



Global IT Asset Inventory API

User Guide

Version 1.3

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Preface

This user guide is intended for application developers who will use the Qualys Global IT Asset Inventory API.

About Qualys

Qualys, Inc. (NASDAQ: QLYS) is a pioneer and leading provider of cloud-based security and compliance solutions. The Qualys Cloud Platform and its integrated apps help businesses simplify security operations and lower the cost of compliance by delivering critical security intelligence on demand and automating the full spectrum of auditing, compliance and protection for IT systems and web applications.

Founded in 1999, Qualys has established strategic partnerships with leading managed service providers and consulting organizations including Accenture, BT, Cognizant Technology Solutions, Deutsche Telekom, Fujitsu, HCL, HP Enterprise, IBM, Infosys, NTT, Optiv, SecureWorks, Tata Communications, Verizon and Wipro. The company is also a founding member of the [Cloud Security Alliance \(CSA\)](#). For more information, please visit www.qualys.com.

Contact Qualys Support

Qualys is committed to providing you with the most thorough support. Through online documentation, telephone help, and direct email support, Qualys ensures that your questions will be answered in the fastest time possible. We support you 7 days a week, 24 hours a day. Access support information at www.qualys.com/support/.

Chapter 1 - Welcome

Welcome to Global IT Asset Inventory API.

Get Started

[Qualys API Framework](#) - Learn the basics about making API requests. The base URL depends on the platform where your Qualys account is located.

[Introduction to Global IT Asset Inventory API Paradigm](#) - Get tips on using the Curl command-line tool to make API requests. Every API request must authenticate using a JSON Web Token (JWT) obtained from the Qualys Authentication API.

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Qualys API Framework

The Qualys Global IT Asset Inventory API uses the following framework.

Request URL

The URL for making API requests respects the following structure:

`https://<baseurl>/<module>/<object>/<object_id>/<operation>`

where the components are described below.

<code><baseurl></code>	The Qualys API server URL that you should use for API requests depends on the platform where your account is located. The base URL for Qualys US Platform 1 is: <code>https://gateway.qg1.apps.qualys.com</code>
<code><module></code>	The API module. For the Global IT Asset Inventory, the module is: "am".
<code><object></code>	The module specific object.
<code><object_id></code>	(Optional) The module specific object ID, if appropriate.
<code><operation></code>	The request operation, such as count.

Qualys API Gateway URL

The Qualys API URL you should use for API requests depends on the Qualys platform where your account is located.

[Click here to identify your Qualys platform and get the API URL](#)

This documentation uses the API gateway URL for Qualys US Platform 1 (<https://gateway.qg1.apps.qualys.com>) in sample API requests. If you're on another platform, please replace this URL with the appropriate gateway URL for your account.

Introduction to Global IT Asset Inventory API Paradigm

Authentication

You must authenticate to the Qualys Cloud Platform using Qualys account credentials (user name and password) and get the JSON Web Token (JWT) before you can start using the Global IT Asset Inventory APIs. Use the Qualys Authentication API to get the JWT.

For example,

```
curl -X POST https://gateway.qg1.apps.qualys.com/auth -d  
"username=value1&password=passwordValue&token=true" -H  
"ContentType: application/x-www-form-urlencoded"
```

where gateway.qg1.apps.qualys.com is the base URL to the Qualys API server where your account is located.

- **username** and **password** are the credentials of the user account for which you want to fetch Global IT Asset Inventory data
- **token** should be true
- **Content-Type** should be "application/x-www-form-urlencoded"

The Authentication API returns a JSON Web Token (JWT) which you can use for authentication during Global IT Asset Inventory calls. The token expires in 4 hours. You must regenerate the token to continue using the Global IT Asset Inventory API.

Using Curl

Curl is a multi-platform command-line tool used to transfer data using multiple protocols. This tool is supported on many systems, including Windows, Unix, Linux and Mac. In this document Curl is used in the examples to build Qualys API requests using the HTTP over SSL (https) protocol, which is required.

Want to learn more? Visit <https://curl.haxx.se/>

The following Curl options are used according to different situations:

Option	Description
-X "POST"	The POST method is required for all Global IT Asset Inventory API requests.
-H "Authorization: Bearer <token>"	This option is used to provide a custom HTTP request header parameter for authentication. Provide the JSON Web Token (JWT) received from Qualys authentication API in the following format: Authorization: Bearer <token> For information about Qualys authentication API, see Authentication .

The sample below shows a typical Curl request using options mentioned above and how they interact with each other.

```
curl -X POST "https://gateway.qg1.apps.qualys.com/am/v1/assets" -H "Authorization: Bearer <token>"
```

Limit your results

Use the optional “fields” parameter for any API request to limit the amount of information returned in the results. Simply specify the fields you want to include or exclude in the output, and all other information will be filtered out (excluded). Multiple fields are comma separated.

Sample limit results

Use this request to get a list of all asset hosts with information for only the operatingSystem and hardware fields:

```
curl -X POST -H 'Accept: */*' -H 'Authorization: <JWT Token>' -H 'Content-Type: application/json' -i 'https://gateway.qg1.apps.qualys.com/am/v1/assets/host/list?pageSize=100&includeFields=operatingSystem,hardware'
```

Note:

- The response would still include all the fields, but other than the included fields, the value returned for all other fields would be null.
- Public API having filters with '>', '<', '=', '>=', '<=' or '[']' operators works only when you use **encodeURIComponent ()** function.

You can include the following fields to limit your results:

activity	lastLocation
address	lastLoggedOnUser
agent	netbiosName
agentId	networkInterface
assetName	openPort
biosAssetTag	operatingSystem
biosDescription	processor
biosSerialNumber	provider
cloudProvider	sensor
container	service
cpuCount	software
dnsName	tag
hardware	timeZone
hostId	totalMemory
inventory	userAccount
isContainerHost	volume
lastBoot	

API Rate Limits

The Qualys API enforces limits on the API calls a customer can make based on their subscription settings. The limits apply to the use of all Qualys APIs except “auth” API (JWT Token Generation API). Default API control settings are provided by the service. Note these settings may be customized per subscription by Qualys Support.

The rate count and period are calculated dynamically each time an API call is received. The rate period represents a rolling window when API calls are counted.

API Controls Definition

X-RateLimit-Remaining: This indicates the total API calls remaining in current rate limit window.

X-RateLimit-ToWait-Sec: This time indicates the wait time for the rate limit to be reset. The customer has to wait for that time to execute next API calls.

X-RateLimit-Window-Sec: This value indicates the total time window assigned for the APIs to be executed.

X-RateLimit-Limit: This indicates the max number of API calls that can be executed in that particular rate limit window.

Sample Request

```
curl -X POST -H 'Accept: */*' -H 'Authorization: Bearer <JWT Token>' -H  
'Content-Type: application/json' -i  
'https://gateway.qgl.apps.qualys.com/am/v1/assets/host/count'
```

Note: Provide "-i" in the curl request as shown in the example returns the response headers which includes the rate limit related parameters.

After executing a curl request, check the following parameters in response headers to check the rate-limit status:

X-RateLimit-Remaining: 0

X-RateLimit-ToWait-Sec: 300

X-RateLimit-Window-Sec: 3600

X-RateLimit-Limit: 300

Example: A subscription for Standard API Service has the default API control settings. Consider that the API rate limit set for a customer is 300 API calls for a time window of 3600 seconds. If 300 API calls are received in a 5 minute period and none are blocked by any API limiting rules, then you need to wait 55 minutes before making the next call to the API. During the wait period API calls will be blocked by the rate limiting rule.

Sample HTTP Response Headers

Sample 1: Normal API call (API call not blocked)

```
Server: nginx/1.19.1
Date: Fri, 16 Apr 2021 12:29:52 GMT
Content-Type: application/json
Transfer-Encoding: chunked
Connection: keep-alive
Vary: Accept-Encoding
X-RateLimit-Remaining: 4
X-RateLimit-Window-Sec: 100
X-RateLimit-Limit: 5
Vary: Accept-Encoding
Cache-Control: no-cache, no-store, max-age=0, must-revalidate
Pragma: no-cache
Expires: 0
X-Content-Type-Options: nosniff
X-Frame-Options: DENY
X-XSS-Protection: 1 ; mode=block
Referrer-Policy: no-referrer

{"count":580,"responseCode":"SUCCESS","responseMessage":"Valid API
Access"}
```

Sample 2: API Call Blocked - Rate Limit exceeded

```
Server: nginx/1.19.1
Date: Fri, 16 Apr 2021 12:28:53 GMT
Content-Length: 0
Connection: keep-alive
X-RateLimit-Remaining: 0
X-RateLimit-ToWait-Sec: 33
X-RateLimit-Window-Sec: 100
X-RateLimit-Limit: 5
Cache-Control: no-cache, no-store, max-age=0, must-revalidate
Pragma: no-cache
Expires: 0
X-Content-Type-Options: nosniff
X-Frame-Options: DENY
X-XSS-Protection: 1 ; mode=block
Referrer-Policy: no-referrer
```

Chapter 2 - Assets Host Data APIs

Use these API functions to get host data from Global IT Asset Inventory

Permissions

- User must have the Global IT Asset Inventory module and the "App API Enabled" option enabled for that role.

Count of Assets

Get count of assets satisfying the specified filter criteria.

/assets/host/count

[POST]

Input Parameters

filter (String)	Filter the events list by providing a query using Qualys syntax. Refer to the "How to Search" topic in the online help for assistance with creating your query. For example - netbiosName: 'acme' AND name: 'acme.qualys.com' Refer to the list of tokens you can use to build the query: Search tokens
lastModifiedDate (String)	Shows records modified on or after this date with the UTC format as yyyy-MM-ddTHH:mmZ e.g. 2019-03-01T11:30Z This date gets updated whenever any activity happens on the asset. Few examples of such activity: - Vulnerability Management scan - Policy Compliance scan - Inventory collection - Security Configuration Assessment - CertView scan - AssetView or CloudView connector run - Secure Enterprise Mobility scan - Out-of-Band Configuration Assessment - Asset rename - Purge of VM, PC, OCA, CertView records - Agent manifest download - Asset Inventory asset identification updates
lastSeenAssetId (Integer)	Use to get the count of assets having asset id greater than the specified last seen assetid.
Authorization (String)	(Required) Authorization token to authenticate to the Qualys Cloud Platform. Prepend token with "Bearer" and one space. For example - Bearer authToken

Sample - Get count of all assets

Request:

```
curl -X POST -H 'Accept: */*' -H 'Authorization: Bearer <JWT  
Token>' -H 'Content-Type: application/json' -i  
'https://gateway.qgl.apps.qualys.com/am/v1/assets/host/count'
```

Response:

```
{  
  "count": 1119,  
  "responseCode": "SUCCESS",  
  "responseMessage": "Valid API Access"  
}
```

List Host details of all assets

Get details of all assets.

/assets/host/list

[POST]

Input Parameters

excludeFields (String)	Comma separated list of fields to be excluded from the asset object in the response. Default is None. You can choose from the list of fields specified in the section "Limit your results" . For example, to exclude openPort and software from the response: excludeFields=openPort,software
includeFields (String)	Comma separated list of fields to be included in the asset object in the response. Default is All. You can choose from the list of fields specified in the section "Limit your results" . For example, to include only operatingSystem and hardware in the response: includeFields=operatingSystem,hardware
lastModifiedDate (String)	Shows records modified on or after this date with the UTC format as yyyy-MM-ddTHH:mmZ e.g. 2019-03-01T11:30Z This date gets updated whenever any activity happens on the asset. Few examples of such activity: <ul style="list-style-type: none">- Vulnerability Management scan- Policy Compliance scan- Inventory collection- Security Configuration Assessment- CertView scan- AssetView or CloudView connector run- Secure Enterprise Mobility scan- Out-of-Band Configuration Assessment- Asset rename- Purge of VM, PC, OCA, CertView records- Agent manifest download- Asset Inventory asset identification updates
lastSeenAssetId (Integer)	Use to get the count of assets having asset id greater than the specified last seen assetid.
pageSize (Integer)	The number of records per page to be included in the response. If pageSize is not specified in the request, 100 records will be fetched by default. The maximum value supported for pageSize is 100.
Authorization (String)	(Required) Authorization token to authenticate to the Qualys Cloud Platform. Prepend token with "Bearer" and one space. For example - Bearer authToken

Sample - List details of all asset

Request:

```
curl -X POST -H 'Accept: */*' -H 'Authorization: Bearer <JWT Token>' -H 'Content-Type: application/json' -i 'https://gateway.qgl.apps.qualys.com/am/v1/assets/host/list'
```

Response:

```
{
  "responseMessage": "Valid API Access",
  "count": 100,
  "responseCode": "SUCCESS",
  "lastSeenAssetId": 10677327,
  "hasMore": 1,
  "assetListData": {
    "asset": [
      {
        "assetId": 10676044,
        "assetUUID": "9da5e990-f09d-4603-8f66-734645dbc10d",
        "hostId": 2288228,
        "lastModifiedDate": "2019-07-30T07:06:34.507Z",
        "agentId": null,
        "createdDate": "2019-07-24T22:36:47.000Z",
        "sensorLastUpdatedDate": "2019-07-24T23:31:58.000Z",
        "assetType": "HOST",
        "address": "10.10.10.77",
        "dnsName": null,

"assetName": "com2k12dc.compliance2.vuln.qa.qualys.com",
        "netbiosName": "COM2K12DC",
        "timeZone": "",
        "biosDescription": "Phoenix Technologies LTD 6.00",
        "lastBoot": "1970-01-01T00:00:00.000Z",
        "totalMemory": 0,
        "cpuCount": 1,
        "lastLoggedOnUser": null,
        "biosSerialNumber": "",
        "biosAssetTag": "",
        "isContainerHost": false,
        "operatingSystem": {
          "osName": "Windows Server 2012 Datacenter 64 bit
Edition AD",
          "fullName": "Windows Server 2012 2012 Datacenter
64-Bit",

          "category": "Windows / Server",
          "category1": "Windows",
          "category2": "Server",
          "productName": "Windows Server 2012",
          "publisher": "Microsoft",
          "edition": "Datacenter",
          "marketVersion": "2012",
          "version": "6.2",
```

```
"update":"","  
"architecture":"64-Bit",  
"lifecycle":{  
  "gaDate":"2012-09-04T00:00:00.000Z",  
  "eolDate":"2018-10-09T00:00:00.000Z",  
  "eosDate":"2023-10-10T00:00:00.000Z",  
  "stage":"EOL",  
  "lifeCycleConfidence":"Exact",  
  "eolSupportStage":"Mainstream Support",  
  "eosSupportStage":"Extended Support"  
},  
"taxonomy":{  
  "id":null,  
  "name":"Windows / Server",  
  "category1":"Windows",  
  "category2":"Server"  
},  
  
"productUrl":"https://en.wikipedia.org/wiki/Windows_Server_2012#Editions,,",  
  "productFamily":null  
},  
"hardware":{  
  "fullName":"","  
  "category":"Computers / Server",  
  "category1":"Computers",  
  "category2":"Server",  
  "manufacturer":"Unidentified",  
  "productName":"Unidentified",  
  "model":"","  
  "lifecycle":{  
    "introDate":null,  
    "gaDate":null,  
    "eosDate":null,  
    "obsoleteDate":null,  
    "stage":"Not Available",  
    "lifeCycleConfidence":""  
  },  
  "taxonomy":{  
    "id":null,  
    "name":"Computers / Server",  
    "category1":"Computers",  
    "category2":"Server"  
  },  
  "productUrl":",,,",  
  "productFamily":null
```

```
    },  
    "userAccountListData":{  
      "userAccount":[  
  
      ]  
    },  
    "openPortListData":{  
      "openPort":[  
        {  
          "port":389,  
          "description":"Lightweight Directory  
Access Protocol",  
          "protocol":"TCP",  
          "detectedService":"ldap",  
          "firstFound":"2019-07-24T22:36:46.000Z",  
          "lastUpdated":"2019-07-24T22:36:46.000Z"  
        },  
        {  
          "port":139,  
          "description":"NetBIOS Session Service",  
          "protocol":"TCP",  
          "detectedService":"netbios_ssn",  
          "firstFound":"2019-07-24T22:36:46.000Z",  
          "lastUpdated":"2019-07-24T22:36:46.000Z"  
        },  
        {  
          "port":88,  
          "description":"Kerberos-5",  
          "protocol":"TCP",  
          "detectedService":"Kerberos-5",  
          "firstFound":"2019-07-24T22:36:46.000Z",  
          "lastUpdated":"2019-07-24T22:36:46.000Z"  
        },  
        {  
          "port":593,  
          "description":"Microsoft RPC Over HTTP",  
          "protocol":"TCP",  
          "detectedService":"msrpc-over-http",  
          "firstFound":"2019-07-24T22:36:46.000Z",  
          "lastUpdated":"2019-07-24T22:36:46.000Z"  
        },  
        {  
          "port":445,  
          "description":"Microsoft Directory  
Server",  
          "protocol":"TCP",
```



```
        "detectedService":"microsoft-ds",
        "firstFound":"2019-07-24T22:36:46.000Z",
        "lastUpdated":"2019-07-24T22:36:46.000Z"
    },
    {
        "port":80,
        "description":"HyperText Transport
Protocol",
        "protocol":"TCP",
        "detectedService":"http",
        "firstFound":"2019-07-24T22:36:46.000Z",
        "lastUpdated":"2019-07-24T22:36:46.000Z"
    }
]
},
"volumeListData":{
    "volume":[

]
},
"processor":{
    "description":" Intel64 Family 6 Model 44
Stepping 2",
    "speed":0,
    "numCPUs":0
},
"networkInterfaceListData":{
    "networkInterface":[
        {
"hostname":"com2k12dc.compliance2.vuln.qa.qualys.com",
        "addressIPv4":null,
        "addressIPv6":null,
        "macAddress":"",
        "interfaceName":"",
        "dnsAddress":null,
        "gatewayAddress":"",
        "addresses":"10.10.10.77"
        }
    ]
},
"softwareListData":{
    "software":[
        {
            "fullName":"Microsoft Internet Explorer
10 10.0 (10.0.9200.16384)",
```

```
Internet Browser",
    "softwareType":"Application",
    "isIgnored":0,
    "ignoredReason":"",
    "category":"Network Application /
    "category1":"Network Application",
    "category2":"Internet Browser",
    "productName":"Internet Explorer",
    "component":"Client",
    "publisher":"Microsoft",
    "edition":"",
    "marketVersion":"10",
    "version":"10.0",
    "update":"10.0.9200.16384",
    "architecture":"",
    "installDate":"1970-01-
    "lastUpdated":"2019-07-
    "lastUseDate":null,
    "language":null,
    "formerlyKnownAs":"",
    "isPackage":false,
    "isPackageComponent":true,
    "packageName":"",
    "productUrl":"https://news.microsoft.com/2013/10/17/windows-8-1-
    is-available-
    now/#SPPPhW2j2Ue1I3mXA.97,https://support.microsoft.com/en-
    in/help/969393/information-about-internet-explorer-versions,",
    "lifecycle":{
        "gaDate":"2012-08-01T00:00:00.000Z",
        "eolDate":null,
        "eosDate":null,
        "stage":"OS Dependent",
        "lifeCycleConfidence":"Exact",
        "eolSupportStage":" ",
        "eosSupportStage":" "
    },
    "supportStageDesc":null,
    "license":{
        "category":"Commercial",
        "subcategory":"Free"
    }
},
{
```

```
(5.2.3790.1164)",
    "fullName":"Microsoft SubInACL 5 5.2",
    "softwareType":"Application",
    "isIgnored":0,
    "ignoredReason":"",
    "category":"IT Operations / Other",
    "category1":"IT Operations",
    "category2":"Other",
    "productName":"SubInACL",
    "component":"Server",
    "publisher":"Microsoft",
    "edition":"",
    "marketVersion":"5",
    "version":"5.2",
    "update":"5.2.3790.1164",
    "architecture":"",
    "installDate":"2018-05-
16T00:00:00.000Z",
    "lastUpdated":"2019-07-
24T22:57:50.000Z",
    "lastUseDate":null,
    "language":null,
    "formerlyKnownAs":"",
    "isPackage":false,
    "isPackageComponent":true,
    "packageName":"Windows Resource Kit
Tools",
    "productUrl":"https://www.microsoft.com/en-
in/download/details.aspx?id=23510,,",
    "lifecycle":{
        "gaDate":null,
        "eolDate":null,
        "eosDate":null,
        "stage":"Unknown",
        "lifeCycleConfidence":"Exact",
        "eolSupportStage":" ",
        "eosSupportStage":" "
    },
    "supportStageDesc":null,
    "license":{
        "category":"Commercial",
        "subcategory":"Free"
    }
},
{
```

```
(3.0.0.101)",
    "fullName":"Qualys Cloud Agent 3.0 3.0.0",
    "softwareType":"Application",
    "isIgnored":0,
    "ignoredReason":null,
    "category":"Security / Agent",
    "category1":"Security",
    "category2":"Agent",
    "productName":"Cloud Agent",
    "component":"Client",
    "publisher":"Qualys",
    "edition":"",
    "marketVersion":"3.0",
    "version":"3.0.0",
    "update":"3.0.0.101",
    "architecture":"",
    "installDate":"2019-04-
11T00:00:00.000Z",
    "lastUpdated":"2019-07-
24T22:57:50.000Z",
    "lastUseDate":null,
    "language":null,
    "formerlyKnownAs":"",
    "isPackage":false,
    "isPackageComponent":false,
    "packageName":"",
    "productUrl":"https://www.qualys.com/docs/qualys-cloud-agent-
brief.pdf,https://www.qualys.com/documentation/release-notes/",
    "lifecycle":{
        "gaDate":"2019-03-31T00:00:00.000Z",
        "eolDate":"Not Announced",
        "eosDate":"Not Announced",
        "stage":"GA",
        "lifeCycleConfidence":"Exact",
        "eolSupportStage":" ",
        "eosSupportStage":" "
    },
    "supportStageDesc":null,
    "license":{
        "category":"Commercial",
        "subcategory":"Free"
    }
},
{
    "fullName":"Oracle Java Platform,
```

```
Standard Edition (Java SE) 8 1.8 (1.8.0.162) 64-Bit",
    "softwareType":"Application",
    "isIgnored":0,
    "ignoredReason":null,
    "category":"Application Development /
Framework",
    "category1":"Application Development",
    "category2":"Framework",
    "productName":"Java Platform, Standard
Edition (Java SE)",
    "component":"",
    "publisher":"Oracle",
    "edition":"",
    "marketVersion":"8",
    "version":"1.8",
    "update":"1.8.0.162",
    "architecture":"64-Bit",
    "installDate":"2018-03-
08T00:00:00.000Z",
    "lastUpdated":"2019-07-
24T22:57:50.000Z",
    "lastUseDate":null,
    "language":null,
    "formerlyKnownAs":"",
    "isPackage":false,
    "isPackageComponent":true,
    "packageName":"",
    "productUrl":"https://en.wikipedia.org/wiki/Java_version_history,h
ttps://www.oracle.com/technetwork/java/java-se-support-
roadmap.html,",
    "lifecycle":{
        "gaDate":"2014-03-18T00:00:00.000Z",
        "eolDate":"2022-03-31T00:00:00.000Z",
        "eosDate":"2025-03-31T00:00:00.000Z",
        "stage":"GA",
        "lifeCycleConfidence":"Exact",
        "eolSupportStage":"Premier Support",
        "eosSupportStage":"Extended Support"
    },
    "supportStageDesc":null,
    "license":{
        "category":"Commercial",
        "subcategory":"Licensed"
    }
},
```

```
{
  "fullName":"Qualys Cloud Agent 2.1 2.1.1
(2.1.1.34)",
    "softwareType":"Application",
    "isIgnored":0,
    "ignoredReason":null,
    "category":"Security / Agent",
    "category1":"Security",
    "category2":"Agent",
    "productName":"Cloud Agent",
    "component":"Client",
    "publisher":"Qualys",
    "edition":"",
    "marketVersion":"2.1",
    "version":"2.1.1",
    "update":"2.1.1.34",
    "architecture":"",
    "installDate":"2018-10-
09T00:00:00.000Z",
    "lastUpdated":"2019-07-
24T22:57:50.000Z",
    "lastUseDate":null,
    "language":null,
    "formerlyKnownAs":"",
    "isPackage":false,
    "isPackageComponent":false,
    "packageName":"",
    "productUrl":"https://www.qualys.com/docs/qualys-cloud-agent-
brief.pdf,https://www.qualys.com/documentation/release-notes/",
    "lifecycle":{
      "gaDate":"2018-09-30T00:00:00.000Z",
      "eolDate":"Not Announced",
      "eosDate":"Not Announced",
      "stage":"GA",
      "lifeCycleConfidence":"Exact",
      "eolSupportStage":" ",
      "eosSupportStage":" "
    },
    "supportStageDesc":null,
    "license":{
      "category":"Commercial",
      "subcategory":"Free"
    }
  }
}
```

```
},
"provider": "",
"cloudProvider": {
  "aws": null,
  "azure": null,
  "gcp": null
},
"agent": {
  "version": null,
  "configurationProfile": "",
  "activations": null,
  "connectedFrom": null,
  "lastActivity": 0,
  "lastCheckedIn": 0,
  "lastInventory": 0,
  "udcManifestAssigned": false
},
"sensor": {
  "activatedForModules": [
    "PC",
    "VM"
  ],
  "pendingActivationForModules": [

  ],
  "lastVMScan": 1564008771000,
  "lastComplianceScan": 1564010482000,
  "lastFullScan": 1564008771000,
  "errorStatus": false
},
"container": {
  "product": null,
  "version": null,
  "noOfContainers": 0,
  "noOfImages": 0
},
"inventory": {
  "source": "IP",
  "created": 1564007807000,
  "lastUpdated": 1564011118000
},
"activity": {
  "source": "IP",
  "lastScannedDate": 1564008771000
},
}
```

```
"tagList":{
  "tag":[
    {
      "tagId":104776589,
      "tagName":"BU-1",
      "foregroundColor":0,
      "backgroundColor":0,
      "businessImpact":"LOW"
    },
    {
      "tagId":104777812,
      "tagName":"AS-IP",
      "foregroundColor":0,
      "backgroundColor":0,
      "businessImpact":"LOW"
    },
    {
      "tagId":104775833,
      "tagName":"IP-10.10.10.10",
      "foregroundColor":0,
      "backgroundColor":0,
      "businessImpact":"LOW"
    },
    {
      "tagId":104776583,
      "tagName":"AG1",
      "foregroundColor":0,
      "backgroundColor":0,
      "businessImpact":"HIGH"
    }
  ]
},
"serviceList":{
  "service":[
  ]
}
}
]
```


List Host details of specific asset

Get details of specific asset by providing an asset id.

/assets/host/id

[POST]

Input Parameters

excludeFields (String)	Comma separated list of fields to be excluded from the asset object in the response. Default is None. You can choose from the list of fields specified in the section "Limit your results" . For example, to exclude openPort and software from the response: excludeFields=openPort,software
includeFields (String)	Comma separated list of fields to be included in the asset object in the response. Default is All. You can choose from the list of fields specified in the section "Limit your results" . For example, to include only operatingSystem and hardware in the response: includeFields=operatingSystem,hardware
assetId (Integer)	(Required) Use to specify theAssetId for which you want to retrieve the details.
Authorization (String)	(Required) Authorization token to authenticate to the Qualys Cloud Platform. Prepend token with "Bearer" and one space. For example - Bearer authToken

Sample - List details of specified asset by assetid

Request:

```
curl -X POST -H 'Accept: */*' -H 'Authorization: Bearer <JWT Token>' -H 'Content-Type: application/json' -i 'https://gateway.qgl.apps.qualys.com/am/v1/asset/host/id?assetId=10685701'
```

Response:

```
{
  "responseMessage": "Valid API Access",
  "count": 1,
  "responseCode": "SUCCESS",
  "lastSeenAssetId": null,
  "hasMore": 0,
  "assetListData": {
    "asset": [
      {
        "assetId": 10685701,
        "assetUUID": "c146d7e5-2d1d-4201-b654-0990d09e357b",
```

```
"hostId":2289420,
"lastModifiedDate":"2019-08-01T21:53:16.048Z",
"agentId":"c146d7e5-2d1d-4201-b654-0990d09e357b",
"createdDate":"2019-07-25T20:57:45.000Z",
"sensorLastUpdatedDate":"2019-08-01T21:53:14.552Z",
"assetType":"HOST",
"address":"10.90.2.249",
"dnsName":null,
"assetName":"Amy-POD4-Agent-quays_iz72-
Centos7+mysql",
"netbiosName":null,
"timeZone":"UTC",
"biosDescription":"Xen 4.2.amazon 08/24/2006",
"lastBoot":"2019-07-25T20:50:07.141Z",
"totalMemory":989,
"cpuCount":1,
"lastLoggedOnUser":"centos",
"biosSerialNumber":"",
"biosAssetTag":"Not Specified",
"isContainerHost":false,
"operatingSystem":{
  "osName":"CentOS Linux 7.6.1810",
  "fullName":"CentOS 7",
  "category":"Linux / Server",
  "category1":"Linux",
  "category2":"Server",
  "productName":"CentOS",
  "publisher":"The CentOS Project",
  "edition":"",
  "marketVersion":"7",
  "version":"1810",
  "update":"",
  "architecture":"",
  "lifecycle":{
    "gaDate":"2018-12-03T00:00:00.000Z",
    "eolDate":"2020-12-31T00:00:00.000Z",
    "eosDate":"2024-06-30T00:00:00.000Z",
    "stage":"GA",
    "lifeCycleConfidence":"Exact",
    "eolSupportStage":"Full updates",
    "eosSupportStage":"Maintenance Updates"
  },
  "taxonomy":{
    "id":null,
    "name":"Linux / Server",
    "category1":"Linux",
```

```
        "category2": "Server"
    },
    "productUrl": "https://www.centos.org/,https://distrowatch.com/index.php?distribution=centos,https://en.wikipedia.org/wiki/CentOS",
    "productFamily": null
},
"hardware": {
    "fullName": "",
    "category": "Computers / Unidentified",
    "category1": "Computers",
    "category2": "Unidentified",
    "manufacturer": "Unidentified",
    "productName": "Unidentified",
    "model": "",
    "lifecycle": {
        "introDate": null,
        "gaDate": null,
        "eosDate": null,
        "obsoleteDate": null,
        "stage": null,
        "lifeCycleConfidence": " "
    },
    "taxonomy": {
        "id": null,
        "name": "Computers / Unidentified",
        "category1": "Computers",
        "category2": "Unidentified"
    },
    "productUrl": ",, ",
    "productFamily": null
},
"userAccountListData": {
    "userAccount": [
        {
            "name": "root"
        },
        {
            "name": "centos"
        }
    ]
},
"openPortListData": {
    "openPort": [
        {
            "port": 663,

```

```
        "description": "",
        "protocol": "UDP",
        "detectedService": "Universal Addresses
to RPC Program Number Mapper",
        "firstFound": "1970-01-01T00:00:00.000Z",
        "lastUpdated": "1970-01-01T00:00:00.000Z"
    },
    {
        "port": 68,
        "description": "",
        "protocol": "UDP",
        "detectedService": "Provides the ISC DHCP
client daemon and dhclient-script",
        "firstFound": "1970-01-01T00:00:00.000Z",
        "lastUpdated": "1970-01-01T00:00:00.000Z"
    },
    {
        "port": 33060,
        "description": "",
        "protocol": "TCP",
        "detectedService": "A very fast and
reliable SQL database server",
        "firstFound": "1970-01-01T00:00:00.000Z",
        "lastUpdated": "1970-01-01T00:00:00.000Z"
    },
    {
        "port": 323,
        "description": "",
        "protocol": "UDP",
        "detectedService": "An NTP client/server",
        "firstFound": "1970-01-01T00:00:00.000Z",
        "lastUpdated": "1970-01-01T00:00:00.000Z"
    },
    {
        "port": 80,
        "description": "",
        "protocol": "TCP",
        "detectedService": "Apache HTTP Server",
        "firstFound": "1970-01-01T00:00:00.000Z",
        "lastUpdated": "1970-01-01T00:00:00.000Z"
    },
    {
        "port": 25,
        "description": "",
        "protocol": "TCP",
        "detectedService": "Postfix Mail Transport
```

```
Agent",
    "firstFound":"1970-01-01T00:00:00.000Z",
    "lastUpdated":"1970-01-01T00:00:00.000Z"
  },
  {
    "port":3306,
    "description":"",
    "protocol":"TCP",
    "detectedService":"A very fast and
reliable SQL database server",
    "firstFound":"1970-01-01T00:00:00.000Z",
    "lastUpdated":"1970-01-01T00:00:00.000Z"
  },
  {
    "port":22,
    "description":"",
    "protocol":"TCP",
    "detectedService":"An open source SSH
server daemon",
    "firstFound":"1970-01-01T00:00:00.000Z",
    "lastUpdated":"1970-01-01T00:00:00.000Z"
  },
  {
    "port":111,
    "description":"",
    "protocol":"TCP",
    "detectedService":"A System and Service
Manager",
    "firstFound":"1970-01-01T00:00:00.000Z",
    "lastUpdated":"1970-01-01T00:00:00.000Z"
  },
  {
    "port":111,
    "description":"",
    "protocol":"UDP",
    "detectedService":"A System and Service
Manager",
    "firstFound":"1970-01-01T00:00:00.000Z",
    "lastUpdated":"1970-01-01T00:00:00.000Z"
  }
]
},
"volumeListData":{
  "volume":[
    {
      "name":"/dev/xvda1",
```

```
        "free":4930144,  
        "size":8377344  
    },  
    {  
        "name":"devtmpfs",  
        "free":483740,  
        "size":483740  
    },  
    {  
        "name":"tmpfs",  
        "free":506596,  
        "size":506596  
    },  
    {  
        "name":"tmpfs",  
        "free":449168,  
        "size":506596  
    }  
    ]  
},  
"processor":{  
    "description":"Intel (R) Xeon (R) ",  
    "speed":2400,  
    "numCPUs":0  
},  
"networkInterfaceListData":{  
    "networkInterface":[  
        {  
            "hostname":"","  
            "addressIPv4":null,  
            "addressIPv6":null,  
            "macAddress":"12:37:5b:7c:2b:ea",  
            "interfaceName":"eth0",  
            "dnsAddress":"10.0.100.10,10.0.100.11",  
            "gatewayAddress":"10.90.2.1",  
  
"addresses":"10.90.2.249, fe80:0:0:0:1037:5bff:fe7c:2bea"  
        }  
    ]  
},  
"softwareListData":{  
    "software":[  
        {  
            "fullName":"OpenBSD OpenSSH 7 7.4  
(7.4p1)",  
            "softwareType":"Application",
```

```
    "isIgnored":0,  
    "ignoredReason":null,  
    "category":"Networking / Access  
Software",  
    "category1":"Networking",  
    "category2":"Access Software",  
    "productName":"OpenSSH",  
    "component":"Server",  
    "publisher":"OpenBSD",  
    "edition":"","  
    "marketVersion":"7",  
    "version":"7.4",  
    "update":"7.4p1",  
    "architecture":"","  
    "installDate":"1970-01-  
01T00:00:00.000Z",  
    "lastUpdated":"1970-01-  
01T00:00:00.000Z",  
    "lastUseDate":null,  
    "language":null,  
    "formerlyKnownAs":"OpenBSD Secure Shell",  
    "isPackage":true,  
    "isPackageComponent":true,  
    "packageName":"","  
    "productUrl":"https://en.wikipedia.org/wiki/OpenSSH,https://www.op  
enssh.com/releasenotes.html",  
    "lifecycle":{  
        "gaDate":"2016-12-19T00:00:00.000Z",  
        "eolDate":"2021-01-19T00:00:00.000Z",  
        "eosDate":"2025-04-19T00:00:00.000Z",  
        "stage":"GA",  
        "lifeCycleConfidence":"Calculated",  
        "eolSupportStage":" ",  
        "eosSupportStage":" "  
    },  
    "supportStageDesc":null,  
    "license":{  
        "category":"Open Source",  
        "subcategory":"BSD 2-Clause License  
(FreeBSD/Simplified) "  
    }  
},  
{  
    "fullName":"Qualys Cloud Agent 1.6  
1.6.1",
```

```
"softwareType":"Application",
"isIgnored":0,
"ignoredReason":null,
"category":"Security / Agent",
"category1":"Security",
"category2":"Agent",
"productName":"Cloud Agent",
"component":"Client",
"publisher":"Qualys",
"edition":"",
"marketVersion":null,
"version":null,
"update":null,
"architecture":"",
"installDate":"1970-01-
01T00:00:00.000Z",
"lastUpdated":"1970-01-
01T00:00:00.000Z",
"lastUseDate":null,
"language":null,
"formerlyKnownAs":"",
"isPackage":false,
"isPackageComponent":false,
"packageName":"",
"productUrl":"https://www.qualys.com/docs/qualys-cloud-agent-
brief.pdf,https://www.qualys.com/documentation/release-notes/",
"lifecycle":{
  "gaDate":null,
  "eolDate":null,
  "eosDate":null,
  "stage":null,
  "lifeCycleConfidence":null,
  "eolSupportStage":null,
  "eosSupportStage":null
},
"supportStageDesc":null,
"license":{
  "category":"Commercial",
  "subcategory":"Free"
}
},
{
"fullName":"Apache httpd 2 2.4 (2.4.6)",
"softwareType":"Application",
"isIgnored":0,
```



```
        "ignoredReason":null,
        "category":"Network Application / Web
Servers",
        "category1":"Network Application",
        "category2":"Web Servers",
        "productName":"httpd",
        "component":"Server",
        "publisher":"Apache",
        "edition":"",
        "marketVersion":"2",
        "version":"2.4",
        "update":"2.4.6",
        "architecture":"",
        "installDate":"1970-01-
01T00:00:00.000Z",
        "lastUpdated":"1970-01-
01T00:00:00.000Z",
        "lastUseDate":null,
        "language":null,
        "formerlyKnownAs":"HTTP Server, Apache",
        "isPackage":false,
        "isPackageComponent":true,
        "packageName":"",
        "productUrl":"https://www.wikiwand.com/en/Apache_HTTP_Server,https
://httpd.apache.org/download.cgi,https://httpd.apache.org/docs/2.0
/",
        "lifecycle":{
            "gaDate":"2012-02-21T00:00:00.000Z",
            "eolDate":null,
            "eosDate":null,
            "stage":"GA",
            "lifeCycleConfidence":"Exact",
            "eolSupportStage":"Not Announced",
            "eosSupportStage":"Not Announced"
        },
        "supportStageDesc":null,
        "license":{
            "category":"Open Source",
            "subcategory":"Apache License 2.0
(Apache-2.0) "
        }
    },
    {
        "fullName":"Python Python 2 2.7 (2.7.5)",
        "softwareType":"Application",
```

```
    "isIgnored":0,
    "ignoredReason":null,
    "category":"Application Development /
Programming Languages",
    "category1":"Application Development",
    "category2":"Programming Languages",
    "productName":"Python",
    "component":"","
    "publisher":"Python",
    "edition":"","
    "marketVersion":"2",
    "version":"2.7",
    "update":"2.7.5",
    "architecture":"","
    "installDate":"1970-01-
01T00:00:00.000Z",
    "lastUpdated":"1970-01-
01T00:00:00.000Z",
    "lastUseDate":null,
    "language":null,
    "formerlyKnownAs":"","
    "isPackage":false,
    "isPackageComponent":false,
    "packageName":"","

"productUrl":"https://en.wikipedia.org/wiki/History_of_Python,,",
    "lifecycle":{
        "gaDate":"2010-07-03T00:00:00.000Z",
        "eolDate":"2020-01-01T00:00:00.000Z",
        "eosDate":"2020-01-01T00:00:00.000Z",
        "stage":"GA",
        "lifeCycleConfidence":"Exact",
        "eolSupportStage":"End-of-life",
        "eosSupportStage":"End-of-life"
    },
    "supportStageDesc":"Python's policy is
to drop support major versions once they reach their end of life",
    "license":{
        "category":"Open Source",
        "subcategory":"Python License
(Python-2.0) "
    }
},
{
    "fullName":"Oracle MySQL Server 5 5.6
(5.6.26)",
```

```
"softwareType":"Application",
"isIgnored":0,
"ignoredReason":null,
"category":"Databases / RDBMS",
"category1":"Databases",
"category2":"RDBMS",
"productName":"MySQL Server",
"component":"Server",
"publisher":"Oracle",
"edition":"",
"marketVersion":null,
"version":null,
"update":null,
"architecture":"",
"installDate":"1970-01-
01T00:00:00.000Z",
"lastUpdated":"1970-01-
01T00:00:00.000Z",
"lastUseDate":null,
"language":null,
"formerlyKnownAs":"",
"isPackage":false,
"isPackageComponent":true,
"packageName":"",
"productUrl":"https://www.mysql.com/,,",
"lifecycle":{
  "gaDate":null,
  "eolDate":null,
  "eosDate":null,
  "stage":null,
  "lifeCycleConfidence":null,
  "eolSupportStage":null,
  "eosSupportStage":null
},
"supportStageDesc":"Puts you in control
of your Database, Middleware, and Applications upgrade strategy by
providing additional maintenance and upgrades for Oracle Database,
Oracle Fusion Middleware, and Oracle Applications for an
additional fee.",
"license":{
  "category":"Open Source",
  "subcategory":"GNU General Public
License v2.0 (GPL-2.0)"
}
}
```

```
    },
    "provider": "AWS",
    "cloudProvider": {
      "aws": {
        "ec2": {
          "accountId": "205767712438",
          "availabilityZone": "us-east-1e",
          "hasAgent": true,
          "hostname": "ip-10-90-2-249.qualys.com",
          "imageId": "ami-02eac2c0129f6376b",
          "instanceId": "i-087965612d096c93d",
          "instanceState": "RUNNING",
          "instanceType": "t2.micro",
          "qualysScanner": false,
          "kernelId": "",
          "launchdate": 1564087655000,
          "privateDNS": "ip-10-90-2-
249.qualys.com",
          "privateIpAddress": "10.90.2.249",
          "publicDNS": "ec2-3-86-24-68.compute-
1.amazonaws.com",
          "publicIpAddress": "3.86.24.68",
          "region": {
            "code": "us-east-1",
            "name": "US East (N. Virginia)"
          },
          "spotInstance": false,
          "subnetId": "subnet-5a756071",
          "vpcId": "vpc-1e37cd76"
        },
        "tags": [
          {
            "key": "Name",
            "value": "Amy-POD4-Agent-quays_iz72-
Centos7+mysql"
          }
        ]
      },
      "azure": null,
      "gcp": null
    },
    "agent": {
      "version": "2.4.0.75",
      "configurationProfile": "Initial Profile",
      "activations": [
        {
```

```
9ce5b342d09e",
    "key": "8e44de48-172b-4529-bf79-
    "status": "ACTIVE"
  }
],
"connectedFrom": "10.90.2.249",
"lastActivity": 1564695367151,
"lastCheckedIn": 1564695367151,
"lastInventory": 1564695367000,
"udcManifestAssigned": false
},
"sensor": {
  "activatedForModules": [
    "SCA",
    "PC",
    "VM",
    "CERTVIEW"
  ],
  "pendingActivationForModules": [
  ],
  "lastVMScan": 1564693585000,
  "lastComplianceScan": 1564672975000,
  "lastFullScan": 1564693585000,
  "errorStatus": false
},
"container": {
  "product": null,
  "version": null,
  "noOfContainers": 0,
  "noOfImages": 0
},
"inventory": {
  "source": "QAGENT",
  "created": 1564088265000,
  "lastUpdated": 1564696288000
},
"activity": {
  "source": "QAGENT",
  "lastScannedDate": 1564696288000
},
"tagList": {
  "tag": [
    {
      "tagId": 104775814,
      "tagName": "EC2",
```

```
        "foregroundColor":0,  
        "backgroundColor":0,  
        "businessImpact":"LOW"  
    },  
    {  
        "tagId":104775815,  
        "tagName":"EC2-3xx",  
        "foregroundColor":0,  
        "backgroundColor":0,  
        "businessImpact":"LOW"  
    },  
    {  
        "tagId":104775816,  
        "tagName":"EC2-2xx",  
        "foregroundColor":0,  
        "backgroundColor":0,  
        "businessImpact":"LOW"  
    },  
    {  
        "tagId":104776729,  
        "tagName":"Cloud Agent",  
        "foregroundColor":0,  
        "backgroundColor":0,  
        "businessImpact":"LOW"  
    }  
    ]  
},  
"serviceList":{  
    "service":[  
        {  
            "description":"","  
            "name":"auditd.service",  
            "status":"loaded/active/running"  
        },  
        {  
            "description":"","  
            "name":"chronyd.service",  
            "status":"loaded/active/running"  
        },  
        {  
            "description":"","  
            "name":"cloud-config.service",  
            "status":"loaded/active/exited"  
        }  
    ]  
}
```

```
}  
  }  
] }  
}
```

List Host details for specific fields

Get details of all assets that satisfy the filter criteria to include or exclude specified fields.

/assets/host/filter/list

[POST]

Input Parameters

excludeFields (String)	Comma separated list of fields to be excluded from the asset object in the response. Default is None. You can choose from the list of fields specified in the section “Limit your results” . For example, to exclude openPort and software from the response: excludeFields=openPort,software
includeFields (String)	Comma separated list of fields to be included in the asset object in the response. Default is All. You can choose from the list of fields specified in the section “Limit your results” . For example, to include only operatingSystem and hardware in the response: includeFields=operatingSystem,hardware
lastModifiedDate (String)	Shows records modified on or after this date with the UTC format as yyyy-MM-ddTHH:mmZ e.g. 2019-03-01T11:30Z This date gets updated whenever any activity happens on the asset. Few examples of such activity: <ul style="list-style-type: none">- Vulnerability Management scan- Policy Compliance scan- Inventory collection- Security Configuration Assessment- CertView scan- AssetView or CloudView connector run- Secure Enterprise Mobility scan- Out-of-Band Configuration Assessment- Asset rename- Purge of VM, PC, OCA, CertView records- Agent manifest download- Asset Inventory asset identification updates
lastSeenAssetId (Integer)	Use to get the count of assets having asset id greater than the specified last seen assetid.
pageSize (Integer)	The number of records per page to be included in the response. If pageSize is not specified in the request, 100 records will be fetched by default. The maximum value supported for pageSize is 100.
filter (String)	(Required) Filter the events list by providing a query using Qualys syntax. Refer to the “How to Search” topic in the online help for assistance with creating your query. For example - netbiosName: 'acme' AND name: 'acme.qualys.com' Refer to the list of tokens you can use to build the query: Search tokens
Authorization (String)	(Required) Authorization token to authenticate to the Qualys Cloud Platform. Prepend token with "Bearer" and one space. For example - Bearer authToken

Sample - List details of asset hosts that belong to Linux Operating system category

Request:

```
curl -X POST -H 'Accept: */*' -H 'Authorization: Bearer <JWT Token>' -H 'Content-Type: application/json' -i  
'https://gateway.qgl.apps.qualys.com/am/v1/assets/host/filter/list  
?filter=operatingSystem.category1:Linux'
```

Response:

```
{  
  "responseMessage": "Valid API Access",  
  "count": 1,  
  "responseCode": "SUCCESS",  
  "lastSeenAssetId": 10685701,  
  "hasMore": 1,  
  "assetListData": {  
    "asset": [  
      {  
        "assetId": 10685701,  
        "assetUUID": "c146d7e5-2d1d-4201-b654-0990d09e357b",  
        "hostId": 2289420,  
        "lastModifiedDate": "2019-08-01T21:53:16.048Z",  
        "agentId": "c146d7e5-2d1d-4201-b654-0990d09e357b",  
        "createdDate": "2019-07-25T20:57:45.000Z",  
        "sensorLastUpdatedDate": "2019-08-01T21:53:14.552Z",  
        "assetType": "HOST",  
        "address": "10.90.2.249",  
        "dnsName": null,  
        "assetName": "Amy-POD4-Agent-quays_iz72-  
Centos7+mysql",  
        "netbiosName": null,  
        "timeZone": "UTC",  
        "biosDescription": "Xen 4.2.amazon 08/24/2006",  
        "lastBoot": "2019-07-25T20:50:07.141Z",  
        "totalMemory": 989,  
        "cpuCount": 1,  
        "lastLoggedOnUser": "centos",  
        "biosSerialNumber": "",  
        "biosAssetTag": "Not Specified",  
        "isContainerHost": false,  
        "operatingSystem": {  
          "osName": "CentOS Linux 7.6.1810",  
          "fullName": "CentOS 7",  
          "category": "Linux / Server",  
          "category1": "Linux",  
        }  
      }  
    ]  
  }  
}
```

```
"category2":"Server",
"productName":"CentOS",
"publisher":"The CentOS Project",
"edition":"",
"marketVersion":"7",
"version":"1810",
"update":"",
"architecture":"",
"lifecycle":{
  "gaDate":"2018-12-03T00:00:00.000Z",
  "eolDate":"2020-12-31T00:00:00.000Z",
  "eosDate":"2024-06-30T00:00:00.000Z",
  "stage":"GA",
  "lifeCycleConfidence":"Exact",
  "eolSupportStage":"Full updates",
  "eosSupportStage":"Maintenance Updates"
},
"taxonomy":{
  "id":null,
  "name":"Linux / Server",
  "category1":"Linux",
  "category2":"Server"
},
"productUrl":"https://www.centos.org/,https://distrowatch.com/index.php?distribution=centos,https://en.wikipedia.org/wiki/CentOS",
"productFamily":null
},
"hardware":{
  "fullName":"",
  "category":"Computers / Unidentified",
  "category1":"Computers",
  "category2":"Unidentified",
  "manufacturer":"Unidentified",
  "productName":"Unidentified",
  "model":"",
  "lifecycle":{
    "introDate":null,
    "gaDate":null,
    "eosDate":null,
    "obsoleteDate":null,
    "stage":null,
    "lifeCycleConfidence":""
  },
  "taxonomy":{
    "id":null,
```

```
        "name":"Computers / Unidentified",
        "category1":"Computers",
        "category2":"Unidentified"
    },
    "productUrl":",,,",
    "productFamily":null
},
"userAccountListData":{
    "userAccount":[
        {
            "name":"root"
        },
        {
            "name":"centos"
        }
    ]
},
"openPortListData":{
    "openPort":[
        {
            "port":663,
            "description": "",
            "protocol":"UDP",
            "detectedService":"Universal Addresses
to RPC Program Number Mapper",
            "firstFound":"1970-01-01T00:00:00.000Z",
            "lastUpdated":"1970-01-01T00:00:00.000Z"
        },
        {
            "port":68,
            "description": "",
            "protocol":"UDP",
            "detectedService":"Provides the ISC DHCP
client daemon and dhclient-script",
            "firstFound":"1970-01-01T00:00:00.000Z",
            "lastUpdated":"1970-01-01T00:00:00.000Z"
        },
        {
            "port":33060,
            "description": "",
            "protocol":"TCP",
            "detectedService":"A very fast and
reliable SQL database server",
            "firstFound":"1970-01-01T00:00:00.000Z",
            "lastUpdated":"1970-01-01T00:00:00.000Z"
        },
    ],
}
```

```
{
  "port":323,
  "description":"",
  "protocol":"UDP",
  "detectedService":"An NTP client/server",
  "firstFound":"1970-01-01T00:00:00.000Z",
  "lastUpdated":"1970-01-01T00:00:00.000Z"
},
{
  "port":80,
  "description":"",
  "protocol":"TCP",
  "detectedService":"Apache HTTP Server",
  "firstFound":"1970-01-01T00:00:00.000Z",
  "lastUpdated":"1970-01-01T00:00:00.000Z"
},
{
  "port":25,
  "description":"",
  "protocol":"TCP",
  "detectedService":"Postfix Mail Transport
Agent",
  "firstFound":"1970-01-01T00:00:00.000Z",
  "lastUpdated":"1970-01-01T00:00:00.000Z"
},
{
  "port":3306,
  "description":"",
  "protocol":"TCP",
  "detectedService":"A very fast and
reliable SQL database server",
  "firstFound":"1970-01-01T00:00:00.000Z",
  "lastUpdated":"1970-01-01T00:00:00.000Z"
},
{
  "port":22,
  "description":"",
  "protocol":"TCP",
  "detectedService":"An open source SSH
server daemon",
  "firstFound":"1970-01-01T00:00:00.000Z",
  "lastUpdated":"1970-01-01T00:00:00.000Z"
},
{
  "port":111,
  "description":"",
```

```
    "protocol":"TCP",
    "detectedService":"A System and Service
Manager",
    "firstFound":"1970-01-01T00:00:00.000Z",
    "lastUpdated":"1970-01-01T00:00:00.000Z"
  },
  {
    "port":111,
    "description":"",
    "protocol":"UDP",
    "detectedService":"A System and Service
Manager",
    "firstFound":"1970-01-01T00:00:00.000Z",
    "lastUpdated":"1970-01-01T00:00:00.000Z"
  }
]
},
"volumeListData":{
  "volume":[
    {
      "name":"/dev/xvda1",
      "free":4930144,
      "size":8377344
    },
    {
      "name":"devtmpfs",
      "free":483740,
      "size":483740
    },
    {
      "name":"tmpfs",
      "free":506596,
      "size":506596
    },
    {
      "name":"tmpfs",
      "free":449168,
      "size":506596
    }
  ]
},
"processor":{
  "description":"Intel (R) Xeon (R) ",
  "speed":2400,
  "numCPUs":0
},
```

```
"networkInterfaceListData":{
  "networkInterface":[
    {
      "hostname":"","
      "addressIPv4":null,
      "addressIPv6":null,
      "macAddress":"12:37:5b:7c:2b:ea",
      "interfaceName":"eth0",
      "dnsAddress":"10.0.100.10,10.0.100.11",
      "gatewayAddress":"10.90.2.1",

"addresses":"10.90.2.249, fe80:0:0:0:1037:5bff:fe7c:2bea"
    }
  ],
},
"softwareListData":{
  "software":[
    {
      "fullName":"OpenBSD OpenSSH 7 7.4
(7.4p1)",
      "softwareType":"Application",
      "isIgnored":0,
      "ignoredReason":null,
      "category":"Networking / Access
Software",
      "category1":"Networking",
      "category2":"Access Software",
      "productName":"OpenSSH",
      "component":"Server",
      "publisher":"OpenBSD",
      "edition":"","
      "marketVersion":"7",
      "version":"7.4",
      "update":"7.4p1",
      "architecture":"","
      "installDate":"1970-01-
01T00:00:00.000Z",
      "lastUpdated":"1970-01-
01T00:00:00.000Z",
      "lastUseDate":null,
      "language":null,
      "formerlyKnownAs":"OpenBSD Secure Shell",
      "isPackage":true,
      "isPackageComponent":true,
      "packageName":"","
```

```
"productUrl":"https://en.wikipedia.org/wiki/OpenSSH,https://www.openssh.com/releases.html,",
  "lifecycle":{
    "gaDate":"2016-12-19T00:00:00.000Z",
    "eolDate":"2021-01-19T00:00:00.000Z",
    "eosDate":"2025-04-19T00:00:00.000Z",
    "stage":"GA",
    "lifeCycleConfidence":"Calculated",
    "eolSupportStage":" ",
    "eosSupportStage":" "
  },
  "supportStageDesc":null,
  "license":{
    "category":"Open Source",
    "subcategory":"BSD 2-Clause License
(FreeBSD/Simplified) "
  }
},
{
  "fullName":"Qualys Cloud Agent 1.6
1.6.1",
  "softwareType":"Application",
  "isIgnored":0,
  "ignoredReason":null,
  "category":"Security / Agent",
  "category1":"Security",
  "category2":"Agent",
  "productName":"Cloud Agent",
  "component":"Client",
  "publisher":"Qualys",
  "edition":"",
  "marketVersion":null,
  "version":null,
  "update":null,
  "architecture":"",
  "installDate":"1970-01-
01T00:00:00.000Z",
  "lastUpdated":"1970-01-
01T00:00:00.000Z",
  "lastUseDate":null,
  "language":null,
  "formerlyKnownAs":"",
  "isPackage":false,
  "isPackageComponent":false,
  "packageName":"",
```



```
"productUrl":"https://www.qualys.com/docs/qualys-cloud-agent-  
brief.pdf,https://www.qualys.com/documentation/release-notes/",  
  "lifecycle":{  
    "gaDate":null,  
    "eolDate":null,  
    "eosDate":null,  
    "stage":null,  
    "lifeCycleConfidence":null,  
    "eolSupportStage":null,  
    "eosSupportStage":null  
  },  
  "supportStageDesc":null,  
  "license":{  
    "category":"Commercial",  
    "subcategory":"Free"  
  }  
},  
{  
  "fullName":"Apache httpd 2 2.4 (2.4.6)",  
  "softwareType":"Application",  
  "isIgnored":0,  
  "ignoredReason":null,  
  "category":"Network Application / Web  
Servers",  
  "category1":"Network Application",  
  "category2":"Web Servers",  
  "productName":"httpd",  
  "component":"Server",  
  "publisher":"Apache",  
  "edition":"",  
  "marketVersion":"2",  
  "version":"2.4",  
  "update":"2.4.6",  
  "architecture":"",  
  "installDate":"1970-01-  
01T00:00:00.000Z",  
  "lastUpdated":"1970-01-  
01T00:00:00.000Z",  
  "lastUseDate":null,  
  "language":null,  
  "formerlyKnownAs":"HTTP Server, Apache",  
  "isPackage":false,  
  "isPackageComponent":true,  
  "packageName":"",  
  "productUrl":"https://www.wikiwand.com/en/Apache_HTTP_Server,https
```

```
://httpd.apache.org/download.cgi,https://httpd.apache.org/docs/2.0  
/",
```

```
    "lifecycle":{  
      "gaDate":"2012-02-21T00:00:00.000Z",  
      "eolDate":null,  
      "eosDate":null,  
      "stage":"GA",  
      "lifeCycleConfidence":"Exact",  
      "eolSupportStage":"Not Announced",  
      "eosSupportStage":"Not Announced"  
    },  
    "supportStageDesc":null,  
    "license":{  
      "category":"Open Source",  
      "subcategory":"Apache License 2.0  
(Apache-2.0) "
```

```
    }  
  },  
  {
```

```
    "fullName":"Python Python 2 2.7 (2.7.5)",  
    "softwareType":"Application",  
    "isIgnored":0,  
    "ignoredReason":null,  
    "category":"Application Development /  
Programming Languages",
```

```
    "category1":"Application Development",  
    "category2":"Programming Languages",  
    "productName":"Python",  
    "component":"",  
    "publisher":"Python",  
    "edition":"",  
    "marketVersion":"2",  
    "version":"2.7",  
    "update":"2.7.5",  
    "architecture":"",  
    "installDate":"1970-01-  
01T00:00:00.000Z",
```

```
    "lastUpdated":"1970-01-  
01T00:00:00.000Z",  
    "lastUseDate":null,  
    "language":null,  
    "formerlyKnownAs":"",  
    "isPackage":false,  
    "isPackageComponent":false,  
    "packageName":"",
```

```
"productUrl":"https://en.wikipedia.org/wiki/History_of_Python,,",
  "lifecycle":{
    "gaDate":"2010-07-03T00:00:00.000Z",
    "eolDate":"2020-01-01T00:00:00.000Z",
    "eosDate":"2020-01-01T00:00:00.000Z",
    "stage":"GA",
    "lifeCycleConfidence":"Exact",
    "eolSupportStage":"End-of-life",
    "eosSupportStage":"End-of-life"
  },
  "supportStageDesc":"Python's policy is
to drop support major versions once they reach their end of life",
  "license":{
    "category":"Open Source",
    "subcategory":"Python License
(Python-2.0) "
  }
},
{
  "fullName":"Oracle MySQL Server 5 5.6
(5.6.26) ",
  "softwareType":"Application",
  "isIgnored":0,
  "ignoredReason":null,
  "category":"Databases / RDBMS",
  "category1":"Databases",
  "category2":"RDBMS",
  "productName":"MySQL Server",
  "component":"Server",
  "publisher":"Oracle",
  "edition":"",
  "marketVersion":null,
  "version":null,
  "update":null,
  "architecture":"",
  "installDate":"1970-01-
01T00:00:00.000Z",
  "lastUpdated":"1970-01-
01T00:00:00.000Z",
  "lastUseDate":null,
  "language":null,
  "formerlyKnownAs":"",
  "isPackage":false,
  "isPackageComponent":true,
  "packageName":"",
  "productUrl":"https://www.mysql.com/, , ",
```

```
    "lifecycle":{
      "gaDate":null,
      "eolDate":null,
      "eosDate":null,
      "stage":null,
      "lifeCycleConfidence":null,
      "eolSupportStage":null,
      "eosSupportStage":null
    },
    "supportStageDesc":"Puts you in control
of your Database, Middleware, and Applications upgrade strategy by
providing additional maintenance and upgrades for Oracle Database,
Oracle Fusion Middleware, and Oracle Applications for an
additional fee.",
    "license":{
      "category":"Open Source",
      "subcategory":"GNU General Public
License v2.0 (GPL-2.0)"
    }
  }
},
"provider":"AWS",
"cloudProvider":{
  "aws":{
    "ec2":{
      "accountId":"205767712438",
      "availabilityZone":"us-east-1e",
      "hasAgent":true,
      "hostname":"ip-10-90-2-249.qualys.com",
      "imageId":"ami-02eac2c0129f6376b",
      "instanceId":"i-087965612d096c93d",
      "instanceState":"RUNNING",
      "instanceType":"t2.micro",
      "qualysScanner":false,
      "kernelId":"",
      "launchdate":1564087655000,
      "privateDNS":"ip-10-90-2-
249.qualys.com",
      "privateIpAddress":"10.90.2.249",
      "publicDNS":"ec2-3-86-24-68.compute-
1.amazonaws.com",
      "publicIpAddress":"3.86.24.68",
      "region":{
        "code":"us-east-1",
        "name":"US East (N. Virginia)"
      }
    }
  }
}
```

```
    },
    "spotInstance":false,
    "subnetId":"subnet-5a756071",
    "vpcId":"vpc-1e37cd76"
  },
  "tags":[
    {
      "key":"Name",
      "value":"Amy-POD4-Agent-quays_iz72-
Centos7+mysql"
    }
  ]
},
"azure":null,
"gcp":null
},
"agent":{
  "version":"2.4.0.75",
  "configurationProfile":"Initial Profile",
  "activations":[
    {
      "key":"8e44de48-172b-4529-bf79-
9ce5b342d09e",
      "status":"ACTIVE"
    }
  ],
  "connectedFrom":"10.90.2.249",
  "lastActivity":1564695367151,
  "lastCheckedIn":1564695367151,
  "lastInventory":1564695367000,
  "udcManifestAssigned":false
},
"sensor":{
  "activatedForModules":[
    "SCA",
    "PC",
    "VM",
    "CERTVIEW"
  ],
  "pendingActivationForModules":[
  ],
  "lastVMScan":1564693585000,
  "lastComplianceScan":1564672975000,
  "lastFullScan":1564693585000,
  "errorStatus":false
}
```

```
},
"container":{
  "product":null,
  "version":null,
  "noOfContainers":0,
  "noOfImages":0
},
"inventory":{
  "source":"QAGENT",
  "created":1564088265000,
  "lastUpdated":1564696288000
},
"activity":{
  "source":"QAGENT",
  "lastScannedDate":1564696288000
},
"tagList":{
  "tag":[
    {
      "tagId":104775814,
      "tagName":"EC2",
      "foregroundColor":0,
      "backgroundColor":0,
      "businessImpact":"LOW"
    },
    {
      "tagId":104775815,
      "tagName":"EC2-3xx",
      "foregroundColor":0,
      "backgroundColor":0,
      "businessImpact":"LOW"
    },
    {
      "tagId":104775816,
      "tagName":"EC2-2xx",
      "foregroundColor":0,
      "backgroundColor":0,
      "businessImpact":"LOW"
    },
    {
      "tagId":104776729,
      "tagName":"Cloud Agent",
      "foregroundColor":0,
      "backgroundColor":0,
      "businessImpact":"LOW"
    }
  ]
}
```

```
    }
  ]
},
"serviceList":{
  "service":[
    {
      "description":"",
      "name":"auditd.service",
      "status":"loaded/active/running"
    },
    {
      "description":"",
      "name":"chronyd.service",
      "status":"loaded/active/running"
    },
    {
      "description":"",
      "name":"cloud-config.service",
      "status":"loaded/active/exited"
    }
  ]
}
}
]
}
}
```


Appendix A - Error Messages

This appendix describes the types of error messages returned from Global IT Asset Inventory API requests.

Error Code	Description
400	The request could not be understood by the server due to malformed syntax.
403 Forbidden	This response code is returned for the following scenarios: <ul style="list-style-type: none"> - If the Asset Inventory License is in "Pending Activation". - If "App API Enabled" option is not checked. - If "App API Enabled" option is checked, but the license expiration date (for Trial/Full customers) has elapsed. - If the customer's license subscription cannot be validated.
404 Not found	The server has not found anything matching the Request
416 Requested Range Not Satisfiable	Please provide a Page Size value less than the max page size limit set.
500 Failure	The server encountered an unexpected condition which prevented it from fulfilling the request

Note: Following tokens are not available for ITAM (Free) License Subscriber:

```
hardware.lifecycle.stage, hardware.lifecycle.eos, hardware.lifecycle.ga,
hardware.lifecycle.intro, hardware.lifecycle.obs,
software.license.category, software.license.subcategory,
software.lifecycle.eol, software.lifecycle.eos, software.lifecycle.ga,
software.lifecycle.stage, software.isPackage,
software.isPackageComponent, operatingSystem.lifecycle.eol,
operatingSystem.lifecycle.eos, operatingSystem.lifecycle.ga,
operatingSystem.lifecycle.stage, asset.type
```