

VMware vCloud Usage Meter Data Privacy and Sharing Guidelines

VMware vCloud Usage Meter 4.x

Version – 2.0

Note: The VMware partner facing guidance and process definitions may be updated at any time.

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1. Scope

This document is for VMware Cloud Services Provider partners. It primarily addresses Frequently Asked Questions (FAQ) about the VMware vCloud Usage Meter 4.x data sharing policy and provides details about the data sent from the partner to VMware by Broadcom. This document also provides information about VMware Cloud Services Console and gives details about the reports that it generates. For more details about these products see the [VMware Documentation](#) site.

vCloud Usage Meter is an on-premises virtual appliance that Cloud Services Provider partners use to facilitate license-based usage reporting. VMware Cloud Services Console is a free cloud service offering that supports vCloud Usage Meter for automatic reporting and data retention. Partners utilize VMware Cloud Services Console to scale-out their metering deployment and simplify their usage reporting each month.

VMware Cloud Services Console enables providers to register vCloud usage meters appliances, track the usage and download the usage report, more details can be found at [VMware Cloud Services console for Cloud Service Providers](#) documentation.

2. Components

vCloud Usage Meter provides metering of vCenter Server, VMware Cloud Foundation, NSX, vSAN, VMware Aria Operations, VMware Aria Automation 7.X and 8.X, VMware Aria Operations for Networks, VMware Cloud Director, VMware Cloud Director Availability, Site Recovery Manager, Tanzu Kubernetes Grid Service and Tanzu Kubernetes Grid Multi-cloud. For the current list of VMware products and versions that vCloud Usage Meter can meter, see the [VMware Product Interoperability Matrixes](#).

2.1 VMware vCloud Usage Meter 4.x

vCloud Usage Meter 4.x is the next evolution in metering and billing. In vCloud Usage Meter 4.x, the data is collected as before, but the raw data is forwarded to VMware Cloud Services Console for aggregation. This benefits the service providers in several ways. First, it separates the data from the logic. By creating this separation, it significantly reduces the updates needed to the appliance. Updates will only be necessary when addressing bugs related to collections or security issues.

The second area that benefits the user is the compliance requirement. With vCloud Usage Meter 3.6.1 and prior, it was incumbent upon the provider to ensure they were keeping the vCloud Usage Meter and related data for three years. With vCloud Usage Meter 4.x, the

data is now being stored within VMware Cloud Services Console and maintained for the required period.

Reports for past months across all vCloud Usage Meter instances can be requested via a support request on VMware Cloud Services Console.

2.2 VMware Cloud Services Console

VMware Cloud Services Console is a VMware cloud service that automates monthly reporting, including end-user data, to the Broadcom billing systems, reducing the overhead of manual reporting. It aggregates reports and data from vCloud Usage Meter instances. Reports for vCloud Usage Meter 4.x data can be viewed in the VMware Cloud Services Console before they are sent to the Broadcom billing systems on a daily basis. It's critical that Cloud Services Providers maintain vCloud Usage Meter instances in good health for billing accuracies.

3. FAQ - Data Sharing

3.1 General

Q. Why is the data being collected?

A. Data is being collected for automated reporting to the Broadcom billing systems by VMware Cloud Services Console.

Q. What data is transmitted?

A. An installation confirmation email, report data including monthly usage, anonymized customer usage, VM history reports. VMware vCloud Usage Meter 4.x also sends metering event data. See [this section](#) for details.

Q. How is the data used?

A. The collected data is used as outlined in the [VMware General Terms](#).

Q. I have chosen not to participate in automatic reporting. Do I still have to populate the Broadcom systems manually ?

A. As part of VMware Cloud Service Providers program, automatic reporting is mandatory without any exceptions and Providers must deploy and maintain vCloud Usage Meter instances online. There is no option for any manual reporting. If you refuse to deploy and manage vCloud Usage Meter instances, you can face legal liabilities as per program rules.

3.2 Privacy

Q. Is end customer information present in the data transmitted to VMware by Broadcom?

A. Utilization statistics for customers are provided. Any information that can be associated directly with a customer. For example, customer names, hostnames, target vCenter, etc. are anonymized using a one-way hash. For more information about vCloud Usage Meter 4.x, see [this section](#).

Q. Is Personally Identifiable Information (PII) information present in the data transmitted to VMware?

A. Any information that can be classified as PII is anonymized using a one-way hash. For more information about vCloud Usage Meter 4.x, see [this section](#).

Q. How is the data anonymized?

A. In vCloud Usage Meter 4.x, data is anonymized using a salted SHA-256 based one-way hash. Salting the hash means that the anonymized values are not subject to decryption by 'rainbow table'.

Q. Are customer labels anonymized?

A. No, they are not anonymized as partners have control over how their customer labels will be named. Partners can provide any names for their customer labels or use names that do not reveal the identities of their customers.

Q. What TLS ciphers are used for the encryption of the communication between vCloud Usage Meter and VMware Cloud Services Console?

A. The connection is secured by the following ciphers:

TLS_AES_128_GCM_SHA256,
TLS_AES_256_GCM_SHA384,
TLS_CHACHA20_POLY1305_SHA256,
TLS_AES_128_CCM_SHA256,
TLS_AES_256_CCM_8_SHA256,
TLS_ECDHE_ECDSA_WITH_AES_128_GCM_SHA256,
TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256,
TLS_ECDHE_ECDSA_WITH_AES_256_GCM_SHA384,
TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384,
TLS_ECDHE_ECDSA_WITH_CHACHA20_POLY1305_SHA256,
TLS_ECDHE_RSA_WITH_CHACHA20_POLY1305_SHA256,

TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA,
TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA,
TLS_RSA_WITH_AES_128_GCM_SHA256, TLS_RSA_WITH_AES_256_GCM_SHA384,
TLS_RSA_WITH_AES_128_CBC_SHA,
TLS_RSA_WITH_AES_256_CBC_SHA,
TLS_RSA_WITH_3DES_EDE_CBC_SHA

Q. Who at VMware has access to the data?

A. The support and product development teams at VMware have access to this data for support and developing improved reporting processes.

Q. In which country will the data reside?

A. The anonymized data will reside in the United States.

Q. How long does the data need to be retained?

A. For users of vCloud Usage Meter 4.x, the data will be retained and managed by VMware for five years.

Q. How is data in the cloud service deleted, by request, or by a customer?

A. Data is deleted automatically upon the expiration of the retention period, which is 5 years.

Q. How is data separated in the cloud service?

A. Data is partitioned by partner identity and vCloud Usage Meter ID. Each partition is processed separately.

3.3 Data and Transmission

Q. Where is the data being sent?

A. For HTTPS, data is being transmitted to <https://ums.cloud.vmware.com>.

Q. In what format is data sent to VMware?

A. For vCloud Usage Meter 4.x, data is sent in a compressed text format that is encrypted for transmission.

Q. How frequently is data sent to VMware?

A. For vCloud Usage Meter 4.x, data is collected and sent on an hourly basis.

Q. How are reports transmitted to VMware?

A. vCloud Usage Meter 4.x transmits data via HTTPS only.

Q. Is an email server required?

A. vCloud Usage Meter 4.x does not require SMTP services.

3.4 Operational

Q. Can I turn off transmitting data to VMware?

A. vCloud Usage Meter does not offer a control to turn off data transmission.

Q. What if vCloud Usage Meter does not have access to an email server that has Internet connectivity?

A. For vCloud Usage Meter 4.x, information is transmitted via HTTPS only. SMTP is not a requirement.

Q. What if the data transmitted fails to reach VMware for some reason?

A. If a data transmission failure occurs, it is the responsibility of the service provider to resolve the connection issue. Once connectivity has been re-established, data will be pushed to VMware. If the data is received prior to the deadline, it will be processed and used to populate the VMware Cloud Services Console. If it is not re-established, the service provider will need to contact VMware point of contact to process missed reporting .

Q. Can reports continue to be generated from the local usage meter?

A. When using vCloud Usage Meter 4.x, usage reports are generated on VMware Cloud Services Console. vCloud Usage Meter 4.x is a collection engine only and all reporting logic has been moved to VMware Cloud Services Console. There is no provision to generate usage reports in vCloud Usage Meter 4.x.

4.1 vCloud Usage Meter Disclosure

The following disclosure is shown when first logging into vCloud Usage Meter 4.x:

vCloud Usage Meter 4.x works along with VMware Cloud Services Console. UM 4.x periodically sends metering data to VMware Cloud Services Console for report processing. You must login to VMware Cloud Services Console to generate reports.

By installing this version of vCloud Usage Meter, you acknowledge that you will automatically send data to VMware. This data -

1) Confirms your installation of vCloud Usage Meter 4.x, and

2) Includes metering event data as described in

<https://partnerportal.broadcom.com/group/partner-portal/vmware-cloud-service-providers>

2) Is used according to the service description on VMware's General Terms page:

<https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/agreements/vmware-general-terms.pdf>

4.2 Report Data Fields for vCloud Usage Meter 4.x

These tables list the collected data by the vCloud Usage Meter 4.x Agent that VMware Cloud Services Console receives.

vCloud Usage Meter runs in the service provider datacenter and sends a json formatted payload of the metered data. The fields whose data is not required are anonymized, but unique anonymization is for reporting purposes. This anonymization is conducted prior to transmitting to VMware using a salted SHA-256 one-way hash. From the hash, VMware cannot obtain the original value of the fields. The json payload is formatted as a table for readability. Data that is anonymized is noted in **bold** in the Description column of the tables below.

The following data is sent by vCloud Usage Meter appliance in addition to product specific data detailed in the product sections below.

| Generic Product Data | | | |
|----------------------|---------|---|---------------|
| Data | Type | Description | Sample |
| active | bool | Represents whether the product instance is active or not. | true |
| port | integer | Port of the endpoint. For vRealize Automation, port data is not sent to the cloud. | 443 |
| host | string | The product host, anonymized . Host data is not sent to the cloud for vRealize Automation. | jyCLaxoGOWEQ |
| forgotten | bool | Represents whether the product is marked as deleted or not. | false |
| metered | bool | Represents whether the product is being metered or not. | true |
| id | integer | Internal unique identifier for each product. | 8 |
| productType | string | The name of the product being metered. | NSX-T |
| lastChanged | long | The unix timestamp of when the record was last updated. | 1587595762016 |
| who | string | Collector type. | Product |

| Generic Product Data | | | |
|----------------------|---------|--|---------------|
| Data | Type | Description | Sample |
| version | string | Product version. | 2.4.1 |
| id | integer | The ID of the product in the vCloud Usage Meter web application. | 2 |
| time | long | The Unix timestamp of when the record was created. | 1585266130714 |

The following data is sent by vCloud Usage Meter appliance in addition to the collected data and is used for system purposes.

| vCloud Usage Meter Metadata | |
|-----------------------------|--------------------------------------|
| Data | Sample |
| UM ID | 3f8fbe8c-4683-43e0-9a6f-76ac4041cb2c |
| UM version | 4.7.0.0 |
| Checksum | e9aa96e83dd17da97aead8c725e1881f |

4.2.1 vCenter/vCloud Foundation

| vCenter Virtual Machine Data | | | |
|------------------------------|---------|---|----------------|
| Data | Type | Description | Sample |
| type | string | The type of object that the metering data is about. | VirtualMachine |
| moref | string | A string that uniquely identifies a virtual machine on one vCenter. | vm-24 |
| vcId | integer | An integer that specifies the vCloud Usage Meter productId | 1 |

| vCenter Virtual Machine Data | | | |
|------------------------------|---------|--|-----------------|
| Data | Type | Description | Sample |
| | | for the vCenter defined behind the moref. For the vCenter collector, this is always the same as the productId. | |
| collectionId | integer | An integer serial number that specifies the collection that this data is part of. | 5882 |
| productType | string | The name of the metered product. | vCenter |
| productId | integer | An integer that specifies the product instance being metered. For the vCenter collector, productId is always the same as vcid. | 1 |
| time | long | A millisecond timestamp that specifies when the usage report data structure was created. Depending on how long the data collection takes, this might be some time after the metering happened. | 1587595907395 |
| category | string | The vCenter managed object used to query the contents of a container to produce this report. | VcContainerView |
| updateKind | string | This property specifies the kind of data collection that this object represents. If the value is "poll", then the optional properties should specify a full | poll |

| vCenter Virtual Machine Data | | | |
|------------------------------|---------|---|---|
| Data | Type | Description | Sample |
| | | report on the virtual machine and most of those properties should be present. Otherwise, this object represents a change in one or more of the properties and most of the optional properties will be absent. If a VM is powered on or off, for example, then this property will be "modify", powerState will be defined, and the other optional properties will be absent. The values "enter" and "leave" occur when a VM is created or deleted. | |
| name | string | The anonymized name of the VM. | OFX0UdmRW6yD |
| cpuReservation | integer | Represents the CPU reservation per VM. | 2000 |
| guestName | string | The anonymized full name of any guest operating system installed in a virtual machine.. | LBRVEFqSZaBK |
| guestId | string | This property is used to distinguish between traditional virtual machines and k8s managed virtual machines. | crxPod1Guest |
| managedByExtKey | string | This property is used to distinguish between traditional | For Service VM such as Supervisor VM this value is com.vmware.vim.eam and for TKG Service VMs |

| vCenter Virtual Machine Data | | | |
|------------------------------|---------|--|--------------------------------------|
| Data | Type | Description | Sample |
| | | virtual machines and k8s-managed virtual machines. | it is com.vmware.vcenter.wc p |
| instanceUuid | string | The virtual machine's unique instance/bios uuid. | 50160db8-07c8-160a-d660-f8a9f1cf8658 |
| memorySizeMB | integer | The allocated memory size in MB to a VM. | 512 |
| memoryReservation | integer | The guest memory reservation of a virtual machine in MB. | 512 |
| numCpu | integer | Indicates the number of CPU cores allocated to a virtual machine. | 1 |
| hostName | string | The anonymized name of the host where the VM is deployed. | 1Vv/uV55nt9R |
| hostMoref | string | A string that uniquely identifies the host on one vCenter. | host-10 |
| powerState | string | Represents whether the VM is on or off. | POWERED_OFF |
| bootTime | string | The timestamp of when the virtual machine was most recently powered on. This property is updated when the virtual machine is powered on from the poweredOff state and is cleared when the virtual machine is powered off. This property is not updated when | 2020-04-07T17:57:05.466391Z |

| vCenter Virtual Machine Data | | | |
|------------------------------|---------|--|----------------------------|
| Data | Type | Description | Sample |
| | | a virtual machine is resumed from a suspended state. | |
| suspendTime | string | The timestamp of when the virtual machine was most recently suspended. This property is updated every time the virtual machine is suspended. | 2020-03-30T07:27:16.07049Z |
| suspendInterval | integer | The total times the virtual machine has been suspended since it was initially powered on. This time excludes the current period if the virtual machine is currently suspended. This property is updated when the virtual machine resumes and is reset to zero when the virtual machine is powered off. | 0 |
| ipAddress | string | The anonymized IP address of a vCenter VM. | aKIN8U4uSaqw |
| productName | string | The vCenter variable summary.config.product.name . Virtual machines with product name vCloud Usage Meter are not metered. | VMware Cloud Director |
| resourcePoolName | string | The name of the resource pool that this VM is associated with. | Namespaces |
| resourcePoolMoref | string | The managed object id of the resource pool that this virtual | resgroup-8 |

| vCenter Virtual Machine Data | | | |
|------------------------------|---------|---|--------------------------------------|
| Data | Type | Description | Sample |
| | | machine is associated with. Resource pools are logical abstractions for flexible management of resources. Resource pools can be grouped into hierarchies to partition CPU and memory resources. | |
| cloudId | string | Cloud ID. | 69e39f38-dbcd-423f-bbb5-88f141171949 |
| numCoresPerSocket | integer | Number of cores used to distribute virtual CPUs among sockets in this virtual machine. If the value is unset, the default value is 1. | 8 |

| vCenter Host Data | | | |
|-------------------|---------|---|------------|
| Data | Type | Description | Sample |
| type | string | The kind of object that the metering data is about. For metering data for vCenter hosts, this property will always be "HostSystem". | HostSystem |
| moref | string | A string that uniquely identifies the host on one vCenter. | host-10 |
| vcId | integer | An integer that specifies the vCloud Usage Meter productId for the vCenter that defines the moref. For the vCenter collector, | 1 |

| vCenter Host Data | | | |
|-------------------|---------|---|---------------------|
| Data | Type | Description | Sample |
| | | this is always the same as productId. | |
| collectionId | integer | An integer serial number that specifies the collection that this data is part of. | 5883 |
| productType | string | For this collector, this property is always "vCenter". | vCenter |
| productId | integer | An integer that specifies the product instance being metered. For the vCenter collector, productId is always the same as vcid. | 1 |
| time | long | A millisecond timestamp that specifies when the UsageReport data structure was created. Depending on how long the data collection takes, this may be some time after the metering happened. | 1587595907904 |
| category | string | The category of the vCenter collector. | VcPropertyCollector |
| updateKind | string | This property specifies the kind of data collection that this object represents. If the value is "poll", then this is a full report on this host and most of the optional properties should be present. Otherwise, this object represents a change in one or more of the properties and most of the | poll |

| vCenter Host Data | | | |
|-------------------|---------|--|--------------|
| Data | Type | Description | Sample |
| | | optional properties will be absent. If a host is powered on or off, for example, then this property will be "modify", powerState will be defined, and the other optional properties will be absent. The values "enter", and "leave" occur when a host is created or deleted. | |
| name | string | The anonymized name of the host. | Z8sITJ01d85O |
| clusterId | string | A string that uniquely identifies this host's parent cluster on the vCenter. It is cluster's moref and it identifies resource type: ClusterComputeResource. | domain-c12 |
| memorySize | integer | The memory size of a host in MB. | 17179332608 |
| numCpuCores | integer | Number of physical CPU cores on the host. | 4 |
| numCpuPackages | integer | Number of physical CPU packages on the host. | 4 |
| numCpuThreads | integer | Aggregated number of CPU threads. | 4 |
| cpuHz | integer | The host CPU capacity is GHz. | 30 |
| fullProductName | string | The host's full name. | A+xa1PyPbNXb |
| productVersion | string | The host product version. | 6.0.0 |
| productLineId | string | The id of the host product line. | embeddedEsx |

| vCenter Host Data | | | |
|--------------------|--------|---|--------------------------------------|
| Data | Type | Description | Sample |
| licenseProductName | string | The host product license name. | VMware ESX Server |
| bootTime | string | The time when the host was booted. | 2019-05-10T09:22:27.329999Z |
| connectionState | string | The host's connection state. | CONNECTED |
| powerState | string | Represents whether the host is on or off. From the vCenter variable runtime.powerState. | POWERED_ON |
| serverManufacturer | string | The name of the server manufacturer. | VMware Inc. |
| serverModel | string | The model of the server. | VMware ESXi |
| cpuManufacturer | string | The name of the CPU manufacturer. | VMware Inc. |
| cpuModel | string | The model of the CPU. | VMware Virtual Platform |
| cloudID | string | Cloud ID | 69e39f38-dbcd-423f-bbb5-88f141171949 |

| vCenter License Data | | | |
|----------------------|--------|--|---------------------------|
| Data | Type | Description | Sample |
| type | string | The kind of object that the metering data is about. | LicenseManagerLicenseInfo |
| moref | string | The vCenter identifier that identifies the entity that is subject to this license. | 1 |

| vCenter License Data | | | |
|----------------------|---------|---|----------------------------------|
| Data | Type | Description | Sample |
| vclid | integer | An integer that specifies the vCloud Usage Meter productId for the vCenter that defines the moref. For the vCenter collector, this is always the same as productId. | 1 |
| collectionId | integer | An integer serial number that specifies the collection that this data is part of. | 5883 |
| productType | string | The name of the metered product: always "vCenter" for this collector. | vCenter |
| productId | integer | An integer that specifies the product instance being metered. For the vCenter collector, productId is always the same as vclid. | 1 |
| time | long | A millisecond timestamp that specifies when the UsageReport data structure was created. Depending on how long the data collection takes, this might be some time after the metering happened. | 1587595907904 |
| licenseKey | string | The license key in use. | 00000-00000-00000-00000-00000 |
| licenseName | string | The name of the license. | VMware vSphere 6 Enterprise Plus |
| licenseEdition | string | The name of the license edition. | esx.enterprisePlus.cpuPackage |
| total | integer | License count. | 64 |

| vCenter License Data | | | |
|----------------------|--------|---|-------------------|
| Data | Type | Description | Sample |
| productName | string | Product name that is using this license. | VMware ESX Server |
| update | bool | If this property is true, then this object was generated in response to a com.vmware.license.AssignLicenseEvent. If false, then this object results from querying all vCenter licenses. | false |

| vCenter CMR Data | | | |
|------------------|---------|---|---------------|
| Data | Type | Description | Sample |
| moref | string | A string that uniquely identifies a virtual machine on one vCenter. | 1 |
| vcId | integer | An integer that specifies the vCloud Usage Meter productId for the vCenter that defines the moref. For the vCenter collector, this is always the same as productId. | 1 |
| collectionId | integer | An integer serial number that specifies the collection that this data is part of. | 5785 |
| productType | string | The name of the metered product: always "vCenter" for this collector. | vCenter |
| productId | integer | A unique identifier per product. Add-on collectors do not have an individual productId. It will be the vCenter productId that will be used. | 1 |
| time | integer | A millisecond timestamp. This property shows the time at which the customer label event was calculated. The calculation occurs | 1587594567904 |

| | | | |
|--------------|--------|--|--------------------------------------|
| | | once an hour. vCenter collector will not send an event if the customer label relationship has not been changed since the last collection. Customer label event is sent after the start of all virtual machines, so the event stream may contain two consecutive events for the presence of a customer label relationship. | |
| ruleName | string | The name of the customer label. If there are customer labels configured and a particular virtual machine is not associated with any of them, events will still be generated. The default value for such virtual machines is "n/a". When a virtual machine is no longer associated with a label, it will be associated with this default label as well. | Customer-123 |
| instanceUuid | string | The virtual machine's unique instance/bios UUID. | 50160db8-07c8-160a-d660-f8a9f1cf8658 |

| vCenter /vSAN/Site Recovery Manager/VMware Cloud Foundation Product Data | | | |
|--|---------|---|--------------------------------------|
| Data | Type | Description | Sample |
| externalSSO | bool | Represents whether SSO is enabled or not. | false |
| extSSOhost | string | The anonymized SSO IP address. | kmQT0Bkq8yU7 |
| extSSOport | integer | SSO port number. | 7444 |
| vc_instance_uuid | string | vCenter instance UUID. | 0f2b6fbc-029e-4138-a9af-921b30d4c299 |

| vCenter /vSAN/Site Recovery Manager/VMware Cloud Foundation Product Data | | | |
|--|-----------|---|----------------------------------|
| Data | Type | Description | Sample |
| vc_licence | string | vCenter license key. | 00000-00000-00000-00000-00000 |
| vc_licence_name | string | vCenter license name. | VMware vCenter Server 6 Standard |
| productType | string | The property of this value should always be “vCenter”. | vCenter |
| vc_version | string | Version of the vCenter instance. | 6.5.0 |
| k8sMetric | string | The metric that metering of the vSphere k8s product is based on. | vRAM |
| srmMetered | bool | Indicates whether Site Recovery Manager metering is turned on or off from the vCloud Usage Meter web application. | true |
| srmEnabled | bool | Indicates whether this vCenter has any Site Recovery Manager extensions. | true |
| srmLicenses | object[] | An array of Site Recovery Manager licenses objects | [{ |

| vCenter /vSAN/Site Recovery Manager/VMware Cloud Foundation Product Data | | | |
|--|--------|---|--|
| Data | Type | Description | Sample |
| | | presented in the Virtual center. | <pre> "product": "VMware vCenter Site Recovery Manager", "productVersion":"8.1", "edition":"srm.enterprise.v m", "total": 2000, "name": "vCenter Site Recovery Manager Enterprise", "key": "00000-00000- 00000-00000-00000" }] </pre> |
| srmLicenses.product | string | The name of the metered product, for example, VMware vCenter Site Recovery Manager. | VMware vCenter Site Recovery Manager |
| srmLicenses.productVersion | string | Site Recovery Manager product version. | 8.1 |
| srmLicenses.edition | string | Type of the Site Recovery Manager license like Enterprise/Advanced, etc. | srm.enterprise.vm |

| vCenter /vSAN/Site Recovery Manager/VMware Cloud Foundation Product Data | | | |
|--|---------|--|--|
| Data | Type | Description | Sample |
| srmlLicenses.total | integer | Capacity of virtual machines specific to license. | 2000 |
| srmlLicenses.name | string | Site Recovery Manager product license name. | vCenter Site Recovery Manager Enterprise |
| srmlLicenses.key | string | Site Recovery Manager product license key. | 00000-00000-00000-00000-00000 |
| vsanEnabled | bool | Indicates whether this vCenter server cluster object has vSAN enabled. | true |
| vsanClusterCount | integer | The number of vSAN clusters on this vCenter. | 1 |
| vsanVersions | array[] | A set of distinct vSAN version numbers. | ["7.0.0"] |
| totalCapacityBytes | Integer | The total vSAN capacity in bytes, which is the total used and free capacity combined. It's the total of physical space which can be used for writing data including the user data, metadata, | 643376873472 |

| vCenter /vSAN/Site Recovery Manager/VMware Cloud Foundation Product Data | | | |
|--|------|------------------------|--------|
| Data | Type | Description | Sample |
| | | and the overhead data. | |

| vCenter CMR Data | | | |
|------------------|---------|--|----------------|
| Data | Type | Description | Sample |
| type | string | The kind of object that the metering data is about. | VirtualMachine |
| moreof | string | Managed Object Reference ID, unique per vCenter. For a virtual machine, the string must start with "vm". | vm-178 |
| productType | string | Product type. The property value is "vCenter". | vCenter |
| productID | integer | Per vCloud Usage Meter unique product id. | 27 |
| time | integer | The Unix timestamp of when the record was collected. | 1584941400000 |
| ruleName | string | The non-obfuscated name of the customer's rule. | RAX-Datastore |

4.2.2 Tanzu Kubernetes Grid Multi-cloud

| Tanzu Kubernetes Grid management cluster Product Data | | | |
|---|--------|---|--------|
| Data | Type | Description | Sample |
| productType | string | The type of VMware product. For this collector, the property value should | TKGM |

| Tanzu Kubernetes Grid management cluster Product Data | | | |
|---|---------|---|---|
| Data | Type | Description | Sample |
| | | always be “TKGM”. | |
| id | number | The number of the Tanzu Kubernetes Grid management cluster in the vCloud Usage Meter web application. | 12 |
| Uuid | string | Product uuid. | 6lkf5070-4c6e-407a-b264-ca7647b25d1b |
| version | double | The product version. | 1.5 |
| host | string | The name of the management cluster. | my.tanzu.management.cluster.control.plane |
| port | integer | The Tanzu Kubernetes Grid management cluster port. | 6443 |
| tkgmEdition | string | The selected type of Tanzu Kubernetes Grid management cluster license edition. | Basic |
| tkgmMetric | string | The selected type of metric for the Tanzu Kubernetes | vRAM |

| Tanzu Kubernetes Grid management cluster Product Data | | | |
|---|---------|---|-----------|
| Data | Type | Description | Sample |
| | | Grid management cluster. | |
| vclId | number | The id of the associated vCenter Server in the vCloud Usage Meter web application. | 3 |
| forgotten | Boolean | Indicates whether the product is marked as deleted or not. | false |
| active | Boolean | Indicates whether a product instance is active or not. | true |
| metered | boolean | Indicates whether the product is ready for metering. | true |
| lastChanged | integer | A millisecond timestamp that specifies when the product data structure was created. | 346654778 |

| Tanzu Kubernetes Grid management cluster VM Data | | | |
|--|---------|---|-------------------------------------|
| Data | Type | Description | Sample |
| productId | number | The number of Tanzu Kubernetes Grid management cluster instances in the vCloud Usage Meter web application. | 2 |
| productType | string | The type of VMware product being metered. | TKGm |
| collectionID | integer | A unique identifier for every collection. | 13435 |
| type | string | The object that the metering data is about. | VirtualMachine |
| vclId | number | An integer that specifies the vCloud Usage Meter productId for the vCenter that defines the object of the metering. | 1 |
| uuid | string | The virtual machine's unique instance/bios uuid. | gxf5070-4c6e-407a-b264-ca7647b25d1b |
| tkgmEdition | string | The Tanzu Kubernetes Grid management cluster edition that is associated with the virtual machine. | Advanced |
| tkgmMetric | string | The type of metric used for tracking virtual machine usage. | vRAM |
| vmType | string | The type of the Tanzu Kubernetes Grid management cluster that is associated with the virtual machine. The types can be management (MGT) and workload (WLD). | WLD |
| time | integer | The timestamp of the collection in ms. | 343463 |

4.2.3 vSAN

| vSAN Cluster Collection Data | | | |
|------------------------------|---------|--|------------------------|
| Data | Type | Description | Sample |
| time | long | The unix timestamp of when the record was collected. | 1585266130714 |
| collectionId | integer | A unique identifier for each collection. | 176586 |
| productType | string | A unique identifier for each product being metered. It is vCenter here. | vCenter |
| category | string | The category of the vCenter collector. The value for vSAN clusters is VcAddon_VSAN_Collector. | VcAddon_VSAN_Collector |
| productId | integer | A unique identifier for each product. Add-on collectors do not have individual productIds. They use the vCenter productId. | 1 |
| clusterId | string | A unique identifier for the cluster for which vSAN is enabled. | domain-c12 |
| clusterName | string | The anonymized name of the cluster for which vSAN is enabled. | 0UfypLEAUZCy |
| edition | string | The license edition. It can be: STANDARD, ADVANCE, ENTERPRISE, DESKTOP or ROBO. | STANDARD |

| vSAN Cluster Collection Data | | | |
|------------------------------|--------|---|-------------------------------------|
| Data | Type | Description | Sample |
| licenseKey | string | The license key associated with the cluster. | 00000-00000-00000-00000-00000 |
| productVersion | string | The vSAN version. | 7.0.0 |
| UsedCapacityBytes | long | The vSAN usage, for the cluster, in bytes. | 1073741824 |
| vsanFeatures | list | The list of detected features used by a vSAN cluster. | BASE, DEDUPLICATION, ERASURE_CODING |

| vSAN VM Collection Data | | | |
|-------------------------|---------|---|------------------------|
| Data | Type | Description | Sample |
| productId | integer | A unique identifier per product. Add-on collectors do not have individual productIds. They use the vCenter productId. | 3 |
| moref | string | A unique identifier for virtual machine moref. | vm-61 |
| spbmFeatures | list | Storage policy related features of a specific virtual machine within the vCenter. | ERASURE_CODING |
| time | long | Unix timestamp of when the record was collected. | 1598563575114 |
| category | string | The category of the vCenter collector. The value should be VcAddon_VSAN_Collector. | VcAddon_SPBM_Collector |
| type | string | The object type of Moref i.e., VirtualMachine. | VirtualMachine |

| vSAN VM Collection Data | | | |
|-------------------------|---------|---|---------|
| Data | Type | Description | Sample |
| collectionId | integer | A unique identifier for every collection. | 9 |
| productType | string | A unique identifier for each product being metered. It is vCenter here. | vCenter |
| vcId | integer | An integer that specifies the vCloud Usage Meter productId for the vCenter that defines the moref. For the vCenter collector, this is always the same as productId. | 3 |

4.2.4 Site Recovery Manager

| Site Recovery Manager Collection Data | | | |
|---------------------------------------|---------|---|---------------|
| Data | Type | Description | Sample |
| collectionId | integer | A unique identifier for each collection. | 21 |
| lastSrmCollectionTimestamp | integer | A unique identifier for the last collection for Site Recovery Manager collection with Unix timestamp. | 1584555748881 |
| moref | string | A unique identifier for virtual machine Moref. | vm-123 |
| name | string | The anonymized name of the virtual machine. | U06MO4+a0Zbl |

| Site Recovery Manager Collection Data | | | |
|---------------------------------------|--------|--|-------------------|
| Data | Type | Description | Sample |
| peerProtectedVmMoref | string | A unique identifier for peer protected virtual machine Moref. | protected-vm-4053 |
| peerState | string | An identifier for the protection state on the remote site. | SHADOWING |
| primarySiteName | string | The primary site name for Site Recovery Manager that is present in the vCenter collector. The primary Site Recovery Manager site where the virtual machine gets protected. This value is anonymized . | lZiExlBcMzTy |
| productId | string | A unique identifier for each product. Add-on collectors do not have an individual productId. The productId is the same as the vCenter productId. | 1 |
| productType | string | A unique identifier for each product being metered. The value for this collector is vCenter. | vCenter |
| protectedVmMoref | string | A unique identifier of the protected virtual machine identifier on the local site. | protected-vm-1182 |

| Site Recovery Manager Collection Data | | | |
|---------------------------------------|---------|---|--------------------------------------|
| Data | Type | Description | Sample |
| protectionGroupMoref | string | A unique identifier of the protection group named Moref. | srm-vm-protection-group-4020 |
| protectionGroupName | string | A unique identifier of the protection group name. This value is anonymized . | 8BsmXulEvu51 |
| protectionState | string | An identifier of the protection state of this protected virtual machine. | READY |
| secondarySiteName | string | The secondary site name of Site Recovery Manager present in the target vCenter collector. The secondary/target Site Recovery Manager site is where the virtual machine gets replicated. This value is anonymized . | mZnAX/826tx/ |
| secondarySiteVcProductId | integer | The secondary/target Site Recovery Manager remote site VCIinfra product ID. | -1 |
| secondarySiteVcUuid | string | The secondary/target Site Recovery Manager site's vCenter Server instance uuid. | 6b3a5070-4c6e-407a-b264-ca7647b25d1b |

| Site Recovery Manager Collection Data | | | |
|---------------------------------------|---------|---|--------------------------------------|
| Data | Type | Description | Sample |
| time | integer | The Unix timestamp of when the record was collected. | 1585266130714 |
| type | string | The object type of Moref i.e., VirtualMachine. | VirtualMachine |
| vmInstanceuuid | string | The virtual machine's unique instance/bios uuid. | 42319808-fbc7-71ff-3c2f-89777f16bf68 |
| category | string | The category of the vCenter collector. The value for vSAN add-ons is VcAddon_SRM_Collector. | VcAddon_SRM_Collector |

4.2.5 NSX-T

| NSX-T Product Data | | | |
|--------------------|--------|---|--------|
| Data | Type | Description | Sample |
| version | string | The software version of the NSX-T instance. | 2.4.1 |

| NSX-T Product Data | | | |
|--------------------|----------|---|--|
| Data | Type | Description | Sample |
| vcHosts | string[] | An array of strings that contains the set of vCenter hosts running virtual machines using NSX-T features. The strings are anonymized . | [73D2CF9D7CF013078AAD3D0BF29EC3EBE18168005549E6E7B9E48AE9EE49756D] |
| licenses | json | The NSX-T license details returned by the produ | {"description":"NSX Data Center Evaluation","licenseKey":"00000-00000-00000-00000-00000","isEval":true,"capacityType":"CPU","quantity":0,"isExpired":false,"expiry":1007136262,"isMh":false} |

| NSX-T Product Data | | | |
|-------------------------|----------|--|------------------|
| Data | Type | Description | Sample |
| | | ct. The values are in json format. | |
| computeManagerHostnames | string[] | An array of hostnames. The values of the strings are anonymized . | ["wSt4MouWfa+v"] |

| NSX-T VM Data | | | |
|---------------|--------|--|--------------------------------------|
| Data | Type | Description | Sample |
| type | string | The kind of object that the metering data is about. For the NSX-T collector this property should always have the "VirtualMachine" value. | VirtualMachine |
| uuid | string | A unique identifier for the virtual machine being metered. | 5009ed49-4579-cae1-6d2e-e58f11c59b50 |

| NSX-T VM Data | | | |
|---------------|----------|--|-------------------------|
| Data | Type | Description | Sample |
| moref | string | A string that uniquely identifies a virtual machine on one vCenter. If this property is specified, then the vcid property is required. | vm-35 |
| vcId | integer | An integer that specifies the vCloud Usage Meter productId for the vCenter that defines the moref. If the moref property is specified, then this property is required. | 3 |
| nsxFeatures | string[] | An array of strings that specify the set of NSX-T features used by the specified virtual machine. The allowed values of these strings and the meaning behind the values are defined by the com.vmware.um.nsxcollector.Feature enum in the NSX-T collector source code. | BASE, DFW |
| collectionId | integer | An integer serial number that specifies the collection that this data is part of. | 5890 |
| productId | integer | An integer that specifies the product instance being metered. For the vCenter collector, productId should always be the same as the vcId. | 3 |
| productType | string | The name of the product being metered. For this collector, the name is "NSX-T". | NSX-T |
| time | long | A millisecond timestamp that specifies when the UsageReport data structure was created. Depending on how long the data collection takes, this might be some time after the metering happened. | 1584569484312 |
| cloudId | string | Cloud ID. | 69e39f38- dbcd-423f- |

| NSX-T VM Data | | | |
|---------------|------|-------------|-------------------|
| Data | Type | Description | Sample |
| | | | bbb5-88f141171949 |

4.2.6 NSX-V

| NSX-V Data | | | |
|--------------|----------|---|----------------|
| Data | Type | Description | Sample |
| type | string | The kind of object that the metering data is about. For the NSX-V collector this property will always be "VirtualMachine". | VirtualMachine |
| moref | string | A string that uniquely identifies a virtual machine on one vCenter. | vm-85 |
| vcld | integer | An integer that specifies the vCloud Usage Meter productId for the vCenter that defines the appliance. | 2 |
| features | string[] | An array of strings that contains the set of NSX-V features used by the specified virtual machine. | DFW, DFW_AD |
| collectionId | integer | An integer serial number that specifies the collection that this data is part of. | 5880 |
| productType | string | The name of the product being metered. For this collector, the name is always "NSX-V". | NSX-V |
| productId | integer | An integer that specifies the product instance being metered. | 2 |
| time | integer | A millisecond timestamp that specifies when the UsageReport data structure was created. Depending on how long the data collection | 1587595912372 |

| NSX-V Data | | | |
|------------|------|---|--------|
| Data | Type | Description | Sample |
| | | takes, this might be some time after the metering happened. | |

| NSX-V Product Data | | | |
|--------------------|---------|---|-------------------------------|
| Data | Type | Description | Sample |
| version | string | Software version of the NSX-V instance.. | 6.4.5.0.1 |
| licenseKey | string | License key of the NSX-V instance. | 00000-00000-00000-00000-00000 |
| licenseName | string | License name of the NSX-V instance. | NSX Data Center Evaluation |
| licenseEdition | string | The type of the license edition. | Advanced |
| licenseTotal | integer | The total number of virtual machines that can be associated with a license. | 50 |
| licenseProductName | string | The full product name of this NSX-V license. | NSX Data Center Advanced |
| vclId | integer | An integer that specifies the vCloud Usage Meter productId for the vCenter of this NSX-V. | 1 |

4.2.7 NSX Advanced Load Balancer

| NSX Advanced Load Balancer Product Data | | | |
|---|--------|---|--|
| Data | Type | Description | Sample |
| clusterUuid | string | A unique identifier of the NSX Advanced Load Balancer Controller license that is being reported on. | cluster-75eb19f8-40e0-4b7d-918d-8c3270be9048 |
| clusterVersion | string | Current software version installed on the NSX Advanced Load Balancer Controller. | 21.1.3 |

| NSX Advanced Load Balancer Usage Data | | | |
|---------------------------------------|---------|---|---------------|
| Data | Type | Description | Sample |
| productId | integer | An integer that specifies the product instance being metered. | 1 |
| category | string | The kind of collector that the metering data is for. The value for this collector is always “NSXALB”. | NSXALB |
| time | int | A millisecond | 1672531200000 |

| NSX Advanced Load Balancer Usage Data | | | |
|---------------------------------------|--------|---|--|
| Data | Type | Description | Sample |
| | | timestamp that specifies when the data was collected. | |
| clusterUuid | string | A unique identifier of the NSX Advanced Load Balancer Controller license that is being reported on. | cluster-bc5be539-2bdd-4ff3- adc9-e4d9917fc29c |
| clusterVersion | string | Current software version installed on the NSX Advanced Load Balancer Controller. | 22.1.3 |
| totalLicensedCores | int | Total cores currently licensed on the NSX Advanced Load | 170 |

| NSX Advanced Load Balancer Usage Data | | | |
|---------------------------------------|--------|---|--|
| Data | Type | Description | Sample |
| | | Balancer controller. | |
| totalCoresConsumed | int | Total cores currently being consumed by service engines on the NSX Advanced Load Balancer controller. | 10 |
| licenseTier | string | License tier NSX Advanced Load Balancer Controller is running under. (ENTERPRISE or BASIC) | ENTERPRISE |
| serviceEngineGroups | array | A list of service engine groups objects with specific information and | "name": "hW2RNyYJDPZY", "uuid": "serviceenginegroup-1172e4a5-8650-40d0-82d2-78834ff2a3e1", "tenant": "hFBqHxHA5PXs", |

| NSX Advanced Load Balancer Usage Data | | | |
|---------------------------------------|--------|--|---|
| Data | Type | Description | Sample |
| | | potential licensing utilization. This list will be populated only for Avi version >= 22.1.3 | "vcdFeatureSetLevel":"STANDARD", "coresConsumed":6 |
| serviceEngineGroups.name | string | Anonymized name of the service engine group. | hW2RNyYJDPZY |
| serviceEngineGroups.uuid | string | A unique identifier for the service engine group. | serviceenginegroup-46beff5e-c9c9-44ec-a0de-7e425d89f2e6 |
| serviceEngineGroups.tenant | string | The NSX Advanced Load Balancer tenant the service engine group is configured within. The value | hFBqHxHA5PXs |

| NSX Advanced Load Balancer Usage Data | | | |
|--|--------|---|----------|
| Data | Type | Description | Sample |
| | | is anonymized. | |
| serviceEngineGroups.vcdFeatureSetLevel | string | The VMware Cloud Director feature set applied to the service engine. This value is applied from VMware Cloud Director directly to the service engine group configuration. | STANDARD |
| serviceEngineGroups.coresConsumed | int | The number of cores being consumed by the service engine group. | 6 |

4.2.8 VMware Cloud Director Availability

| VMware Cloud Director Availability Data | | | |
|---|---------|---|---|
| Data | Type | Description | Sample |
| vmId | string | A string that uniquely identifies a virtual machine on one vCenter. | vm-85 |
| type | string | The kind of object that the metering data is about. For the VMware Cloud Director Availability collector this property will always be "ReplicatedVM". | ReplicatedVM |
| sourceSite | string | The source replication site. The value is anonymized | 18KhuhG/jjUr |
| destinationSite | string | The destination replication site. The value is anonymized . | 18KhuhG/jjUr |
| direction | string | The flow of the replication traffic. | C2C |
| year | integer | The current CE year when this data was collected. | 2020 |
| month | integer | The current month (as a number between 1 and 12) when this data was collected. | 4 |
| vmReplicationId | string | The unique replicationId associated with every replication or migration. | C4-3290f914-f7ff-4d6a-886b-25132a76b5b1 |
| isMigration | bool | This value is set to true if this is a migration or false for replication. | true |
| time | integer | A millisecond timestamp that specifies when the UsageReport data structure was created. Depending on how long the data collection takes, this might be some time after the metering happened. | 1587595905670 |

| VMware Cloud Director Availability Data | | | |
|---|---------|---|--------|
| Data | Type | Description | Sample |
| collectionId | integer | An integer serial number that specifies the collection that this data is part of. | 5879 |
| productType | string | The name of the product being metered. The value should be "VCAV" for this collector. | VCAV |
| productId | integer | An integer that specifies the product instance being metered. | 8 |

4.2.9 VMware Cloud Director

| VMware Cloud Director Product Data | | | |
|------------------------------------|---------|---|--------------------------|
| Data | Type | Description | Sample |
| isActive | integer | Indicates whether the cell is active. 1 means that the cell is active and 0 means its inactive. | 1 |
| buildNumber | string | Software version of the VMware Cloud Director instance. | 3.0.1.13737106-5c1331dcd |

| VMware Cloud Director Collection Data | | | |
|---------------------------------------|---------|---|---|
| Data | Type | Description | Sample |
| vAppId | string | The vAppId which this virtual machine belongs to. | vapp-ecc8152d-b597-48c8-9de8-f2cb1c596280 |
| productId | integer | An integer that specifies the product instance being metered. | 7 |

| VMware Cloud Director Collection Data | | | |
|---------------------------------------|---------|--|---|
| Data | Type | Description | Sample |
| moref | string | A string that uniquely identifies a virtual machine on one vCenter. | vm-87 |
| type | string | The kind of object that the metering data is about. For the VMware Cloud Director collector, this property should be "VirtualMachine". | VirtualMachine |
| orgId | string | The VMware Cloud Director organization to which this virtual machine belongs. | 03d09d1f-1c41-46ce-be2f-924d78d356a9 |
| numberOfCpus | integer | The total number of virtual CPUs associated with the virtual machine. | 1 |
| vcdVmId | string | A unique ID generated by the VMware Cloud Director server for every virtual machine.. | vm-86d8e2bc-38de-45d5-bc19-8222dfbb0546 |
| memoryMB | integer | Total memory (in MB) associated with the virtual machine. | 256 |
| guestOs | string | The operating system of the virtual machine. The value is anonymized . | CVw+KuSNWflc |
| powerStatus | string | Indicates if the virtual machine is powered on or powered off. | POWERED_OFF |
| orgVdId | string | The VMware Cloud Director organization to which this virtual machine belongs. | 60b01de8-aca5-43a7-8c92-0c55a8eccc71 |
| hardwareVersion | integer | The current hardware version of the virtual machine. | 7 |

| VMware Cloud Director Collection Data | | | |
|---------------------------------------|---------|---|--------------------------------------|
| Data | Type | Description | Sample |
| collectionId | integer | An integer serial number that specifies the collection that this data is part of. | 5891 |
| productType | string | The name of the product being metered. The value should always be "VCD" for this collector. | VCD |
| vcUuid | string | A unique identifier for the vCenter that defines the moref of the virtual machines being metered. | 4b2183fe-76d7-4218-9d83-7d0aaff2fd3b |
| time | integer | A millisecond timestamp that specifies when the UsageReport data structure was created. Depending on how long the data collection takes, this may be some time after the metering happened. | 1587595911912 |

| VMware Cloud Director CMR Data | | | |
|--------------------------------|--------|--|--------------------------------------|
| Data | Type | Description | Sample |
| moref | string | A string that uniquely identifies a virtual machine on one vCenter. | vm-67 |
| type | string | Indicates the object type. The value should be "VirtualMachine". | VirtualMachine |
| vcUuid | string | A unique identifier for the vCenter that defines the moref of the virtual machine being metered. | 4b2183fe-76d7-4218-9d83-7d0aaff2fd3b |
| productType | strong | The name of the product being metered. The name for this collector should always be "VCD". | VCD |

| | | | |
|-----------|---------|--|---------------|
| productId | integer | An integer that specifies the product instance being metered. | 8 |
| time | integer | A millisecond timestamp - the time at which the customer label event was calculated. The calculation happens once an hour. VMware Cloud Director collector will not send an event if the customer label relationship has not been changed since the last collection. The customer label event is sent after the start of all virtual machines, so the event stream might contain two consecutive events for the presence of a customer label relationship. | 1457594311912 |
| ruleName | string | The name of the customer label. If there are customer labels configured and no particular virtual machine is associated to any of them, events will still be generated. The default value for such virtual machines is "n/a". When a virtual machine is no longer associated with a label, it will be associated with the default label as well. | Customer-123 |

4.2.10 VMware Aria Operations for Networks

| VMware Aria Operations for Networks Collection Data | | | |
|---|--------|--|----------------|
| Data | Type | Description | Sample |
| type | string | The kind of object that the metering data is about. For the VMware Aria Operations for Networks, the value of this | VirtualMachine |

| VMware Aria Operations for Networks Collection Data | | | |
|---|---------|---|--------------------------------------|
| Data | Type | Description | Sample |
| | | property should be "VirtualMachine". | |
| moref | string | A string that uniquely identifies a virtual machine on one vCenter. For virtual machines, the string must start with "vm". | vm-85 |
| vcUuid | string | vCenter UUID. | 0f2b6fbc-029e-4138-a9af-921b30d4c299 |
| vcId | integer | An integer that specifies the vCloud Usage Meter productId for the vCenter that defines the moref. If that vCenter is not being metered, then this property will be absent. | 1 |
| memory | integer | Total memory (in MB) associated with the virtual machine. | 4096 |
| cpus | integer | Total number of virtual CPUs associated with the virtual machine. | 2 |
| collectionId | integer | An integer serial number that specifies the collection that this data is part of. | 5881 |
| productType | string | The name of the product being metered. For this collector, the property value should always be "VRNI". | VRNI |

| VMware Aria Operations for Networks Collection Data | | | |
|---|---------|---|---|
| Data | Type | Description | Sample |
| productId | integer | Per vCloud Usage Meter unique product id, displayed on UI product page. | 7 |
| uuid | string | An alternative identifier that consists of the VMware Aria Operations for Networks vCenter entity ID (length varies) and a moref of the VM being metered. | vrni:10000:8:1419036932:vm-112 For unknown value: vrni:__unknown__:vm-1 |
| time | integer | The Unix timestamp of when the record was collected. | 1587595911912 |
| stream | string | The name of the data collection. | VRNI_Collection |

VMware Aria Operations for Networks Product Data

| Data | Type | Description | Sample |
|-------------|---------|---|---------------|
| lastChanged | integer | A millisecond timestamp that specifies when the product data structure was created. | 1584561143442 |
| active | bool | Indicates whether a product instance is active or not. | True |

| | | | |
|----------|-------------|---------------------------------------|--|
| licenses | array [] | A list of licenses and their details. | [{ "evaluation": false, "licenseKey": "00000-00000-00000-00000-00000", "deploymentType": "onprem", "expired": false, "deleted": false, "capacityType": "CPU", "serviceTag": "CJBOEgdEUTRXWIdK", "numberOfSockets": 64, "licenseEdition": "ENTERPRISE", "productName": "VMware Aria Operations for Networks", "suspended": false }] |
|----------|-------------|---------------------------------------|--|

| | | | |
|-------------------------|--------|--|-------------------------------|
| licenses.evaluation | bool | Indicates whether the product uses evaluation license. | false |
| licences.licenseKey | string | VMware license key for the product. | 00000-00000-00000-00000-00000 |
| licenses.deploymentType | string | Indicates the product deployment type. | onprem |
| licences.expired | bool | Indicates if the license is expired. | false |
| licenses.deleted | bool | Indicates if the license was deleted. | false |
| licenses.capacityType | string | Indicates how the license use is determined. | CPU |
| licenses.serviceTag | string | The service tag of the product. | CJBOEgdEUTRXWIdK |

| | | | |
|--------------------------|---------|--|-------------------------------------|
| licenses.licenseEdition | string | Indicates the VMware Aria Operations for Networks edition. Can be one of two values: "ADVANCED" or "ENTERPRISE". | ENTERPRISE |
| licenses.numberofSockets | integer | Indicates the number of sockets VMware Aria Operations for Networks is licensed for. | 64 |
| licenses.productName | string | The product name for the license. | VMware Aria Operations for Networks |
| licenses.suspended | bool | Indicates if the license is suspended or not. | false |
| licenseEdition | string | License edition of the VMware Aria Operations for Networks instance. | ADVANCED |
| licenseKey | string | License key of the VMware Aria Operations for Networks instance. | 00000-00000-00000-00000-00000 |
| version | string | The software version of the VMware Aria Operations for Networks. | 5.0.0 |
| apiVersion | string | The REST API version that is supported by the VMware Aria Operations for Networks instance. | 1.1.3 |
| port | integer | The port number of the VMware Aria Operations for Networks instance. | 443 |

| | | | |
|-----------|--------|--|----------|
| host | string | The anonymized name of the hos. | p+k0nrBG |
| forgotten | bool | Indicates whether the product is marked as deleted or not. | false |

| | | | |
|-------------------|--------|--|-------|
| authorizationType | string | The authorization type used for authentication to this VMware Aria Operations for Networks. This can be LOCAL, LDAP or vIDM. | LOCAL |
|-------------------|--------|--|-------|

| | | | |
|-------------|---------|---|---------------|
| domainLDAP | string | The anonymized LDAP domain name. | tSt4LouXfa+c |
| metered | bool | Indicates whether the product is ready for metering. | true |
| id | integer | An integer that specifies the id of the metered product instance in vCloud Usage Meter. | 24 |
| productType | string | The type of the product. For this collector, the value should always be “VRNI”. | VRNI |
| time | integer | The Unix timestamp of when the record was created. | 1584659539040 |
| who | string | For this collector, the value is always “Product”. | Product |

4.2.11 VMware Aria Operations

| VMware Aria Operations Collection Data | | | |
|--|---------|---|--------|
| Data | Type | Description | Sample |
| productId | integer | An integer that specifies the product instance being metered. | 4 |

| VMware Aria Operations Collection Data | | | |
|--|---------|---|--------------------------------------|
| Data | Type | Description | Sample |
| moref | string | A string that uniquely identifies a virtual machine on one vCenter. | vm-28 |
| time | integer | A millisecond timestamp that specifies when the UsageReport data structure was created. Depending on how long the data collection takes, this might be some time after the metering happened. | 1587595912971 |
| type | string | The kind of object that the metering data is about. For the VMware Aria Operations collector, this property value should be "VirtualMachine". | VirtualMachine |
| collectionId | integer | An integer serial number that specifies the collection that this data is part of. | 5889 |
| productType | string | The name of the product being metered. For this collector, the value should always be "VROPS". | VROPS |
| vcId | string | vCenter Product ID. Populated only if VMware Aria Operations is registered as an extension in the vCenter and vCenter is added for metering in the vCloud Usage Meter web application. | 3 |
| vcUuid | string | A unique identifier for the vCenter that defines the moref of the VM being metered. | 9ae55b14-d47c-4211-b356-51ec224baf20 |
| licenseEdition | string | The license edition. It is detected in the following order: ENTERPRISE>ADVANCED>STANDARD. | ENTERPRISE |

4.2.12 VMware Aria Automation 7.X

| VMware Aria Automation Product Data | | | |
|-------------------------------------|----------|--|--|
| Data | Type | Description | Sample |
| id | integer | The id of the product in the vCloud Usage Meter web application. | 3 |
| version | string | The version of the VMware Aria Automation instance. | 7.0 |
| licenses | string[] | The license details for the product which is being metered. | [{ "serialKeys": ["00000-00000-00000-00000"], "restrictions": [{ "name": "VMware vCloud Suite Enterprise", "version": "7.0", "editionKey": "vac.vcloudEnterprise" }] }] |
| licenses.expiration | string | The date when the license expires. | 2020-09-09T00:48:40.023Z |
| licenses.serialKeys | string[] | The serial license keys of | ["00000-00000-00000-00000-00000"] |

| VMware Aria Automation Product Data | | | |
|-------------------------------------|--------------|--|--|
| Data | Type | Description | Sample |
| | | the metered product. | |
| licenses.restrictions | string [] | A list of additional license information. | [{ "name": "VMware vCloud Suite Enterprise", "version": "7.0", "editionKey": "vac.vcloudEnterprise" }] |
| licenses.restrictions.name | string | The licensing product name. The same product name is displayed in the VMware Aria Automation appliance management console. | VMware vCloud Suite Enterprise |
| licenses.restrictions.version | string | The licensing product version. The same product version is displayed in the VMware Aria Automation appliance management console. | 7.0 |

| VMware Aria Automation Product Data | | | |
|-------------------------------------|--------|---------------------------------|----------------------|
| Data | Type | Description | Sample |
| licenses.restrictions.editionKey | string | The key of the license edition. | vac.vcloudEnterprise |

| VMware Aria Automation Collection Data | | | |
|--|---------|---|---------------|
| Data | Type | Description | Sample |
| type | string | The kind of object that the metering data is about. For the VMware Aria Automation collector, the value of this property should be "VMCount". | VMCount |
| vmCount | integer | The number of the managed virtual machines in a VMware Aria Automation instance. | 100 |
| time | integer | The Unix timestamp of when the record was collected. | 1585266130714 |
| collectionId | integer | An integer serial number that specifies the collection that this data is part of. | 1 |
| productType | string | The name of the product being metered. | VRA |
| productId | integer | An integer that specifies the product instance being metered. | 1 |

4.2.13 VMware Aria Automation 8.X

| VMware Aria Automation 8.X Product Data | | | |
|---|--------|--|---------|
| Data | Type | Description | Sample |
| productType | String | The type of VMware product. For this collector, the property | VRA-VRS |

| VMware Aria Automation 8.X Product Data | | | |
|---|----------|---|---|
| Data | Type | Description | Sample |
| | | value should be “VRA-VRS”. | |
| Id | Number | The number of the VMware Aria Automation instance that appears in the vCloud Usage Meter web application. | 1 |
| version | string | The version of VMware Aria Automation instance. . | 8.7.0 |
| licenses | string[] | The license details for the product which is being metered. | { "key": "00000-00000-00000-00000-00000-00000", "description": "VMware Aria Suite 2018 Enterprise", "type": "AriaSuite" "status": "ACTIVE", "expiredOn": "never", "expired": false } |
| license.key | string | The serial license key of the metered product. | 00000-00000-00000-00000-00000 |
| license.description | string | The license name. | VMware Aria Suite Lifecycle 2018 Enterprise |
| license.type | string | The license type. | VMware Aria Suite Lifecycle |

| VMware Aria Automation 8.X Product Data | | | |
|---|---------|---|--------|
| Data | Type | Description | Sample |
| licesne.status | string | The status of the license. | Active |
| License.expiredOn | String | States if the license is set to expire. | Never |
| license.expired | boolean | States if the license has expired or not. | false |

| VMware Aria Automation 8.X Collection Data | | | |
|--|--------|---|--------------------------------------|
| Data | Type | Description | Sample |
| type | string | The kind of object that the metering data is about. For the VMwar Aria Automationcollector, the property value should be " VirtualMachine". | VirtualMachine |
| instanceUuid | string | Virtual machine's instance UUID for vCenter Server. Otherwise, it is the UUID, VMware Aria Automation identifies a virtual machine. | 5001998d-5980-efd3-c5fb-787138abad9f |
| endpointType | string | The cloud platform the virtual machine is running on. e.g., vSphere,GSP, AWS, machine, Azure. It's the value provided by VMware Aria Automation untouched. If it's not available, the value is unknown. | vsphere |
| vcUuid | string | vCenter Server's instance UUID. Only applicable to virtual machines running in vCenter. | 4c676f09-3926-4ac4-88fc-d66cef36f1b6 |
| vcId | number | The vCenter Server ID generated by vCloud Usage Meter. When the endpoint is not vCenter Server, the value is "null". | 1 |

4.3 Data Hashing

Starting with vCloud Usage Meter 4.5, providers can decide what type of data anonymization to apply to their collected data. Under the Settings tab in the vCloud Usage Meter Web application, there are three data hashing options available to providers. The options are:

- Anonymizable fields are Hashed – The selected product data will be hashed in the usage reports.
- Anonymizable fields are Redacted – The selected product data will be replaced by a string provided by the provider.
- No Hashing – The selected product data will not be anonymized and appears in plain text in the usage reports.

4.4 VMware Cloud Services Console Report

Usage reports in VMware Cloud Services Console have some fields anonymized. The actual values of these fields are not required but unique anonymization is for reporting purposes. Data that is anonymized is marked in **bold** in the Field value of the table below.

| Report | Field | Sample |
|---------------------|--------------------------------|--|
| Monthly Usage Units | Product | VMware Cloud Foundation |
| Monthly Usage Units | Hostname, anonymized | a4b155e772ade626f5ecbe3eadf1d1c73a4f2c01 |
| Monthly Usage Units | Version | 6.5.0 |
| Monthly Usage Units | VcUUIId | abc1cf6c-5cd4-4f0b-9f60-ff38f928adaa |
| Monthly Usage Units | Unit of Measure | CORE |
| Monthly Usage Units | Units to be Reported | 1857 |

| Report | Field | Sample |
|-------------------------|-----------------------------------|--|
| Monthly Usage Units | Product | VMware Cloud Foundation |
| Monthly Usage Units | Hostname, anonymized | a4b155e772ade626f5ecbe3eadf1d1c73a4f2c01 |
| Monthly Usage Units | Version | 6.5.0 |
| Customer Monthly Usage | Customer Label | Customer-123 |
| Customer Monthly Usage | Product | VMware Cloud Foundation |
| Customer Monthly Usage | Unit of Measure | CORE |
| Customer Monthly Usage | Units to be Reported | 460 |
| Virtual Machine History | Name, anonymized | 48fbd593c85389a38e2d7001946220bc9016260 |
| Virtual Machine History | Guest Hostname, anonymized | 746ce9f9bda9b9a9da2c4ea69b7caef0895358d |
| Virtual Machine History | vCenter | 1 |

| Report | Field | Sample |
|-------------------------|----------------------------------|--|
| Monthly Usage Units | Product | VMware Cloud Foundation |
| Monthly Usage Units | Hostname, anonymized | a4b155e772ade626f5ecbe3eadf1d1c73a4f2c01 |
| Monthly Usage Units | Version | 6.5.0 |
| Virtual Machine History | VCHostName, anonymized | 94b155e772ade626f5ecbe3eadf1d1c73a4f2c01 |
| Virtual Machine History | MO | 173 |
| Virtual Machine History | Instance UUID | 5003d4c6-eb7a-c0b2-6362-965cd42b570b |
| Virtual Machine History | From | 2024-05-21_18-00-00.096361_00-00 |
| Virtual Machine History | To | 2024-05-21_18-00-00.096361_00-00 |
| Virtual Machine History | Interval | 4.25 |
| Virtual Machine History | Power State | On |

| Report | Field | Sample |
|-------------------------|----------------------------------|--|
| Monthly Usage Units | Product | VMware Cloud Foundation |
| Monthly Usage Units | Hostname, anonymized | a4b155e772ade626f5ecbe3eadf1d1c73a4f2c01 |
| Monthly Usage Units | Version | 6.5.0 |
| Virtual Machine History | RAM (MB) | 24567 |
| Virtual Machine History | Res (MB) | 8192 |
| Virtual Machine History | Billing (MB) | 12288 |
| Virtual Machine History | MB-Hours | 6553131 |
| Virtual Machine History | ESXi HostName, anonymized | 4cbea9f47001057d924395fec8adc6b37834d50 |
| Virtual Machine History | vSphere License | VMware vSphere 6 Enterprise Plus |
| Virtual Machine History | VMware Aria Operations | ADVANCED |

| Report | Field | Sample |
|-------------------------|-------------------------------------|--|
| Monthly Usage Units | Product | VMware Cloud Foundation |
| Monthly Usage Units | Hostname, anonymized | a4b155e772ade626f5ecbe3eadf1d1c73a4f2c01 |
| Monthly Usage Units | Version | 6.5.0 |
| Virtual Machine History | NSX | BASIC |
| Virtual Machine History | NsxFlnt | 1 |
| Virtual Machine History | VMware Aria Operations for Networks | ADVANCED |
| Virtual Machine History | VMware Cloud Director | FALSE |
| Virtual Machine History | vmType | OTHER |
| Virtual Machine History | VMware Cloud Foundation | STANDARD |
| Virtual Machine History | CustomerLabel | Customer-123 |
| Cluster History Report | vCenter | 8 |

| Report | Field | Sample |
|------------------------|--|--|
| Monthly Usage Units | Product | VMware Cloud Foundation |
| Monthly Usage Units | Hostname, anonymized | a4b155e772ade626f5ecbe3eadf1d1c73a4f2c01 |
| Monthly Usage Units | Version | 6.5.0 |
| Cluster History Report | VCHostName, anonymized | iK1e+qvMo5ys |
| Cluster History Report | vSAN ClusterName, anonymized | yxFVWWo2oRGw |
| Cluster History Report | vSAN License | ENT |
| Cluster History Report | vSAN Used (MB) | 30312 |
| Cluster History Report | From | 2021-12-15T14:23:35.000 |
| Cluster History Report | To | 2021-12-15T17:51:03.504 |
| Cluster History Report | Interval (hours) | 3.5 |
| Cluster History Report | vSANFint | 15 |

5. Contact

For additional questions, please contact the VMware cloud service provider point of contact or open a support request at support.broadcom.com

