

Qualys Container Security v1.x

API Release Notes

Version 1.17

August 5, 2022

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

What's New

Introducing Role Based Access Permissions

New Sensor Profile APIs for Registry Sensors

Create/Update/Validate Registry: Name and Sensor Profile

Qualys API URL

Container Security supports both API server URLs and API gateway URLs for API requests.

The Qualys API server or gateway 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 URL for Qualys US Platform 2 (https://gateway.qg2.apps.qualys.com) in sample API requests. If you're on another platform, please replace this URL with the appropriate server URL for your account.

Introducing Role Based Access Permissions

If you use other Qualys modules, then you're probably already familiar with how the Role Based Access Control (RBAC) model works. With Qualys Cloud Platform 3.12 and Container Security 1.17, the Qualys Container Security module will start using the RBAC model to control access to Container Security features. With RBAC, each user is assigned a pre-defined user role which determines which actions the user can take in the UI and API.

A "Manager" user (superuser with full permissions and scope) can access the Administration utility, has all roles assigned, can add and manage users, can create custom roles and assign roles to users. The first user in a new customer subscription is a Manager user.

A "CS Manager" user has all Container Security permissions and can perform all actions in the Container Security UI and API. Existing Container Security users will be assigned the CS Manager role automatically, which means all existing users will be able to perform all actions just like in previous releases. These users will have access to the UI and the API.

A "CS User" user only has access the Container Security UI, and has no other permissions assigned. A user with this role cannot access Container Security APIs.

Managers can create custom user roles and assign them to users using the Administration utility. See the Container Security Online Help to learn more about user roles and permissions.

API Response When User Does Not Have Permission For Action

When a user makes an API call but doesn't have the required permission for the action, the user will get a 403 FORBIDDEN error in the response similar to the one shown below. The user will need to reach out to a Manager user to request the permission.

```
"errorCode": "403 FORBIDDEN",
"message": "The joe_user user does not have the CS.IMAGE.VIEW permission
to perform this operation. Ensure that required permissions are assigned
to the user",
```

"timestamp": 1654169949515

New Sensor Profile APIs for Registry Sensors

Now users can configure sensor profiles to control which sensors are used for scanning registries. Each profile associates a list of registries with a list of sensors that can scan them. This is especially useful when you have sensors that don't have Internet access and are not able to scan cloud-based registries. Now you can create a profile with your cloud-based registries and include only the sensors that can reach them for scanning. Using sensor profiles will make registry scanning more efficient and improve performance.

Good to Know

- You can assign only one sensor profile to each registry.
- The same profile can be assigned to multiple registries.
- At scan time, only sensors associated with a registry will be used for the scan job.
- If a registry is not included in a sensor profile, then any sensor can be used to scan it.

New APIs

We've introduced several new API endpoints for managing sensor profiles.

API Objective	Operator	API Path
Create a sensor profile	POST	/csapi/v1.3/sensorProfile
Update a sensor profile	PUT	/csapi/v1.3/sensorProfile/{sensorProfileId}
Fetch a list of sensor profiles	GET	/csapi/v1.3/sensorProfile
Fetch details for a sensor profile	GET	/csapi/v1.3/sensorProfile/{sensorProfileId}
Fetch registries associated with a sensor profile	GET	/csapi/v1.3/sensorProfile/{sensorProfileId}/registry
Fetch sensors associated with a sensor profile	GET	/csapi/v1.3/sensorProfile/{sensorProfileId}/sensors
Fetch sensors which could be associated with a sensor profile	GET	/csapi/v1.3/sensorProfile/sensor/associate
Delete a sensor profile	DELETE	/csapi/v1.3/sensorProfile/{sensorProfileId}

Jump to a section to see API samples:

Create a sensor profile
Update a sensor profile
Fetch a list of sensor profiles
Fetch details for a sensor profile
Fetch registries associated with a sensor profile
Fetch sensors associated with a sensor profile

Fetch sensors which could be associated with a sensor profile Delete a sensor profile

Create a sensor profile

/csapi/v1.3/sensorProfile

[POST]

Use this API to create a new sensor profile.

Input Parameters:

Parameter	Description
profileName	(Required) Specify a title for your sensor profile.
description	Specify a description for your sensor profile.
profileType	(Required) Specify the type of sensor profile. Only "Registry" profile type is supported at this time.
associatedRegistryIds	(Required) Add one or more registries to this profile by specifying the registry IDs. These are the registries that will be scanned by the sensors in the same profile.
associatedSensorIds	(Required) Add one or more sensors to this profile by specifying the sensor IDs. These are the sensors that will be used to scan the registries in the same profile.

API request:

```
curl -X POST
"https://gateway.qg2.apps.qualys.com/csapi/v1.3/sensorProfile" -H
"accept: application/json" -H "Authorization: Bearer TOKEN" -H "Content-
Type: application/json" -d
"{\"profileName\":\"ecprofile\",\"description\":\"ecprofile
desc\",\"profileType\":\"Registry\",\"associatedRegistryIds\":[\"1ec46398
-23be-40fc-8cde-8b4bd916d5fa\",\"fe88284c-5fb3-4bc7-b2a0-
33208e8d7d41\"],\"associatedSensorIds\":[\"3a00f41d-8bb8-41d2-b2c2-
54ed50131082\",\"7cbc434a-5387-4591-940d-
c8bfd131a699\"],\"createdBy\":\"username\",\"updatedBy\":\"username\"}"
```

```
{
  "profileUuid": "ed37bef6-5ed3-4464-b6c0-9e2251e567c0"
}
```

Update a sensor profile

/csapi/v1.3/sensorProfile/{sensorProfileId}

[PUT]

Use this API to update a sensor profile in your account.

<u>Input Parameters:</u>

Parameter	Description
sensorProfileId	(Required) The ID/UUID for the sensor profile to update.
profileName	Specify a title for your sensor profile.
description	Specify a description for your sensor profile.
profileType	Specify the type of sensor profile. Only "Registry" profile type is supported at this time.
associatedRegistryIds	Add one or more registries to this profile by specifying the registry IDs. These are the registries that will be scanned by the sensors in the same profile.
associatedSensorIds	Add one or more sensors to this profile by specifying the sensor IDs. These are the sensors that will be used to scan the registries in the same profile.

API request:

```
curl -X PUT
"https://gateway.qg2.apps.qualys.com/csapi/v1.3/sensorProfile/789214bc-
d21b-4a26-94a2-2f48ddd4df52" -H "accept: application/json" -H
"Authorization: Bearer TOKEN" -H "Content-Type: application/json" -d
"{\"profileName\":\"ecprofileupdate\",\"description\":\"ecprofile
desc\",\"profileType\":\"Registry\",\"associatedRegistryIds\":[\"1ec46398
-23be-40fc-8cde-8b4bd916d5fa\",\"fe88284c-5fb3-4bc7-b2a0-
33208e8d7d41\"],\"associatedSensorIds\":[\"3a00f41d-8bb8-41d2-b2c2-
54ed50131082\",\"7cbc434a-5387-4591-940d-
c8bfd131a699\"],\"createdBy\":\"username\",\"updatedBy\":\"username\"}"
```

Response:

```
{
    "profileUuid": "8aee8879-d536-4efd-b23d-41dcb77a4a32"
}
```

Fetch a list of sensor profiles

/csapi/v1.3/sensorProfile

[GET]

Use this API to get a list of sensor profiles in your account.

Input Parameters:

Parameter	Description
filter	Filter the sensor profiles 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.
pageNumber or pageNo	(Optional) The page to be returned. Page numbers start with 1.
	For API v1.1 and v1.2, pageNumber and pageNo are both supported. If both are specified in the same request, then pageNumber takes precedence.
	For API v1.3, only pageNumber is supported.
pageSize	(Required) The number of records per page to be included in the response. The default value is 50.
sort	Sort the results using a Qualys token. For example created:desc . Refer to the "Sortable tokens" topic in the online help for more information.

API request:

```
curl -X GET
'https://gateway.qg2.apps.qualys.com/csapi/v1.3/sensorProfile?pageNumber=
1&pageSize=50&sort=created%3Adesc' --header 'Authorization: Bearer
<token>'
```

```
{
  "data": [
  {
    "profileId": "00000000-0000-0000-000000000000000,
    "profileName": "Default",
    "profileType": null,
    "associatedSensorsCount": 1,
    "createdBy": "System",
    "created": "1657782140652",
    "updatedBy": "System",
    "updated": "1657782140652"
    },
    {
        "profileId": "8aee8879-d536-4efd-b23d-41dcb77a4a32",
        "profileName": "North",
        "profileType": "Registry",
```

```
"associatedSensorsCount": 1,
"createdBy": "quays_kg86",
"created": "1657793883813",
"updatedBy": "quays_kg86",
"updated": "1657866985321"
}
],
"count": 2,
"groups": {}
```

Fetch details for a sensor profile

/csapi/v1.3/sensorProfile/{sensorProfileId}

[GET]

Use this API to get details for a sensor profile in your account.

Input Parameters:

Parameter	Description
sensorProfileId	(Required) The ID/UUID for the sensor profile for which you want to get details.

API request:

```
curl -X GET
'https://gateway.qg2.apps.qualys.com/csapi/v1.3/sensorProfile/d96b936c-
4d7c-449a-bc32-cfdc31c87a9c' --header 'Authorization: Bearer <token>'
```

```
{
"profileId": "0000000-0000-0000-0000-0000000000",
   "profileName": "Default",
   "profileType": null,
   "description": "Initial Profile",
   "createdBy": "System",
   "created": "1657601138783",
   "updatedBy": null,
   "updated": "1657601138783",
   "associatedSensorsCount": 2,
   "associatedRegistriesCount": 4,
   "associatedSensors": [
   "b17cdd54-64ff-4b37-b83e-6dcfa3ea5ba9",
   "6e651384-7412-4e7e-ae4f-fbf045bacb25"
],
   "associatedRegistries": [
```

```
"6e92f810-1182-4ffd-8c14-3191f84ed333",
"3f3539a8-7994-45f6-81e2-12581be2c9a1",
"d67dac61-7be2-40a2-8145-346c9e322181",
"f78162f6-54c9-4b29-a04e-3518a1d6e211",
]
```

Fetch registries associated with a sensor profile

/csapi/v1.3/sensorProfile/{sensorProfileId}/registry [GET]

Use this API to get a list of registries associated with a sensor profile in your account.

<u>Input Parameters:</u>

Parameter	Description
sensorProfileId	(Required) The ID/UUID for the sensor profile for which you want to get associated registries.
filter	Filter the sensor profiles 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.
pageNumber or pageNo	(Optional) The page to be returned. Page numbers start with 1.
	For API v1.1 and v1.2, pageNumber and pageNo are both supported. If both are specified in the same request, then pageNumber takes precedence.
	For API v1.3, only pageNumber is supported.
pageSize	(Required) The number of records per page to be included in the response. The default value is 50.
sort	Sort the results using a Qualys token. For example created: desc. Refer to the "Sortable tokens" topic in the online help for more information.

<u>API request:</u>

```
curl -X GET
'https://gateway.qg2.apps.qualys.com/csapi/v1.3/sensorProfile/d96b936c-
4d7c-449a-bc32-cfdc31c87a9c/registry' --header 'Authorization: Bearer
<token>'
```

Response:

{

```
"data": [
{
    "registryUuid": "e6d33990-41dc-46a0-8274-8eb6e65e25a2",
    "registryName": "reg1",
    "registryUri": "https://registry-1.docker.io",
    "registryType": "DockerHub",
    "totalImages": 10,
    "lastScanned": "1657868777405"
}
],
    "count": 1,
    "groups": {}
}
```

Fetch sensors associated with a sensor profile

/csapi/v1.3/sensorProfile/{sensorProfileId}/sensor

[GET]

Use this API to get a list of sensors associated with a sensor profile in your account.

Input Parameters:

Parameter	Description
sensorProfileId	(Required) The ID/UUID for the sensor profile for which you want to get associated sensors.
filter	Filter the sensor profiles 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.
pageNumber or pageNo	(Optional) The page to be returned. Page numbers start with 1.
	For API v1.1 and v1.2, pageNumber and pageNo are both supported. If both are specified in the same request, then pageNumber takes precedence.
	For API v1.3, only pageNumber is supported.
pageSize	(Required) The number of records per page to be included in the response. The default value is 50.
sort	Sort the results using a Qualys token. For example created:desc. Refer to the "Sortable tokens" topic in the online help for more information.

API request:

```
curl -X GET
'https://gateway.qg2.apps.qualys.com/csapi/v1.3/sensorProfile/d96b936c-
4d7c-449a-bc32-cfdc31c87a9c/sensor' --header 'Authorization: Bearer
<token>'
```

```
"content": [
"uuid": "e9f3c631-e440-443f-92d0-73624647b707",
"activationUuid": "9315142c-d52e-4378-b3e9-6ca16925f15f",
"hostname": "ip-10-82-11-73",
"customerUuid": "46fa2878-32d7-75af-82de-e624b224d693",
"dockerVersion": "20.10.12",
"ipv4": "10.82.11.73",
"os": "Ubuntu 20.04.4 LTS",
"ipv6": "fe80::8c6:9aff:fe55:1239",
"sensorVersion": "1.16.0-0",
"platform": "LINUX SENSOR",
"lastCheckedIn": "1657871603302",
"label": [
{
"key": "image-source",
"value": "Docker Hub"
},
"key": "name",
"value": "Qualys Sensor Image"
},
"key": "jira-id",
"value": "BI-117"
},
"kev": "VersionInfo",
"value": "Qualys Sensor Version 1.16.0-0"
},
"key": "build-date",
"value": "Wed Jul 6 14:37:41 UTC 2022"
},
"key": "vendor",
"value": "Qualys, Inc"
},
"key": "Base image name",
"value": "art-hq.intranet.qualys.com:5006/secure/oraclelinux:7"
```

```
},
 "key": "maintainer",
 "value": "DevOps <devops@qualys.com>"
],
"privileged": "false",
"macAddress": "0a:c6:9a:55:12:39",
"vulnSigVersion": null,
"hostUuid": "be084969-957f-4959-a813-fa06ded2dde5",
 "configurationProfile": null,
"status": "Provisioned",
"registry": "docker.io",
"49fc4327957c8979dcf87a7436c8152fa10b3039197489e631c3f7f595398740",
 "sensorId": "49fc4327957c",
"name": "qualys-container-sensor",
 "created": "1657793184000",
"imageId": "lab23c77b5d4",
"imageSha":
"1ab23c77b5d44b1e798355c73f3e5feb3ceab8d0bcf9cd3ef0b8511a6f685ba6",
 "binaryVersion": null,
"containerIpv4": null,
"containerIpv6": null,
 "containerMacAddress": "",
"sensorType": "REGISTRY",
 "containerRuntime": "DOCKER",
"containerRuntimeVersion": "20.10.12",
"architecture": "x86 64"
}
]
}
```

Fetch sensors which could be associated with a sensor profile

/csapi/v1.3/sensorProfile/associate

[GET]

Use this API to get a list of sensors that you could associate with a sensor profile in your account.

Input Parameters:

Parameter	Description
sensorProfileId	(Required) The ID/UUID for the sensor profile for which you want to get available sensors that could be associated with the profile.

filter	Filter the sensor profiles 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.
pageNumber or pageNo	(Optional) The page to be returned. Page numbers start with 1.
	For API v1.1 and v1.2, pageNumber and pageNo are both supported. If both are specified in the same request, then pageNumber takes precedence.
	For API v1.3, only pageNumber is supported.
pageSize	(Required) The number of records per page to be included in the response. The default value is 50.
sort	Sort the results using a Qualys token. For example created:desc. Refer to the "Sortable tokens" topic in the online help for more information.

API request:

```
curl -X GET
'https://gateway.qg2.apps.qualys.com/csapi/v1.3/sensorProfile/associate'
--header 'Authorization: Bearer <token>'
```

```
"content": [
"uuid": "4b5e39f6-2b49-4a8f-8422-881cfb9e4f98",
"activationUuid": "dbbcbd37-a861-4d8a-9d5a-f49de4cd4a46",
"hostname": "ip-10-82-10-215",
"customerUuid": "ace12c84-392e-5d31-80f9-7bdce6556f30",
"dockerVersion": "20.10.12",
"ipv4": "10.82.10.215",
"os": "Ubuntu 20.04.4 LTS",
"ipv6": "fe80::831:17ff:fe44:1ce1",
"sensorVersion": "1.15.1-5",
"platform": "LINUX SENSOR",
"lastCheckedIn": "1657876347204",
"label": [
{
"key": "name",
"value": "Qualys Sensor Image"
},
"key": "build-date",
"value": "Mon Apr 25 09:11:30 UTC 2022"
```

```
},
 "kev": "vendor",
 "value": "Qualys, Inc"
 },
 "key": "jira-id",
 "value": "BI-114"
},
 "key": "image-source",
 "value": "SJC-POD01"
 },
 "key": "VersionInfo",
 "value": "Qualys Sensor Version 1.15.1-5"
 },
 "key": "maintainer",
 "value": "DevOps <devops@qualys.com>"
 }
 ],
 "privileged": "false",
 "macAddress": "0a:31:17:44:1c:e1",
 "vulnSigVersion": null,
 "hostUuid": "e06ba849-9911-4b62-83bc-b4d1e0595978",
 "configurationProfile": null,
 "status": "Provisioned",
 "registry": "docker.io",
 "sha":
"d99c6d36726e344bbea70e04068abc2cedb067ce946349b5873c13740ecbd7ef",
 "sensorId": "d99c6d36726e",
 "name": "qualys-container-sensor",
 "created": "1656918462000",
 "imageId": "c21454744aa0",
 "imageSha":
"c21454744aa0857ef108e7522e6bc0e3a43ee95aaa02d7be563e3f31deb9d9a7",
 "binaryVersion": null,
 "containerIpv4": null,
 "containerIpv6": null,
 "containerMacAddress": "",
 "sensorType": "REGISTRY",
 "containerRuntime": "DOCKER",
 "containerRuntimeVersion": "20.10.12",
 "architecture": "x86 64"
 }
1
```

Delete a sensor profile

/csapi/v1.3/sensorProfile/{sensorProfileId}

[DELETE]

Use this API to delete a sensor profile in your account.

<u>Input Parameters:</u>

Parameter	Description
sensorProfileId	(Required) The ID/UUID for the sensor profile you want to delete.

API request:

curl -X DELETE

'https://gateway.qg2.apps.qualys.com/csapi/v1.3/sensorProfile/d96b936c-4d7c-449a-bc32-cfdc31c87a9c' --header 'Authorization: Bearer <token>'

Response:

response code 200

Create/Update/Validate Registry: Name and Sensor Profile

We made changes to the Create, Update, and Validate Registry APIs. Now you can give your registry a name. This will allow you to add the registry by name to sensor profiles. You can also directly assign a sensor profile to a registry. When you do this, the profile will be updated to include the new registry. Select from sensor profiles in your account.

To know more on the updated APIs, refer the API User Guide.