



Qualys Container Security v1.x

API Release Notes

Version 1.6.8.5

October 15, 2020

Qualys Container Security API gives you many ways to integrate your programs and API calls with Qualys capabilities.

What's New

[New Bulk APIs for Detailed Image and Container Lists](#)

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

New Bulk APIs for Detailed Image and Container Lists

APIs affected	/csapi/v1.1/images/list /csapi/v1.1/containers/list
New or Updated APIs	New

This release introduces new API endpoints to get a list of images with details for each image, and a list of containers with details for each container.

When you make your API request, you'll use the "limit" input parameter to specify the number of records to return. For example, you can choose to return details for 10 images at a time by specifying limit=10. The Response Header will include a unique link that you can specify in the next API request to get the next set of results. i.e. the next 10 images. Simply take the link as is for the new request, no additional parameters are needed. When there are no more records to return, the Response Header will show a value of "null" for the link. The detailed containers list works in the same way as the detailed images list.

The details shown for each image/container in the list response will be the same as if you were fetching a single image/container, with a few exceptions. For both images and containers lists, the "vulnerabilities" section of the response will only show qid, result and software. For images list, instead of listing all hosts where an image was found, we'll show details for the most recent host where the image was found. This appears in the response under "lastFoundOnHost".

Get detailed images list

/csapi/v1.1/images/list

[GET]

Get a list of images in your account with detailed information for each image.

Input Parameters:

Parameter	Description
limit	Specify the number of records to include in the response. Enter a value from 1 to 250.
filter	Filter the images list by providing a query using Qualys syntax. Refer to "How to Search" topic in the online help for assistance with creating your query.

Example: List images with limit of 2 records

API request:

```
curl -X GET --header 'Accept: application/json' --header 'Authorization:
Basic VVNFUk5BTUU6UEFTU1dPUkQ='
'http://qualysapi.qualys.com/csapi/v1.1/images/list?limit=2'
```

Response:

Response Headers:

```
{
  "content-type": "application/json;charset=UTF-8",
  "date": "Wed, 26 Aug 2020 07:41:21 GMT",
  "link":
"<http://qualysapi.qualys.com/csapi/v1.1/images/list?limit=2&paginationQu
ery=updated%3E%3D1593731505425+AND+not+uuid%3A+%5Bbc092a61-caee-3ff1-
a693-d9062361ad3c%5D>;rel=next",
  "referrer-policy": "same-origin",
  "server": "Qualys",
  "transfer-encoding": "chunked",
  "x-content-type-options": "nosniff",
  "x-frame-options": "sameorigin",
  "x-permitted-cross-domain-policies": "none",
  "x-powered-by": "Qualys",
  "x-xss-protection": "1; mode=block"
}
```

Response JSON:

```
{
  "data": [
    {
      "created": "1557533223000",
      "updated": "1593731440059",
      "author": "",
      "repo": [
        {
          "registry": "docker.io",
          "tag": "3.9",
          "repository": "alpine"
        }
      ],
      "repoDigests": [
        {
          "registry": "docker.io",
          "digest":
"7746df395af22f04212cd25a92c1d6dbc5a06a0ca9579a229ef43008d4d1302a",
          "repository": "alpine"
        }
      ]
    }
  ]
}
```

```
    ],
    "label": null,
    "layersCount": null,
    "uuid": "cfd55a5d-28fd-39c3-9572-50b05b89bd1a",
    "sha":
"055936d3920576da37aa9bc460d70c5f212028bda1c08c0879aedf03d7a66ea1",
    "operatingSystem": "Alpine Linux 3.9.4",
    "sensorUuid": null,
    "customerUuid": "a1d17d51-03fb-c803-81a6-1048accaca9",
    "dockerVersion": "18.06.1-ce",
    "size": 5533135,
    "layers": null,
    "architecture": "amd64",
    "imageId": "055936d39205",
    "lastScanned": "1593731440058",
    "registryUuid": null,
    "source": [
      "GENERAL"
    ],
    "users": [
      "root",
      "operator",
      "postgres"
    ],
    "lastFoundOnHost": null,
    "isDockerHubOfficial": null,
    "isInstrumented": null,
    "instrumentedFrom": null,
    "instrumentationState": null,
    "scanType": "DYNAMIC",
    "softwares": [
      {
        "name": "musl",
        "version": "1.1.20-r4",
        "fixVersion": null
      },
      {
        "name": "libtls-standalone",
        "version": "2.7.4-r6",
        "fixVersion": null
      },
      {
        "name": "alpine-keys",
        "version": "2.1-r1",
        "fixVersion": null
      },
      {
...
    ],
```

```
"vulnerabilities": [
  {
    "qid": 105144,
    "result": "shadow:x:42:\n\n/etc/shadow\n\n-rw-r-----  1 root
shadow  441 May  9 2019 /etc/shadow",
    "software": null
  }
],
},
{
  "created": "1591815652000",
  "updated": "1593731505425",
  "author": "",
  "repo": [
    {
      "registry": "docker.io",
      "tag": "1",
      "repository": "hello_world_ps"
    }
  ],
  "repoDigests": null,
  "label": [
    {
      "key": "org.label-schema.name",
      "value": "CentOS Base Image"
    },
    {
      "key": "org.label-schema.license",
      "value": "GPLv2"
    }
  ],
  ...
],
"layersCount": null,
"uuid": "bc092a61-caee-3ff1-a693-d9062361ad3c",
"sha":
"016ad20049fb86f4f027cc93efecce7a9c546ee5a30139b1d62c225161954581",
"operatingSystem": "CentOS Linux 7.7.1908",
"sensorUuid": null,
"customerUuid": "a1d17d51-03fb-c803-81a6-1048accaca9",
"dockerVersion": "19.03.5",
"size": 457819642,
"layers": null,
"architecture": "amd64",
"imageId": "016ad20049fb",
"lastScanned": "1593731505424",
"registryUuid": null,
"source": [
  "GENERAL"
],
```

```
"users": [
  "root"
],
"lastFoundOnHost": null,
"isDockerHubOfficial": null,
"isInstrumented": null,
"instrumentedFrom": null,
"instrumentationState": null,
"scanType": "DYNAMIC",
"softwares": [
  {
    "name": "util-linux",
    "version": "2.23.2-61.el7",
    "fixVersion": null
  },
  {
    "name": "tar",
    "version": "1.26-35.el7",
    "fixVersion": null
  },
  ...
],
"vulnerabilities": [
  {
    "qid": 256906,
    "result": "#table cols=3\nPackage Installed_Version
Required_Version\nbind-license 9.11.4-16.P2.el7.noarch 9.11.4-
16.P2.el7__8.6",
    "software": [
      {
        "name": "bind-license",
        "version": "9.11.4-16.P2.el7",
        "fixVersion": "9.11.4-16.P2.el7__8.6"
      }
    ]
  }
]
},
"limit": 2
}
```

Example 2: Get the next set of results for images list

In this example, the link from the Response Header from the previous API request is specified as part of the new request in order to get the next set of results. The response will be similar to the previous example.

API request:

```
curl -X GET --header 'Accept: application/json' --header 'Authorization:
Basic VVNFUk5BTUU6UEFTU1dPUkQ='
'http://qualysapi.qualys.com/csapi/v1.1/images/list?limit=2&paginationQue
ry=updated%3E%3D1593731505425+AND+not+uuid%3A+%5Bbc092a61-caee-3ff1-a693-
d9062361ad3c%5D'
```

Example 3: Response with no link

Here's a sample response where there are no more records to return after this, so there is no link provided in the Response Header section. You'll see a value of "null" for the link.

Response:

```
Response Headers:
{
  "content-type": "application/json;charset=UTF-8",
  "date": "Wed, 26 Aug 2020 07:41:21 GMT",
  "link": "null",
  "referrer-policy": "same-origin",
  "server": "Qualys",
  "transfer-encoding": "chunked",
  "x-content-type-options": "nosniff",
  "x-frame-options": "sameorigin",
  "x-permitted-cross-domain-policies": "none",
  "x-powered-by": "Qualys",
  "x-xss-protection": "1; mode=block"
}
...
```

Get detailed containers list

/csapi/v1.1/containers/list

[GET]

Get a list of containers in your account with detailed information for each container.

Input Parameters:

Parameter	Description
limit	Specify the number of records to include in the response. Enter a value from 1 to 250.
filter	Filter the containers list by providing a query using Qualys syntax. Refer to “How to Search” topic in the online help for assistance with creating your query.

Example: List containers with limit of 2 records

API request:

```
curl -X GET --header 'Accept: application/json' --header 'Authorization: Basic VVNFUk5BTUU6UEFTU1dPUkQ=' 'http://qualysapi.qualys.com/csapi/v1.1/containers/list?limit=2'
```

Response:

Response Headers:

```
{
  "content-type": "application/json;charset=UTF-8",
  "date": "Wed, 26 Aug 2020 07:56:59 GMT",
  "link":
"<http://qualysapi.qualys.com/csapi/v1.1/containers/list?limit=2&paginati
onQuery=updated%3E%3D1594876830694+AND+not+uuid%3A+%5B65eff01b-7775-3a0a-
bd68-e6dale7a39f5%5D>;rel=next",
  "referrer-policy": "same-origin",
  "server": "Qualys",
  "transfer-encoding": "chunked",
  "x-content-type-options": "nosniff",
  "x-frame-options": "sameorigin",
  "x-permitted-cross-domain-policies": "none",
  "x-powered-by": "Qualys",
  "x-xss-protection": "1; mode=block"
}
```

Response JSON:

```
{
  "data": [
```



```
{
  "portMapping": null,
  "imageId": "3aacd9e6d667",
  "created": "1593759719000",
  "updated": "1594876830316",
  "label": null,
  "uuid": "cdb92685-9fbb-3971-90aa-706086a64079",
  "sha":
"a979ee950e639492563f2dd7caa231adc5fc3fe5714f1d82a23cc2f8bbcda22f",
  "privileged": false,
  "path": "/bin/sh",
  "imageSha":
"3aacd9e6d6670283b5e2df06ba77354b379b17ac7b940e8ea9edb202d423af13",
  "macAddress": "",
  "customerUuid": "a1d17d51-03fb-c803-81a6-1048accaca9",
  "ipv4": null,
  "ipv6": null,
  "name": "adoring_easley",
  "host": {
    "sensorUuid": "213d6f22-f8cc-42ad-814a-49b4b5c38d64",
    "hostname": "cloudagent",
    "ipAddress": "10.115.77.138",
    "uuid": "53d08bfe-2899-4f5c-81fa-8c0950d80f5e",
    "lastUpdated": null
  },
  "state": "DELETED",
  "imageUuid": "e2c85565-d1d9-3f9c-ac93-ad9b09e110ef",
  "containerId": "a979ee950e63",
  "stateChanged": "1593759720784",
  "services": null,
  "users": null,
  "operatingSystem": null,
  "lastScanned": null,
  "source": "GENERAL",
  "isInstrumented": null,
  "environment": [
    "VAULT_VERSION=0.9.3",
    "PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin"
  ],
  "arguments": [
    "-c",
    "sed -i 's/\\r//g' /usr/local/bin/init.sh"
  ],
  "command": "/bin/sh -c sed -i 's/\\r//g' /usr/local/bin/init.sh",
  "drift": null,
  "vulnerabilities": null,
  "softwares": null,
  "isDrift": null,
}
```

```
    "isRoot": true
  },
  {
    "portMapping": null,
    "imageId": "dd6d1712ac5a",
    "created": "1593759720000",
    "updated": "1594876830694",
    "label": null,
    "uuid": "65eff01b-7775-3a0a-bd68-e6da1e7a39f5",
    "sha":
"c0da6c214c2ec6cd6620ad07e4e06da540c50c3c0c1372f84116dbe8aa03dd8d",
    "privileged": false,
    "path": "/bin/sh",
    "imageSha":
"dd6d1712ac5a55dffe5faff50e7407f51f8f11081f7c4c43e8e84697becfa38b",
    "macAddress": "",
    "customerUuid": "a1d17d51-03fb-c803-81a6-1048accaca9",
    "ipv4": null,
    "ipv6": null,
    "name": "gifted_bohr",
    "host": {
      "sensorUuid": "213d6f22-f8cc-42ad-814a-49b4b5c38d64",
      "hostname": "cloudagent",
      "ipAddress": "10.115.77.138",
      "uuid": "53d08bfe-2899-4f5c-81fa-8c0950d80f5e",
      "lastUpdated": null
    },
    "state": "DELETED",
    "imageUuid": "ca5f95da-7785-355b-8681-8b64f20a043b",
    "containerId": "c0da6c214c2e",
    "stateChanged": "1593759721914",
    "services": null,
    "users": null,
    "operatingSystem": null,
    "lastScanned": null,
    "source": "GENERAL",
    "isInstrumented": null,
    "environment": [
      "VAULT_VERSION=0.9.3",
      "PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin"
    ],
    "arguments": [
      "-c",
      "sed -i 's/\\r//g' /usr/local/bin/docker-entrypoint.sh"
    ],
    "command": "/bin/sh -c sed -i 's/\\r//g' /usr/local/bin/docker-
entrypoint.sh",
    "drift": null,
  }
}
```

```
    "vulnerabilities": null,  
    "softwares": null,  
    "isDrift": null,  
    "isRoot": true  
  }  
],  
  "limit": 2  
}
```

Example 2: Get the next set of results for containers list

In this example, the link from the Response Header from the previous API request is specified as part of the new request in order to get the next set of results. The response will be similar to the previous example.

API request:

```
curl -X GET --header 'Accept: application/json' --header 'Authorization:  
Basic VVNFUk5BTUU6UEFTUldPUkQ='  
'http://qualysapi.qualys.com/csapi/v1.1/containers/list?limit=2&paginatio  
nQuery=updated%3E%3D1594876830694+AND+not+uuid%3A+%5B65eff01b-7775-3a0a-  
bd68-e6dale7a39f5%5D'
```

Example 3: Response with no link

Here's a sample response where there are no more records to return after this, so there is no link provided in the Response Header section. You'll see a value of "null" for the link.

Response:

```
Response Headers:  
{  
  "content-type": "application/json;charset=UTF-8",  
  "date": "Wed, 26 Aug 2020 07:56:59 GMT",  
  "link": "null",  
  "referrer-policy": "same-origin",  
  "server": "Qualys",  
  "transfer-encoding": "chunked",  
  "x-content-type-options": "nosniff",  
  "x-frame-options": "sameorigin",  
  "x-permitted-cross-domain-policies": "none",  
  "x-powered-by": "Qualys",  
  "x-xss-protection": "1; mode=block"  
}  
...
```