each month in the VMware Cloud Provider Program Business Portal. Information on the number of concurrent connections is available through the vCenter Server virtual machine count.	
	There is no automated report that keeps track of the maximum concurrent connections at this time, so it is the Service Provider's responsibility to track and report this information accurately each month. As NSX Advanced for Desktop does not include vCenter Server for Desktop or vSphere for Desktop licensing; all use of those products must be reported separately, in addition to the usage of the NSX Advanced for Desktop product.	
Support	Production Level Support	
More Information	https://www.vmware.com/products/horizon/horizon-nsx.html or https://cloudsolutions.vmware.com/	



VMware NSX Enterprise for Desktop*

Description	VMware NSX Advanced for Desktops is the network virtualization platform for Horizon, XenApp, and XenDesktop environments across multiple data centers. Additionally, it includes:		
	Multi-site NSX optimizations		
	VPN (Ipsec and SSL) Remote Gateway		
	Integration with hardware VTEPs		
Point Value / Charged Per	8 points per concurrent connection per month		
Components	VMware NSX Enterprise for Desktop		
Reporting	Service Providers must manually report NSX Enterprise for Desktop usage each month in the VMware Cloud Provider Program Business Portal. Information on the number of concurrent connections is available through the vCenter Server virtual machine count.		
	There is no automated report that keeps track of the maximum concurrent connections currently, so it is the Service Provider's responsibility to track and report this information accurately each month.		
	As NSX Enterprise for Desktop does not include vCenter Server for Desktop or vSphere for Desktop licensing; all use of those products must be reported separately, in addition to the usage of the NSX Enterprise for Desktop product.		
Support	Production Level Support		
More Information	https://www.vmware.com/products/horizon/horizon-nsx.html or https://cloudsolutions.vmware.com/		

^{*} Existing partners, as of May 1, 2019 may continue to use current bundles for up to 18 months. Current bundles are not available to new VCPP partner contracts signed after April 30, 2019. Current bundles will be discontinued after Oct 31, 2020.



THIRD-PARTY SOFTWARE

Third-Party Product Terms

VMware may make products licensed by third parties ("Third-Party Products") available through the VMware Cloud Provider Program. The VMware end user license agreement does not apply to Third-Party Products. VMware does not provide support for Third-Party Products.

Third-Party Products are provided by VMware "AS IS" but may include warranty, support or indemnification from the Third-Party Product Provider. VMware hereby disclaims any warranty, support or indemnification obligations for Third-Party Products. Use of a Third-Party Product should be reported as if it were a VMware product under the VMware Cloud Provider Program.

By ordering Third-Party Products from VMware, Service Providers agree that VMware may share their information (including reported usage) with the Third-Party Product Provider for purposes of providing the Third-Party Product through VMware Cloud Provider Program.



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Blue Medora True Visibility for vRealize Operations

Blue Medora True Visibility is a Third- Party Product that provides additional value to vRealize Operations by providing Service Provider partners with advanced analysis, capacity planning, monitoring, reporting, and alerting for the entire infrastructure. True Visibility for vRealize Operations provides comprehensive storage, compute, network, converged infrastructure, container, database, and application monitoring within vRealize Operations, enabling staff to monitor and troubleshoot their entire infrastructure within one tool. Actual capabilities of vRealize Operations Manager vary by edition. 100-point minimum monthly commitment for usage of Blue Medora products is required.

Blue Medora True Visibility for vRealize Operations is available to VMware Cloud Provider Program Service Providers in four editions:

- Blue Medora True Visibility Standard
- Blue Medora True Visibility Advanced
- Blue Medora True Visibility Enterprise
- Blue Medora Manager of Managers

For a feature comparison visit: https://bluemedora.com/platforms/true-visibility-suite-for-VMware/vrealize-operations/.

The Blue Medora license terms are available at: https://bluemedora.com/eula/



Blue Medora True Visibility for vRealize Operations Standard

Description	True Visibility Suite Standard Edition includes access to compute layer integrations such as Cisco UCS, as well as access to Dell EMC storage monitoring for VNX, VMAX, and XtremelO.			
Point Value / Charged Per	1.25 points per VM or OSI per month			
Components	Blue Medora True Visibility for vRealize Operations Standard			
Reporting	Monthly usage for Blue Medora should align to the corresponding monthly usage reported for vRealize Operations and should be reported in the VMware Cloud Provider Program Business Portal each month.			
	Follow the usage reporting instructions for vRealize Operations included in Appendix B for capturing standalone reporting for vRealize Operations. Reporting for Blue Medora is manual and is not captured by the Usage Meter. 100-point minimum monthly commitment for usage of Blue Medora products is required.			
Support	Engineered by Blue Medora and validated by VMware, the True Visibility Suite includes an extensive knowledge portal and includes 24/7/365 individualized technical support through Blue Medora. Support can be reached via phone at +1.616.965.3175 or at support.bluemedora.com			
More Information	Limitations:			
	Professional Services will be contracted directly with and billed by Blue Medora.			
	Service Providers must have vRealize Operations in order to use True Visibility Suite. True Visibility Suite edition may not exceed the Service Provider's vRealize Operations edition. Example: A Service Provider with vRealize Operations Standard may not use True Visibility Advanced or Enterprise.			
	Additional Resources:			
	To contact Blue Medora for a live demo please submit your request via e-mail at sales@bluemedora.com			
	 Installation & Support will be provided by Blue Medora. All Blue Medora management packs within the True Visibility Suites are Service Provider installable. However, if a Service Provider is interested in customization or assistance with an advanced installation, please contact Blue Medora at sales@bluemedora.com to receive a custom Professional Services proposal. 			



Blue Medora True Visibility for vRealize Operations Advanced

Description	True Visibility Suite Advanced Edition includes everything from the Standard Edition, plus additional storage, network, converged, Hyper-Converged, virtualization, and container integrations such as NetApp FAS, Cisco Nexus, F5 BIG-IP, FlexPod, Pivotal, and more		
Point Value / Charged Per	3 points per VM or OSI per month		
Components	Blue Medora True Visibility for vRealize Operations Advanced		
Reporting	Monthly usage for Blue Medora should align to the corresponding monthly usage reported for vRealize Operations and should be reported in the VMware Cloud Provider Program Business Portal each month.		
	Follow the usage reporting instructions for vRealize Operations included in Appendix B for capturing standalone reporting for vRealize Operations. Reporting for Blue Medora is manual and is not captured by the Usage Meter. 100-point minimum monthly commitment for usage of Blue Medora products is required.		
Support	Engineered by Blue Medora and validated by VMware, the True Visibility Suite includes an extensive knowledge portal and includes 24/7/365 individualized technical support through Blue Medora. Support can be reached via phone at +1.616.965.3175 or at support.bluemedora.com		
More Information	Limitations		
	Professional Services will be contracted directly with and billed by Blue Medora.		
	Service Providers must have vRealize Operations in order to use True Visibility Suite. True Visibility Suite edition may not exceed the Service Provider's vRealize Operations edition. Example: A Service Provider with vRealize Operations Standard may not use True Visibility Advanced or Enterprise.		
	Additional Resources		
	To contact Blue Medora for a live demo please submit your request via e-mail at sales@bluemedora.com		
	 Installation & Support will be provided by Blue Medora. All Blue Medora management packs within the True Visibility Suites are Service Provider installable. However, if a Service Provider is interested in customization or assistance with an advanced installation, please contact Blue Medora at sales@bluemedora.com to receive a custom Professional Services proposal. 		



Blue Medora True Visibility for vRealize Operations Enterprise

Description	True Visibility Suite Enterprise Edition includes everything from Standard and Advanced Edition, plus database, big data, platform, and application integrations including Oracle Database, Microsoft SQL, Amazon, SAP, and more.			
Point Value / Charged Per	6 points per VM or OSI per month			
Components	Blue Medora True Visibility for vRealize Operations Enterprise			
Reporting	Monthly usage for Blue Medora should align to the corresponding monthly usage reported for vRealize Operations and should be reported in the VMware Cloud Provider Program Business Portal each month.			
	Follow the usage reporting instructions for vRealize Operations included in <u>Appendix B</u> for capturing standalone reporting for vRealize Operations. Reporting for Blue Medora is manual and is not captured by the Usage Meter. 100-point minimum monthly commitment for usage of Blue Medora products is required.			
Support	Engineered by Blue Medora and validated by VMware, the True Visibility Suite includes an extensive knowledge portal and includes 24/7/365 individualized technical support through Blue Medora. Support can be reached via phone at +1.616.965.3175 or at support.bluemedora.com			
More Information	Limitations:			
	Professional Services will be contracted directly with and billed by Blue Medora.			
	Service Providers must have vRealize Operations in order to use True Visibility Suite. True Visibility Suite edition may not exceed the Service Provider's vRealize Operations edition. Example: A Service Provider with vRealize Operations Standard may not use True Visibility Advanced or Enterprise.			
	Additional Resources:			
	To contact Blue Medora for a live demo please submit your request via e-mail at sales@bluemedora.com			
	 Installation & Support will be provided by Blue Medora. All Blue Medora management packs within the True Visibility Suites are Service Provider installable. However, if a Service Provider is interested in customization or assistance with an advanced installation, please contact Blue Medora at sales@bluemedora.com to receive a custom Professional Services proposal. 			



Blue Medora True Visibility for vRealize Operations Manager of Managers

Description	The True Visibility connector's management pack suite compliments VMware's vRealize Operations offerings with a variety of management packs for pulling management data in from domain specific management platforms, and analyzing for deeper usage, capacity, trend and health data. Please note that the Manager of Manager Connectors pack is only available to add on to the True Visibility Suite – Advanced. 100-point minimum monthly commitment for usage of Blue Medora products is required.	
	*OSI stands for OS Instance. This measure is used for non-VMware environments, including physical.	
Point Value / Charged Per	1.25 points per VM or OSI per month	
Components	Blue Medora True Visibility for vRealize Operations Enterprise	
Reporting	Monthly usage for Blue Medora should align to the corresponding monthly usage reported for vRealize Operations and should be reported in the VMware Cloud Provider Program Business Portal each month.	
	Follow the usage reporting instructions for vRealize Operations included in Appendix B for capturing standalone reporting for vRealize Operations. Reporting for Blue Medora is manual and is not captured by the Usage Meter. 100-point minimum monthly commitment for usage of Blue Medora products is required.	
Support	Engineered by Blue Medora and validated by VMware, the True Visibility Suite includes an extensive knowledge portal and includes 24/7/365 individualized technical support through Blue Medora. Support can be reached via phone at +1.616.965.3175 or at support.bluemedora.com	
More Information	Limitations:	
	Professional Services will be contracted directly with and billed by Blue Medora.	
	Service Providers must have vRealize Operations in order to use True Visibility Suite. True Visibility Suite edition may not exceed the Service Provider's vRealize Operations edition. Example: A Service Provider with vRealize Operations Standard may not use True Visibility Advanced or Enterprise.	
	Additional Resources:	
	To contact Blue Medora for a live demo please submit your request via e-mail at sales@bluemedora.com	
	 Installation & Support will be provided by Blue Medora. All Blue Medora management packs within the True Visibility Suites are Service Provider installable. However, if a Service Provider is interested in customization or assistance with an advanced installation, please contact Blue Medora at sales@bluemedora.com to receive a custom Professional Services proposal. 	



Caveonix RiskForesight Solution for VMware Cloud Provider Program

Product Level	Min Monthly Volume	Point Value / VM*	Components
Standard	> 100	15	RiskForesight™ for VMware Cloud Provider Program
Extended	> 1,000	13.5	RiskForesight™ for VMware Cloud Provider Program
Classic	> 3,000	12.8	RiskForesight™ for VMware Cloud Provider Program
Premium	> 10,000	12.2	RiskForesight™ for VMware Cloud Provider Program
Global	> 15,000	11.6	RiskForesight™ for VMware Cloud Provider Program

Description	Caveonix RiskForesight™ is the first multi-tenant Cyber Risk & Compliance Management platform for the hybrid cloud, enabling Service Providers to offer workload protection services to their customers. The RiskForesight hybrid cloud workload protection platform (Hybrid CWPP), has been designed from ground-up to be a multi-tenant solution. It provides proactive workload protection from risks due to Cyberthreats as well as regulatory Compliance issues.
	RiskForesight provides real-time visibility into what is running in the customer's hybrid cloud. RiskForesight integrates into the Service Providers cloud orchestration platform based on VMware Cloud technology stack such as vCD, NSX, vCenter, vRA, vSphere, VMC on AWS, as well as the hyperscale public clouds. RiskForesight is a ready to deploy solution for Cloud Service Providers, Managed Service Providers, Managed Security Service Providers, and IT System Integrators.
Reporting	VMware Cloud Provider Program partners need to manually report monthly usage in the VMware Cloud Provider Program Business Portal. Individual Tenant monthly usage data is made available through the Caveonix RiskForesight product.
Support	Sales Support can be reached by Phone- 833.462.2836 or mailto:VCPP_Sales@caveonix.com Customer Support can be reached by mailto:Support@Caveonix.com
More Information	Professional Services will be contracted directly with and billed by Caveonix. • https://marketplace.vmware.com/vsx/search/RiskForesight • https://www.caveonix.com

Note: Price per point for third party products VM is different to your contracted VCPP price per point



vCloud Director Data Protection Solution

Product Level	Volume	Point Value / VM*	Components
Standard	<100	8.87	Data Protection Suite (DPS)
Extended	<1,000	3.46	Data Protection Suite (DPS)
Classic	<3,000	3.28	Data Protection Suite (DPS)
Premium	<7,500	3.02	Data Protection Suite (DPS)
Global	<18,000	2.66	Data Protection Suite (DPS)

Description	vCloud Director Data Protection enables VMware Cloud Provider Partners to offer backup-as-a-service with self-service recovery to their end-user customers (tenants). Powered by Dell EMC Data Protection Suite (DPS), it provides high performance backup while minimizing the cost-to-serve. The DPS SKU in VCPP includes only the following:			
	 Avamar Virtual Edition Data Protection Search Data Protection Advisor Data Protection Central 			
Reporting	vCloud Director Data Protection reporting is manual. For additional information on reporting, please see Appendix B			
Support	Production Level Support provided directly by Dell EMC			
More Information	 vCloud Director v9.10 or above is required. Older versions are not currently supported Backup-as-a-service, when purchased without protection storage can be used in combination with Data Domain hardware appliances or Data Domain Virtual Edition purchased separately. To learn more about vCloud Director Data Protection visit: https://www.dellemc.com/content/dam/digitalassets/active/en/unauth/offering-overview-documents/products/data-protection/data-protection-for-vmware-cloud-providers.pdf 			

Note: Price per point for third party products VM is different to your contracted VCPP price per point



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vCloud Director Data Domain Virtual Solution

Product Level	Volume	Point Value / VM*	Components
Standard	<100	23.47	Data Protection Suite (DPS) and Data Domain Virtual Edition (DDVE)
Extended	<1,000	9.15	Data Protection Suite (DPS) and Data Domain Virtual Edition (DDVE)
Classic	<3,000	8.68	Data Protection Suite (DPS) and Data Domain Virtual Edition (DDVE)
Premium	<7,500	7.98	Data Protection Suite (DPS) and Data Domain Virtual Edition (DDVE)
Global	<18,000	7.04	Data Protection Suite (DPS) and Data Domain Virtual Edition (DDVE)

Description	vCloud Director Data Protection enables VMware Cloud Provider Partners to offer backup-as-a-service with self-service recovery to their end-user customers (tenants). Powered by Dell EMC Data Protection Suite (DPS) and Data Domain Virtual Edition (DDVE), it provides high performance backup while minimizing the cost-to-serve.	
Support	Production Level Support provided directly by Dell EMC	
More Information	 vCloud Director v9.10 or above is required. Older versions are not currently supported Backup-as-a-service, when purchased without protection storage can be used in combination with Data Domain hardware appliances or Data Domain Virtual Edition purchased separately. 	
	To learn more about vCloud Director Data Protection visit:	
	https://www.dellemc.com/content/dam/digitalassets/active/en/unauth/offering-overview-documents/products/data-protection/data-protection-for-VMware-cloud-providers.pdf	



VMware vCloud Director Object Storage Extension (with Cloudian Hyperstore)

Product Level	Volume Level (in TB)	VCPP Points (per GB/month)
VCAN-CLD-OBJ-STR-TIER1	<500	0.0110*
VCAN-CLD-OBJ-STR-TIER2	500-1,.000	0.0086*
VCAN-CLD-OBJ-STR-TIER3	1,000-5,000	0.0072*
VCAN-CLD-OBJ-STR-TIER4	5,000-10,000	0.0055*
VCAN-CLD-OBJ-STR-TIER5	>10,000	0.0050*

Description	VMware vCloud Director Object Storage Extension enables VMware Cloud Provider Partners to offer Object Storage as a Service leveraging their in-house & heterogeneous storage media Powered by Cloudian it provides high performance, scalable and highly compliant S3 API based service while greatly minimizing the total cost of running the service.		
Reporting	vCloud Director Data Protection reporting is manual. To generate the report, Service Providers will leverage Cloudian's Smart Support Feature that provides system usage and status information. Smart Support employs proactive analysis and alerts to help the Cloudian Support team maximize system uptime and performance.		
	Service Provider will have to enable Smart Support on Cloudian's system to be able to report usage. If enabled, system logs are generated once per day and sent to Cloudian Support. Communication is one-way only. No additional information may be requested. Data is sent only via https protocol through port 443. No user object data is either transmitted or accessible via Smart Support.		
	Smart Support is configured to communicate only with a specific end point hosted by Cloudian Support. Users can further limit this by configuring a firewall to permit port 443 communication only between the Cloudian system and the Cloudian Support.		
	Cloudian will generate a month-end report based on the data from Smart Support system. This monthly usage report will then be used for reporting in vCPP business portal.		
Support	Production Level Support provided directly by Cloudian		
More Information	vCloud Director v9.10 and above are required for vCloud Director Object Storage Extension.		
	Different SKUs (product levels) are reflective of corresponding volume discounts. No additional discounting is available/applicable in addition.		
	To learn more about vCloud Director Data Protection visit:		
	 https://docs.vmware.com/en/VMware-vCloud-Director-Object-Storage-Extension/index.html https://cloudian.com/vmware/ 		

^{*} Product levels listed below are reflective of corresponding volume discounts. No additional discounts are applicable beyond what is already reflected in SKUs/product levels.



Appendix A

ADJUSTING REPORTS WITH MANUALLY COLLECTED PRODUCT USAGE DATA

Depending on the products used by Service Providers, monthly reports may need to be manually adjusted to accurately report all required data.

This appendix explains how to adjust reports to place product usage into the correct bundle or standalone line items.

Two different approaches are used to adjust a monthly report with manually collected data.

- If the product usage will be reported standalone, then a simple count of VMs running the products is required. The billed GB usage is removed from the bundle reported by vCloud Usage Meter and added to the report as a new standalone line item.
- However, if the product usage will be reported as part of a bundle, then a more complex process is followed. The
 total Memory Allocation for all VMs running the product must be subtracted from the 'Reported Bundle' and added to
 a bundle that includes the product.

To reduce reporting complexity, rather than retrieving the actual vRAM reserved by each VM running a product, an Average Billed vRAM value is used as the memory billed for each VM.



REPORTING FLEX PRICING MODEL

Bundle Translation:

The Flex Pricing Model is reported in the Business Portal through Bundle-to-Flex translation. Partners that have transitioned to the Flex Pricing Model will input their usage on the first page of the monthly report in the bundle format and the Business Portal will translate the bundles to Flex Core and Add-On usage.

Current Bundles		In Flex Model		
Name	Points	Equivalent	Points	Comments
Advanced	7	Core	7	No change
Standard w/ Networking	8	Core + NSX-DC Prof.	7 + 2 = 9	Discount 1 Pt*
Standard w/ Management	8	Core + vROps Ent	7 + 3 = 10	Discount 2 Pt*
Advanced w/ Networking	9	Core + NSX-DC Prof.	7 + 2 = 9	No Change
Advanced w/ Management	10	Core + vROps Ent	7 + 3 = 10	No Change
Advanced w/ Networking & Management	12	Core + vROps Ent + NSX-DC Adv.	7 + 3 + 3 = 13	Discount 1 Pt*

Manually Reporting Flex Add-Ons:

Use of additional Flex Add-Ons can be reported under the standalone section of the monthly report.

- If a partner wishes to report a different add-on, (ex. NSX DC Enterprise+ instead of NSX DC Advanced through bundle translation), the partner should report the units from the original bundle as Advanced Bundle, and add the same unit count to the accompanying Add-On.
- If a partner wishes to report usage for an add-on not tied to a previous bundle, the partner needs to calculate the Unit count associated with the usage and add it to the accompanying SKU in the Flex Add-On Standalone section of the monthly report.



Standalone Reporting

Reporting product usage as standalone entries for NSX or vRealize Operations

Add new line entries to the monthly report for each standalone product reported (NSX or vRealize Operations). For each product:

- 1. Determine the count of VMs running the product (See Appendix for details)
- Add a line item to the monthly usage report as follows: Product Name <IP address of instance> <Version> <VM count >

Reporting product usage as standalone entries for Virtual SAN

Add a new line entry to the monthly report for Virtual SAN storage usage.

For each product:

- 1. Determine the Virtual SAN Used storage capacity in GB (See Appendix for details)
- 2. Add a line item to the monthly usage report as follows: Product Name < Version > < GB >

Reporting product usage as standalone entries for vCloud Availability

Add a new line entry to the monthly report for vCloud Availability usage.

For each product:

- 1. Determine the vCPU and vStorage used by vCloud Availability (See Appendix for details)
- 2. Add an additional line item to the monthly usage report for each Organization with VMs protected by vCloud Availability in the following format:
 - Organization Name, CountOfProtectedVMs, TotalStorageUsedByVMsInBytes



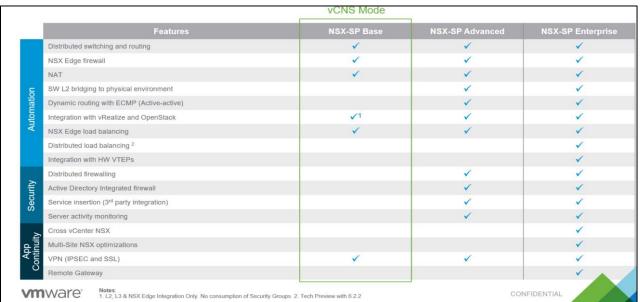
Reporting Product Usage Using VMware Cloud Provider Program Bundles*

Manual reporting on VMware Cloud Provider Program bundles is determined by the answer to three questions:

- Is NSX deployed? If so, which edition?
- Is vRealize Operations deployed?
- Is vCloud Director deployed?

Based on the answer to these questions a single line will be added to the monthly report. See the following tables for more information:

NSX Features Comparison*



^{*} Existing partners, as of May 1, 2019 may continue to use current bundles for up to 18 months. Current bundles are not available to new VCPP partner contracts signed after April 30, 2019. Current bundles will be discontinued after Oct 31, 2020.



NSX DC SP Features Comparison

	NSX DC SP Base	NSX DC SP Professional	NSX DC SP Advanced	NSX DC SP Enterprise Plus	
	Agility and automation of the network	Standard, plus a fundamentally more secure data center	Standard, plus a fundamentally more secure data center	Advanced, plus networking and security across multiple domains	
Distributed switching and routing				✓	
NSX Edge firewall			√	√	
NSX Edge NAT			√	√	
SW L2 bridging to Physical Environments			√	√	
Dynamic routing with ECMP (Active-active)				√	
Integration with Cloud Management Platforms ¹				√	
Distributed firewalling for VMs and workloads running on Bare Metal		√	✓	✓	
VPN (L2 and L3)	<u>✓</u>	✓	✓	✓	
Integration with NSX Cloud ² for AWS and Azure Support		✓	✓	✓	
NSX Edge Load Balancing	<u> </u>			√	
Integration with Distributed Firewall (Active Directory, VMware AirWatch and Third-party Service insertion)			✓	✓	
Container Networking and Security			✓	✓	
Multisite Networking and Security			✓	✓	
IPv6			✓	✓	
Context-Aware Micro-Segmentation (Application Identification, RDSH)				✓	
URL Filtering				✓	
+vRealize Network Insight Advanced				√	
Traffic (IPFIX) Visibility and Monitoring				✓	
Firewall Planning and Management				✓	
NSX Operations and Troubleshooting				✓	
+NSX Hybrid Connect Advanced				✓	
Large-Scale Workload Migration				✓	
WAN Optimization for Workload Migration				✓	
Traffic and Load Management Across Multiple Links				√	

L2, L3, and NSX Edge integration only. No consumption of security groups.
 NSX Cloud subscription required for public cloud workloads
 Different from NSBU Editions

* NOTE: NSX Cloud is not included in VCPP NSX



ADJUSTING VCLOUD USAGE METER REPORTS

Completing the steps in this section requires two or three values depending on whether both NSX and vRealize Operations are deployed.

- A count of VMs running vRealize Operations
- A count of VMs running NSX
- A value that represents the Avg. Billed vRAM.

Refer to Appendix A for instructions on obtaining these values before proceeding.

STEPS TO ADJUST VCLOUD USAGE METER REPORTS

- 1. Select the products in use and determine the type of bundle to be added to the report.
- 2. Run the Monthly Usage Report.
- 3. Read from the report the vCloud Service Provider Bundle Premier Edition GB value. This is Value A.
- 4. Determine Value B -
 - If only NSX is deployed, multiply the total count of NSX VMs by average billed vRAM to compute Value B.
 - If only vRealize Operations is deployed, multiply the total count of vRealize Operations VMs by average billed vRAM to compute Value B.
 - If both NSX and vRealize Operations are deployed, multiply the larger of the two values by average billed vRAM to compute Value B.
- 5. Update the report as follows:
 - a. Update: vCloud Service Provider Bundle Premier Edition = A-B
 - b. Add: vCloud Service Provider Bundle Bundle Name From Flowchart = B

STEPS TO ADJUST VCLOUD USAGE METER REPORTS FOR MIXED EDITIONS OF NSX

To report mixed editions of NSX you will need to first run your Usage Meter report. The report will indicate the bundle with the highest level of NSX used. To report multiple editions of NSX you will need to subtract usage for the lower point bundle from the bundle that is indicated on your Usage Meter report and manually report for the lower bundle. The sum of the two bundles should equal the amount of usage indicated on the UM report.

For Example: If your Usage Meter report indicates that you used 100 vRAM of the new VMware Cloud Provider Program Advanced with Networking and Management Bundle and you would like to report usage of both NSX Enterprise and NSX advanced you would need to do the following:

- 1. Determine the VMs that are using NSX Advanced Features and the VMs that are using the NSX Enterprise Features.
- Deduct the Average vRAM for the VMs using NSX Advanced from the amount of vRAM indicated on the UM Report for the New Advanced with Networking and Management Bundle. For example, if you are using 50GB of vRAM of NSX advanced features deduct 50GB of vRAM from the New Advanced with Networking and Management Bundle.
- 3. Report the deducted vRAM amount under the new VMware Cloud Provider Program Advanced with Networking Bundle and report the remainder of the vRAM under the new VMware Cloud Provider Program Advanced with Networking and Management Bundle. Note the sum of vRAM for the two bundles should equal the vRAM indicated on your UM report for the New Advanced with Networking and Management Bundle. In this example you would report 50GB of vRAM to the New Advanced with Networking Bundle and 50GB of vRAM to the New Advanced with Networking and Management Bundle.



Appendix B

MANUALLY COLLECTING USAGE DATA FOR VCLOUD AVAILABILITY

Usage Meter versions before Usage Meter 3.6 do not report usage for vCloud Availability. If you are using a previous version of Usage Meter, please follow the reporting instructions below:

Service Providers using vCloud Availability are required to execute a script once each reporting period and enter the data into the Business Portal.

A Python script is used to automate the retrieval of usage data for vCloud Availability.

The script is available on github.com at https://github.com/VMware/vcloud-availability-examples Refer to the README file at

Script Execution

Each execution of the script returns a point-in-time listing of protected VMs' virtual storage usage by Organization.

Run the script providing the following values:

the above link for script installation instructions.

- A vCD System domain administrator username & password.
- The IP or DNS name of vCloud Director.

For Example:

\$ python gen_usage_report.py root my password 10.162.102.164

This returns output in the format:

['Organization', 'TotalReplicatedVMs', 'TotalOrganizationReplicationSize']VMware

For example:

[('tenant1Org', 0, 0), ('tenant2Org', 2, 760225792)]

The output contains a list of Organizations, with each Organization in parenthesis.

For each Organization, three values are output:

- 1. The Organization name
- 2. A total count of protected VMs in the Organization
- 3. The total storage used by the protected VMs in the Organization in Bytes



In the sample execution above, the first Organization name is Tenant1Org, the total count of protected VMs in Tenant1Org is 0, and the total storage used by protected VMs in Tenant1Org is 0.

The second Organization is named tenant2Org, it has two replicated VMs using a total of 760225792 Bytes of storage.

Reporting Usage

Service providers should execute the script once per reporting period, as close to the end of the billing period as possible. The script outputs data based on the current state of the system, no historical data is collected.

The output for Organizations with non-zero values are entered into the Business Portal to record standalone use of vCloud Availability.

A Note about Migrations: vCloud Availability may be used to perform 'VM Migrations', where replication is configured solely for the purpose of moving a tenant virtual machine to a cloud provider. In such cases, the replication is not used for Disaster Recovery protection. When migration is complete, the associated replication configuration is deleted. Replications used for Migration with vCloud Availability can be performed at zero cost. To avoid being charged for replications associated with migrations, ensure no migrations are in progress when the gen usage report is executed.



MANUAL METERING DELL DATA PROTECTION FOR VCLOUD DIRECTOR

vCloud Director Data Protection reporting is manual. The number of protected VMs can be queried via REST API in the following way:

1. Get the list of tenant organizations GET: /api/org <OrgList href="https://cncd-av-vm-235-85.ccoe.lab.emc.com/api/org/"> <Org href="https://cncd-av-vm-235-85.ccoe.lab.emc.com/api/org/a93c9db9-7471-3192-8d09-</pre> a8f7eeda85f9" name="System" /> <Org href="https://cncd-av-vm-235-85.ccoe.lab.emc.com/api/org/c0bd6ecb-c51f-4e81-ab21f113d4443b31" name="rita2" /> <Org href="https://cncd-av-vm-235-85.ccoe.lab.emc.com/api/org/c349cae2-ce44-43ab-8306-**4279cb134dff**" name="rita1" /> </OrgList> For each tenant organization, get the list of vDCs GET: /api/admin/org/{{org-id}} <AdminOrg name="rita1" id="urn:vcloud:org:c349cae2-ce44-43ab-8306-4279cb134dff" href="https://cncd-av-vm-</p> 235-85.ccoe.lab.emc.com/api/admin/org/c349cae2-ce44-43ab-8306-4279cb134dff" > <Vdcs> <Vdc href="https://cncd-av-vm-235-85.ccoe.lab.emc.com/api/vdc/6dc11ff9-33fe-4625-93c9-2af625b19ff6" name="coke-vdc-1" /> <Vdc href="https://cncd-av-vm-235-85.ccoe.lab.emc.com/api/vdc/**553daf05-c8b3-4058-a27ab18c164dd761**" name="pepsi-vdc-2" /> <Vdc href="https://cncd-av-vm-235-85.ccoe.lab.emc.com/api/vdc/d6837471-b688-4ac9-8cc2-122ee38451bc" name="vdc33" /> </Vdcs> </AdminOrg> 3. For each vDC, get the "Protection Overview" GET: /api/admin/extension/vdc/{{vdc-id}}/protectionOverview <VdcOverview name="coke-vdc-1" totalVms="5" totalStorage="82678120448" unprotectedVms="3"unprotectedStorage="65498251264"> <PolicyRef href="https://cncd-av-vm-235-85.ccoe.lab.emc.com/api/admin/extension/vdc/6dc11ff9-33fe-4625-93c9-2af625b19ff6/BackupPolicy/1647d2d6-eaf5-4a40-a43d-bff6e203d461" name="ondemandvdc1" quotaValue="549755813888" quotaUsaqe="17179869184" protectedVms="2"

The number of protected VMs can be derived at the vDC level by subtracting unprotected Vms from total Vms.

Report the usage into the VMware Cloud Provider Business Portal.

protectedStorage="17179869184"/>



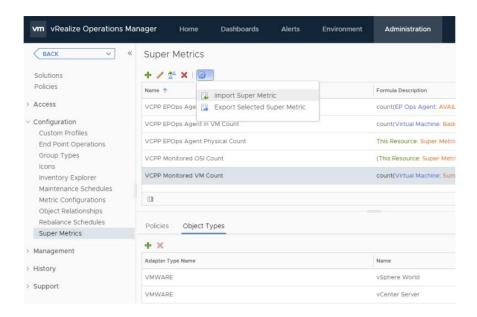
</VdcOverview>

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MANUAL METERING WITH VREALIZE OPERATIONS REPORTS

Metering Configuration

Metering requires the use of super metrics and a report to perform the necessary calculations. The steps in this section show how to import preconfigured super metrics and reports to automate metering and reporting.



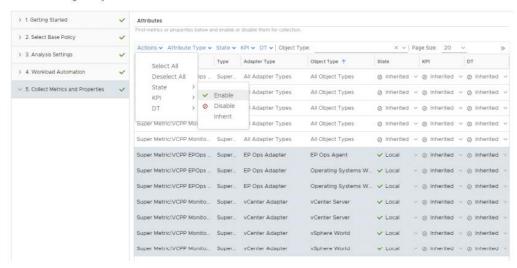
- 1. Import all super metric configuration files defined in Appendix A: Super Metric Definitions.
- 2. Set the Object Type for each super metric as shown in the following table.

Super Metric	Adapter Type	Object Type
VCPP EPOps Agent in VM Count	EP Ops Adapter	EP Ops Agent
VCPP EPOps Agent Count	EP Ops Adapter	Operating Systems World
VCPP EPOps Agent Physical Count	EP Ops Adapter	Operating Systems World
VCPP Monitored OSI Count	VMWARE	vCenter Server
VCPP Monitored OSI Count	VMWARE	vSphere World
VCPP Monitored VM Count	VMWARE	vCenter Server
VCPP Monitored VM Count	VMWARE	vSphere World

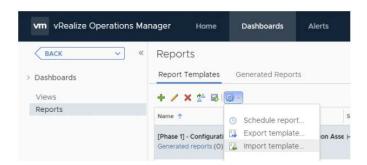


3. Enable super metrics in the policy editor for highlighted object types as shown in the following figure.

Edit Monitoring Policy



- 4. Navigate to Dashboards / Reports.
- 5. Import the report template defined in Appendix B: Report Template.



Reporting Configuration

Reports can be scheduled within vRealize Operations to automate the reporting process. The following steps show how to send the reports through email on a scheduled basis:

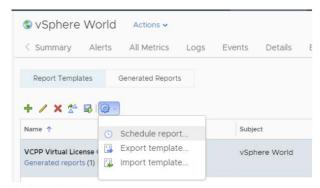
- 1. Navigate to vSphere World Object.
- 2. Select the Reports tab.
- 3. Select the VCPP Virtual License Count report.
- 4. Click Schedule report.
- 5. Configure the schedule to send email monthly.



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*Note

While this illustrates sending a global report, the same process applies to reporting for Tenant usage. Instead of selecting vSphere World Object, select the object that represents a Tenant when scheduling the report.



1. VCPP Virtual License Counts

Name	Month	Average OSI	
vSphere World	June 2017	116.27	
vSphere World	July 2017	116.51	
vSphere World	August 2017	113	

References:

Document Title	Link or URL
VMware vCloud Architecture Toolkit for Service Providers	https://www.vmware.com/solutions/cloud-computing/vcat-sp.html
vCloud Architecture Toolkit (vCAT) Blog	https://blogs.vmware.com/vcat/
Multitenant Use of VMware vRealize Operations as a Service	https://www.vmware.com/content/dam/dig talmarketing/vmware/en/pdf/vcat/vmware- multitenant-vrealize-operations-as-a- service.pdf
vRealize Operations Manager Sizing Guidelines (2093783)	https://kb.vmware.com/kb/2093783



Appendix A: Super Metrics Definitions

VCPP EPOps Agent in VM Count

VCPP EPOps Agent Physical Count

```
Save this code as sm_VCPP EPOps Agent Physical Count.json.
```

mware

}

VCPP EPOps Agent Count

VCPP Monitored OSI Count

```
Save this code as sm_VCPP Monitored OSI Count.json.
```

```
{
 "ea33ba48-3a9d-4be3-9c98-e227e102c4b2": {
    "resourceKinds": [
     {
        "resourceKindKey": "VMware Adapter Instance",
        "adapterKindKey": "VMWARE"
     },
        "resourceKindKey": "vSphere World",
        "adapterKindKey": "VMWARE"
     }
    1.
    "name": "VCPP Monitored OSI Count",
    "formula": "(${this, metric=Super Metric|sm_8a7bd06e-ae7a-4b8a-83d8-691be8976eb5}
> 0) ? (${this, metric=Super Metric|sm_8a7bd06e-ae7a-4b8a-83d8-691be8976eb5}) : ($
{this, metric=summary|total_number_hosts})",
    "description": ""
```

mware

VCPP Monitored VM Count

```
Save this code as VCPP Virtual License Counts.xml.
```

Appendix B: Report Template

VCPP Virtual License Counts

Save this code as VCPP Virtual License Counts.xml.

mware[®]

```
<Usage>content</Usage>
            <Controls>
                <Control id="time-interval-selector_id_26" type="time-interval-</pre>
selector" visible="false">
                    <Property name="advancedTimeMode" value="false"/>
                    <Property name="unit" value="YEARS"/>
                    <Property name="count" value="1"/>
                </Control>
                <Control id="attributes-selector_id_27" type="attributes-selector"</pre>
visible="false">
                    <Property name="attributeInfos">
                        <List>
                            <Item>
<Value>
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</Value>
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e227e102c4b2"/>
    <Property name="id" value="extModel1219-2"/>
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        </List>
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```

mware

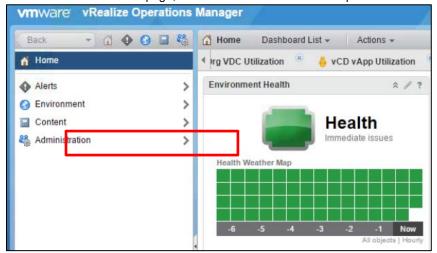
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```
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            <Description/>
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            </Settings>
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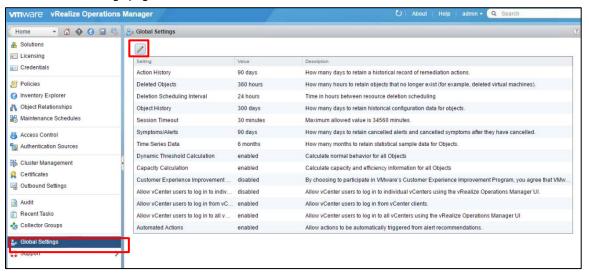


CREATING A REPORT IN VREALIZE OPERATIONS MANAGER

- 1. Log in to vRealize Operations Manager.
- 2. Set the time period for storing deleted object data to 30 days.
 - a. In the Home page, click Administration in the left pane.

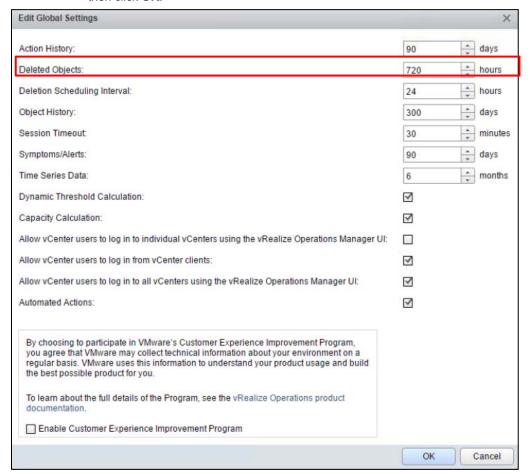


 In the left pane, click Global Settings, then click the Edit Global Settings icon at the top of the Global Settings page.





 In the Edit Global Settings page, change the value of the **Deleted Objects** field from **360** hours to **720** hours, then click **OK**.





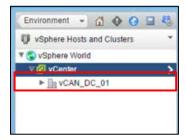
- 3. Create a new View to obtain the list of VMs managed by vRealize Operations.
 - a. In the left pane, click **Home** to go to the vRealize Operations Manager Home page.
 - b. In the left pane, click Environment.



c. Click vSphere Hosts and Clusters under Inventory Trees.

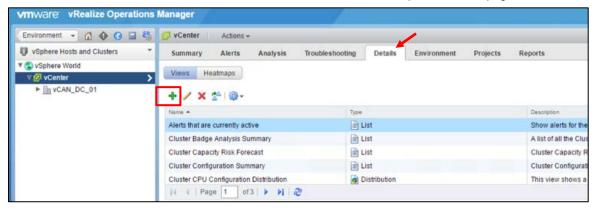


d. Expand **vSphere World** and select the vCenter Server for which you want to create the report. **Note:** You must create a report for every vCenter Server under vRealize Operations management.

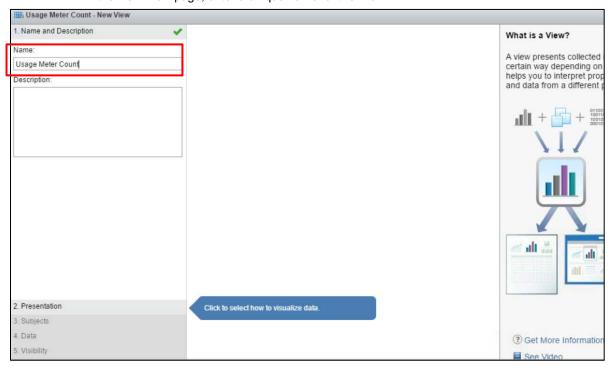


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e. Click the **Details** tab, then click the **Create View** icon at the top of the Views page.

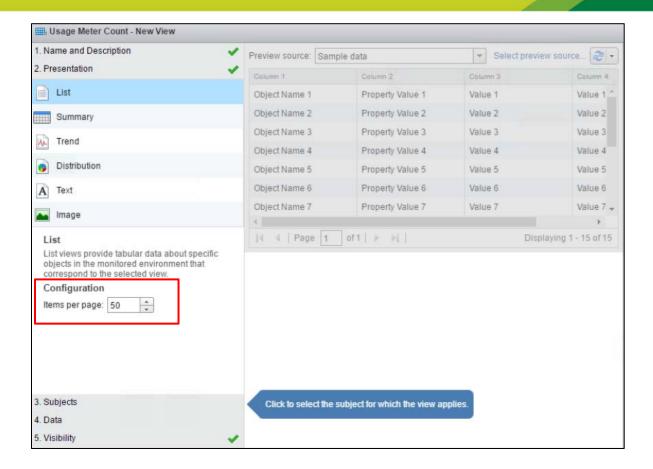


f. In the New View page, enter a unique name for the View.

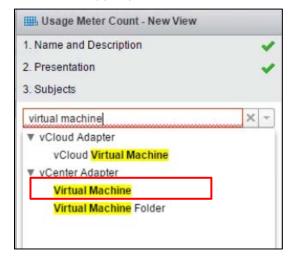


- g. Click Presentation at the bottom of the New View page, then click List.
- h. Under Configuration, you can modify the number of items displayed per page.

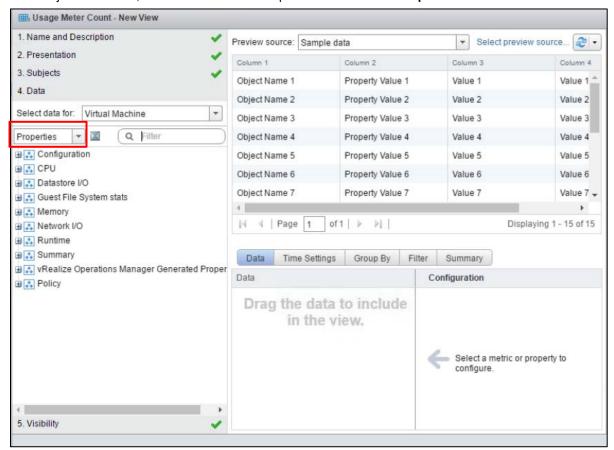




 Click Subjects and type Virtual Machine in the text field. From the drop-down list that appears, select Virtual Machine.





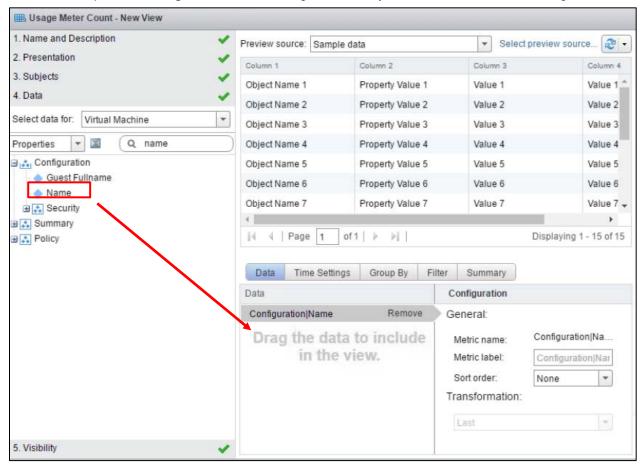


j. Click Data, then click the Metrics drop-down list and select Properties.

Note: In vRealize Operations 6.0, this step is different. Instead of clicking the **Metrics** drop-down list, you need to click the folder icon under the **Select data for** field. The search box appears. Then proceed to the next step.

k. In the search box next to **Properties**, type Name, then press **Enter**.

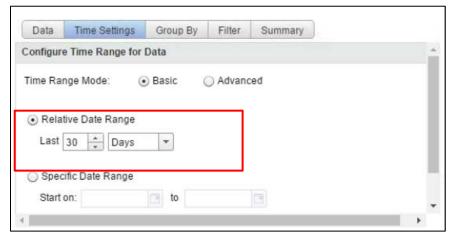




I. Expand the Configuration menu and drag the Name object into the Data window on the right.

The Data window displays Configuration|Name when the Name object has been added successfully.

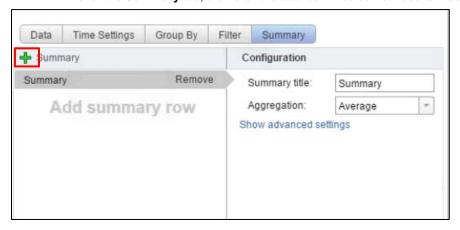
m. Click the Time Settings tab and change the Relative Date Range field from 7 days to 30 days.



Note: In vRealize Operations 6.0, this step is different. Instead of clicking the **Time Settings** tab, you set the time range for the View in the **Show data for last <number>** field. This field appears just above the tabs.

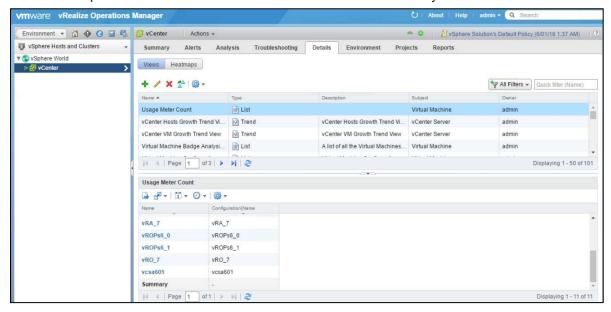


n. Click the **Summary** tab, then click the 🛨 icon. You do not need to modify any of the fields that appear.



o. Click Save.

The View is displayed. From the list of VMs in the View, count only those VMs that are managed by vRealize Operations. Do not use the total number of VMs in the list as it may include other VMs.



4. Run the View at any time from the **Details** tab of the **Environment – vSphere Hosts & Clusters - vCenter** page by clicking the View name. From the list of VMs that is displayed, count only those VMs that are managed by vRealize Operations.

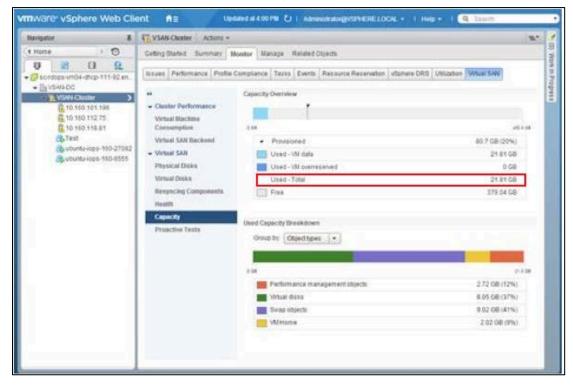
The VM count value is used when manually adjusting monthly reports for bundles or standalone use.

Refer to Appendix A. for information on adjusting monthly reports.



Manually Collecting Usage Data for vSAN

The Used Capacity for each Virtual SAN cluster can be found in the vSphere Web Client under the **Capacity** tab as shown below. If the data center has several vSAN clusters, each one will be shown:



This **Used – Total** value will be used as the 'vSAN Storage Used' value per VM in all manual reporting adjustments.

Refer to Appendix A. for information on adjusting monthly reports.



Manually Collecting Usage Data for NSX

To collect NSX usage data, determine the number of VMs in your vCenter Server instance that use NSX.

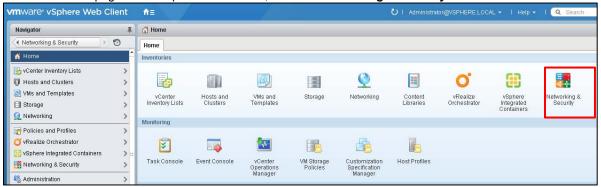
Collecting this information involves the following tasks:

- Determine the hosts that have NSX installed.
- Export a list of all the VMs in the vCenter Server.
- From the list, count the number of VMs on each host that has NSX installed.

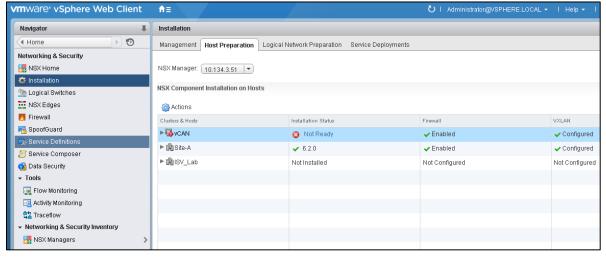
Collect NSX Usage Data

Use a browser to log into the vSphere Web Client.

2. In the Home page of the vSphere Web Client, click the Networking & Security icon.

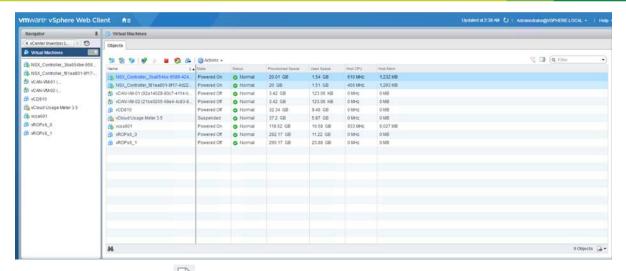


 In the Navigator pane on the left, under Networking & Security, click Installation, then select the Host Preparation tab.

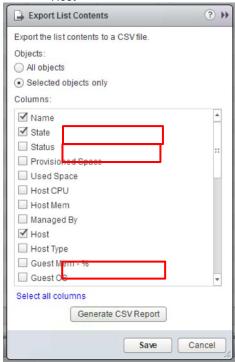


- 4. Make a note of the hosts that have NSX installed.
- 5. In the Navigator pane, click **Home** to return to the vSphere Web Client Home page.
- In the Navigator pane, click vCenter Inventory Lists, then click Virtual Machines.
 All the virtual machines in your vCenter Server instance are listed.





- 7. Click the Export List icon at the bottom-right of the page to export the list of VMs.
- 8. In the Export List Contents pop-up window, select the following items:
 - Name
 - State
 - Host



- 9. Click Generate CSV Report.
- 10. Sort the report by host name and count the number of VMs on each host that has NSX installed.

The total number of VMs running NSX is used while manually adjusting monthly reports for bundles or standalone product usage. Refer to Appendix A. for information on adjusting monthly reports.



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