

Usage Meter Guidelines

Usage Meter 3.6.x, 4.x and Usage Insight

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1. SCOPE

This document is for VMware Cloud Provider Program partners. This document describes Usage Meter (UM) 3.6.x and 4.x and the related data sharing policy. This document also covers Usage Insight 1.x.

2. FEATURES AND BENEFITS OF USAGE METER 3.6.X

VMware's Usage Meter 3.6.x provides advanced metering of NSX, vSAN, and vRealize Operations. Usage Meter 3.6.x automatically detects NSX editions based on features used on a per VM basis, thereby allowing you to grow and pay for NSX usage based on customer demand. Usage Meter monitors usage based on vSAN editions and supports Service Provider hosted vRealize Operations Manager.

Usage Meter 3.6.x ships with a modern OS incorporating fixes to known security vulnerabilities, provides increased stability, and offers increased scale. API support has also been expanded. Its widened interoperability matrix includes support for newer product versions and support for a broader range of popular browsers.

3. FEATURES AND BENEFITS OF USAGE METER 4.X

Usage Meter 4.0 is the next evolution in metering and billing. With Usage Meter 3.6.X, when the data is collected, all of the data is aggregated and analyzed locally. This means that there is a computational and storage overhead associated with the usage meter. In Usage Meter 4.0, this changes significantly. In Usage Meter 4.0, the data is collected as before, but the raw data is forwarded to Usage Insight for computation and bundling. This benefits the service provider 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 Usage Meter 3.6.x and prior, it was incumbent upon the provider to ensure they were keeping the usage meter and related data for three years. With 4.0, the data is now being stored with Usage Insight so VMware will maintain the data for the required period of time.

Furthermore, reports for past months across all Usage Meter instances are available centrally in Usage Insight.

4. FEATURES AND BENEFITS OF USAGE INSIGHT

Usage Insight is a VMware cloud service that automates monthly reporting, including end-user data, to the VCPP business portal reducing the overhead of manual reporting. It aggregates reports from Usage Meter 3.6.x instances and supports site-reporting. The VCPP partner maintains control of the units reported to the business portal and the existing manual reporting option remains available.

5. FAQ – DATA SHARING

A. General

Q: Why is the data being collected?

A: Data is being collected for automated reporting to the VCPP business portal by Usage Insight, improving usage meter support, and developing and improving reporting processes

Q: What data is transmitted?

A: An installation confirmation email, report data including monthly usage, anonymized customer usage, VM history reports, and metering event data.

4.x sends metering event data

Q: How is the data uses?

A: Data is used for the purpose of pre-populating usage information in the VCPP business portal, improving usage meter support, and developing and improving the reporting process. You are provided an opportunity to opt-in to the terms and use of your data as part of this process.

Q: I've chose to participate in automatic reporting. Do I still have to populate the business portal on a monthly basis?

A: If you participate in automatic reporting, your usage data is automatically entered into the portal. You will need to confirm the reported usage and submit the final report

Q: I've chosen not to participate in automatic reporting. Do I still have to populate the business portal on a monthly basis?

A: Yes. Reporting guidelines are unchanged

B. Privacy

Q: Is end customer information present in the data transmitted to VMware?

A: Utilization statistics for customers are provided. Any information that can be associated directly with a customer (Customer names, hostnames, etc) are anonymized using a one-way hash. See appendix 2 for details on Usage Meter 3.6.x and Usage Meter 4.x

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. See appendix 2 for details.

Q: How is the data anonymized

A: In Usage Meter 3.6.x, data is anonymized using a SHA-1 based one-way hash. By using a one-way hash, any data transmitted and received cannot be decrypted to retrieve its original value.

In Usage Meter 4.x, data is anonymized using a SHA-256 based one-way has

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: Data needs to be retained for three years. For Usage Meter 3.6.x appliances, the service provider will be responsible for maintaining the appliances, and associated data, for the three years. For users of 4.x, the data will be retained and managed by VMware for three years.

C. Data and Transmission

Q: Where is the data being sent?

A: For HTTP, data is being transmitted to <https://ums.cloud.vmware.com> and for SMTP, data is being forwarded to um-reports@vmware.com

Q: In what format is data sent to VMware?

A: For Usage Meter 3.6.x, data is sent in standard usage report format: Monthly Usage, Customer Usage, and VM history reports

For 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 Usage Meter 3.6.x, data is sent on a monthly basis on the first day of the following month. For Usage Meter 4.x, data is collected and sent on an hourly basis.

Q: How are reports transmitted to VMware?

A: Usage Meter 3.6.x transmits report data via SMTP and/or HTTPS. Usage Meter 4.x transmit data via HTTPS only.

Q: Is an email server required?

A: For Usage Meter 3.6.x an email server which is accessible from the usage meter appliance in order to transmit reports via email and notify administrators for failures in data collection. Usage Meter 4.x does not require SMTP services

Q: Can I have a copy of the email to inspect what is sent to VMware?

A: Yes, you can temporarily configure the appliance to obtain a copy of the email sent to VMware. This only applies to Usage Meter 3.6.x

D. Operational

Q Can I turn off transmitting data to VMware?

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

Q: What if Usage Meter does not have access to an email server that has internet connectivity

A: For Usage Meter 3.6.x, an email server is required for installation. This email server does not need to have internet access. It is the partners responsibility to retrieve the reports and ensure they are submitted to VMware by 3:00 PM UTC on the third day of each month. If the report is not received in a timely manner, the business portal will not be pre-populated and usage statistics will need to be reported manually.

For 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 business portal. If it is not re-established, the service provider will need to report usage statistics manually.

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

A: Usage reports can continue to be generated in Usage Meter 3.6.x. When using Usage Meter 4.x, usage reports may be generated on Usage Insight only. Usage Meter 4.x is a collection engine only and all business logic has been moved to Usage Insight. There is no provision to generate usage reports in Usage Meter 4.x.

6. APPENDIX 1: USAGE METER DISCLOSURE

Upon installation and first use of Usage Meter 3.6.x, you will see this disclosure.

You have an option to accept and use the version or decline by uninstalling 3.6.0 or 3.6.1. 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 v3.6 and
- 2) includes Monthly Usage, Customer Usage, VM History and anonymized metering event data.

All data collected will only be used for the purpose of improving usage meter support or developing an improved reporting process. When the improved reporting process is available, you will be provided an opportunity to opt-in to the terms and use of your data as part of this process.

Accept

7. APPENDIX 2: REPORT DATA FIELDS FOR USAGE METER 3.6.x

Usage Meter running in the service provider datacenter anonymizes fields whose actual values are not required but unique anonymization is for reporting purposes. This anonymization is conducted prior to transmitting to VMware using SHA1 to create a one-way hash. From the hash, VMware cannot obtain the original value.

Report	Field	Anonymized	Sample
All	Version	False	3.6 Build 5250017
All	UM	False	f8019f1a-9487-42fd-a3e9-a4912d5d6de7
All	Report Type	False	Monthly Usage Units
All	Service Provider	False	VCPP partner name
All	Partner ID	False	12345678
All	Contract Number	False	123456
All	Site ID	False	123456
All	Contact	False	John Doe
All	Email	False	john@vcpp-partner.com
All	Phone	False	123.456.7890
All	Start Time	False	Wed Mar 01 00:0:00 UTC 2017
All	End Time	False	Sat Apr 01 00:0:00 UTC 2017
All	License Sets	False	vSphere 6 Ent+
All	Per-VM Memory Cap (GB)	False	24
Monthly Usage Units	Product	False	VMwre Cloud SP Advance Bundle
Monthly Usage Units	Hostname	True	a4b155e772ade626f5ecbe3eadf1d1c73a4f2c01
Monthly Usage Units	Version	False	6.4.00
Monthly Usage Units	VcUUIId	False	abc1cf6c-5cd4-4f0b-9f60-ff38f928adaa
Monthly Usage Units	Unit of Measure	False	Avg Capped Billed vRAM (GB)
Monthly Usage Units	Units to be Reported	False	1857.0
Customer Monthly Usage	Customer	True	cc155e772ade626f5ecbe3eadf1d1c73a4f2c0

Customer Monthly Usage	Country	False	US
Customer Monthly Usage	Postal Code	False	23456
Customer Monthly Usage	Product	False	VMware vRealize Operations
Customer Monthly Usage	Unit of Measure	False	Number of VMs
Customer Monthly Usage	Units to be Reported	False	8782
Virtual Machines by Product Server	Product	False	vCenter Server
Virtual Machines by Product Server	Hostname	True	f4c155e772ade626f5ecbe3eadfd1c73a4f2c01
Virtual Machines by Product Server	Version	False	6.0.0
Virtual Machines by Product Server	License Key	False	300U3-GVH4N-X8LJ1-00C80-0J55L(VC), HN4VJ-G4117-X8LW1-0K4A2-AEXPQ(ESX, vCAN)
Virtual Machines by Product Server	# VMs under Management	False	5609
Virtual Machines by Product Server	Target vCenter	True	475b5a2bd748c09554f4e5c9554a4282fca41c80
Cluster History	Customer	True	70d405d1f26515fd18ad696561d744de92c4cbf4
Cluster History	VCHostname	True	8c7803bae418ff76318aaba29baa62a7b8e0f42
Cluster History	vSAN ClusterName	True	da68bf3a55223d19ffeabebe48b0af570d763307
Cluster History	vSAN License	False	Ent
Cluster History	vSAN Used (MB)	False	14452
Cluster History	From	False	3/31/17 10:22
Cluster History	To	False	4/1/17 0:00
Cluster History	Interval	False	13:37:36
Cluster History	DeDup	False	Y
Cluster History	ErasureCoding	False	Y
Cluster History	StretchedCluster	False	N
Cluster History	lopsLimit	False	N

Product Configuration Issues	Product	False	VMWare vCenter Site Recovery Manager
Product Configuration Issues	Hostname	True	475b5a2bd748c09554f4e5c9554a4282fca41c80
Product Configuration Issues	Issue	False	Extension found but no peer vCenter Server specified
Product Configuration Issues	Time	False	2017-09-12 21:05:00.58
vCloud Director Summary	Hostname	True	5684267cdb15387d188a68d5b4b822426b36a8
vCloud Director Summary	Organization Name	True	70d405d1f26515fd18ad696561d744de92c4cbf4
vCloud Director Summary	Organization ID	False	01ff13ca-6f07-49d8-b804-eb347cc2971a
vCloud Director Summary	Virtual Datacenter Name	True	49c8a4ab5736a94d563fad4b81a89b632a5bfbfc
vCloud Director Summary	Virtual Datacenter ID	False	f4af2643-2b71-4192-aaee-f05f1af0df14
vCloud Director Summary	Days	False	31
vCloud Director Summary	Min vApps	False	7
vCloud Director Summary	Avg vApps	False	7.0
vCloud Director Summary	Max vApps	False	7
vCloud Director Summary	Min VMs	False	7
vCloud Director Summary	Avg VMs	False	7.0
vCloud Director Summary	Max VMs	False	7
Virtual Machine History	Customer	True	2f22765d04931a078909145ca628d2264c852d7d
Virtual Machine History	Name	True	48fbd593c85389a38e2d7001946220bc9016260
Virtual Machine History	Guest Hostname	True	746ce9f9bda9b9a9da2c4ea69b7caef0895358d
Virtual Machine History	VC	False	1
Virtual Machine History	VCHostName	True	94b155e772ade626f5ecbe3eadf1d1c73a4f2c01
Virtual Machine History	MO	False	173
Virtual Machine History	Instance UUID	False	5003d4c6-eb7a-c0b2-6362-965cd42b570b

Virtual Machine History	From	False	3/30/17 18:52
Virtual Machine History	To	False	3/30/17 18:57
Virtual Machine History	Interval	False	4.25
Virtual Machine History	Power	False	On
Virtual Machine History	RAM (MB)	False	24567
Virtual Machine History	Res (MB)	False	8192
Virtual Machine History	Billing (MB)	False	12288
Virtual Machine History	MB-Hours	False	6553131.165
Virtual Machine History	Bnd	False	8
Virtual Machine History	vROps	False	Y
Virtual Machine History	NSX	False	A
Virtual Machine History	ESXi HostName	True	4cbea9f47001057d924395fec8adc6b37834d50
Virtual Machine History	vSphere License	False	VMware vSphere 6 Enterprise Plus
Virtual SAN by vCenter Server	Product	False	VMware Virtual SAN Advanced
Virtual SAN by vCenter Server	Version	False	5.0
Virtual SAN by vCenter Server	License Key	False	Y000J-8739J-78V7E-OR2U2-3M41M
Virtual SAN by vCenter Server	GBs to be Reported	False	17,268
Horizon DaaS Tenants	Tenant	True	2f22765d04931a078909145ca628d2264c852d7d
Horizon DaaS Tenants	Unit of Measure	False	Sessions
Horizon DaaS Tenants	Units to be Reported	False	500

8. APPENDIX 3: REPORT DATA FIELDS FOR USAGE METER 4.X

Data Collected by Agent and sent to Usage Insight

Data	Anonymized	Sample
Hostnames	True	800570E409C360ECD06BE34BC16 CB1361382C5702E4CF226C76CC07 D68F88894
IP address	True	08B59A55AB64E038C53F3EAE2D2 C1C569646DF1EC4B2B0AE5BEB6A 436DF87C71
VirtualMachine CPU Reservation	False	8
VirtualMachine guest Full Name	True	E64745CBEF75807AA2403BA8DA0 1A9E05743154EOC19F2DEE1F9C183 0A79ED92
VM Instance UUID	False	500c8824-4428-be84-bf31- deb8322a3eab
VM Memory Reservation	False	128
VM Memory Size (vRAM)	False	256
VM name	True	1E95B83CE32376DC7BE42FF5A4B4 FD25F296E6832FB564616626F8A3 F71ECCBE
VM number of CPU	False	4
VirtualMachine UUID	False	d47b3c88-5c67-4c6c-8a4b- 236da00c68a0
VM bootTime	False	2019-05-01T00:00:00Z
VM Hostname	True	681EB0C28A924FAD9EDC79341321 82B6E6F9905D2A79D2C47246153D 2DF9DBDF
VM power state	False	poweredOn
VM suspend interval time	False	1 day 23:40:01
VM suspend time	False	2019-05-01T00:00:00Z
VM IP address	True	08B59A55AB64E038C53F3EAE2D2 C1C569646DF1EC4B2B0AE5BEB6A 436DF87C71
Host hardware version	False	13

Host num CPU cores	False	12
Host number of CPU Packages	False	10
Host number of CPU threads	False	24
Host memory size (RAM)	False	128
Host UUID	False	abc1cf6c-5cd4-4f0b-9f60-ff38f928adaa
Host fullname	True	681EB0C28A924FAD9EDC7934132182B6E6F9905D2A79D2C47246153D2DF9DBDF
Host instance UUID	False	50039abb-3c53-b89e-00ab-2478b83760c8
Host license name	False	VMware vSphere 6 Enterprise Plus
Host version	False	Not available in VMH/MUR
Host name	True	681EB0C28A924FAD9EDC7934132182B6E6F9905D2A79D2C47246153D2DF9DBDF
Host ID	False	102036
Host version	False	ESXi 6.5
Host bootTime	False	2019-05-01T00:00:00Z
Host powerState	False	poweredOn
License edition key	False	VMware vSphere 6 Enterprise Plus
LlicenseKey	True	K44J6-XXXXX-XXXXX-XXXXX-XXXXX (VC) 5N6HM-XXXXX-XXXXX-XXXXX-XXXXX (ESX, VCPP)
License name	False	VMware vSphere 6 Enterprise Plus
Total number of license key	False	2

Events Collected by Agent

VC-Mint Agent collects the following Events and sent it to Server.

Data	Anonymized	Comments
VmCreatedEvent	False	keyword:EventHistoryCollector, eventType: VmCreatedEvent, fullMessage: Created virtual machine Win-2012-DS-VM1 on 10.110.99.142 in DC1, createTime: 2019-05-10T09:39:36.206308Z, mold: vm-85, name: Win-2012-DS-VM1
VmPoweredOffEvent	False	keyword:EventHistoryCollector, eventType: VmPoweredOffEvent, fullMessage: Guest Introspection on 10.110.99.142 in DC1 is powered off, createTime: 2019-05-10T09:07:23.590258Z, mold: vm-72, name: Guest Introspection
VmPoweredOnEvent	False	keyword:EventHistoryCollector, eventType: VmPoweredOnEvent, fullMessage: Guest Introspection on 10.110.99.142 in DC1 is powered on, createTime: 2019-05-10T09:07:23.590258Z, mold: vm-72, name: Guest Introspection
VmSuspendedEvent	False	keyword:EventHistoryCollector, eventType: VmPoweredOnEvent, fullMessage: Guest Introspection on 10.110.99.142 in DC1 is powered on, createTime: 2019-05-10T09:07:23.590258Z, mold: vm-72, name: Guest Introspection
VmReloactedEvent	False	keyword:EventHistoryCollector, eventType: VmReloactedEvent, fullMessage: Guest Introspection on 10.110.99.142 in DC1 is relocated, createTime: 2019-05-10T09:07:23.590258Z, mold: vm-72, name: Guest Introspection
VmMigratedEvent	False	keyword:EventHistoryCollector, eventType: VmMigratedEvent, fullMessage: Guest Introspection on 10.110.99.142 in DC1 is migrated, createTime: 2019-05-10T09:07:23.590258Z, mold: vm-72, name: Guest Introspection
AddLicenseEvent	False	keyword:EventHistoryCollector, eventType: AddLicenseEvent, fullMessage: Guest Introspection on 10.110.99.142 in DC1 is add licence, createTime: 2019-05-10T09:07:23.590258Z, mold: vm-72, name: Guest Introspection
AssignLicenseEvent	False	keyword:EventHistoryCollector, eventType: AssignLicenseEvent, fullMessage: Guest Introspection on 10.110.99.142 in DC1 is assign licence, createTime: 2019-05-10T09:07:23.590258Z, mold: vm-72, name: Guest Introspection

Meta Data sent by Agent

Data sent by Usage Meter appliance in addition to the collected data. Used for system purposes.

Data	Anonymized	Comments
UM ID	False	3f8fbe8c-4683-43e0-9a6f-76ac4041cb2c
UM version	False	4.0.1
UM hardware ID	False	HWaddr 00:50:56:b6:11:e4
Checksum	False	e9aa96e83dd17da97aeed8c725e1881f

Usage Insight 2.1 - Reports

Report	Field	Anonymized	Sample
Monthly Usage Units	Product	False	VMwre Cloud SP Advance Bundle
Monthly Usage Units	Hostname	True	a4b155e772ade626f5ecbe3eadf1d1c73a4f2c01
Monthly Usage Units	Version	False	6.5.0
Monthly Usage Units	VcUUIId	False	abc1cf6c-5cd4-4f0b-9f60-ff38f928adaa
Monthly Usage Units	Unit of Measure	False	Avg Capped Billed vRAM (GB)
Monthly Usage Units	Units to be Reported	False	1857.0
Virtual Machine History	Name	True	48fbd593c85389a38e2d7001946220bc9016260
Virtual Machine History	Guest Hostname	True	746ce9f9bda9b9a9da2c4ea69b7caef0895358d
Virtual Machine History	VC	False	1
Virtual Machine History	UMA	False	56054054
Virtual Machine History	VCHostName	True	94b155e772ade626f5ecbe3eadf1d1c73a4f2c01
Virtual Machine History	MO	False	173
Virtual Machine History	Instance UUID	False	5003d4c6-eb7a-c0b2-6362-965cd42b570b
Virtual Machine History	From	False	3/30/17 18:52
Virtual Machine History	To	False	3/30/17 18:57
Virtual Machine History	Interval	False	4.25
Virtual Machine History	Power State	False	On
Virtual Machine History	RAM (MB)	False	24567

Virtual Machine History	Res (MB)	False	8192
Virtual Machine History	Billing (MB)	False	12288
Virtual Machine History	MB-Hours	False	6553131.165
Virtual Machine History	ESXi HostName	True	4cbea9f47001057d924395fec8adc6b37834d50
Virtual Machine History	vSphere License	False	VMware vSphere 6 Enterprise Plus
Virtual Machine History	vROps	False	E
Virtual Machine History	NSX	False	E

9. CONTACT

For additional questions please contact VCPP operations at vcan-operations@vmware.com

