



Qualys CloudView v1.x

API Release Notes

Version 1.17.1

September 10, 2021

The Qualys CloudView API provides automation and integration capabilities for your Qualys subscription. 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

[IaC Scan API \(Beta\)](#)

URL to the Qualys API Server

Qualys maintains multiple Qualys platforms. The Qualys API server URL that you should use for API requests depends on the platform where your account is located.

Account Location	API Server URL
Qualys US Platform 1	https://qualysguard.qualys.com
Qualys US Platform 2	https://qualysguard.qg2.apps.qualys.com
Qualys US Platform 3	https://qualysguard.qg3.apps.qualys.com
Qualys EU Platform 1	https://qualysguard.qualys.eu
Qualys EU Platform 2	https://qualysguard.qg2.apps.qualys.eu
Qualys India Platform 1	https://qualysguard.qg1.apps.qualys.in
Qualys Canada Platform	https://qualysguard.qg1.apps.qualys.ca
Qualys AE Platform	https://qualysguard.qg1.apps.qualys.ae
Qualys Private Cloud Platform	<a href="https://qualysguard.<customer_base_url>">https://qualysguard.<customer_base_url>

The Qualys API documentation and sample code use the API server URL for the Qualys US Platform 1. If your account is located on another platform, please replace this URL with the appropriate server URL for your account.

IaC Scan API (Beta)

New APIs	/rest/v1/iac/scan POST /rest/v1/iac/scanResult?scanUuid=<id> GET /rest/v1/iac/getScanList GET
New or Updated APIs	New
Operator	POST, GET

IaC scanning works by uploading the template file or zip containing multiple files to CloudView, either via our CLI or API. The template is processed, and the response returns a scan ID. The returned scan id then can be used to fetch the scan report which provides the evaluation results giving you a clear picture of the misconfigurations (if any) that need to be fixed to secure your code before the actual deployment.

You can scan the templates either through CLI commands or using APIs:

[Scanning Template Files Using CLI](#)

[Scanning Template Files Using API](#)

Template Support

This Qualys IaC Security version supports following template files and compressed files:

- **AWS, Azure, and GCP Terraform Templates:** (.tf template files)
- **AWS, Azure, and GCP Terraform Plan:** (.json plan files) To scan the plan files, you need to make those files available in JSON format. Refer <https://www.terraform.io/docs/internals/json-format.html>
- **AWS Cloudformation Template:** .json, .yaml, .yml, .template
- **Compressed Template File Formats:** .zip, .7z, .tar, .tar.gz

Scanning Template Files Using CLI

Qualys provides a IaC scanning CLI which can be installed on any machines having python3. Qualys IaC Security CLI is based on Python PIP Platform.

For complete details, refer to Secure IaC scan section in [CloudView User Guide](#).

Scanning Template Files Using API

- 1) [Trigger IaC Scan \(POST\)](#)
- 2) [Get Scan Results](#)
- 3) [Get List of Scans](#)

Let us view examples for each one in detail. For complete details, refer to Secure IaC section in [CloudView API User Guide](#).

Trigger IaC Scan (POST)

You can trigger an IaC scan. Provide a name and upload the IaC configuration file to be scanned. Once the scan is triggered, it goes into Submitted state. Once the scan is completed (Finished state), the response provides a unique Scan UUID that you can use to view the scan results.

Note: We support only 10 concurrent scans to be executed in parallel.

Input Parameters

Parameter	Description
name	(Required) Provide a name for the IaC scan you would want to trigger. Note: Double quotes are not allowed.
file	(Required) Upload an IaC configuration file with maximum size of 10MB. For valid file formats, refer to Template Support .
showOnlyFailedControls	(boolean) Set this flag to true to include only the failed controls in the IaC scan result.
tags=[{'key':'value'}]	Name of the tags. The cloud assets are tagged with specified tag are included in the scan.

Sample - Trigger an Iac Scan

API Request

```
curl -X POST
'https://<QualysBaseURL>/cloudview-api/rest/v1/iac/scan'
-H 'authorization: Basic XXXXXXXXXXXXXXXXXXXXXXXXXXXX='
-H 'Content-Type: multipart/form-data'
-F 'file=@security-group.tf'
-F 'name=DemoTemplate'
-F 'showOnlyFailedControls=false'
-F 'tags=[{"Key":"Value"}]'
```

JSON Output

```
{
  "scanUuid": "337a21ef-3c53-43bf-aed6-46f04e1c542d"
}
```

Get Scan Results

Use scanUuid returned by Trigger scan API to fetch scan results. The scan results can be fetched only when the IaC scan is completed. If you try to fetch the scan results before it is completed, you will see respective message in response. For example, Scan is in a processing state.

Input Parameters

Parameter	Description
scanUuid	(Required) Unique identifier assigned to the IaC scan. The scan UUID is returned in the response of Trigger IaC scan.

Sample - Get Scan Results

API Request

```
curl -X GET
'https://<QualysBaseURL>/cloudview-api/rest/v1/iac/scanResult?scanUuid=337a21ef-3c53-43bf-aed6-46f04e1c542d' -H 'authorization: Basic XXXXXXXXXXXXXXXXXXXXXXXXXXXX'
```

JSON Output

```
{
  "scanUuid": "337a21ef-3c53-43bf-aed6-46f04e1c542d",
  "scanDate": "2021-06-22T11:13:37.275+00:00",
  "name": "Sample_Scan",
  "status": "FINISHED",
  "tags": [],
  "result": [
    {
      "checkType": "terraform",
      "results": {
        "passedChecks": [
          {
            "checkId": "CKV_AWS_60",
            "checkName": "Ensure IAM role allows only specific
services or principals to assume it",
            "criticality": "HIGH",
            "cvControl": null,
            "checkResult": {
              "result": "PASSED",
              "evaluatedKeys": []
            },
            "codeBlock": [
              [
                23,
                "resource \"aws_iam_role\" \"dynamodb-dax-cluster-
iam-role-fail\" {\n"
              ],
              [
                24,
                "  name                                = \"dax-cluster-iam-role-
fail\"\n"
              ],
              ...
            ],
            "filePath": "/dynamodb.tfplan.json",
            "repoFilePath": "/dynamodb.tfplan.json",
            "resource": "aws_dynamodb_table.dynamodb-table-fail",
            "callerFilePath": null,
            "callerFileLineRange": null,
            "remediation": "Ensure aws_dynamodb_table resource has
enabled argument set to True for point_in_time_recovery object."
          }
        ]
      }
    }
  ]
}
```

```

        "skippedChecks": [],
        "parsingErrors": []
    },
    "summary": {
        "passed": 5,
        "failed": 3,
        "failedStats": {
            "high": 2,
            "low": 1,
            "medium": 0
        },
        "skipped": 0,
        "parsingErrors": 0
    }
}
]
}
}

```

Get List of Scans

You can fetch the list of scans that you have triggered by you. You could also use filters to narrow down the scan list. For example, filter such as status of the scan (SUBMITTED, PROCESSING, or FINISHED) to view scans that are in particular state.

Input Parameters

Parameter	Description
filter	Filter the scan list by providing a query using filters we support. The following search filters are supported: - scanUuid : Unique identifier assigned to the IaC scan. The scan UUID is returned in the response of Trigger IaC scan after the scan is completed. - status : status of the scan - SUBMITTED, PROCESSING, or FINISHED. - tag.key & tag.value : Use a text value ##### to define the key and value of the tag assigned to the resource (case sensitive). For example, using the status:FINISHED filter in the curl request fetches all scans that are completed. - scanDate:[start date .. end date] : Use a date range or a specific date on which the scan was triggered. For more information on how to enter dates, see Date Queries .
pageNo	(integer) The page to be returned.
pageSize	(integer) The number of records per page to be included in the response.

Get the list of scans

Let us fetch the list of scans that are in FINISHED state.

API request:

```
curl -X GET
"https://<QualysBaseURL>/cloudview-
api/rest/v1/iac/getScanList?filter=scanUuid:337a21ef-3c53-43bf-
aed6-46f04e1c542d AND tag.value:Value AND tag.key:Key AND
status:FINISHED AND scanDate:%5B2021-06-15%20...%202021-06-
24%5D&pageNo=0&pageSize=80"
-H 'authorization: Basic XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX'
```

Response:

```
{
  "content": [
    {
      "scanUuid": "337a21ef-3c53-43bf-aed6-46f04e1c542d",
      "tags": [
        {
          "key": "Key",
          "value": "Value"
        }
      ]
    }
  ]
}
```

```
        }
      ],
      "scanDate": "2021-06-16T12:05:03.889+00:00",
      "status": "FINISHED",
      "name": "FilterTrue"
    },
    ...
  ],
  "pageable": {
    "sort": {
      "sorted": true,
      "unsorted": false
    },
    "pageSize": 50,
    "pageNumber": 0,
    "offset": 0,
    "paged": true,
    "unpaged": false
  },
  "totalPages": 3,
  "totalElements": 140,
  "last": false,
  "number": 0,
  "size": 50,
  "numberOfElements": 50,
  "sort": {
    "sorted": true,
    "unsorted": false
  },
  "first": true
}
```