



Qualys®

# Qualys Global AssetView/CyberSecurity Asset Management v2.x and v1.x

## API Release Notes

Version 2.16

August 30, 2023

Qualys Cloud Suite API gives you many ways to integrate your programs and API calls with Qualys capabilities. You'll find all the details in our user guides, available at the time of release. Just log in to your Qualys account and go to Help > Resources.

### What's New

[Support to Import Third-Party Assets to CSAM](#)

[Support to Create TagSets \(Only CSAM\)](#)

[Visibility to Missing Required Software](#)

[Enhancements to Software Details Field](#)

### URL to the Qualys API Server

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](#)

In some of the API Release Notes, the API gateway URL for Qualys US Platform 1 (<https://gateway.qg1.apps.qualys.com>) is used in sample API requests.

For this API Release Notes, instead of providing any platform-specific URL, `<qualys_base_url>` is mentioned in the sample API requests.

If you are on another platform, replace this URL with the appropriate gateway URL for your account.

## Support to Import Third-Party Assets to CSAM

API affected	rest/2.0/am/connector/asset/data/sync
New or Updated APIs	New
Operator	POST
DTD or XSD changes	No

With this release, we have introduced this new API that imports Third-Party assets into your CSAM account. This API is introduced only for the Third-Party asset source - Webhook.

**Note:** The Third-Party Asset Identification is a new feature in Beta phase. It's in early stage and only available on a request basis. Contact your Technical Account Manager (TAM) for more information.

### Before You Begin

- Create the "businessAppId" using the 2.0/upsert/am/businessapp/metadata API before importing the Third-Party assets.
- The values mentioned in the "identityAttributes" list except "qualysAssetId", "instanceUuid", and "instanceUuidSource" must be the same as mentioned in the "coreAttributes" list.

### **Sample - Import Third-Party assets**

#### API Request:

```
curl --location --request POST
'<qualys_base_url>/rest/2.0/am/connector/asset/data/sync' \
--header 'Authorization: Bearer <JWT Token>' \
--header 'Content-Type: application/json' \
--data-raw '<JSON payload>'
```

#### Sample JSON Payload:

```
{
  "connectorMetaData": {
    "requestId": "string",
    "assetCount": "integer",
    "source": "string",
    "connectorUuid": "string"
  },
  "assetData": [
    {
      "identityAttributes": {
        "qualysAssetId": "string",
```

```
"sourceNativeKey": "string",
  "instanceUuid": "String",
  "instanceUuidSource": "String",
  "hostName": "String",
  "netBiosName": "string",
  "fqdn": "String",
  "macAddress": [
    "string"
  ],
  "ipAddress": [
    "String"
  ],
  "serialNumber": "String",
  "hardwareUuid": "string",
  "networkUuid": "String"
},
"coreAttributes": {
  "lastLoggedOnUser": "String",
  "operatingSystem": "String",
  "hostName": "String",
  "address": "String",
  "dnsName": "String",
  "biosInfo": {
    "biosDescription": "String",
    "lastBoot": "date",
    "manufacturer": "String",
    "totalMemory": "integer",
    "timeZone": "String",
    "model": "String",
    "serialNumber": "String",
    "biosAssetTag": "String",
    "hardwareUuid": "String"
  },
  "netBiosName": "String",
  "isContainer": "boolean",
  "fqdn": "String",
  "domain": "String",
  "osVersion": "String",
  "osArchitecture": "String",
  "domainRole": "String",
  "processor": {
    "description": "String",
    "speed": "float",
    "numberOfCpu": "integer"
  },
  "ports": [
    {
      "port": "Integer",
      "protocol": "String",
```

```
        "detectedService": "String",
        "description": "String",
        "firstFound": "Date",
        "lastUpdated": "Date"
    }
],
"networkInterfaces": [
    {
        "interfaceName": "String",
        "macAddress": "String",
        "address": "String",
        "gatewayAddress": [
            "String"
        ],
        "dnsAddress": [
            "String"
        ],
        "hostName": "String",
        "ipv4Address": [
            "String"
        ],
        "ipv6Address": [
            "String"
        ],
        "type": "String",
        "networkUuid": "String"
    }
],
"softwares": [
    {
        "name": "String",
        "version": "String",
        "installedDate": "date",
        "lastUpdated": "date",
        "identifier": "String",
        "isSystemApp": "boolean",
        "isEnterpriseApp": "boolean",
        "publisher": "String",
        "language": "String",
        "type": "String",
        "installPath": "String",
        "lastUsedDate": "date",
        "firstFoundDate": "date"
    }
],
"services": [
    {
        "name": "String",
        "description": "String",
```

```
        "status": "String"
    }
],
"volumes": [
    {
        "name": "String",
        "size": "Integer",
        "free": "Integer"
    }
],
"accounts": [
    {
        "username": "String"
    }
],
"businessMetaData": {
    "status": "String",
    "environment": "String",
    "company": "String",
    "department": "String",
    "ownedBy": "String",
    "managedBy": "String",
    "supportedBy": "String",
    "supportGroup": "String"
},
"assignedLocation": {
    "name": "String",
    "street": "String",
    "city": "String",
    "state": "String",
    "zip": "String",
    "country": "String",
    "latitude": "String",
    "longitude": "String"
},
"businessApps": [
    {
        "businessAppId": "String"
    }
],
"containers": [
    {
        "version": "String",
        "numberOfContainers": "Integer",
        "numberOfImages": "Integer",
        "type": "String"
    }
],
"customConnectorAttributes": {
```

```
        "key": "value"  
      }  
    }  
  ]  
}
```

Response:

```
{  
  "message": "All Assets are successfully published for sync.",  
  "responseCode": "SUCCESSFULLY_PUBLISHED",  
  "assetsError": {}  
}
```

## Support to Create TagSets (Only CSAM)

API affected	qps/rest/2.0/create/am/tag/ qps/rest/2.0/update/am/tag/<id>
New or Updated APIs	Updated
Operator	POST
DTD or XSD changes	No

With this release, we have updated the Create Tags API to create TagSets through API. Before this release, it was possible to create tagsets only through the CSAM UI.

**Note:** You can use this API only after general availability of the Portal 3.16.0.0.

### **Prerequisite:**

Full or Trial CSAM subscription

### **Permissions:**

Managers with full scope and other users must have the following permissions:

- API Access
- Create User Tag
- Modify Dynamic Tag Rules

For more information, refer to the [Cloud Platform 3.16 API Release Notes](#).

## Visibility to Missing Required Software

With this release, you can now find the assets where the required software is missing.

The Missing Required Software (MRS) details are now shown in the response of the following V2 APIs:

- [Asset List V2 API](#)
- [Asset by AssetID V2 API](#)
- [Asset Count V2 API](#)

**Note:** The software is already mentioned in the software rule.

### Asset List V2 API

API affected	rest/2.0/search/am/asset
New or Updated APIs	Updated
Operator	POST
DTD or XSD changes	No

### Input Parameters

By using the following input parameters, you can find the list of assets for which the software is missing.

Field Name	Mandatory/Optional	Data type	Description
software.isRequired	Mandatory	Boolean	- Set the parameter to true to display all the assets on which the software is installed. - Set the parameter to false to display all the assets on which the software is not installed.
asset.hasMissingSoftware	Mandatory	Boolean	- Set the parameter to true to display all assets with the MRS. - Set the parameter to false to display all assets on which the software is not missing.



## Asset List V2 API (with filter)

Using this API, you can get all the assets listed on which the required software is missing or available.

### Sample - List assets with the missing software

#### Request:

```
curl --location --request POST
'<qualys_base_url>/rest/2.0/search/am/asset' -header 'Authorization:
Bearer <JWT Token>' --header 'Content-Type: application/xml' --data-raw
'<FilterRequest>'
```

#### Filter in XML format:

```
a.
<FilterRequest>
<filters><Criteria field="software.isRequired"
operator="EQUALS"><value>>true</value></Criteria>
</filters>
</FilterRequest>
```

```
b.
<FilterRequest>
<filters><Criteria field="asset.hasMissingSoftware"
operator="EQUALS"><value>>true</value></Criteria>
</filters>
</FilterRequest>
```

#### Filter in JSON format:

```
a.
{
  "filters": [
    {
      "field": "software.isRequired",
      "operator": "EQUALS",
      "value": "true"
    }
  ]
}
```

```
b.
{
  "filters": [
    {
      "field": "asset.hasMissingSoftware",
```

```
        "operator": "EQUALS",  
        "value": "true"  
    }  
]  
}
```

Response:

```
{  
  "responseMessage": "Valid API Access",  
  "count": 1,  
  "responseCode": "SUCCESS",  
  "lastSeenAssetId": null,  
  "hasMore": 0,  
  "assetListData": {  
    "asset": [  
      {  
        "assetId": 21011056,  
        "assetUUID": "7fb779d4-b120-42dc-b6a8-4f6a08d6ef1e",  
        "hostId": 3186329,  
        ...  
        "domain": null,  
        "subdomain": null,  
        "missingSoftware": [  
          {  
            "name": "Google Chrome",  
            "category1": "Network Application",  
            "category2": "Internet Browser",  
            "publisher": "Google",  
            "product": "Chrome",  
            "rule": "ASD",  
            "criteria": [  
              {  
                "criteria": "ANY Version ",  
                "release": [  
                  "ANY"  
                ]  
              }  
            ]  
          }  
        ]  
      }  
    ],  
    "whois": null,  
    ...  
    "multithreadingStatus": null  
  }  
]  
}
```

## Asset by AssetID V2 API

API affected	rest/2.0/get/am/asset
New or Updated APIs	Updated
Operator	GET
DTD or XSD changes	No

### Input Parameters

By using the following input parameters, you can find the MRS on a particular asset.

**Note:** The software is already mentioned in the software rule.

Field Name	Mandatory/Optional	Data type	Description
software.isRequired	Mandatory	Boolean	<ul style="list-style-type: none"> <li>- Set the parameter to true to display the details about the required software installed on a specific asset.</li> <li>- Set the parameter to false to display the details about the required software that is not installed on a specific asset.</li> </ul>
asset.hasMissingSoftware	Mandatory	Boolean	<ul style="list-style-type: none"> <li>- Set the parameter to true to display the MRS details for a specific asset.</li> <li>- Set the parameter to false to display the MRS details for a specific asset.</li> </ul>

## Asset by AssetID V2 API (with filter)

Using this API, you come to know whether the required software is missing or available on the specified asset.

### Sample - Get the missing software details for specific asset

#### Request:

```
curl --location --request GET
'<qualys_base_url>/rest/2.0/get/am/asset?assetId=19605572--header
'Content-Type: application/json' --header 'Authorization: Bearer <JWT
Token>' --header 'Content-Type: application/xml' --data-raw
'<FilterRequest>'
```

#### Filter in XML format:

```
a.
<FilterRequest>
<filters>
<Criteria field="software.isRequired" " operator="EQUALS"><value> true
</value></Criteria>
</filters>
</FilterRequest>

b.
<FilterRequest>
<filters><Criteria field="asset.hasMissingSoftware"
operator="EQUALS"><value>true</value></Criteria>
</filters>
</FilterRequest>
```

#### Filter in JSON format:

```
a.
{
  "filters": [
    {
      "field": "software.isRequired" ,
      "operator": "EQUALS",
      "value": "true"
    }
  ]
}

b.
{
  "filters": [
    {
      "field": "asset.hasMissingSoftware",
```

```
        "operator": "EQUALS",  
        "value": "true"  
    }  
]  
}
```

Response:

```
{  
  "responseMessage": "Valid API Access",  
  "count": 1,  
  "responseCode": "SUCCESS",  
  "lastSeenAssetId": null,  
  "hasMore": 0,  
  "assetListData": {  
    "asset": [  
      {  
        "assetId": 21011056,  
        "assetUUID": "7fb779d4-b120-42dc-b6a8-4f6a08d6ef1e",  
        "hostId": 3186329,  
        ...  
        "domain": null,  
        "subdomain": null,  
        "missingSoftware": [  
          {  
            "name": "Google Chrome",  
            "category1": "Network Application",  
            "category2": "Internet Browser",  
            "publisher": "Google",  
            "product": "Chrome",  
            "rule": "ASD",  
            "criteria": [  
              {  
                "criteria": "ANY Version ",  
                "release": [  
                  "ANY"  
                ]  
              }  
            ]  
          }  
        ]  
      }  
    ],  
    "whois": null,  
    ...  
    "multithreadingStatus": null  
  }  
]  
}
```

## Asset Count V2 API

API affected	rest/2.0/count/am/asset
New or Updated APIs	Updated
Operator	POST
DTD or XSD changes	No

### Input Parameters

By using the following input parameters, you can find the count of assets with the MRS.

**Note:** The software is already mentioned in the software rule.

Field Name	Mandatory/Optional	Data type	Description
software.isRequired	Mandatory	Boolean	<ul style="list-style-type: none"> <li>- Set this parameter to true to display the count of assets on which the required software is installed.</li> <li>- Set this parameter to false to display the count of assets on which the required software is not missing.</li> </ul>
asset.hasMissingSoftware	Mandatory	Boolean	<ul style="list-style-type: none"> <li>- Set this parameter to true to display the count of assets on which the required software is missing.</li> <li>- Set this parameter to false to display the count of assets on which the required software is not missing.</li> </ul>

## Asset Count V2 API (with filter)

Using this API, you can find a count of assets for which the software is missing or not missing.

### Sample - Get assets count where the software is missing

#### Request:

```
curl --location --request POST
'<qualys_base_url>/rest/2.0/count/am/asset' --header 'Authorization:
Bearer <JWT Token>' --header 'Content-Type: application/xml' --data
'<FilterRequest>
```

#### Filter in XML format:

```
a.
<FilterRequest>
<filters>
<Criteria field=" software.isRequired " operator="EQUALS"><value> true
</value></Criteria>
</filters>
</FilterRequest>
```

```
b.
<FilterRequest>
<filters><Criteria field="asset.hasMissingSoftware"
operator="EQUALS"><value>true</value></Criteria>
</filters>
</FilterRequest>
```

#### Filter in JSON format:

```
a.
{
  "filters": [
    {
      "field": " software.isRequired ",
      "operator": "EQUALS",
      "value": " true "
    }
  ]
}
```

```
b.
{
  "filters": [
    {
      "field": "asset.hasMissingSoftware",
```

```
        "operator": "EQUALS",  
        "value": "true"  
    }  
]  
}
```

Response:

```
{  
  "count": 1,  
  "responseCode": "SUCCESS",  
  "responseMessage": "Valid API Access"  
}
```



## Enhancements to Software Details Field

With this release, the software details field is enhanced to show additional important software details. The field includes the new attributes - "discoveredName", "discoveredVersion" and "discoveredPublisher".

This enhancement is made to the following public V2 and V1 APIs responses:

### V2 APIs

- [Asset List V2 API](#)
- [Asset by AssetId V2 API](#)

### V1 APIs

- [Asset Filter by AssetID V1 API](#)
- [Asset Filter V1 API](#)
- [Asset List V1 API](#)

## Asset List V2 API

API affected	rest/2.0/search/am/asset
New or Updated APIs	Updated
Operator	POST
DTD or XSD changes	No

## Sample - Get additional software details for assets

### Request:

```
curl --location --request POST
'<qualys_base_url>/rest/2.0/search/am/asset' --header 'Authorization:
Bearer <JWT Token>' --header 'Content-Type: application/xml' --data
'<FilterRequest>'
```

### Response:

```
"softwareListData": {
  "software": [
    {
      "id": 3364396158600903308,
      "fullName": "Milestone Systems XProtect Smart
Client 71",
      "softwareType": "Application",
      "isIgnored": false,
      ...
    }
  ]
}
```

```
        "lifecycle": {
            "gaDate": null,
            "eolDate": null,
            "eosDate": null,
            "stage": "Unknown",
            "lifeCycleConfidence": null,
            "eolSupportStage": null,
            "eosSupportStage": null
        },
        "supportStageDesc": null,
        "license": {
            "category": "Commercial",
            "subcategory": "Free"
        },
        "authorization": null,
        "discoveredPublisher": null,
        "discoveredName": "XProtect",
        "discoveredVersion": "71"
    },
}
}
```

## Asset by AssetId V2 API

API affected	rest/2.0/get/am/asset
New or Updated APIs	Updated
Operator	GET
DTD or XSD changes	No

## Sample - Get additional software details for a specific asset

### Request:

```
curl --location --request GET
'<qualys_base_url>/rest/2.0/get/am/asset?assetId= 28713741' --header
'Content-Type: application/json' --header 'Authorization: Bearer <JWT
Token>'
```

### Response:

```
    "softwareListData": {
        "software": [
            {
                "id": -6384183525629312896,
                "fullName": "Milestone Systems XProtect Smart
Client 101",
                ...
            }
        ]
    }
```

```
        "lifecycle": {
            "gaDate": null,
            "eolDate": null,
            "eosDate": null,
            "stage": "Unknown",
            "lifeCycleConfidence": null,
            "eolSupportStage": null,
            "eosSupportStage": null
        },
        "supportStageDesc": null,
        "license": {
            "category": "Commercial",
            "subcategory": "Free"
        },
        "authorization": null,
        "discoveredPublisher": null,
        "discoveredName": "XProtect",
        "discoveredVersion": "101"
    },
}
}
```

## Asset Filter by AssetID V1 API

API affected	am/v1/assets/host/id
New or Updated APIs	Updated
Operator	POST
DTD or XSD changes	No

### Sample - Get additional software details for specific asset

#### Request:

```
curl --location --request POST
'<qualys_base_url>/am/v1/asset/host/id?assetId=28713741' --header
'Authorization: Bearer <JWT Token>'
```

#### Response:

```
"softwareListData": {
    "software": [
        {
            "id": 3364396158600903378,
            "fullName": "Milestone Systems XProtect Smart
Client 99",
            ...
```

```

        "lifecycle": {
            "gaDate": null,
            "eolDate": null,
            "eosDate": null,
            "stage": "Unknown",
            "lifeCycleConfidence": null,
            "eolSupportStage": null,
            "eosSupportStage": null
        },
        "supportStageDesc": null,
        "license": {
            "category": "Commercial",
            "subcategory": "Free"
        },
        "authorization": null,
        "discoveredPublisher": null,
        "discoveredName": "XProtect",
        "discoveredVersion": "99"
    }
}
]
}

```

## Asset Filter V1 API

API affected	am/v1/assets/host/filter/list
New or Updated APIs	Updated
Operator	POST
DTD or XSD changes	No

### Sample - Get additional software details according to specified filter

#### Request:

```

curl --location --request POST
'<qualys_base_url>/am/v1/assets/host/filter/list?
filter=software:(publisher:Milestone Systems)'' --
header 'Authorization: Bearer <JWT Token>'

```

#### Response:

```

"softwareListData": {
    "software": [
    {
        "id": 3364396158600903374,
        "fullName": "Milestone Systems XProtect Smart
Client 95",
        "softwareType": "Application",

```

```

    ...
    "lifecycle": {
        "gaDate": null,
        "eolDate": null,
        "eosDate": null,
        "stage": "Unknown",
        "lifeCycleConfidence": null,
        "eolSupportStage": null,
        "eosSupportStage": null
    },
    "supportStageDesc": null,
    "license": {
        "category": "Commercial",
        "subcategory": "Free"
    },
    "authorization": null,
    "discoveredPublisher": null,
    "discoveredName": "XProtect",
    "discoveredVersion": "95"
}
    ]
}
    
```

## Asset List V1 API

API affected	am/v1/assets/host/list
New or Updated APIs	Updated
Operator	POST
DTD or XSD changes	No

## Sample - Get additional software details for assets

### Request:

```

curl --location --request POST
'<qualys_base_url>/am/v1/assets/host/list' --header
'Authorization: Bearer <JWT Token>'
    
```

### Response:

```

"softwareListData": {
    "software": [
    {
        "id": 3364396158600903308,
        "fullName": "Milestone Systems XProtect Smart
Client 71",
        "softwareType": "Application",
    
```

```
    "isIgnored": false,  
    ...  
    "lifecycle": {  
        "gaDate": null,  
        "eolDate": null,  
        "eosDate": null,  
        "stage": "Unknown",  
        "lifeCycleConfidence": null,  
        "eolSupportStage": null,  
        "eosSupportStage": null  
    },  
    "supportStageDesc": null,  
    "license": {  
        "category": "Commercial",  
        "subcategory": "Free"  
    },  
    "authorization": null,  
    "discoveredPublisher": null,  
    "discoveredName": "XProtect",  
    "discoveredVersion": "71"  
},  
]  
}
```