



vCloud Usage Meter 3.6

API Reference

July 13, 2017

VMware, Inc.
3401 Hillview Ave.
Palo Alto, CA 94304
www.vmware.com

Copyright © 2017 VMware, Inc. All rights reserved.

[Copyright and trademark information.](#)

Table of Contents

1.	Using the vCloud Usage Meter API	1
1.1	About vCloud Usage Meter	1
1.2	Audience.....	1
1.3	Related Documentation	1
1.4	Supported Languages	1
1.5	Tokens.....	1
2.	vCloud Usage Meter API – Customers.....	3
2.1	Get All Customers	3
2.2	Get Customer by ID.....	4
2.3	Get Customer’s Rules	4
2.4	Delete a Customer and Associated Rules.....	6
2.5	Create a Customer	6
2.6	Update a Customer	7
3.	vCloud Usage Meter API – Rules.....	8
3.1	Get Rules.....	8
3.2	Get Rule	9
3.3	Delete Rule.....	9
3.4	Create a Rule	9
4.	vCloud Usage Meter API – Reports	11
4.1	Get Reports	11
4.2	Get Report.....	11
4.3	Get ZIP Report	12
5.	vCloud Usage Meter API – vCenter Servers	14
5.1	Get vCenter Servers.....	14
5.2	Get vCenter Server.....	16
5.3	Create a vCenter Server.....	16
5.4	Update a vCenter Server.....	17
5.5	Delete a vCenter Server	18
6.	vCloud Usage Meter API – vCloud Director Server.....	19
6.1	Get All vCloud Director Servers	19
6.2	Create a vCloud Director Server	20

6.3	Get vCloud Director Server	20
6.4	Update a vCloud Director Server	21
6.5	Delete a vCloud Director Server.....	21
7.	vCloud Usage Meter API – Horizon DaaS	22
7.1	Get All Horizon DaaS Servers	22
7.2	Get Horizon DaaS Server.....	23
7.3	Post a Horizon DaaS Server	23
7.4	Update a Horizon DaaS Server	24
7.5	Delete a Horizon DaaS Server	24
8.	vCloud Usage Meter API – NSX	25
8.1	Get NSX Servers	25
8.2	Get NSX Server	26
8.3	Post NSX Server	27
8.4	Put NSX Server	28
8.5	Delete NSX Server	29
9.	vCloud Usage Meter API – Provider	30
9.1	Get All Providers.....	30
9.2	Get Provider	31
9.3	Put Provider.....	31
9.4	Post Provider	32

1. Using the vCloud Usage Meter API

1.1 About vCloud Usage Meter

VMware vCloud Usage Meter is a tool that monitors, measures, and provides reports on virtual machine resource usage. It provides an easy way for Service Providers and Aggregators to gather and report accurate usage to support VMware Cloud Provider Program billing process. The vCloud Usage Meter is provided as a virtual appliance. vCloud Usage Meter serves two functions: metering and reporting. Service Providers use the metering part of the tool to collect raw usage data on VMware Cloud Provider Program bundles. Service Providers and/or Aggregators use the reporting part of the tool to generate reports for planning, billing, general account management, dispute resolution, and other purposes.

1.2 Audience

This document assumes that the audience is familiar with the following technologies:

- REST framework and conventions
- XML

Service provider developers are the intended audience of this guide.

1.3 Related Documentation

Document	Location
vCloud Usage Meter User's Guide	https://docs.vmware.com/en/vCloud-Usage-Meter/index.html
vCloud Usage Meter Release Notes	https://docs.vmware.com/en/vCloud-Usage-Meter/3.6/rn/VMware-vCloud-Usage-Meter-36-Release-Notes.html
vCloud Usage Meter Interoperability Matrix	https://www.vmware.com/support/vcloud-usage-meter/doc/vcloud-usage-meter-36-interop.html
VMware product documentation	https://docs.vmware.com/

The vCloud Usage Meter REST API (exposed over HTTPS) is provided for clients such as portals, scripts, and other programs that are external to vCloud Usage Meter.

1.4 Supported Languages

Any programming language that supports the REST framework supports the vCloud Usage Meter API.

Note: If you are using BASH to execute REST API calls, use single quotes (' ') to escape any special characters.

1.5 Tokens

All vCloud Usage Meter APIs require authentication. Authentication tokens can be generated in two ways:

- Click **Manage** in the *vCloud Usage Meter* UI, then click the **API** tab.
- Use the `umtoken` command from the console.

A curl command to invoke API:

```
curl -v -k -H x-usagemeter-authorization:<Auth-Key> https://<UM-IP>:8443/um/api/customers
```

2. vCloud Usage Meter API – Customers

This section summarizes the vCloud Usage Meter API Customer operations.

2.1 Get All Customers

Get an XML representation of all customers.

Operation	GET /api/customers
Request Header	Content-Type: application/xml x-usagemeter-authorization: TOKJ1QDQO3QD1VR1MQN03U2BA1WQR2PY04T
Sample Response	<pre><?xml version="1.0" encoding="UTF-8"?> <customers> <customer> <id>1</id> <name>test-Customer-1</name> <country>United States</country> <postalCode>94305</postalCode> </customer> <customer> <id>2</id> <name>test-Customer-2-update</name> <country>United States</country> <postalCode>94304</postalCode> </customer> <customer> <id>6</id> <name>test-Customer-3-update</name> <country>United States</country> <postalCode>95129</postalCode> </customer> <customer> <id>5</id> <name>test-get-customer-by-id</name> <country>United States</country> <postalCode>94314</postalCode> </customer> </customers></pre> <p>Note: If no customers exist, the response body is an empty list.</p> <pre><?xml version="1.0" encoding="UTF-8"?> <customers></customers></pre>
Success Response	200 OK

Note: Customer ID is auto-assigned by vCloud Usage Meter and it is retained.

2.2 Get Customer by ID

Get an XML representation of a specified customer.

Operation	GET /api/customer/{id}
Request Header	Content-Type: application/xml x-usagemeter-authorization: TOKJ1QDQO3QD1VR1MQN03U2BA1WQR2PY04T
Sample Response	<?xml version="1.0" encoding="UTF-8"?> <customer> <id>1</id> <name>test-Customer-1</name> <country>United States</country> <postalCode>94304</postalCode> </customer>
Success Response	200 OK

2.3 Get Customer's Rules

Lists all rules for a specified customer. A customer ID is required for this operation.

Operation	GET /api/customer/{id}/rules
Request Header	Content-Type: application/xml x-usagemeter-authorization: TOKJ1QDQO3QD1VR1MQN03U2BA1WQR2PY04T

Sample Response	<pre> <?xml version="1.0" encoding="UTF-8"?> <rules> <rule xmlns="http://www.vmware.com/UM" xmlns:tns="http://www.vmware.com/UM" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"> <id>11</id> <vcServerId>1</vcServerId> <customerId>1</customerId> <objectType>VM</objectType> <valueType>Unique ID</valueType> <value>vm-21</value> </rule> <rule xmlns="http://www.vmware.com/UM" xmlns:tns="http://www.vmware.com/UM" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"> <id>12</id> <vcServerId>1</vcServerId> <customerId>1</customerId> <objectType>VM</objectType> <valueType>Unique ID</valueType> <value>vm-33</value> </rule> <rule xmlns="http://www.vmware.com/UM" xmlns:tns="http://www.vmware.com/UM" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"> <id>13</id> <vcServerId>1</vcServerId> <customerId>1</customerId> <objectType>Folder</objectType> <valueType>Unique ID</valueType> <value>folder1</value> </rule> </rules> Note: If no rules exist for this customer, the response body is an empty rules list. <?xml version="1.0" encoding="UTF-8"?> </pre>
------------------------	--

	<code><rules></rules></code>
Success Response	200 OK

2.4 Delete a Customer and Associated Rules

Delete a specified customer and delete rules associated with the customer.

Operation	DELETE /api/customer/{id}
Success Response	204 No Content

2.5 Create a Customer

Create a customer from an included XML body.

The country must be a valid 2 letter country code. Country code information is available from the ISO Organization, [ISO 3166-1-alpha-2 code](#).

Operation	POST /api/customer
Body	<pre><customer xmlns="http://www.vmware.com/UM"> <name>Customer Name</name> <country>US</country> <postalCode>90210</postalCode> </customer></pre>
Sample Response	<pre><?xml version="1.0" encoding="UTF-8"?> <customer> <id>25</id> <name>Customer Name</name> <country>United States</country> <postalCode>90210</postalCode> </customer></pre>
Success Response	201 Created

2.6 Update a Customer

Update a specified customer.

Operation	PUT /api/customer/{id}
Body	<pre><customer xmlns="http://www.vmware.com/UM"> <name>Customer - Added address</name> <country>CA</country> <postalCode>90210</postalCode> </customer></pre>
Success response	200 OK

3. vCloud Usage Meter API – Rules

This section summarizes vCloud Usage Meter API rules operations.

Also see [Delete a Customer and Associated Rules](#).

3.1 Get Rules

Get an XML representation of all rules.

Operation	GET /api/rules
Sample Response	<pre><?xml version="1.0" encoding="UTF-8"?> <rules> <rule> <id>42</id> <vcServerId>12</vcServerId> <customerId>24</customerId> <objectType>Resource Pool</objectType> <valueType>Unique ID</valueType> <value>resgroup-59</value> </rule> <rule> <id>43</id> <vcServerId>12</vcServerId> <customerId>24</customerId> <objectType>Resource Pool</objectType> <valueType>Unique ID</valueType> <value>resgroup-62</value> </rule> <rule> <id>44</id> <vcServerId>12</vcServerId> <customerId>24</customerId> <objectType>Resource Pool</objectType> <valueType>Unique ID</valueType> <value>resgroup-64</value> </rule> <rule> <id>45</id> <vcServerId>12</vcServerId> <customerId>24</customerId> <objectType>Resource Pool</objectType> <valueType>Unique ID</valueType> <value>resgroup-66</value> </rule> </rules></pre>

```

    </rule>
  </rules>

```

Note: If no content exists, the response body is an empty list.

```

<?xml version="1.0" encoding="UTF-8"?>
<rules></rules>

```

Success Response	200 OK
------------------	--------

3.2 Get Rule

Get an XML representation of a specified rule.

Operation	GET /api/rule/{id}
Sample Response	<pre> <?xml version="1.0" encoding="UTF-8"?> <rule> <id>42</id> <vcServerId>12</vcServerId> <customerId>24</customerId> <objectType>Resource Pool</objectType> <valueType>Unique ID</valueType> <value>resgroup-59</value> </rule> </pre>
Success Response	200 OK

3.3 Delete Rule

Delete a specified rule.

Operation	DELETE /api/rule/{id}
Success Response	204 No Content

3.4 Create a Rule

Create a rule from an included XML body.

Customer name and vCenter Server ID are required for this operation. The required field varies depending on `objectType`.

Operation	POST /api/rule
Request Header	<pre> Content-Type: application/xml x-usagemeter-authorization: <token value> </pre>

Body	<p>Example 1</p> <pre><rule xmlns="http://www.vmware.com/UM"> <vcServerId>1</vcServerId> <customerName>CustomerTest</customerName> <objectType>VM</objectType> <valueType>Unique ID</valueType> <value>vm-21</value> </rule></pre> <p>Example 2</p> <pre><rule xmlns="http://www.vmware.com/UM"> <vcServerId>1</vcServerId> <customerName>CustomerTest</customerName> <objectType>vCenter Server</objectType> <valueType>Unique ID</valueType> </rule></pre>
Sample Response	<pre><?xml version="1.0" encoding="UTF-8"?> <rule xmlns="http://www.vmware.com/UM" xmlns:tns="http://www.vmware.com/UM" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"> <id>22</id> <vcServerId>1</vcServerId> <customerId>17</customerId> <objectType>VM</objectType> <valueType>Unique ID</valueType> <value>vm-21</value> </rule></pre>
Success Response	201 Created

Note: Customer and vCenter Server must pre-exist.

4. vCloud Usage Meter API – Reports

This section summarizes vCloud Usage Meter API Report operations.

4.1 Get Reports

Get an XML description for reports.

Note: Currently vCloud Usage Meter supports the following reports APIs:

- Monthly Usage Units
- Virtual Machines by Product Server
- Virtual Machine History
- Product Configuration Issues
- vCloud Director Summary
- Customer Monthly Usage
- Horizon DaaS Tenants
- Virtual SAN by vCenter Server
- Cluster History

Operation	GET /api/reports
Sample Response	<pre><?xml version="1.0" encoding="UTF-8"?> <reports> <report> <link method="get" rel="Monthly Usage Units" href="/api/report/5" /> </report><report> <link method="get" rel="Virtual Machines by Product Server" href="/api/report/19" /> </report><report> <link method="get" rel="Virtual Machine History" href="/api/report/21" /> </report><report> <link method="get" rel="Product Configuration Issues" href="/api/report/22" /> </report><report> <link method="get" rel="vCloud Director Summary" href="/api/report/23" /> </report><report> <link method="get" rel="Customer Monthly Usage" href="/api/report/24" /> </report><report> <link method="get" rel="Horizon DaaS Tenants" href="/api/report/26" /> </report><report> <link method="get" rel="Virtual SAN by vCenter Server" href="/api/report/31" /> </report><report> <link method="get" rel="Cluster History" href="/api/report/32" /> </report> </reports></pre>
	<p>Note: If no content exists, the response body is an empty list.</p> <pre><?xml version="1.0" encoding="UTF-8"?> <reports></reports></pre>
Success Response	200 OK

4.2 Get Report

Get a tsv representation of a specified report. Query is required for all specific reports and must follow the following format:

```
/<id>?dateFrom=yyyymm0100&dateTo=yyyymm0100
```

Example:

```
curl -v -k -H x-usagemeter-authorization:TOK4GWBQU1ZX5D15QXAC5UX003EGLUYTNUS -X GET 'https://10.110.99.224:8443/um/api/report/21?dateFrom=2016100100&dateTo=2016110100'
```

The monthly interval must be exactly one month.

Operation	GET /api/report/21?dateFrom=2016060100&dateTo=2016070100
Sample Response	<pre>#Version: 3.5 #Report Type: Virtual Machines by Product Server #Service Provider: a #Partner ID: 1 #Contract Number: 1 #Site ID: 1 #Contact: a #Email: a@b.com #Phone: a #Start Time: Wed Jun 01 00:00:00 EEST 2016 #End Time: Fri Jul 01 00:00:00 EEST 2016 #Per-VM Memory Cap (GB): 24 #Product Hostname Version License Key # VMs under Management #Message Authentication Code: 41e94ab016b6ace0b4f20f7ef3e666a2ede60436d5fe0632820679b04329ab6c</pre>
Success response	200 OK

4.3 Get ZIP Report

Export a vCloud Usage Meter report in a ZIP file.

Get a ZIP file containing a specified report. A query is required for all specific reports and must follow the following format:

```
/<id>?dateFrom=yyyymm0100&dateTo=yyyymm0100
```

A new parameter `toZip` is added to the operation. If the value for `toZip` is `true`, the result is of Content-Type `application/zip`.

If the value is `false` or does not exist, the result is of Content-type `text/tab-separated-values`. For more information about exporting vCloud Usage Meter reports, see [Get Report](#).

Example:

```
curl -o outputZippedReports.zip -v -k -H x-usagemeter-authorization:TOK4GWBQU1ZX5D15QXAC5UX003EGLUYTNUS -X GET 'https://10.110.99.224:8443/um/api/report/21?dateFrom=2016100100&dateTo=2016110100&toZip=true'
```

The monthly interval must be exactly one month.

Operation	GET /api/report/21?dateFrom=2016090100&dateTo=2016100100&toZip=true
Request Header	Content-Type:text/xml;x-usagemeter-authorization:<token value>
Success Response	ZIP File with the report.

5. vCloud Usage Meter API – vCenter Servers

This section summarizes vCloud Usage Meter API vCenter Server operations. All vCenter Server APIs should use the following XML tag:

```
<vcServers>:<vcServer>
```

vCloud Usage Meter 3.6 introduces the following four new, optional fields to handle external Platform Services Controller (PSC):

Option	Description
<code>sso</code>	The following values are allowed: <ul style="list-style-type: none"> 0 – Use when the vCenter Server does not use single sign-on. 1 – Use when the vCenter Server does not use an external PSC. If you do not set a specific <code>sso</code> value in your request, 1 is the default value. 2 – Use when the vCenter Server uses an external PSC. When you use this <code>sso</code> value in your request, you must also define values for <code>pscId</code>, <code>pscHost</code>, and <code>pscPort</code>.
<code>pscId</code>	The ID of the external PSC host.
<code>pscHost</code>	The IP Address of the external PSC Host
<code>pscPort</code>	The port that the external PSC is using.

You can add PSC when you add a vCenter Server. For PSC, you can only update the PSC port of an existing host. If you change the PSC host, you create a new record.

5.1 Get vCenter Servers

Get an XML description for all vCenter Servers.

This API operation returns a list of all active vCenter Servers. The inactive servers are kept hidden in the inventory.

Example:

```
curl -v -k -H Content-Type:application/xml -H x-usagemeter-authorization:<token-value>
GET 'https://11.111.111.11: 7444/um/api/vcServers'
```

Operation	<code>GET /api/vcServers</code>
Request Header	<code>Content-Type: application/xml;x-usagemeter-authorization:<token value></code>

Sample Response	<pre> <?xml version="1.0" encoding="UTF-8"?> <vcServers> <vcServer xmlns="http://www.vmware.com/UM" xmlns:tns="http://www.vmware.com/UM" xmlns:xs ="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchem a-instance"> <id>1</id> <hostname>111.111.11.111</hostname> <port>443</port> <username>administrator@vsphere.local</username> <instanceUuid>47d315b6-c77f-4abc-985b-f9b864d9g724</instanceUuid> <fullname>VMware vCenter Server 6.0.0 build-3339084</fullname> <active>true</active> <version>6.0.0</version> <meter>true</meter> <monitor>true</monitor> <sso>1</sso> </vcServer> <vcServer> <id>2</id> <hostname>222.222.22.222</hostname> <port>443</port> <username>administrator@vsphere.local</username> <instanceUuid>del1263b-872a-4ae7-88e2-1a127d87d608</instanceUuid> <fullname>VMware vCenter Server 6.0.0 build-3634794</fullname> <active>true</active> <version>6.0.0</version> <meter>true</meter> <monitor>true</monitor> <sso>2</sso> <pscId>1</pscId> <pscHost>33.333.333.333</pscHost> <pscPort>7444</pscPort> </vcServer> </vcServers> </pre>
	<p>Note: If no content exists, the response body is an empty list.</p> <pre> <?xml version="1.0" encoding="UTF-8"?> <vcServers></vcServers> </pre>
Success Response	200 OK

5.2 Get vCenter Server

Get an XML representation of a specified vCenter Server. {id} is the vCenter Server ID, which remains unchanged.

Operation	GET /api/vcServer/{id}
Request Header	Content-Type: application/xml;x-usagemeter-authorization:<token value>
Sample Response	<pre><?xml version="1.0" encoding="UTF-8"?> <vcServers> <vcServer> <vcServerID>1</vcServerID> <host>11.11.111.111</host> <fullname>VMware vCenter Server 5.1.0 build-799731</fullname> <active>true</active> <instanceUuid>7C1A5AF7-4DB1-4E90-BDFE- A3EEF1B1C79B</instanceUuid> <user>root</user> <sso>2</sso> <pscId>1</pscId> <pscHost>22.222.222.222</pscHost> <pscPort>7444</pscPort> </vcServer> </vcServers></pre>
Success Response	200 OK

5.3 Create a vCenter Server

Create a vCenter Server.

Operation	POST /api/vcServer
Request Header	Content-Type: application/xml;x-usagemeter-authorization:<token value>
Request Body	<pre><vcServer xmlns="http://www.vmware.com/UM"> <hostname>11.111.11.11</hostname> <username>administrator@vsphere.local</username> <password>password</password> <monitor>true</monitor> <sso>2</sso> <pscId>1</pscId> <pscHost>22.222.222.222</pscHost> <pscPort>7444</pscPort> </vcServer></pre>

Sample Response	<pre><?xml version="1.0" encoding="UTF-8"?> <vcServer xmlns="http://www.vmware.com/UM" xmlns:tns="http://www.vmware.com/UM" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"> <id>3</id> <hostname>11.111.11.11</hostname> <port>443</port> <username>administrator@vsphere.local</username> <instanceUuid>b64def84-899e-4c12-8e52-ef8e633eb994</instanceUuid> <fullname>VMware vCenter Server 6.0.0 build-3339084</fullname> <active>true</active> <version>6.0.0</version> <meter>true</meter> <monitor>true</monitor> <sso>2</sso> <pscId>1</pscId> <pscHost>22.222.222.222</pscHost> <pscPort>7444</pscPort> </vcServer></pre>
Success Response	201 OK

Note: The `<monitor>` field is optional. By default, the value is `<true>`.

5.4 Update a vCenter Server

Update details or reactivate a specified vCenter Server. This API is used for the following operations:

- Change username and/or password
- Reactivate deleted vCenter Server
- Update PSC port of an existing host. If you change the PSC host, you create a new record.

Operation	PUT <code>/api/vcServer/{id}</code>
Request Header	Content-Type: application/xml x-usagemeter-authorization: <code><token value></code>
Body	<pre><vcServer xmlns="http://www.vmware.com/UM"> <port>443</port> <username>administrator@vsphere.local</username> <password>password</password> <sso>2</sso> <pscHost>22.222.222.222</pscHost> <pscPort>7444</pscPort> </vcServer></pre>

Sample Response	<pre> <?xml version="1.0" encoding="UTF-8"?> <vcServer xmlns="http://www.vmware.com/UM" xmlns:tns="http://www.vmware.com/UM" xmlns :xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XM LSchema-instance"> <id>3</id> <hostname>111.11.11.11</hostname> <port>443</port> <username>administrator@vsphere.local</username> <instanceUuid>b64def84-899e-4c12-8e52-ef8e633eb994</instanceUuid> <fullname>VMware vCenter Server 6.0.0 build-3339084</fullname> <active>true</active> <version>6.0.0</version> <meter>true</meter> <monitor>true</monitor> <sso>2</sso> <pscId>1</pscId> <pscHost>22.222.222.222</pscHost> <pscPort>7444</pscPort> </vcServer> </pre>
------------------------	---

Success Response	200 OK
-------------------------	--------

5.5 Delete a vCenter Server

Delete or deactivate a specified vCenter Server. The vCenter Server becomes inactive. After deletion, the vCenter Server `<active>` attribute is set to "false".

Operation	<code>DELETE /api/vcenter/{id}</code>
Success Response	204 No Content

6. vCloud Usage Meter API – vCloud Director Server

This section summarizes vCloud Usage Meter API vCloud Director Server operations.

6.1 Get All vCloud Director Servers

Get an XML representation for all vCloud Director Servers.

You can add a query parameter to get a list of all active or inactive vCloud Director servers.

- **GET /api/vcd?active=true** returns a list of all **active** vCloud Director Servers.
- **GET /api/vcd?active=false** returns a list of all **inactive** vCloud Director Servers.

Operation	GET /api/vcd
Sample Response	<pre><?xml version="1.0" encoding="UTF-8"?> <vcdServers> <vcdServer xmlns="http://www.vmware.com/UM" xmlns:tns="http://www.vmware.com/UM" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"> <id>6</id> <hostname>11.111.111.111</hostname> <port>443</port> <user>admin</user> <active>true</active> <version>8.0.1.3635340</version> </vcdServer> <vcdServer> <id>7</id> <hostname>22.222.222.222</hostname> <port>443</port> <user>admin</user> <active>true</active> <version>8.0.1.3635340</version> </vcdServer> </vcdServers></pre> <p>Note: If no content exists, the response body is an empty list.</p> <pre><?xml version="1.0" encoding="UTF-8"?> <vcdServers></vcdServers></pre>
Success Response	200 OK

6.2 Create a vCloud Director Server

Create a vCloud Director Server.

Operation	POST /api/vcd
Body	<pre><VCD xmlns="http://www.vmware.com/UM"> <hostname>22.444.66.888</hostname> <username>admin</username> <password>password</password> </VCD></pre>
Sample Response	<pre><?xml version="1.0" encoding="UTF-8"?> <vcdServer xmlns="http://www.vmware.com/UM" xmlns:tns="http://www.vmware.com/UM" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"> <id>3</id> <hostname>11.110.22.44</hostname> <port>443</port> <username>admin</username> <active>true</active> <version>8.0.1.3635340</version> </vcdServer></pre>
Success Response	201 Created

6.3 Get vCloud Director Server

Get an XML representation of a specified vCloud Director Server.

Operation	GET /api/vcd/{id}
Sample Response	<pre><?xml version="1.0" encoding="UTF-8"?> <vcdServers> <vcdServer xmlns="http://www.vmware.com/UM" xmlns:tns="http://www.vmware.com/UM" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"> <id>1</id> <hostname>11.111.111.111</hostname> <port>443</port> <username>admin</username> <active>true</active> <version>8.0.1.3635340</version> </vcdServer> </vcdServers></pre>
Success Response	200 OK

6.4 Update a vCloud Director Server

Update details or activate a specified vCloud Director Server. This API is only for updating username/password and cannot be used for updating the id.

Note: If username/password does not get updated, an “Invalid credentials for vCloud Director Server” error message is displayed.

Operation	PUT /api/vcd/{id}
Request Sample	<pre><VCD xmlns="http://www.vmware.com/UM"> <username>admin-update</username> <password>pwd-update</password> </VCD></pre>
Success Response	204 No Content
Failure Response	403 Forbidden

6.5 Delete a vCloud Director Server

Delete or deactivate a specific vCloud Director Server.

Operation	DELETE /api/vcd/{id}
Success Response	204 No Content

7. vCloud Usage Meter API – Horizon DaaS

This section summarizes vCloud Usage Meter API Horizon DaaS operations.

7.1 Get All Horizon DaaS Servers

Get an XML representation for all Horizon DaaS Servers.

You can add a query parameter to get a list of all active or inactive Horizon DaaS Servers.

- **GET /api/products/horizonDaaS?active=true** returns a list of all **active** Horizon DaaS Servers.
- **GET /api/products/horizonDaaS?active=false** returns a list of all **inactive** Horizon DaaS Servers.

Operation	GET /api/products/horizonDaaS
Sample Response	<pre><horizonDaaS> <DeskstoneServer xmlns="http://www.vmware.com/UM" xmlns:tns="http://www.vmware.com/UM" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"> <id>1</id> <hostname>11.22.33.44</hostname> <username>test</username> <sessionModels>1</sessionModels> <active>true</active> </DeskstoneServer> </horizonDaaS></pre> <p>Note: If no content exists, the response body is an empty list.</p> <pre><?xml version="1.0" encoding="UTF-8"?> < DeskstoneServers></ DeskstoneServers></pre>
Success Response	200 OK

7.2 Get Horizon DaaS Server

Get an XML representation of a specified Horizon DaaS Server.

Operation	GET /api/products/horizonDaaS/{id}
Sample Response	<pre><?xml version="1.0" encoding="UTF-8"?> <horizonDaaS> <DesktonServer xmlns="http://www.vmware.com/UM" xmlns:tns="http://www.vmware.com/UM" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"> <id>1</id> <hostname>12.34.56.78</hostname> <username>test2</username> <sessionModels>1</sessionModels> <active>true</active> </DesktonServer> </horizonDaaS></pre>
Success Response	200 OK

7.3 Post a Horizon DaaS Server

Create a Horizon DaaS Server.

Operation	POST /api/products/horizonDaaS
Body	<pre>'<?xml version="1.0" encoding="UTF-8"?> <DesktonServer> xmlns="http://www.vmware.com/UM" xmlns:tns="http://www.vmware.com/UM" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"> <hostname>22.44.55.66</hostname> <username>test2</username> <password>pwd</password> <sessionModels>4</sessionModels> </DesktonServer>'</pre>

Sample Response	<pre><?xml version="1.0" encoding="UTF-8"?> <DesktonServer xmlns="http://www.vmware.com/UM" xmlns:tns="http://www.vmware.com/UM" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"><id>2</id> <hostname>11.33.11.22</hostname> <username>test2 </username><sessionModels>2</sessionModels> <active>true</active> </DesktonServer></pre>
Success Response	201 Created

7.4 Update a Horizon DaaS Server

Update details or activate a specified Horizon DaaS Server.

Operation	PUT /api/products/horizonDaaS/{id}
Request Sample	<pre>'<?xml version="1.0" encoding="UTF-8"?> <DesktonServer xmlns="http://www.vmware.com/UM" xmlns:tns="http://www.vmware.com/UM" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"> <hostname>11.222.33.555/hostname> <username>test</username> <password>pwd</password> <sessionModels>4</sessionModels> </DesktonServer>'</pre>
Success Response	204 No Content
Failure Response	403 Forbidden

7.5 Delete a Horizon DaaS Server

Delete or deactivate a specific Horizon DaaS Server.

Operation	DELETE /api/products/horizonDaaS/{id}
Success Response	204 No Content

8. vCloud Usage Meter API – NSX

This section summarizes vCloud Usage Meter API NSX operations.

8.1 Get NSX Servers

Get an XML representation for all NSX Servers.

Operation	<code>GET /api/products/nsxServer</code>
Request Header	<code>Content-Type: application/xml;x-usagemeter-authorization:<token value></code>

Sample Response	<pre> <?xml version="1.0" encoding="UTF-8"?> <nsxServers> <nsxServer xmlns="http://www.vmware.com/UM" xmlns:tns="http://www.vmware.com/UM" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"> <id>3</id> <active>true</active> <host>11.111.111.111</host> <port>443</port> <userName>username</userName> <password>3rfGs3cui1ko/wxsQKkrLmJY0mS2Jwr2N7Qsr3X6AP8=</password> <vchost>22.222.222.222</vchost> </nsxServer> <nsxServer xmlns="http://www.vmware.com/UM" xmlns:tns="http://www.vmware.com/UM" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"> <id>4</id> <active>true</active> <host>33.333.333.333</host> <port>443</port> <userName>username</userName> <password>byofTVGKcU1VCBPk0YPoU5B3Zs7vHQfofr7sumZJmBI=</password> <vchost>44.344.444.444</vchost> </nsxServer> </nsxServers> </pre>
Success Response	200 OK

8.2 Get NSX Server

Get an XML representation of a specified NSX server. {id} is the NSX server ID, which remains unchanged.

Operation	GET /api/nsxServer/{id}
Request Header	Content-Type: application/xml;x-usagemeter-authorization:<token value>

Sample Response	<pre><?xml version="1.0" encoding="UTF-8"?> <nsxServers> <nsxServer xmlns="http://www.vmware.com/UM" xmlns:tns="http://www.vmware.com/UM" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"> <id>{id}</id> <active>true</active> <host>11.111.111.111</host> <port>443</port> <userName>user</userName> <password>3rfGs3cuilko/wxsQKKrLmJY0mS2Jwr2N7Qsr3X6AP8=</password> <vchost>22.222.222.222</vchost> </nsxServer> </nsxServers></pre>
-----------------	--

Success Response	200 OK
------------------	--------

If there is no NSX server associated with the *{id}* you provide in the call, you receive a 404 Not Found error.

8.3 Post NSX Server

Create an NSX server.

Operation	POST /api/products/nsxServer
Request Header	Content-Type:text/xml;x-usagemeter-authorization:<token value>
Request Body	<pre><nsxServer xmlns="http://www.vmware.com/UM"> <host>11.111.111.111</host> <port>443</port> <userName>username</userName> <password>password</password> <vchost>22.222.222.222</vchost> </nsxServer></pre>

Sample Response	<pre><?xml version="1.0" encoding="UTF-8"?> <nsxServer xmlns="http://www.vmware.com/UM" xmlns:tns="http://www.vmware.com/UM" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"> <id>4</id> <active>true</active> <host>11.111.111.111</host> <port>443</port> <userName>username</userName> <password>3rfGs3cuilko/wxstyKrLmJY0mS2Jwr2N7Qsr3X6AP8=</password> <vchost>22.222.222.222</vchost> </nsxServer></pre>
Success Response	201 Created
Failure Response	400 Bad Request

Note: If the vCenter Server that an NSX server is referencing, is not registered, you receive a 400 Bad Request error.

8.4 Put NSX Server

Update an NSX server.

Operation	PUT /api/products/nsxServer/{id}
Request Header	Content-Type:text/xml;x-usagemeter-authorization:<token value>
Request Sample	<pre><nsxServer xmlns="http://www.vmware.com/UM"> <host>11.111.111.111</host> <port>443</port> <userName>username</userName> <password>password</password> <vchost>22.222.222.222</vchost> </nsxServer></pre>

Sample Response	<pre><?xml version="1.0" encoding="UTF-8"?> <nsxServer xmlns="http://www.vmware.com/UM" xmlns:tns="http://www.vmware.com/UM" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"> <id>4</id> <active>true</active> <host>11.111.111.111</host> <port>443</port> <userName>username</userName> <password>3rfGs3cuilko/wxstyKrLmJY0mS2Jwr2N7Qsr3X6AP8=</password> <vchost>22.222.222.222</vchost> </nsxServer></pre>
Success Response	201 Created

8.5 Delete NSX Server

Delete NSX server.

Operation	DELETE /api/products/nsxServer/{id}
Success Response	204 No Content

9. vCloud Usage Meter API – Provider

This section summarizes vCloud Usage Meter API Provider operations.

9.1 Get All Providers

Get an XML representation for all Providers.

Operation	GET /api/providers
Sample Response	<pre><providers> <provider xmlns="http://www.vmware.com/UM"> <id>1</id> <company>test-update</company> <contact>test</contact> <phone>111111</phone> <email>a@b.com</email> <partnerId>test</partnerId> <contractNum>test</contractNum> <siteId>test</siteId> <portalUserName/> <portalPassword/> </provider> <provider xmlns="http://www.vmware.com/UM"> <id>2</id> <company>test-update</company> <contact>test</contact> <phone>111111</phone> <email>a@b.com</email> <partnerId>test</partnerId> <contractNum>test</contractNum> <siteId>test</siteId> <portalUserName/> <portalPassword/> </provider> </providers></pre> <p>Note: If no content exists, the response body is an empty list.</p> <pre><?xml version="1.0" encoding="UTF-8"?> <Providers></Providers></pre>
Success Response	200 OK

9.2 Get Provider

Get an XML representation of a specified provider.

Operation	GET /api/provider
Sample Response	<pre><provider xmlns="http://www.vmware.com/UM"> <id>1</id> <company>test-update</company> <contact>test</contact> <phone>111111</phone> <email>a@b.com</email> <partnerId>test</partnerId> <contractNum>test</contractNum> <siteId>test</siteId> <portalUserName/> <portalPassword/> </provider></pre>
Success Response	200 OK
Failure Response	404 Not Found The specified provider is not configured.

9.3 Put Provider

Update a specified provider.

Operation	PUT /api/provider
-----------	--------------------------

Request Sample	<pre> <provider xmlns="http://www.vmware.com/UM"> <company>test-update</company> <contact>test</contact> <phone>111111</phone> <email>a@b.com</email> <partnerId>test</partnerId> <contractNum>test</contractNum> <siteId>test</siteId> <portalUserName/> <portalPassword/> </provider> </pre>
Sample Response	<pre> <provider xmlns="http://www.vmware.com/UM"> <id>1</id> <company>test-update</company> <contact>test</contact> <phone>111111</phone> <email>a@b.com</email> <partnerId>test</partnerId> <contractNum>test</contractNum> <siteId>test</siteId> <portalUserName/> <portalPassword/> </provider> </pre>
Success Response	200 OK

9.4 Post Provider

Create a specified provider.

Operation	POST /api/provider
Sample Response	<pre> <provider xmlns="http://www.vmware.com/UM"> <company>test-update</company> <contact>test</contact> <phone>111111</phone> <email>a@b.com</email> <partnerId>test</partnerId> <contractNum>test</contractNum> <siteId>test</siteId> <portalUserName/> <portalPassword/> </provider> </pre>

Success	201 CREATED
Response	<pre><provider xmlns="http://www.vmware.com/UM" xmlns:tns="http://www.vmware.com/UM" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"> <id>1</id> <company>Company Name</company> <contact>FirstName LastName</contact> <phone>111111</phone> <email>a@b.com</email> <partnerId>partner-id</partnerId> <contractNum>contact-number</contractNum> <siteId>site-id</siteId> <portalUserName> </portalUserName> <portalPassword> </portalPassword> </provider></pre>
Failure	400 BAD REQUEST - If the provider already exists.
Response	
