



Custom Assessment and Remediation APIs

User Guide
Version 2.0

January 18, 2024

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Preface

This user guide is intended for application developers who will use the Qualys CAR 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 - Getting Started

Welcome to Qualys Custom Assessment and Remediation (CAR) APIs.

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 CAR 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 CAR 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 CAR API, the module is: "sm". |
| <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 and search. |

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 document uses as sample API gateway URL for Qualys platform (https://gateway.xxx.eng.xxx.qualys.com)(qualys_base_URL) in sample API requests. Please replace this URL with the appropriate gateway URL for your account.

Qualys API Postman Collection

Interact with Qualys APIs using Postman. Instead of creating calls manually to send over the command line, you can use the Qualys Postman Collection to get started with Qualys APIs quickly.

[Click here to view the steps involved](#)

Introduction to CAR 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 CAR APIs. Use the Qualys Authentication API to get the JWT.

For example,

```
curl -X POST https://<qualys_base_url>/auth -d  
"username=value1&password=passwordValue&token=true" -H "Content-  
Type: 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 CAR 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 CAR API calls. The token expires in 4 hours. You must regenerate the token to continue using the CAR 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 GET/POST | The GET method or the POST method is used as per requirement. |
| -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: <code>Authorization: Bearer <token></code> For information about Qualys authentication API, see Authentication . |
| -H 'content-type: application/json' | Denotes that content is in JSON format. |
| -d @request.json | Provide a request.json file for parameter input. |
| --data-urlencode | Used to encode spaces and special characters in the URL/Parameter values. |

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

```
curl -X GET
'https://<qualys_base_url>/sm/v1/scripts/exportids=1
6515' \
--header 'Authorization: Bearer <authToken>' \
{'}
```

Pagination Support for APIs

CAR APIs are designed to fetch 10 records per page by default. You can use `pageSize` and `pageNumber` parameters to fetch more records.

For example:

```
{
  "filter": "status:APPROVED",
  "pageSize": 30,
  "pageNumber": 0
}
```

Here, `'pageSize'` indicates the number of records that should be included in a page. `'pageNumber'` indicates the page number from which records must be fetched. For example, **"pageNumber":0** would fetch results from page 1.

Fetching More than Ten Thousand Events

CAR APIs are designed to fetch less than 10,000 (9999 jobs or asset jobs) per page. However, you can use the `'searchAfter'` parameter in order to fetch more than 10,000 records of assets, jobs, and asset jobs.

For this parameter to function accurately, use the `'sort'` parameter to sort assets, script jobs, or asset jobs by using a filter that has unique values such as ID or name. Each asset/job/asset job is returned with an identifier called `'sortValue'`. In the subsequent API request, to fetch records beyond the current page size, provide the `sortValue` of an asset, job, or asset job to the `searchAfter` parameter to fetch records after the specific ID.

The `'searchAfter'` parameter is supported for the following APIs:

- `sm/v2/jobs/search`
- `sm/v2/assetjobs/search`
- `sm/v1/assets/search`

To understand this better, let's consider the following scenario:

You have 15000 jobs in your account. The first API request will only return 9999 jobs. To get jobs beyond 9999, in a subsequent API request, provide the `sortValue` of the 9999th job in the `searchAfter` parameter. The second API request will fetch the remaining job starting from the 10000th job.

For better performance, it is recommended that you use smaller page sizes of 1000 to 2000 records.

Example:

You need to sort a list before you can use 'searchAfter'.

Step 1) Search events using the sort parameter

URI: sm/v2/jobs/search

Curl:

```
curl -X POST 'https://<qualys_base_url>/sm/v2/jobs/search' \  
--header 'Authorization: Bearer <authToken>' \  
--header 'Content-Type: application/json' \  
--data-raw '{  
    "filter":"script.name:Auto_script_22062022_074300047",  
    "sort":[{"created.dateTime":"desc"}, {"id":"desc"}],  
    "pageSize":10  
  
}'
```

Request Body:

```
{  
    "filter":"script.name:Auto_script_22062022_074300047",  
    "sort":[{"created.dateTime":"desc"}, {"id":"desc"}],  
    "pageSize":10  
}
```

Response:

```
{  
    "errorCode": null,  
    "message": null,  
    "body": {  
        "totalCount": 80,  
        "list": [  
            {  
                "sortValues": [  
                    1674216006119,  
                    "25943"  
                ],  
                "data": {
```

```
        "severity": 1,  
        "test": false,  
        "created": {  
            "dateTime": 1674216006119  
        },  
        "executionType": "Automated",  
        "schedulerId": "23f97a1f-76f4-4e85-a7c2-  
566f120874fc",  
        "correlationUuid": "bbc62201-cec7-4f9d-8edc-  
37b55b7b55f4",  
        "threshold": 250,  
        "title": "Auto_script_22062022_074300047-  
1674216006",  
        "platform": "WINDOWS",  
        "updatedDateTime": 1674216006119,  
        "scriptId": 19218,  
        "customerUuid": "74c1bcdd-9bbb-e9dd-802a-  
65e2c579abc0",  
        "isTest": false,  
        "scriptType": "PowerShell",  
        "id": "25943",  
        "category": {  
            "name": "Data Backup",  
            "id": 1  
        },  
        "schedulerName": "dfdfdfd"  
    }  
},  
{  
    "sortValues": [  
        1674201598656,  
        "25934"  
    ],  
    "data": {  
        "severity": 1,  
        "test": false,  
        "created": {  
            "dateTime": 1674201598656  
        },  
        "executionType": "Automated",  
        "schedulerId": "23f97a1f-76f4-4e85-a7c2-  
566f120874fc",  
        "correlationUuid": "07084308-5e75-4368-86b6-  
c4f2d7ad29af",  
        "threshold": 250,  
        "title": "Auto_script_22062022_074300047-
```

```
1674201598",
    "platform": "WINDOWS",
    "updatedDateTime": 1674201598656,
    "scriptId": 19218,
    "customerUuid": "74c1bcdd-9bbb-e9dd-802a-
65e2c579abc0",
    "isTest": false,
    "scriptType": "PowerShell",
    "id": "25934",
    "category": {
        "name": "Data Backup",
        "id": 1
    },
    "schedulerName": "dfdfdfd"
},
{
    "sortValues": [
        1674187598311,
        "25921"
    ],
    "data": {
        "severity": 1,
        "test": false,
        "created": {
            "dateTime": 1674187598311
        },
        "executionType": "Manual",
        "correlationUuid": "804b034e-5345-4250-9c9c-
29f7ae7c35fc",
        "threshold": 250,
        "title": "Auto_script_22062022_074300047-
1674187598",
        "platform": "WINDOWS",
        "updatedDateTime": 1674187598311,
        "scriptId": 19218,
        "customerUuid": "74c1bcdd-9bbb-e9dd-802a-
65e2c579abc0",
        "isTest": false,
        "scriptType": "PowerShell",
        "id": "25921",
        "category": {
            "name": "Data Backup",
            "id": 1
        }
    }
}
```

```
    },  
    {  
      "sortValues": [  
        1674187198064,  
        "25918"  
      ],  
      "data": {  
        "severity": 1,  
        "test": false,  
        "created": {  
          "dateTime": 1674187198064  
        },  
        "executionType": "Automated",  
        "schedulerId": "23f97a1f-76f4-4e85-a7c2-  
566f120874fc",  
        "correlationUuid": "204165bd-8ce7-4bbb-812d-  
5162a1a79b40",  
        "threshold": 250,  
        "title": "Auto_script_22062022_074300047-  
1674187198",  
        "platform": "WINDOWS",  
        "updatedDateTime": 1674187198064,  
        "scriptId": 19218,  
        "customerUuid": "74c1bcdd-9bbb-e9dd-802a-  
65e2c579abc0",  
        "isTest": false,  
        "scriptType": "PowerShell",  
        "id": "25918",  
        "category": {  
          "name": "Data Backup",  
          "id": 1  
        },  
        "schedulerName": "dfdfdfd"  
      }  
    },  
    {  
      "sortValues": [  
        1674187165989,  
        "25917"  
      ],  
      "data": {  
        "severity": 1,  
        "test": false,  
        "created": {  
          "dateTime": 1674187165989  
        },  
      },  
    }  
  ]  
}
```

```
        "executionType": "Automated",
        "schedulerId": "23f97a1f-76f4-4e85-a7c2-
566f120874fc",
        "correlationUuid": "337021cb-4f03-471a-917f-
e2a4964afd9f",
        "threshold": 250,
        "title": "Auto_script_22062022_074300047-
1674187165",
        "platform": "WINDOWS",
        "updatedDateTime": 1674187165989,
        "scriptId": 19218,
        "customerUuid": "74c1bcdd-9bbb-e9dd-802a-
65e2c579abc0",
        "isTest": false,
        "scriptType": "PowerShell",
        "id": "25917",
        "category": {
            "name": "Data Backup",
            "id": 1
        },
        "schedulerName": "dfdfdfd"
    }
},
{
    "sortValues": [
        1674187164192,
        "25914"
    ],
    "data": {
        "severity": 1,
        "test": false,
        "created": {
            "dateTime": 1674187164192
        },
        "executionType": "Automated",
        "schedulerId": "23f97a1f-76f4-4e85-a7c2-
566f120874fc",
        "correlationUuid": "4c975b15-7058-4dc7-a299-
e93c6a4e17c9",
        "threshold": 250,
        "title": "Auto_script_22062022_074300047-
1674187164",
        "platform": "WINDOWS",
        "updatedDateTime": 1674187164192,
        "scriptId": 19218,
        "customerUuid": "74c1bcdd-9bbb-e9dd-802a-
```

```
65e2c579abc0",
    "isTest": false,
    "scriptType": "PowerShell",
    "id": "25914",
    "category": {
      "name": "Data Backup",
      "id": 1
    },
    "schedulerName": "dfdfdfd"
  }
},
{
  "sortValues": [
    1674144002127,
    "25913"
  ],
  "data": {
    "severity": 1,
    "test": false,
    "created": {
      "dateTime": 1674144002127
    },
    "executionType": "Automated",
    "schedulerId": "23f97a1f-76f4-4e85-a7c2-
566f120874fc",
    "correlationUuid": "e0423de6-d43c-404d-93f7-
5ee58c7e8739",
    "threshold": 250,
    "title": "Auto_script_22062022_074300047-
1674144002",
    "platform": "WINDOWS",
    "updatedDateTime": 1674144002127,
    "scriptId": 19218,
    "customerUuid": "74c1bcdd-9bbb-e9dd-802a-
65e2c579abc0",
    "isTest": false,
    "scriptType": "PowerShell",
    "id": "25913",
    "category": {
      "name": "Data Backup",
      "id": 1
    },
    "schedulerName": "dfdfdfd"
  }
},
{
```

```
    "sortValues": [
      1674135232953,
      "25899"
    ],
    "data": {
      "severity": 1,
      "test": false,
      "created": {
        "dateTime": 1674135232953
      },
      "executionType": "Manual",
      "correlationUuid": "fd5cd7c2-c9c5-4b99-b54c-
17c325b634cf",
      "threshold": 250,
      "title": "Auto_script_22062022_074300047-
1674135232",
      "platform": "WINDOWS",
      "updatedDateTime": 1674135232953,
      "scriptId": 19218,
      "customerUuid": "74c1bcdd-9bbb-e9dd-802a-
65e2c579abc0",
      "isTest": false,
      "scriptType": "PowerShell",
      "id": "25899",
      "category": {
        "name": "Data Backup",
        "id": 1
      }
    }
  },
  {
    "sortValues": [
      1674129937713,
      "25892"
    ],
    "data": {
      "severity": 1,
      "test": false,
      "created": {
        "dateTime": 1674129937713
      },
      "executionType": "Manual",
      "correlationUuid": "ed5abecc-04ea-4c67-9f9c-
61c3716e9fcb",
      "threshold": 250,
      "title": "Auto_script_22062022_074300047-
```

```
1674129937",
    "platform": "WINDOWS",
    "updatedDateTime": 1674129937713,
    "scriptId": 19218,
    "customerUuid": "74c1bcdd-9bbb-e9dd-802a-
65e2c579abc0",
    "isTest": false,
    "scriptType": "PowerShell",
    "id": "25892",
    "category": {
        "name": "Data Backup",
        "id": 1
    }
},
{
    "sortValues": [
        1674129606914,
        "25890"
    ],
    "data": {
        "severity": 1,
        "test": false,
        "created": {
            "dateTime": 1674129606914
        },
        "executionType": "Automated",
        "schedulerId": "23f97a1f-76f4-4e85-a7c2-
566f120874fc",
        "correlationUuid": "febe6dcc-594f-45d5-9b06-
83c4d219cc6a",
        "threshold": 250,
        "title": "Auto_script_22062022_074300047-
1674129606",
        "platform": "WINDOWS",
        "updatedDateTime": 1674129606914,
        "scriptId": 19218,
        "customerUuid": "74c1bcdd-9bbb-e9dd-802a-
65e2c579abc0",
        "isTest": false,
        "scriptType": "PowerShell",
        "id": "25890",
        "category": {
            "name": "Data Backup",
            "id": 1
        },
    },
}
```

```
        "schedulerName": "dfdfdfd"
      }
    }
  ]
}
```

Step 2) Take one of the sortValues from the above response and provide it as input for searchAfter. This will fetch Jobs after that particular sortValue

Curl:

```
curl -X POST 'https://<qualys_base_url>/sm/v2/jobs/search' \
--header 'Authorization: Bearer <authToken>' \
--header 'Content-Type: application/json' \
--data-raw '{
  "filter": "script.name:Auto_script_22062022_074300047",
  "sort": "[{"created.dateTime": "desc"}, {"id": "desc"}]",
  "pageSize": 10,
  "searchAfter": [1674129606914, "25890"]
}'
```

Request Body:

```
{
  "filter": "script.name:Auto_script_22062022_074300047",
  "sort": "[{"created.dateTime": "desc"}, {"id": "desc"}]",
  "pageSize": 10,
  "searchAfter": [1674129606914, "25890"]
}
```

Response:

```
{
  "errorCode": null,
  "message": null,
  "body": {
    "totalCount": 80,
    "list": [
      {
        "sortValues": [
```

```
        1674115200508,  
        "25875"  
    ],  
    "data": {  
        "severity": 1,  
        "test": false,  
        "created": {  
            "dateTime": 1674115200508  
        },  
        "executionType": "Automated",  
        "schedulerId": "23f97a1f-76f4-4e85-a7c2-  
566f120874fc",  
        "correlationUuid": "917e2217-e747-4ae5-8100-  
58a96ebb8386",  
        "threshold": 250,  
        "title": "Auto_script_22062022_074300047-  
1674115200",  
        "platform": "WINDOWS",  
        "updatedDateTime": 1674115200508,  
        "scriptId": 19218,  
        "customerUuid": "74c1bcdd-9bbb-e9dd-802a-  
65e2c579abc0",  
        "isTest": false,  
        "scriptType": "PowerShell",  
        "id": "25875",  
        "category": {  
            "name": "Data Backup",  
            "id": 1  
        },  
        "schedulerName": "dfdfdfd"  
    }  
},  
{  
    "sortValues": [  
        1674100804290,  
        "25862"  
    ],  
    "data": {  
        "severity": 1,  
        "test": false,  
        "created": {  
            "dateTime": 1674100804290  
        },  
        "executionType": "Automated",  
        "schedulerId": "23f97a1f-76f4-4e85-a7c2-  
566f120874fc",
```

```
        "correlationUuid": "534181ea-9644-4052-a654-  
546af75192ca",  
        "threshold": 250,  
        "title": "Auto_script_22062022_074300047-  
1674100804",  
        "platform": "WINDOWS",  
        "updatedDateTime": 1674100804290,  
        "scriptId": 19218,  
        "customerUuid": "74c1bcdd-9bbb-e9dd-802a-  
65e2c579abc0",  
        "isTest": false,  
        "scriptType": "PowerShell",  
        "id": "25862",  
        "category": {  
            "name": "Data Backup",  
            "id": 1  
        },  
        "schedulerName": "dfdfdfd"  
    },  
    {  
        "sortValues": [  
            1674086404113,  
            "25859"  
        ],  
        "data": {  
            "severity": 1,  
            "test": false,  
            "created": {  
                "dateTime": 1674086404113  
            },  
            "executionType": "Automated",  
            "schedulerId": "23f97a1f-76f4-4e85-a7c2-  
566f120874fc",  
            "correlationUuid": "a89dce45-9b6c-4d11-8f69-  
2cf7777ca96a",  
            "threshold": 250,  
            "title": "Auto_script_22062022_074300047-  
1674086404",  
            "platform": "WINDOWS",  
            "updatedDateTime": 1674086404113,  
            "scriptId": 19218,  
            "customerUuid": "74c1bcdd-9bbb-e9dd-802a-  
65e2c579abc0",  
            "isTest": false,  
            "scriptType": "PowerShell",
```

```
        "id": "25859",
        "category": {
            "name": "Data Backup",
            "id": 1
        },
        "schedulerName": "dfdfdfd"
    }
},
{
    "sortValues": [
        1674072000447,
        "25856"
    ],
    "data": {
        "severity": 1,
        "test": false,
        "created": {
            "dateTime": 1674072000447
        },
        "executionType": "Automated",
        "schedulerId": "23f97a1f-76f4-4e85-a7c2-566f120874fc",
        "correlationUuid": "ed6cb107-00d3-40f7-bc31-17661cd6c467",
        "threshold": 250,
        "title": "Auto_script_22062022_074300047-1674072000",
        "platform": "WINDOWS",
        "updatedDateTime": 1674072000447,
        "scriptId": 19218,
        "customerUuid": "74c1bcdd-9bbb-e9dd-802a-65e2c579abc0",
        "isTest": false,
        "scriptType": "PowerShell",
        "id": "25856",
        "category": {
            "name": "Data Backup",
            "id": 1
        },
        "schedulerName": "dfdfdfd"
    }
},
{
    "sortValues": [
        1674057606097,
        "25853"
```

```
    ],  
    "data": {  
      "severity": 1,  
      "test": false,  
      "created": {  
        "dateTime": 1674057606097  
      },  
      "executionType": "Automated",  
      "schedulerId": "23f97a1f-76f4-4e85-a7c2-  
566f120874fc",  
      "correlationUuid": "b7140edb-2b3d-418a-8bc3-  
f66a9cd361f2",  
      "threshold": 250,  
      "title": "Auto_script_22062022_074300047-  
1674057606",  
      "platform": "WINDOWS",  
      "updatedDateTime": 1674057606097,  
      "scriptId": 19218,  
      "customerUuid": "74c1bcdd-9bbb-e9dd-802a-  
65e2c579abc0",  
      "isTest": false,  
      "scriptType": "PowerShell",  
      "id": "25853",  
      "category": {  
        "name": "Data Backup",  
        "id": 1  
      },  
      "schedulerName": "dfdfdfd"  
    }  
  },  
  {  
    "sortValues": [  
      1674043202429,  
      "25841"  
    ],  
    "data": {  
      "severity": 1,  
      "test": false,  
      "created": {  
        "dateTime": 1674043202429  
      },  
      "executionType": "Automated",  
      "schedulerId": "23f97a1f-76f4-4e85-a7c2-  
566f120874fc",  
      "correlationUuid": "9819d023-62b5-4db1-a55d-  
a747b2d29f7e",
```

```
        "threshold": 250,  
        "title": "Auto_script_22062022_074300047-  
1674043202",  
        "platform": "WINDOWS",  
        "updatedDateTime": 1674043202429,  
        "scriptId": 19218,  
        "customerUuid": "74c1bcdd-9bbb-e9dd-802a-  
65e2c579abc0",  
        "isTest": false,  
        "scriptType": "PowerShell",  
        "id": "25841",  
        "category": {  
            "name": "Data Backup",  
            "id": 1  
        },  
        "schedulerName": "dfdfdfd"  
    },  
    {  
        "sortValues": [  
            1674028806011,  
            "25798"  
        ],  
        "data": {  
            "severity": 1,  
            "test": false,  
            "created": {  
                "dateTime": 1674028806011  
            },  
            "executionType": "Automated",  
            "schedulerId": "23f97a1f-76f4-4e85-a7c2-  
566f120874fc",  
            "correlationUuid": "6cec15ba-a876-4c1d-96ff-  
85bfda3128db",  
            "threshold": 250,  
            "title": "Auto_script_22062022_074300047-  
1674028806",  
            "platform": "WINDOWS",  
            "updatedDateTime": 1674028806011,  
            "scriptId": 19218,  
            "customerUuid": "74c1bcdd-9bbb-e9dd-802a-  
65e2c579abc0",  
            "isTest": false,  
            "scriptType": "PowerShell",  
            "id": "25798",  
            "category": {
```

```
        "name": "Data Backup",
        "id": 1
    },
    "schedulerName": "dfdfdfd"
}
},
{
    "sortValues": [
        1674014398110,
        "25778"
    ],
    "data": {
        "severity": 1,
        "test": false,
        "created": {
            "dateTime": 1674014398110
        },
        "executionType": "Automated",
        "schedulerId": "23f97a1f-76f4-4e85-a7c2-566f120874fc",
        "correlationUuid": "e801a316-7276-4dbd-bdb2-189c554f93fb",
        "threshold": 250,
        "title": "Auto_script_22062022_074300047-1674014398",
        "platform": "WINDOWS",
        "updatedDateTime": 1674014398110,
        "scriptId": 19218,
        "customerUuid": "74c1bcdd-9bbb-e9dd-802a-65e2c579abc0",
        "isTest": false,
        "scriptType": "PowerShell",
        "id": "25778",
        "category": {
            "name": "Data Backup",
            "id": 1
        },
        "schedulerName": "dfdfdfd"
    }
},
{
    "sortValues": [
        1674000002294,
        "25775"
    ],
    "data": {
```

```
        "severity": 1,  
        "test": false,  
        "created": {  
            "dateTime": 1674000002294  
        },  
        "executionType": "Automated",  
        "schedulerId": "23f97a1f-76f4-4e85-a7c2-  
566f120874fc",  
        "correlationUuid": "34f0c04b-006c-44b3-8295-  
f5e15bf30c6e",  
        "threshold": 250,  
        "title": "Auto_script_22062022_074300047-  
1674000002",  
        "platform": "WINDOWS",  
        "updatedDateTime": 1674000002294,  
        "scriptId": 19218,  
        "customerUuid": "74c1bcdd-9bbb-e9dd-802a-  
65e2c579abc0",  
        "isTest": false,  
        "scriptType": "PowerShell",  
        "id": "25775",  
        "category": {  
            "name": "Data Backup",  
            "id": 1  
        },  
        "schedulerName": "dfdfdfd"  
    }  
},  
{  
    "sortValues": [  
        1673985600547,  
        "25772"  
    ],  
    "data": {  
        "severity": 1,  
        "test": false,  
        "created": {  
            "dateTime": 1673985600547  
        },  
        "executionType": "Automated",  
        "schedulerId": "23f97a1f-76f4-4e85-a7c2-  
566f120874fc",  
        "correlationUuid": "5da67487-42b9-45b5-aa7f-  
7eb34ffff223",  
        "threshold": 250,  
        "title": "Auto_script_22062022_074300047-
```

```
1673985600",  
    "platform": "WINDOWS",  
    "updatedDateTime": 1673985600547,  
    "scriptId": 19218,  
    "customerUuid": "74c1bcdd-9bbb-e9dd-802a-  
65e2c579abc0",  
    "isTest": false,  
    "scriptType": "PowerShell",  
    "id": "25772",  
    "category": {  
        "name": "Data Backup",  
        "id": 1  
    },  
    "schedulerName": "dfdfdfd"  
    }  
    }  
    ]  
    }  
}
```


Chapter 2 - Script-based APIs

Use these API functions to fetch required scripts:

- [Count Number of Scripts](#)
- [Count Number of Scripts](#)
- [List Scripts Based on Script Attributes](#)
- [Create Custom Scripts with GitHub URL and Parameter](#)
- [Update Scripts with GitHub URL and Parameter](#)
- [Get Valid List of Categories Supported by CAR](#)
- [Get Valid List of Languages Supported by CAR](#)

Count Number of Scripts

sm/v1/script/count

[GET]

This API lets you fetch the count of scripts created in your subscription.

Input Parameters

| Parameter | Mandatory? | Data Type | Description |
|---------------|------------|-----------|--|
| query | No | string | <p>Search for scripts based on the values as follows:</p> <ul style="list-style-type: none"> - - HasSystemBehaviorAffectingCommands [Boolean]: Get scripts that contain commands that can potentially impact the system behavior or performance of your assets. For example: hasSystemBehaviorAffectingCommands:"True" - importedScriptFromGitHub [Boolean]: Get scripts that are imported from a private or public GitHub repository. For example: importedScriptFromGitHub:"True" - githubAutoSync [Boolean]: Get scripts that are configured to be automatically synced with GitHub repository. For example: githubAutoSync:"True" - githubSyncStatus [String]: Get scripts based on the pass or fail status of the GitHub sync. For example: githubSyncStatus:"failed" - - importedFromGitHubPublicRepo [Boolean]: Get scripts that are imported from a public GitHub repository. For example: importedFromGitHubPublicRepo:"true" |
| startAt/endAt | No | string | Search for scripts by specifying the start/end date and time. |
| groupBy | No | string | Group scripts by status, asset.operatingSystem, script.name, script.type, and script.category parameters. |

Sample 1: Get the total count of scripts on Linux platform

API Request:

```
curl -X GET
'https://<qualys_base_url>/sm/v1/script/count?query=platform:LINUX
' \
--header 'Authorization: Bearer <authToken>'
```

Response:

```
{
  "data": {
    "count": 671
  },
  "timestamp": "2023-01-16T04:40:05.284Z"
}
```

Sample 2: Get the total count of scripts by specifying 'groupBy' = severity, with startAt and endAt values

API Request:

```
curl -X GET
'https://<qualys_base_url>/sm/v1/script/count?groupBy=severity&startAt=
2022-11-01T00:00:01.000Z&endAt=2023-01-08T23:59:59.000Z' \
--header 'Authorization: Bearer <authToken>'
```

Response:

```
{
  "data": {
    "3": 45,
    "1": 27,
    "5": 11,
    "2": 10,
    "4": 3
  },
  "timestamp": "2023-01-16T04:35:45.915Z"
}
```

Fetch Script Details Based on Script ID or Name

[GET]

sm/v1/scripts/{id}

Search script details based on the script ID or the script name.

Response Code

- 200: Returns the script details output
- 404: If script with id/name not found
- 500: Internal server error

Input Parameters

| Parameter | Mandatory? | Data Type | Description |
|------------------------|------------|-----------|--|
| {id} as Path parameter | No | string | Provide Script ID or script name for which you want to fetch the details |
| Authorization | Yes | string | Authorization token to authenticate to the Qualys Cloud Platform. Prepend token with "Bearer" and one space. For example: Bearer <authToken> |

Sample

Request:

```
curl-X GET 'https://<qualys_base_url>/sm/v1/scripts/16012'\  
--header 'Content-Type:application/json'\  
--header 'Authorization:Bearer <authToken>'\  
--data-raw''
```

Request Body: N/A

Response:

```
{  
  "body": {  
    "id": <SCRIPT ID>,  
    "customerUUID": "<CUSTOMER UUID>",&br/>    "title": "<SCRIPT TITLE>",&br/>    "description": "",  
    "category": {  
      "id": 6,  
      "name": "<SCRIPT NAME>"  
    },  
    "scriptStatus": "APPROVED",  
    "importedFromId": 0,  
  }  
}
```

```
"platform":"WINDOWS",
"severity":2,
"threshold":12,
"type":{
  "id":1,
  "name":"Python"
},
"content":"<SCRIPT CONTENT>",
"recurringDay":0,
"approverId":"<USER ID OF APPROVER>",
"approverName":"<USER NAME OF APPROVER>",
"created":{
  "dateTime":1651846745520,
  "user":{
    "id":"<SCRIPT ID>",
    "name":"<USER NAME>",
  },
  "updated":{
    "dateTime":1652865043670,
    "user":{
      "id":"<USER ID>",
      "name":"<USER NAME>",
    }
  },
  "lastExecutedDateTime":1652865043670,
  "hasBlacklistedCommands":true,
  "blacklistedCommands":["os.chmod, wget.download"]
}
```

Note: The script content is in base64-encoded format.

List Scripts Based on Script Attributes

[POST]

/sm/v1/scripts/search

Search list of scripts for an user account.

Response Code

- 200: Returns list of scripts
- 500: Internal server error

Input Parameters

| Parameter | Mandatory? | Data Type | Description |
|---------------|------------|-----------|--|
| Filter | No | string | Filter the scripts 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 – "filter": "status:DEPRECAT D" Filter the scripts based on their status. For example: Approved, Pending Review, Pending Test, Rejected, Deprecated. |
| pageNumber | No | string | The page to be returned. Starts from zero. |
| pageSize | No | string | The number of records per page to be included in the response. Default is 10. |
| sort | No | | Sort the results using a Qualys token. For example: [{"Created.dateTime": "\ asc"}] |
| Authorization | Yes | string | Authorization token to authenticate to the Qualys Cloud Platform. Prepend the token with 'Bearer', followed by a space. For example: Bearer <authToken> |

Sample

Request:

```
curl -X POST 'https://<qualys_base_url> /sm/v1/scripts/search' \  
--header 'Content-Type: application/json' \  
--header 'Authorization: Bearer <authToken>' \  
--data-raw '{ "filter":"status:REJECTED" }'
```

Request Body:

i) Filter scripts with status 'Rejected':

```
{  
  "filter":"status:REJECTED"  
}
```

Response:

```
{  
  "body": {  
    "totalCount": 1,  
    "list": [  
      {  
        "severity": 1,  
        "testAssets": null,  
        "importedFromId": 0,  
        "approverId": null,  
        "created": {  
          "dateTime": 1651490591578,  
          "user": {  
            "name": "<USER NAME>",&br/>            "id": "<USER ID>"  
          }  
        },  
        "blacklistedCommands": "",  
        "description": "This script is created for Sanity Automation",  
        "lastExecutedDateTime": 0,  
      }  
    ]  
  }  
}
```

```
"threshold": 250,  
"title": "<SCRIPT TITLE>",  
"type": {  
  "name": "Powershell",  
  "id": 4  
},  
"excludedAssets": null,  
"assetTags": null,  
"platform": "WINDOWS",  
"approverName": null,  
"subscribedModules": [  
  "PC"  
],  
"schedule": {  
  "recurringDay": 0,  
  "recurringTime": null,  
  "frequency": null  
},  
"customerUuid": "<CUSTOMER UUID>",  
"assets": null,  
"hasBlacklistedCommands": false,  
"id": "72524",  
"category": {  
  "name": "Data Backup",  
  "id": 1  
},  
"updated": {  
  "dateTime": 1651490890451,  
  "user": {  
    "name": "<USER NAME>",  
    "id": "<USER ID>"
```

```
}  
},  
"status": "REJECTED"  
}  
]  
}
```

Create Custom Scripts with GitHub URL and Parameter

`/sm/v2/script`

[POST]

This API lets you create custom scripts with GitHub and URL.

Response Code:

-201 - Created

-400 - Bad Request

-500 - Internal server error

Input Parameters

| Parameter | Mandatory/Optional | Data Type | Description |
|-------------------|--------------------|-----------|--|
| title | Mandatory | String | Use it to provide the name of the script. |
| description | Optional | String | Use it to provide the script description. |
| categoryId | Optional | Long | Use it to provide the category of script based on categories like general automation, data collection, and backup. |
| platform | Mandatory | String | Use it to provide the platform like WINDOWS,LINUX,UNIX, and MAC. |
| severity | Mandatory | Short | Use it to provide the severity level that defines the criticality of the script. Select a value from 1 to 5. |
| threshold | Mandatory | Integer | Use it to provide the specific time that defines how long the script must run. You can specify the time in seconds, hours and minutes. |
| thresholdTimeUnit | Mandatory | String | Use it to provide the time to specify in SECONDS, HOURS, MINUTES. |
| languageId | Mandatory | Integer | Use it to provide the ID to get the list of valid languages. |
| gitHubSyncEnabled | Optional | Boolean | Use it to enable the GitHub script to sync with the created script. |
| gitHubAutoSync | Optional | Boolean | Use it to enable GitHub auto-sync with the created script. |
| gitHubUser | Mandatory | String | Use it to provide a github user that has a github account. |
| gitHubRepo | Optional | String | Use it to provide the name of the github repository. |
| gitHubBranch | Optional | String | Use it to provide the github branch name. |
| gitHubFilePath | Mandatory | String | Use it to provide a relative github file path for which we want to create as script content. |

| | | | |
|-------------------------------|----------|---------|---|
| gitHubToken | Optional | String | Use it to provide a github token to access a private github repository. For private repository it is mandatory. |
| scriptApprovalUserCo nsent | Optional | Boolean | Use it to create a script in an approval state or not. |
| githubInputUrl | Optional | String | Use it to provide complete github file path for which we want to create as script content. |

Sample 1: Create Script With URL

API Request:

```
curl -X POST '<qualys_base_url>/sm/v2/script' \  
--header 'Authorization: Bearer <authToken>' \  
--header 'Content-Type: application/json' \  
--data-raw '{  
  "title": "<sample-file-name>",  
  "description": "Sample Description",  
  "categoryId": 2,  
  "platform": "WINDOWS",  
  "severity": 3,  
  "threshold": 300,  
  "thresholdTimeUnit": "SECOND",  
  "languageId": 4,  
  "typeId": 1,  
  "githubInputUrl": "<github-file-url>"  
}'
```

Request Body:

```
{  
  "title": "{{scriptTitle}}",  
  "description": "Sample Description",  
  "categoryId": 2,  
  "platform": "WINDOWS",  
  "severity": 3,  
  "threshold": 300,  
  "thresholdTimeUnit": "SECOND",  
  "languageId": 4,  
  "typeId": 1,  
  "githubInputUrl": "https://github.com/ruanyf/simple-bash-  
scripts/blob/master/scripts/hello-world.sh"  
}
```

Response:

```
{  
  "errorCode": "0",  
  "message": "Script created successfully",  
  "body": {  
    "id": 61179
```

```
}  
}
```

Sample 2: Create Script With GitHub Parameters

API Request:

```
curl -X POST '<qualys_base_url>/sm/v2/script' \  
--header 'Authorization: Bearer <authToken>' \  
--header 'Content-Type: application/json' \  
--data-raw '{  
  "title": "<sample-file-name>",  
  "description": "Sample Description",  
  "categoryId": 2,  
  "platform": "WINDOWS",  
  "severity": 3,  
  "threshold": 300,  
  "thresholdTimeUnit": "SECOND",  
  "languageId": 201,  
  "githubUser": "<github-username>",  
  "githubRepo": "<github-repository>",  
  "githubBranch": "<github-branch>",  
  "githubFilePath": "<github-file-relative-path>"  
}'
```

Request Body:

```
{  
  "title":"{{scriptTitle}}",  
  "description":"Sample Description",  
  "categoryId":2,  
  "platform":"WINDOWS",  
  "severity":3,  
  "threshold":300,  
  "thresholdTimeUnit":"SECOND",  
  "languageId":201,  
  "githubUser":"Qualys",  
  "githubRepo":"community",  
  "githubBranch":"","  
  "githubFilePath":"assetcount/README.md"  
}
```

Response:

```
{  
  "errorCode":"0",  
  "message":"Script created successfully",  
  "body":{  
    "id":61180  
  }  
}
```

Sample 3: Create Script with GitHub Parameters Using Private Repository

API Request:

```
curl -X POST '<qualys_base_url>/sm/v2/script' \  
--header 'Authorization: Bearer <authToken>' \  
--header 'Content-Type: application/json' \  
--data-raw '{  
  "title": "<sample-file-name>",  
  "description": "Sample Description",  
  "categoryId": 2,  
  "platform": "LINUX",  
  "severity": 3,  
  "threshold": 300,  
  "thresholdTimeUnit": "SECOND",  
  "languageId": 6,  
  "githubUser": "<private-github-username>",  
  "githubRepo": "<private-github-repository-name>",  
  "githubBranch": "<private-github-branch>",  
  "githubFilePath": "<private-github-filepath>",  
  "githubToken": "<private-github-token>"  
}'
```

Request Body:

```
{  
  "title":"{{scriptTitle}}",  
  "description":"Sample Description",  
  "categoryId":2,  
  "platform":"LINUX",  
  "severity":3,  
  "threshold":300,  
  "thresholdTimeUnit":"SECOND",  
  "languageId":6,  
  "githubUser":"smqa123",  
  "githubRepo":"SM_QA_PRIVATE",  
  "githubBranch":"main",  
  "githubFilePath":"Blacklisted",  
  "githubToken":"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"  
}
```

Response:

```
{  
  "errorCode":"0",  
  "message":"Script created successfully",  
  "body":{  
    "id":61186  
  }  
}
```

Sample 4: Create Script by with GitHub URLs Using Private Repository

API Request:

```
curl -X POST '<qualys_base_url>/sm/v2/script' \  
--header 'Authorization: Bearer <authToken>' \  
--header 'Content-Type: application/json' \  
--data-raw '{  
  "title": "<sample-file-name>",  
  "description": "<sample-description>",  
  "categoryId": 2,  
  "platform": "WINDOWS",  
  "severity": 3,  
  "threshold": 300,  
  "thresholdTimeUnit": "SECOND",  
  "languageId": 4,  
  "typeId": 1,  
  "githubToken" : "<private-github-token>",  
  "githubInputUrl": "<private-github-url>"  
}'
```

Request Body:

```
{  
  "title":"{{scriptTitle}}",  
  "description":"Sample Description",  
  "categoryId":2,  
  "platform":"WINDOWS",  
  "severity":3,  
  "threshold":300,  
  "thresholdTimeUnit":"SECOND",  
  "languageId":4,  
  "typeId":1,  
  "githubToken":"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",  
  
  "githubInputUrl":"https://github.com/smqal23/SM_QA_PRIVATE/blob/main/Blacklisted"  
}
```

Response:

```
{  
  "errorCode":"0",  
  "message":"Script created successfully",  
  "body":{  
    "id":61403  
  }  
}
```

Update Scripts with GitHub URL and Parameter

`/sm/v2/script/{id}`

[PATCH]

This API lets you update scripts with GitHub URL and Parameter.

Response Code:

-200 - Ok

-400 - Bad request

-500 - Internal server error

Input Parameters

| Parameter | Mandatory/Optional | Data Type | Description |
|---------------------------|--------------------|-----------|---|
| title | Optional | String | Use it to provide the name of the script. |
| categoryID | Optional | String | Use it to provide the category of script based on categories like general automation, data collection, and backup. |
| severity | Optional | Short | Use it to provide the severity level that defines the criticality of the script. Select a value from 1 to 5. |
| threshold | Optional | Integer | Use it to provide the specific time that defines how long the script must run. You can specify the time in seconds, hours, and minutes. |
| gitHubUser | Optional | String | Use it to provide a github user that has a github account. |
| gitHubRepo | Optional | String | Use it to provide the name of the github repository. |
| gitHubBranch | Optional | String | Use it to provide the github branch name. |
| gitHubFilepath | Optional | String | Use it to provide a relative github file path for which we want to create as script content. |
| gitHubToken | Optional | String | Use it to provide a github token to access a private github repository. |
| scriptApprovalUserConsent | Optional | Boolean | Use it to create a script in an approval state or not. |
| githubInputUrl | Optional | String | Use it to provide a complete github file path for which we want to create script content. |

Sample 1: Update Script by Providing File in URL

API Request:

```
curl -X PATCH '<qualys_base_url>/sm/v2/script/<script-id-to-update>' \
--header 'Authorization: Bearer <authToken>' \
--header 'Content-Type: application/json' \
--data-raw '{
  "title": "<sample-file-name-to-update>",
  "description": "Sample Description updated",
  "categoryId": 6,
```

```
    "severity": 3,  
    "threshold": 300,  
    "thresholdTimeUnit": "SECOND",  
    "githubInputUrl": "<github-url>"  
  }'  
'
```

Request Body:

```
{  
  "title":"{{scriptTitle}}",  
  "description":"Sample Description updated",  
  "categoryId":6,  
  "severity":3,  
  "threshold":300,  
  "thresholdTimeUnit":"SECOND",  
  "githubInputUrl":"https://github.com/ruanyf/simple-bash-  
scripts/blob/master/scripts/hello-world.sh"  
}
```

Response:

```
{  
  "id":61179,  
  "message":"Updated Successfully."  
}
```

Sample 2: Update Script with Github Parameters

API Request:

```
curl -X PATCH '<qualys_base_url>/sm/v2/script/<script-id-to-update>' \  
--header 'Authorization: Bearer <authToken>' \  
--header 'Content-Type: application/json' \  
--data-raw '{  
  "title": "<sample-file-name-to-update>",  
  "description": "Sample Description updated",  
  "categoryId": 6,  
  "severity": 3,  
  "threshold": 300,  
  "thresholdTimeUnit": "SECOND",  
  "githubUser": "<github-username>",  
  "githubRepo": "<github-repository-name>",  
  "githubBranch": "<github-branch>",  
  "githubFilePath": "<github-file-relative-path>"  
}'
```

Request Body:

```
{  
  "title":"{{scriptTitle}}",  
  "description":"Sample Description updated",  
  "categoryId":6,  
  "severity":3,  
  "threshold":300,  
  "thresholdTimeUnit":"SECOND",  
}
```

```
"gitHubUser":"Qualys",  
"gitHubRepo":"community",  
"gitHubBranch":"","  
"gitHubFilePath":"assetcount/README.md"  
}
```

Response:

```
{  
  "id":61180,  
  "message":"Updated Successfully."  
}
```

Sample 3: Update Script with Github Parameters Using a Private Repo

API Request:

```
curl -X PATCH '<qualys_base_url>/sm/v2/script/<script-id-to-update>' \  
--header 'Authorization: Bearer <authToken>' \  
--header 'Content-Type: application/json' \  
--data-raw '{  
  "title": "<sample-file-name-to-update>",  
  "description": "Sample Description updated",  
  "categoryId": 6,  
  "severity": 3,  
  "threshold": 300,  
  "thresholdTimeUnit": "SECOND",  
  "gitHubUser": "<private-github-username>",  
  "gitHubRepo": "<private-github-repository-name>",  
  "gitHubBranch": "<private-github-branch>",  
  "gitHubFilePath": "<private-github-filepath>",  
  "gitHubToken": "<private-github-token>"  
}'
```

Request Body:

```
{  
  "title":"{{scriptTitle}}",  
  "description":"Sample Description updated",  
  "categoryId":6,  
  "severity":3,  
  "threshold":300,  
  "thresholdTimeUnit":"SECOND",  
  "gitHubUser":"smqa123",  
  "gitHubRepo":"SM_QA_PRIVATE",  
  "gitHubBranch":"main",  
  "gitHubFilePath":"PythinNums",  
  "gitHubToken":"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"  
}
```

Response:

```
{  
  "id":61186,  
  "message":"Updated Successfully."  
}
```

```
}
```

Sample 4: Update Script with Github URL Using Private Repository

API Request:

```
curl -X PATCH '<qualys_base_url>/sm/v2/script/<script-id-to-update>' \  
--header 'Authorization: Bearer <authToken>' \  
--header 'Content-Type: application/json' \  
--data-raw '{  
  "title": "<sample-file-name-to-update>",  
  "description": "Sample private url Description updated",  
  "categoryId": 6,  
  "severity": 3,  
  "threshold": 300,  
  "thresholdTimeUnit": "SECOND",  
  "gitHubToken" : "<private-github-token>",  
  "githubInputUrl": "<private-github-url>"  
}'
```

Request Body:

```
{  
  "title":"{{scriptTitle}}",  
  "description":"Sample private url Description updated",  
  "categoryId":6,  
  "severity":3,  
  "threshold":300,  
  "thresholdTimeUnit":"SECOND",  
  "gitHubToken":"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",  
  
  "githubInputUrl":"https://github.com/smqa123/SM_QA_PRIVATE/blob/main/Blacklisted"  
}
```

Response:

```
{  
  
  "id": 61403,  
  
  "message": "Updated Successfully."  
}
```

Get Valid List of Categories Supported by CAR

/sm/v1/script-category

[GET]

This API lets you get the valid list of categories supported by CAR.

Response Code:

-200 - Returns list of scripts from library.

-400 - Bad request

-500 - Internal server error

Sample: Get Valid List of Categories Supported by CAR

API Request:

```
curl -X GET '<qualys_base_url>/sm/v1/script-category' \  
--header 'Authorization: Bearer <authToken>'
```

Response:

```
{  
  "body": [  
    {  
      "id":103,  
      "customerUuid":"00000000-0000-0000-0000-000000000000",  
      "name":"Active Directory Security",  
      "createdById":"00000000-0000-0000-0000-000000000000",  
      "createdByName":"System",  
      "createdDatetime":1684318269000  
    },  
    {  
      "id":105,  
      "customerUuid":"00000000-0000-0000-0000-000000000000",  
      "name":"Asset Tagging",  
      "createdById":"00000000-0000-0000-0000-000000000000",  
      "createdByName":"System",  
      "createdDatetime":1684318269000  
    },  
    {  
      "id":1,  
      "customerUuid":"00000000-0000-0000-0000-000000000000",  
      "name":"Data Backup",  
      "createdById":"00000000-0000-0000-0000-000000000000",  
      "createdByName":"System",  
      "createdDatetime":1624549017000  
    },  
    {  
      "id":2,  
      "customerUuid":"00000000-0000-0000-0000-000000000000",  
      "name":"Data Collection",  
      "createdById":"00000000-0000-0000-0000-000000000000",  
      "createdByName":"System",  
    }  
  ]  
}
```

```
"createdDatetime":1624549017000
},
{
  "id":108,
  "customerUuid":"00000000-0000-0000-0000-000000000000",
  "name":"Forensic Analysis",
  "createdById":"00000000-0000-0000-0000-000000000000",
  "createdByName":"System",
  "createdDatetime":1684318269000
},
{
  "id":6,
  "customerUuid":"00000000-0000-0000-0000-000000000000",
  "name":"General Automation",
  "createdById":"00000000-0000-0000-0000-000000000000",
  "createdByName":"System",
  "createdDatetime":1624549017000
},
{
  "id":102,
  "customerUuid":"00000000-0000-0000-0000-000000000000",
  "name":"Malware Research and Detection",
  "createdById":"00000000-0000-0000-0000-000000000000",
  "createdByName":"System",
  "createdDatetime":1684318269000
},
{
  "id":106,
  "customerUuid":"00000000-0000-0000-0000-000000000000",
  "name":"QID without Patch",
  "createdById":"00000000-0000-0000-0000-000000000000",
  "createdByName":"System",
  "createdDatetime":1684318269000
},
{
  "id":7,
  "customerUuid":"00000000-0000-0000-0000-000000000000",
  "name":"Remediation",
  "createdById":"00000000-0000-0000-0000-000000000000",
  "createdByName":"System",
  "createdDatetime":1624549017000
},
{
  "id":104,
  "customerUuid":"00000000-0000-0000-0000-000000000000",
  "name":"Sensitive Data Discovery",
  "createdById":"00000000-0000-0000-0000-000000000000",
  "createdByName":"System",
  "createdDatetime":1684318269000
},
{
  "id":5,
  "customerUuid":"00000000-0000-0000-0000-000000000000",
  "name":"System Administration",
```

```
    "createdById":"00000000-0000-0000-0000-000000000000",
    "createdByName":"System",
    "createdDatetime":1624549017000
  },
  {
    "id":3,
    "customerUuid":"00000000-0000-0000-0000-000000000000",
    "name":"System Maintenance",
    "createdById":"00000000-0000-0000-0000-000000000000",
    "createdByName":"System",
    "createdDatetime":1624549017000
  },
  {
    "id":107,
    "customerUuid":"00000000-0000-0000-0000-000000000000",
    "name":"Virtual Patching",
    "createdById":"00000000-0000-0000-0000-000000000000",
    "createdByName":"System",
    "createdDatetime":1684318269000
  },
  {
    "id":101,
    "customerUuid":"00000000-0000-0000-0000-000000000000",
    "name":"Zero Day",
    "createdById":"00000000-0000-0000-0000-000000000000",
    "createdByName":"System",
    "createdDatetime":1684318269000
  }
]
}
```

Get Valid List of Languages Supported by CAR

/sm/v1/script-language

[GET]

This API lets you get the valid list of languages supported by CAR.

Response Code:

-200 - Returns list of scripts from library.

-400 - Bad request

-500 - Internal server error

Sample: Get Valid List of Languages Supported by CAR

API Request:

```
curl -X GET '<qualys_base_url>/sm/v1/script-language' \  
--header 'Authorization: Bearer <authToken>'
```

Response:

```
{  
  "body": [  
    {  
      "id":509,  
      "platform":"MAC",  
      "name":"Lua"  
    },  
    {  
      "id":504,  
      "platform":"UNIX",  
      "name":"Lua"  
    },  
    {  
      "id":8,  
      "platform":"LINUX",  
      "name":"Lua"  
    },  
    {  
      "id":502,  
      "platform":"UNIX",  
      "name":"Perl"  
    },  
    {  
      "id":507,  
      "platform":"MAC",  
      "name":"Perl"  
    },  
    {  
      "id":7,  
      "platform":"LINUX",  
      "name":"Perl"  
    },  
  ],  
}
```

```
{
  "id":201,
  "platform":"WINDOWS",
  "name":"PowerShell-Command"
},
{
  "id":4,
  "platform":"WINDOWS",
  "name":"PowerShell-Script"
},
{
  "id":5,
  "platform":"LINUX",
  "name":"Python"
},
{
  "id":1,
  "platform":"WINDOWS",
  "name":"Python"
},
{
  "id":508,
  "platform":"MAC",
  "name":"Python"
},
{
  "id":503,
  "platform":"UNIX",
  "name":"Python"
},
{
  "id":506,
  "platform":"MAC",
  "name":"Shell"
},
{
  "id":6,
  "platform":"LINUX",
  "name":"Shell"
},
{
  "id":501,
  "platform":"UNIX",
  "name":"Shell"
},
{
  "id":101,
  "platform":"WINDOWS",
  "name":"VBScript"
}
]
}
```


Chapter 3 - Asset-based APIs

Use the following API functions to fetch the asset information:

- [List Assets](#)
- [Count Number of Assets](#)
- [List Asset Tags](#)

List Assets

/sm/v1/assets/search

[POST]

Search list of assets on which CAR is enabled.

Response Code

- 200: Returns list of assets
- 500: Internal server error

Input Parameters

| Parameter | Mandatory? | Data Type | Description |
|---------------|------------|-----------|---|
| Authorization | Yes | string | Authorization token to authenticate to the Qualys Cloud Platform. Prepend the token with 'Bearer', followed by a space. For example: Bearer <authToken> |

Sample

Request:

```
curl -X POST 'https://<qualys_base_url>/sm/v1/assets/search' \
--header 'Authorization: Bearer <authToken>'
```

Response:

```
{
  "errorCode": null,
  "message": null,
  "body": {
    "totalCount": <NUMBER OF ASSETS>,
    "list": [
      {
```

```

"sortValues": [],
"data": {
  "interfaces": [
    {
      "hostname": "<ASSET NAME>",
      "macAddress": "<MAC ADDRESS>",
      "address": "<ASSET IP>",

      "interfaceName": "eth0"
    },
    {
      "hostname": null,
      "macAddress": "<MAC ADDRESS>",
      "address": "fe80:0:0:0:82a:39ff:feda:4fa5",
      "interfaceName": "eth0"
    }
  ],
  "address": "<ASSET IP>",
  "activatedForModules": [
    "PC"
  ],
  "operatingSystem": "OPERATING SYSTEM",
  "assetType": "HOST",
  "tags": [
    12047163,
    11516586,
    8543820,
    9738814
  ],
  "customerUuid": "<CUSTOMER UUID>",
  "assetId": <ASSET ID>,
  "customerId": <CUSTOMER ID>,
  "name": "<ASSET NAME>",
  "agentVersion": "<CLOUD AGENT VERSION>",
  "id": "<ASSET IP>",
  "agentUuid": "<AGENT UUID>"
}
},
{
  "sortValues": [],
  "data": {
    "interfaces": [
      {
        "hostname": "<HOST NAME>",
        "macAddress": "<MAC ADDRESS>",

```

```

"address": "<ASSET IP>",
"interfaceName": "ens160"
},
{
"hostname": null,
"macAddress": "<MAC ADDRESS>",
"address": "<ASSET IP>",

"interfaceName": "virbr0"
},
{
"hostname": null,
"macAddress": "<MAC ADDRESS>",
"address": "<ASSET IP>",
"interfaceName": "ens160"
}
],
"address": "<ASSET IP>",
"activatedForModules": [
"PC"
],
"operatingSystem": "<OPERATING SYSTEM>",
"assetType": "HOST",
"tags": [
8543820
],
"customerUuid": "<CUSTOMER UUID>",
"assetId": <ASSET ID>,
"customerId": <CUSTOMER ID>,
"name": "<HOST NAME>",
"agentVersion": "<AGENT VERSION>",
"id": "<AGENT ID>",
"agentUuid": "<AGENT UUID>"
}
},
{
"sortValues": [],
"data": {
"interfaces": [
{
"hostname": "<ASSET NAME>",
"macAddress": "<MAC ADDRESS>",
"address": "<ASSET IP>",
"interfaceName": "Intel(R) PRO/1000 MT Network Connection"
}
}
}

```

```
],
"address": "<ASSET IP>",
"activatedForModules": [
  "AGENT_FIM",
  "AGENT_PC",
  "FIM",
  "PC"
],
"operatingSystem": "<OPERATING SYSTEM>",
"assetType": "HOST",
"tags": [
  17970415,
  12047183,
  11172212,
  8546868,
  14695569,
  12047182,
  8543820
],
"customerUuid": "2<CUSTOMER UUID>",
"assetId":<ASSET ID>,
"customerId": <CUSTOMER ID>,
"name": "<ASSET NAME>",
"agentVersion": "<AGENT VERSION>",
"id": "<AGENT ID>",
"agentUuid": "<AGENT UUID>"
  }
}
]
```

Count Number of Assets

sm/v1/assets/count

[POST]

Use this API to get the total number of assets.

Input Parameters

| Parameter | Mandatory? | Data Type | Description |
|-----------|------------|-----------|--|
| query | No | string | Filter assets by providing a query using Qualys syntax. Refer to the “How to Search” topic in the online help for assistance. For example, “agentVersion:5.0.0.17” |
| groupBy | No | string | Group results to fetch count based on values such as agentVersion, agentStatus, and so on. |

Sample 1: Get asset count by using agentVersion as the query parameter

API Request:

```
curl -X GET 'https://<qualys_base_url>/sm/v1/assets/count' \  
--header 'Authorization: Bearer <authToken>'
```

Response:

```
{  
  "data": {  
    "count": 2  
  },  
  "timestamp": "2023-01-19T11:07:35.006Z"  
}
```

Sample 2: Get asset count by using groupBy as the query parameter

API Request:

```
curl -X GET  
'https://<qualys_base_url>/sm/v1/assets/count?groupBy=operatingSystem'  
\  
--header 'Authorization: Bearer <authToken>' \  

```

Response:

```
"data": {  
  "Microsoft Windows 10 Pro 10.0.19044 64-bit N/A Build 19044": 3,  
  "CentOS Linux 7.9.2009": 1  
},  
"timestamp": "2023-01-19T11:14:56.324Z"  
}
```

List Asset Tags

/sm/v1/assettags/search

[POST]

Search list of asset tags on which CAR is enabled.

Response Code

- 200: Returns list of asset tags
- 500: Internal server error

Input Parameters

| Parameter | Mandatory? | Data Type | Description |
|---------------|------------|-----------|--|
| Authorization | Yes | string | Authorization token to authenticate to the Qualys Cloud Platform. Prepend token with 'Bearer', followed by a space. For example: 'Bearer' <authToken> |

Sample

Request:

```
curl -X POST 'https://<qualys_base_url>/sm/v1/assettags/search' \-  
-header 'Authorization: Bearer <authToken>'
```

Response:

```
{  
  "errorCode": null,  
  "message": null,  
  "body": {  
    "totalCount": <NUMBER OF ASSETS>,  
    "list": [  
      {  
        "customerUuid": "<CUSTOMER UUID>",  
        "tagId": <ASSET TAG>,  
        "customerId": <CUSTOMER ID>,  
        "name": "<ASSET NAME>",  
        "tagUuid": "<ASSET TAG UUID>",  
        "id": "<ASSET ID>"  
      },  
      {  
        "backgroundColor": "#0000FF",
```

```

        "customerUuid": "<CUSTOMER UUID>",
        "tagId": <ASSET TAG ID>,
        "customerId": <CUSTOMER ID>,
        "name": "<ASSET TAG>",
        "tagUuid": "<ASSET TAG UUID>",
        "id": "<TAG ID>"
    },
    {
        "customerUuid": "<CUSTOMER UUID>",
        "tagId":<TAG ID>,
        "customerId": <CUSTOMER ID>,
        "name": "Internet Facing Assets",
        "tagUuid": "<ASSET TAG UUID>",
        "id": "<TAG ID>"
    },
    {
        "backgroundColor": "#FF0000",
        "customerUuid": "<CUSTOMER UUID>",
        "tagId": <TAG ID>,
        "customerId": <CUSTOMER ID>,
        "name": "<TAG NAME>",
        "tagUuid": "<ASSET TAG UUID>",
        "id": "<TAG ID>"
    },
},
{
    {
        "backgroundColor": "#A2C4C9",
        "customerUuid": "<CUSTOMER UUID>",
        "tagId": <TAG ID>,
        "customerId": <CUSTOMER ID>,
        "name": "<ASSET ID>",
        "tagUuid": "<ASSET TAG UUID>",
        "id": "<TAG ID>"
    },
    {
        "customerUuid": "<CUSTOMER UUID>",
        "tagId": <TAG ID>,
        "customerId": <CUSTOMER ID>,
        "name": "<TAG NAME>",
        "tagUuid": "<ASSET TAG UUID>",
        "id": "<TAG ID>"
    },
},
{
    "customerUuid": "<CUSTOMER UUID>",
    "tagId": <TAG ID>,

```

```
"customerId": <CUSTOMER ID>,  
"name": "<TAG NAME>",  
"tagUuid": "<ASSET TAG UUID>"id": "<TAG ID>"  
},  
{  
  "customerUuid": "<CUSTOMER UUID>",  
  "tagId": <TAG ID>,  
  "customerId": <CUSTOMER ID>,  
  "name": "<TAG NAME>",  
  "tagUuid": "<ASSET TAG UUID>",  
  "id": "<TAG ID>"  
},  
{  
  "backgroundColor": "#FFFF00",  
  "customerUuid": "<CUSTOMER UUID>",  
  "tagId": <TAG ID>,  
  "customerId": <CUSTOMER ID>,  
  "name": "<TAG NAME>",  
  "tagUuid": "<ASSET TAG UUID>",  
  "id": "<TAG ID>"  
},  
{  
  "backgroundColor": "#206CFF",  
  
  "customerUuid": "<CUSTOMER UUID>",  
  "tagId": <TAG ID>,  
  "customerId": <CUSTOMER ID>,  
  "name": "<TAG NAME>",  
  "tagUuid": "<ASSET TAG UUID>",  
  "id": "<TAG ID>"  
}  
]  
}
```

Chapter 4 - Job-based APIs

Use these API functions to fetch script jobs:

[List Script Jobs](#)

[List Asset Jobs](#)

[Count Number of Jobs](#)

[Count Number of Asset Jobs](#)

[Fetch Jobs by Script Name or Script ID](#)

[Fetch Asset Job Details for a Given Job Name or Job ID](#)

List Script Jobs

/sm/v1/jobs/search

[POST]

Search for the parent jobs that are created when you execute scripts.

Response Code

- 200: Returns list of jobs
- 500: Internal server error

Input Parameters

| Parameter | Mandatory? | Data Type | Description |
|---------------|------------|-----------|--|
| Filter | No | string | Filter the jobs 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 – “scriptId: <SCRIPT_ID>” |
| startAt/endAt | No | string | Filter jobs based on the time when the jobs are generated (dateTime) or the time when the jobs are processed at Qualys (processedTime). |
| pageNumber | No | string | The page to be returned. Starts from zero. |
| pageSize | No | string | The number of records per page to be included in the response. Default is 10. |
| Authorization | Yes | string | Authorization token to authenticate to the Qualys Cloud Platform. Prepend the token with 'Bearer', followed by a space. For example: Bearer <authToken> |
| sort | No | string | Sort the results using a Qualys token. For example, ID or Category: [{"Created.date-Time": "asc"}] |

Sample

Request:

```
curl -X POST 'https://<qualys_base_url>/sm/v1/jobs/search' \
--header 'Content-Type: application/json' \
--header 'Authorization: Bearer <authToken>' \
--data '{"filter": "scriptId:77245"}'
```

Request Body:

i) Filter jobs using script name

```
{
  "filter": "scriptId:77245"
```

```
}
```

Response:

```
{  
  "errorCode": null,  
  "message": null,  
  "body": {  
    "totalCount": 13,  
    "list": [  
      {  
        "severity": 2,  
        "test": true,  
        "created": {  
          "dateTime": 1651847969380  
        },  
        "executionType": "Manual",  
        "correlationUuid": "9bde85fb-010e-45fe-8bc0-  
4b55cc6c3a2a",  
        "threshold": 12,  
        "title": "Script test for subscribed modules-  
1651847969",  
        "platform": "WINDOWS",  
        "updatedDateTime": 1651847969380,  
        "scriptId": 77245,  
        "customerUuid": "317df02c-4ad1-55e2-83a3-  
5646a34fceec",  
        "isTest": true,  
        "scriptType": "Python",  
        "id": "79097",  
        "category": {  
          "name": "General Automation",  
          "id": 6  
        }  
      }  
    ]  
  }  
}
```

List Asset Jobs

`/sm/v1/assetjobs/search`

[POST]

The asset job is created per asset when a script is executed on it.

Note: If you want to include script result in the response, you can set the 'includeScriptResult' variable to 'True'.

Response Code

- 200: Returns list of asset jobs
- 500: Internal server error

Input Parameters

| Parameter | Mandatory? | Data Type | Description |
|---------------------|------------|-----------|---|
| startAt/endAt | No | string | Filter jobs based on the time when a job is generated (dateTime) or based on the time when a job is processed at Qualys (processedTime). |
| Filter | No | string | Filter the asset jobs 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 – "filter": "job.id:<JOB ID>" |
| includeScriptResult | No | string | This flag can be set to 'true' if you want the script output to be fetched in the response. Note: The script result will be fetched in Base 64 encoded format. You must decode it to view the result. |
| pageNumber | No | string | The page to be returned. Starts from zero. |

Sample

Request:

```
curl -X POST 'https://<qualys_base_url>/sm/v1/assetjobs/search' \  
--header 'Content-Type: application/json' \  
--header 'Authorization: Bearer <authToken>' \  
--data-raw '  
{  
  "filter": "job.id:80507",  
  "includeScriptResult": true,  
  "sort": "[{\\"created.dateTime\\":\\"desc\\"}]"  
}'
```

Request Body:

Search job details with job ID:

```
{  
  "filter": "job.id:80507",  
  "includeScriptResult": true,  
  "sort": "[{\\"created.dateTime\\":\\"desc\\"}]"  
}
```

Response:

i) Response with the 'IncludeScriptResult' variable set to 'true':

Note: The 'scriptResult' is in base64-encoded format.

```
{  
  "errorCode": null,  
  "message": null,  
  "body": {  
    "totalCount": 1,  
    "list": [  
      {  
        "output": {  
          "code": 0,  
          "text": "SUCCESS"  
        },  
        "customerUuid": "<CUSTOMER UUID>",  
        "enddate": "2022-05-11T06:42:13.692+00:00",  
        "test": false,  
        "isTest": false,  
        "scriptResult":  
        "U2h1bGwgU2NyaXB0IE91dHB1dCBwcm1udGVkISEK",  
      }  
    ]  
  }  
}
```

```
"created": {
  "dateTime": 1652251134952
},
"id": "80541",
"job": {
  "scriptId": <SCRIPT ID>,
  "scriptType": "Shell",
  "scriptSeverity": 1,
  "scriptName": "<SCRIPT NAME>",
  "correlationUuid": "<CORRELATION UUID>",
  "id": 80014,
  "platform": "LINUX",
  "scriptCategory": "Data Backup"
},
"asset": {
  "address": "<ASSET IP>",
  "name": "sm-pc-test-Linux-vm2",
  "id": 20452610,
  "agentUuid": "<AGENT UUID>",
  "operatingSystem": "CentOS Linux 7.9.2009",
  "tags": [
    {
      "name": "Cloud Agent",
      "tagUuid": "<TAG UUID>",
      "id": 102909758
    },
    {
      "name": "Test tag",
      "tagUuid": "<TAG UUID>",
      "id": 112278818
    },
    {
      "name": "SM 1.0 test tag",
      "tagUuid": "<TAG UUID>",
      "id": 120198213
    },
    {
      "name": "SM_Tag_Test",
      "tagUuid": "<TAG UUID>",
      "id": 119295749
    },
    {
      "name": "PostgreSQL",
      "tagUuid": "<TAG UUID>",
      "id": 112207922
    }
  ]
}
```

```
    },  
    {  
      "name": "testBU3",  
      "tagUuid": "<TAG UUID>",  
      "id": 103100188  
    },  
    {  
      "name": "testBU",  
      "tagUuid": "<TAG UUID>",  
      "id": 34781853  
    },  
    {  
      "name": "SM<TAG UUID>",  
      "id": 119082623  
    },  
    {  
      "name": "SM 1.1 Tag Test",  
      "tagUuid": "<TAG UUID>",  
      "id": 122379045  
    }  
  ]  
},  
"manifestId": "c202ab1e-3fbe-46ec-8e28-  
52f644098880",  
"status": "SUCCESS"  
}  
]  
}
```

Count Number of Jobs

`/sm/v1/jobs/count`

[GET]

Use this API to fetch the total count of script jobs executed.

Input Parameters

| Parameter | Mandatory? | Data Type | Description |
|---------------|------------|-----------|---|
| query | No | string | Search for jobs based on values as such script ID, script category and so on. |
| startAt/endAt | No | string | Search for script jobs by specifying the start date/end date. |
| groupBy | No | string | Group script jobs by status, asset.operatingSystem, script.name, script.type, and script.category parameters. |

Sample 1: Get the total count of script jobs with startAt and endAt values

API Request:

```
curl -X GET
'https://<qualys_base_url>/sm/v1/jobs/count?startAt=2023-01-01T00%3A00%3A01.000Z&endAt=2023-01-09T23%3A59%3A59.000Z' \
--header 'Authorization: Bearer <authToken>'
```

Response:

```
{
  "data": {
    "count": 119
  },
  "timestamp": "2023-01-12T05:50:55.598Z"
}
```

Sample 2: Get the total count of script jobs by specifying groupBy=script.category as query parameter

API Request:

```
curl -X GET
'https://<qualys_base_url>/sm/v1/jobs/count?groupBy=script.category' \
--header 'Authorization: Bearer <authToken>'
```

Response:

```
{
  "data": {
    "Data Backup": 86,
  }
}
```

```
        "Remediation": 58,  
        "Data Collection": 11,  
        "General Automation": 10  
    },  
    "timestamp": "2023-01-12T05:51:20.157Z"  
}
```

Count Number of Asset Jobs

`sm/v1/assetjobs/count`

[GET]

Use this API to get the total number of asset jobs executed.

Input Parameters

| Parameter | Mandatory? | Data Type | Description |
|---------------|------------|-----------|--|
| query | No | string | Search for asset jobs based on values as such script name, script type and so on. |
| startAt/endAt | No | string | Search for asset jobs by specifying the start date/end date. |
| groupBy | No | string | Group asset jobs by status, asset.operatingSystem, script.name, script.type, and script.category parameters. |

Sample 1: Get the total count of asset jobs by using `asset.operatingSystem` as the query parameter

API Request:

```
curl -X GET
'https://<qualys_base_url>/sm/v1/assetjobs/count?query=asset.operatingSystem:WINDOWS' \
--header 'Authorization: Bearer <authToken>'
```

Response:

```
{
  "data": {
    "count": 202
  },
  "timestamp": "2023-01-12T05:54:03.749Z"
}
```

Sample 2: Get the total count of asset jobs by using `groupBy=status` as query parameter

API Request:

```
curl --location --request GET
'https://<qualys_base_url>/sm/v1/assetjobs/count?groupBy=status' \
--header 'Authorization: Bearer <authToken>' \
```

Response:

```
{
  "data": {
    "EXECUTION PASSED": 189,
    "SCRIPT_RESULT_UPLOAD_FAILED": 3,
    "SCRIPT_RESULT_UPLOAD_SUCCESS": 2,
    "EXECUTION FAILED": 1,
    "MANIFEST_ASSIGNED": 1
  },
  "timestamp": "2023-01-11T18:05:45.162Z"
}
```

Fetch Jobs by Script Name or Script ID

`sm/v2/jobs/search`

[POST]

Use this API to fetch jobs by specifying the script name or ID.

Input Parameters

| Parameter | Mandatory? | Data Type | Description |
|----------------------------|------------|-----------|---|
| <code>filter</code> | No | string | Filter the jobs 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 – “scriptId: <SCRIPT_ID>” |
| <code>startAt/endAt</code> | No | string | Filter script jobs based on the time when the jobs are generated (<code>dateTime</code>) or the time when the jobs are processed at the Qualys platform (<code>processedTime</code>). |
| <code>pageNumber</code> | No | string | The page to be returned. Starts from zero. |
| <code>pageSize</code> | No | string | The number of records per page to be included in the response. Default is 10. |
| <code>sort</code> | No | string | Sort results in ascending or descending order. For example, “sort”: “[{“name”:“asc”}]” |
| <code>searchAfter</code> | No | string | This parameter is required to fetch more than 10,000 rows. |

Sample: Get scripts by specifying value for `searchAfter` parameter

API Request:

```
curl -X POST 'https://<qualys_base_url>/sm/v2/jobs/search' \  
--header 'Authorization: Bearer <authToken>' \  
--header 'Content-Type: application/json' \  
--data-raw '{ "filter": "script.name:<scriptName> ",  
"sort": "[{"created.dateTime": "desc"}, {"id": "desc"}]",  
"pageSize": 10, "searchAfter": [1673236800800, "25310"]}'
```

Request Body:

```
{
  "filter": "script.name:Auto_script_22062022_074300047",
  "sort": "[{\"created.dateTime\": \"desc\"}, {\"id\": \"desc\"}]",
  "pageSize": 10,
  "searchAfter": [1673236800800, "25310"]
}
```

Response:

```
{
  "errorCode": null,
  "message": null,
  "body": {
    "totalCount": 70,
    "list": [
      {
        "sortValues": [
          1673222405175,
          "25309"
        ],
        "data": {
          "severity": 1,
          "test": false,
          "created": {
            "dateTime": 1673222405175
          },
          "executionType": "Automated",
          "schedulerId": "<SCHEDULER ID>",
          "correlationUuid": "<CORRELATION RULE ID>",
          "threshold": 250,
          "title": "<SCRIPT NAME>",
          "platform": "WINDOWS",
          "updatedDateTime": 1673222405175,
          "scriptId": 19218,
          "customerUuid": "<CUSTOMER UUID>",
          "isTest": false,
          "scriptType": "PowerShell",
          "id": "25309",
          "category": {
            "name": "Data Backup",
            "id": 1
          },
          "schedulerName": "<SCHEDULER NAME>"
        }
      }
    ]
  }
}
```

Fetch Asset Job Details for a Given Job Name or Job ID

`sm/v2/assetjobs/search`

[POST]

Use this API to fetch asset jobs by specifying the job name or the job ID.

Input Parameters

| Parameter | Mandatory? | Data Type | Description |
|---------------------|------------|-----------|---|
| filter | No | string | Filter jobs 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, "job.id:22580" |
| startAt/endAt | No | string | Filter jobs based on the time when a job is generated (dateTime) or based on the time when a job is processed at Qualys (processedTime). |
| includeScriptResult | No | string | This flag can be set to 'true' if you want the script output to be fetched in the response. Note: The script result will be fetched in Base 64 encoded format. You must decode it to view the result. |
| pageNumber | No | string | The page to be returned. Starts from zero. |
| pageSize | No | string | The number of records per page to be included in the response. Default is 10. |
| sort | No | string | Sort results in ascending or descending order. |
| searchAfter | No | string | This parameter is required to fetch more than 10,000 rows. |

Sample: Get asset jobs filtered by job ID and searchAfter parameter

API Request:

```
curl -X POST 'https://<qualys_base_url> /sm/v2/assetjobs/search' \  
--header 'Content-Type: application/json' \  
--header 'Authorization: Bearer <authToken>' \  
--data '{"filter":  
"job.id:<JobID>","includeScriptResult":<true/false>,"sort":  
"[{"created.dateTime":\\"desc\\"}]"}'
```

Request Body:

```
{
  "filter": "job.id:25389",
  "sort": "[{\"created.dateTime\": \"desc\"}]",
  "searchAfter": ["1673366408146"]
}
```

Response:

```
{
  "errorCode": null,
  "message": null,
  "body": {
    "totalCount": 3,
    "list": [
      {
        "sortValues": [
          1673366408141
        ],
        "data": {
          "test": false,
          "durationInMillis": 3141,
          "created": {
            "dateTime": 1673366408141
          },
          "schedulerId": "<SCHEDULER ID>",
          "executionEndTime": 1673366418141,
          "output": {
            "code": 0,
            "text": "EXECUTION PASSED"
          },
          "customerUuid": "<CUSTOMER UUID>",
          "enddate": "2023-01-10T16:01:04.547+00:00",
          "isTest": false,
          "executionStartTime": 1673366415000,
          "id": "87671",
          "job": {
            "scriptId": <SCRIPT ID>,
            "scriptType": "PowerShell",
            "scriptSeverity": 1,
            "scriptName": "Auto_script_22062022_074300047",
            "correlationUuid": "<CORRELATION RULE UUID>",
            "id": 25389,
            "platform": "WINDOWS",
            "scriptCategory": "Data Backup"
          },
          "asset": {
            "address": "XX.XXX.XXX.XXX",
            "name": "<ASSET NAME>",
            "id": <ASSET ID>,

```

```
    "agentUuid": "<AGENT UUID>",  
    "operatingSystem": "Microsoft Windows 10 Pro",  
    "tags": [  
      {  
        "name": "Cloud Agent",  
        "tagUuid": "<TAG UUID>",  
        "id": 16245104  
      }  
    ]  
  },  
  "manifestId": "<MANIFEST ID>",  
  "schedulerName": "<SCHEDULER NAME>",  
  "status": "EXECUTION PASSED"  
}  
}  
]  
}
```

Sample: Get asset jobs filtered by job lastCheckedIn and isAssetDisconnected parameter

API Request:

```
curl -X POST
'https://<qualys_base_url>/sm/v2/assetjobs/search?includesQidData=true' \
--header 'Content-Type: application/json' \
--header 'Authorization: Bearer <authToken>' \
eyJhbGciOiJIUzUxMiIsInR5cCI6IkpXVCJ9.eyJzdWIiOiJxZW5c19ubjIiLCJpc3MiOiJx
YXMiLCJwb3J0YWxVc2VySWQiOiJzNjUyMzQ2LCJjdXN0b211c1V1aWQiOiJjNGVmZDY2Mi0xZ
TMxLWY3NjgtODM4Ny1jOGJmZjE0NjJkN2QiLCJtb2R1bGVzQWxs3d1ZCI6WyJBU1NFVCBjT1
.
.
.
RIUkVBVF9QUk9URUNUIiwiVklSVFVBTQ0FOTkVSIiwiQVBJIiwiQ0EiLCJwTSBTQ0FOTkV
SI10sImN1c3RvbWVYc2VySWQiOiJzNjUyMzQ2LCJjdXN0b211c1V1aWQiOiJjNGVmZDY2Mi0xZ
cGlyeU1pbnV0ZSI6IjIOMCI6ImV4cCI6MTY5MTU0ODYwMCwiaWF0IjoxNjYxNTc0MjAwLCJqd
GkiOiJURlQzMTMxMlxaUJHdnFMWkNhY01pV3d1bW1IS05HUKhMVkx3cm5YZ3FBW1JyQWtaeX
.
.
.
JW9uVXVpZCI6ImM0ZWZkNjYyLTFlMzEtZjc2OC04Mzg3LWM4YmZmMTQ2MmQ3ZCI6Im1zVGd0R
XhwaXJlZCI6InRydWUiLCJzdWJzY3JpcHRpb25JZCI6MTcyNjI5fQ.2IIeDct4OCpXg82zXVT
qx00866MmlpJ40NkYnhnbD1obAJ2wFgnjO6qZNFZyRHR3dE5ooqkIEfuIvOBCV-T1Gw' \
--data '{

"filter": "job.id:35634"

}'
```

Response:

```
{
  "errorCode": null,
  "message": null,
  "body": {
    "totalCount": 4,
    "list": [
      {
        "sortValues": [
          ],
        "data": {
          "lastCheckedIn": 1691560181696,
          "test": false,
          "durationInMillis": 2500,
        }
      }
    ]
  }
}
```

```
"created": {
  "dateTime": 1691499411891
},
"executionEndTime": 1691500177500,
"output": {
  "code": 0,
  "text": "EXECUTION PASSED"
},
"customerUuid": "c4efd662-1e31-f768-8387-c8bff1462d7d",
"enddate": "2023-08-08T13:09:46.226+00:00",
"isTest": false,
"executionStartTime": 1691500175000,
"id": "108206",
"job": {
  "scriptId": 41528,
  "scriptLanguage": "PowerShell-Script",
  "scriptType": "Custom Script",
  "scriptSeverity": 3,
  "scriptName": "CAR_1926_CMD_Publ_FeedBck",
  "correlationUuid": "db21cd1a-d0d7-44e7-a721-04926ecf9e2f",
  "id": 35634,
  "platform": "WINDOWS",
  "scriptCategory": "Asset Tagging"
},
"asset": {
  "address": "10.115.136.67",
  "name": "ActivationDeactivationAsset",
  "id": 9727023,
  "agentUuid": "42c3ab74-5869-442a-b13d-8d99c17e1444",
  "operatingSystem": "Microsoft Windows 10 Pro 10.0.19045 64-bit
N/A Build 19045 UBR 3208",
  "tags": [
    {
      "name": "Cloud Agent",
      "tagUuid": "5c8f2fbf-1014-4c22-917f-8214b40bd882",
      "id": 8383573
    }
  ]
},
"manifestId": "7ae4d581-ebd4-4d30-b2b2-f12b8b369284",
"status": "EXECUTION PASSED"
}
},
{
  "sortValues": [
  ],
"data": {
  "customerUuid": "c4efd662-1e31-f768-8387-c8bff1462d7d",
  "lastCheckedIn": 1691221673740,
  "test": false,
  "isTest": false,
  "created": {
    "dateTime": 1691499411888
```

```
    },  
    "isAssetDisconnected": true,  
    "id": "108205",  
    "job": {  
      "scriptId": 41528,  
      "scriptLanguage": "PowerShell-Script",  
      "scriptType": "Custom Script",  
      "scriptSeverity": 3,  
      "scriptName": "CAR_1926_CMD_Publ_FeedBck",  
      "correlationUuid": "db21cd1a-d0d7-44e7-a721-04926ecf9e2f",  
      "id": 35634,  
      "platform": "WINDOWS",  
      "scriptCategory": "Asset Tagging"  
    },  
    "asset": {  
      "address": "10.115.105.179",  
      "name": "Automation",  
      "id": 8179862,  
      "agentUuid": "d7121ee5-bdc3-43e8-8e4e-07b204f46e44",  
      "operatingSystem": "Microsoft Windows 10 Pro 10.0.17763 64-bit  
N/A Build 17763",  
      "tags": [  
        {  
          "name": "Cloud Agent",  
          "tagUuid": "5c8f2fbf-1014-4c22-917f-8214b40bd882",  
          "id": 8383573  
        }  
      ]  
    },  
    "manifestId": "7ae4d581-ebd4-4d30-b2b2-f12b8b369284",  
    "status": "MANIFEST_ASSIGNED"  
  }  
},  
{  
  "sortValues": [  
  
  ],  
  "data": {  
    "customerUuid": "c4efd662-1e31-f768-8387-c8bff1462d7d",  
    "lastCheckedIn": 1616648659000,  
    "test": false,  
    "isTest": false,  
    "created": {  
      "dateTime": 1691499411881  
    },  
    "isAssetDisconnected": true,  
    "id": "108203",  
    "job": {  
      "scriptId": 41528,  
      "scriptLanguage": "PowerShell-Script",  
      "scriptType": "Custom Script",  
      "scriptSeverity": 3,  
      "scriptName": "CAR_1926_CMD_Publ_FeedBck",  
      "correlationUuid": "db21cd1a-d0d7-44e7-a721-04926ecf9e2f",
```

```
        "id": 35634,  
        "platform": "WINDOWS",  
        "scriptCategory": "Asset Tagging"  
    },  
    "asset": {  
        "address": "10.115.108.177",  
        "name": "WindowsUpdated",  
        "id": 4412591,  
        "agentUuid": "b42311f1-8425-4dc5-a765-f14a64fe9d8b",  
        "operatingSystem": "Microsoft Windows 10 Pro 10.0.18363 64-bit  
N/A Build 18363",  
        "tags": [  
            {  
                "name": "Cloud Agent",  
                "tagUuid": "5c8f2fbf-1014-4c22-917f-8214b40bd882",  
                "id": 8383573  
            }  
        ]  
    },  
    "manifestId": "7ae4d581-ebd4-4d30-b2b2-f12b8b369284",  
    "status": "MANIFEST_ASSIGNED"  
}  
},  
{  
    "sortValues": [  
  
    ],  
    "data": {  
        "customerUuid": "c4efd662-1e31-f768-8387-c8bff1462d7d",  
        "lastCheckedIn": 1691221032353,  
        "test": false,  
        "isTest": false,  
        "created": {  
            "dateTime": 1691499411885  
        },  
        "isAssetDisconnected": true,  
        "id": "108204",  
        "job": {  
            "scriptId": 41528,  
            "scriptLanguage": "PowerShell-Script",  
            "scriptType": "Custom Script",  
            "scriptSeverity": 3,  
            "scriptName": "CAR_1926_CMD_Publ_FeedBck",  
            "correlationUuid": "db21cd1a-d0d7-44e7-a721-04926ecf9e2f",  
            "id": 35634,  
            "platform": "WINDOWS",  
            "scriptCategory": "Asset Tagging"  
        },  
        "asset": {  
            "address": "10.115.105.59",  
            "name": "OldAutomation",  
            "id": 5764443,  
            "agentUuid": "611a49e6-8216-4e70-8b26-09f49520d8ef",  
            "operatingSystem": "Microsoft Windows 10 Pro 10.0.18362 64-bit
```

```
N/A Build 18362",
  "tags": [
    {
      "name": "ManifestTag",
      "tagUuid": "9bac8e7a-bcaf-4e37-982a-30f059bad8a6",
      "id": 9654344
    },
    {
      "name": "Cloud Agent",
      "tagUuid": "5c8f2fbf-1014-4c22-917f-8214b40bd882",
      "id": 8383573
    }
  ]
},
"manifestId": "7ae4d581-ebd4-4d30-b2b2-f12b8b369284",
"status": "MANIFEST_ASSIGNED"
}
]
}
}
```


Chapter 5 - Activity-based APIs

Use the following API function to fetch activity logs:

- [List Activity Logs](#)

List Activity Logs

`/sm/v1/scripts/activities`

[POST]

Search for activities such as create, approve, deprecate, execute, modify, and test carried out by CAR users.

Response Code

- 200: Returns list of activities/audit logs
- 500: Internal server error

Input Parameters

| Parameter | Mandatory? | Data Type | Description |
|--------------------|------------|-----------|---|
| QQL | No | string | filter the activities 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 - "activity: CREATE" |
| pageNumber | No | string | The page to be returned. Starts from zero. |
| pageSize | No | string | The number of records per page to be included in the response. The default value is 10. |
| sort | No | string | Sort the results using a Qualys token. For example, ID, Category and so on. [{"Created.dateTime":"asc"}] |
| startDate, EndDate | No | string | Provide the start date and the end date to fetch results between a specified time frame. |

Sample

Request:

1) Filter based on the activity type, such as Create, Approve, Deprecate, Execute, Modify, Reject:

Request:

```
curl -X POST 'https://<qualys_base_url>/sm/v1/scripts/activities'\
--header 'Content-Type: application/json' \
--header 'Authorization: Bearer <authToken>' \
--data '{"qql": "activity: Create "'
```

Response:

```
{
  "auditRecords": [
    {
      "id": "a563f016-8a1e-46ca-9d5f-f30a5df7f860",
      "auditEnabledAppId": 1,
      "applicationName": "SM",
      "userName": "<USER NAME>",
      "userUuid": "<USER UUID>",
      "customerUuid": "<CUSTOMER UUID>",
      "client": null,
      "sourceIp": null,
      "createdDate": 1651206222012,
      "targetType": "script",
      "targetName": "testFor",
      "action": "CREATE",
      "auditComment": null,
      "externalChangeLink": null,
      "customFields": [
        {
          "key": "targetId",
          "value": "16016"
        }
      ]
    }
  ]
}
```

```
        ]  
    },  
    {  
],  
"totalCount": 1,  
"pageNumber": 0,  
"pageSize": 10,  
"applicationName": "SM",  
"clientApp": "SM",  
"auditEnabledAppId": 1  
}
```

Chapter 6 - Script Operation-based APIs

Use the following API functions to perform operations on scripts:

- [Export Scripts](#)
- [Import Scripts](#)
- [Clone Scripts](#)
- [Execute Scripts On Demand](#)
- [Schedule Script Execution](#)
- [Deprecate, Reject, and Approve Scripts](#)

Export Scripts

sm/v1/scripts/export

[GET]

Export one or more scripts by providing script IDs in query parameter.

Response Code

- 200: Exported the scripts
- 400: Bad request (If script is deprecated or rejected)
- 404: If script not found
- 500: Internal server error

Input Parameters

| | |
|----------------------------------|---|
| Authorization (String) | (Required) Authorization token to authenticate to the Qualys Cloud Platform. Prepend the token with "Bearer", followed by a space. For example, <code>Bearer <authToken></code> |
| IDs as query parameter (Integer) | Provide single or multiple script IDs as the query parameter. For example: <code>https://<qualys_base_url>/sm/v1/scripts/exportids=<SCRIPT ID1>,<SCRIPT ID2></code> |

Sample

Request:

```
curl -X GET 'https://<qualys_base_url>/sm/v1/scripts/export?ids=<ScripID> \'
```

```
--header 'Authorization: Bearer <authToken>' \
--data '{}'
```

You can export multiple scripts by providing multiple comma-separated script IDs. For example, https://<qualys_base_url>/sm/v1/scripts/export ids=72652,75508

Response:

```
[
  {
    "id": <SCRIPT ID1>,
    "customerUuiD": "<CUSTOMER UUID>",
    "title": "<SCRIPT TITLE>",
    "description": "",
    "category": {
      "id": 5,
      "name": "System Administration"
    },
    "scriptStatus": "APPROVED",
    "importedFromId": 0,
    "platform": "WINDOWS",
    "severity": 3,
    "threshold": 50,
    "type": {
      "id": 1,
      "name": "Python"
    },
    "content": "<SCRIPT CONTENT>",
    "recurringDay": 0,
    "approverId": "<APPROVER ID>",
    "created": {
      "dateTime": 1651745523598,
      "user": {
        "id": "51fbdb4b-5fb5-fdf6-8141-5a7887ec557b",
        "name": "FIM Automation"
      }
    },
    "updated": {
      "dateTime": 1652674833932,
      "user": {
        "id": "51fbdb4b-5fb5-fdf6-8141-5a7887ec557b",
        "name": "FIM Automation"
      }
    },
    "lastExecutedDateTime": 1652684748401,
    "hasBlacklistedCommands": true,
```

```

"blacklistedCommands": "os.chmod, wget.download"
},
{
  "id": <SCRIPT ID2>,
  "customerUUID": "<CUSTOMER UUID>",
  "title": "<SCRIPT TITLE>",
  "description": "",
  "category": {
    "id": 5,
    "name": "System Administration"
  },
  "scriptStatus": "APPROVED",
  "importedFromId": 0,
  "platform": "WINDOWS",
  "severity": 3,
  "threshold": 50,
  "type": {
    "id": 1,
    "name": "Python"
  },
  "content": "<SCRIPT CONTENT>",
  "recurringDay": 0,
  "approverId": "<APPROVER ID>",
  "approverName": "FIM Automation",
  "created": {
    "dateTime": 1651748729939,
    "user": {
      "id": "51fbdb4b-5fb5-fdf6-8141-5a7887ec557b",
      "name": "FIM Automation"
    }
  },
  "updated": {
    "dateTime": 1652674850859,
    "user": {
      "id": "51fbdb4b-5fb5-fdf6-8141-5a7887ec557b",
      "name": "FIM Automation"
    }
  },
  "lastExecutedDateTime": 1652674850859,
  "hasBlacklistedCommands": true,
  "blacklistedCommands": "os.chmod, wget.download"
}]

```

Note: The script content is in base64-encoded format.

Import Scripts

`/sm/v1/scripts/import`

[POST]

Import scripts into CAR. Importing a script only imports the script details and excludes the meta data such as asset details.

Response Code

- 200: Successfully imported the scripts
- 409: Conflict(If duplicate script name is present)
- 429: Too many requests(Maximum script creation limit is reached)
- 500: Internal server error

Input Parameters

| | |
|--|--|
| File (form-data) option in request body. | Browse and select the file to be imported. Note: The file must be in .json) format. |
| Authorization (String) | (Required) Authorization token to authenticate to the Qualys Cloud Platform. Prepend token with "Bearer", followed by a space. For example, Bearer authToken. |

Sample

Request:

```
curl -X POST 'https://<qualys_base_url>/sm/v1/scripts/import'
--header 'Content-Type: multipart/form-data;boundary=<calculated
when request is sent>'
--header 'Authorization: Bearer <authToken>'
--form 'file=@"<FilePath>/<FileName.json>"'
```

Response:

```
{
  "ImportedIds": "[16508]"
}
```

Clone Scripts

`/sm/v1/scripts/{scriptId}/clone`

[POST]

Clone a script by using script ID or script name. Even if you clone an approved script, you must get it reviewed and approved before you execute it.

You cannot clone deprecated and rejected scripts.

Response Code

- 201: Successfully cloned the script
- 400: Bad request (If script title/description is not in proper format)
- 404: If script with id/name not found
- 429: Too many requests (Maximum script creation limit is reached)
- 500: Internal server error

Input Parameters

| | |
|--|---|
| Script name/ script ID as Path parameter | Name or ID of the script to be cloned. |
| Authorization (String) | (Required) Authorization token to authenticate to the Qualys Cloud Platform. Prepend the token with "Bearer", followed by a space. For example, Bearer authToken |
| scriptTitle (String) | Name of the newly cloned script. Note: Duplicate script name is not allowed. |

Sample

Request:

```
curl -X POST 'https://<qualys_base_url>
/sm/v1/scripts/<ScriptId>/clone'\
--header 'Content-Type:application/json'\
--header 'Authorization:Bearer <authToken>'\
--data-raw?'{ "scriptTitle": "<Name of new cloned script>" }'
```

Request Body:

```
{
  "scriptTitle": "<SCRIPT NAME>"
}
```

```
{  
  
  "errorCode": "0",  
  
  "message": "Cloned script successfully",  
  
  "body": {  
  
    "id": 16520  
  
  }  
  
}
```

Execute Scripts On Demand

`/sm/v1/scripts/{scriptId}/execute`

[POST]

Execute the script on demand by using script ID.

Response Code

- 200: Script execution started successfully
- 400: Bad request (If script is deprecated OR asset IDs, asset tag IDs not provided OR number of asset IDs > 25 OR number of asset tag IDs > 25 OR excluded asset IDs >25)
- 404: If script with id not found
- 429: Too many requests (Only one execution allowed within the interval of configured time in minutes)
- 500: Internal server error

Input Parameters

| | |
|--|---|
| assetTagIds (String) | Multiple comma-separated asset tag IDs can be provided. |
| testMode (String) | The script execution through public API is supported only in production mode and not in evaluation mode. Hence, this flag must always be set to 'false'. |
| Authorization (String) | (Required) Authorization token to authenticate to the Qualys Cloud Platform. Prepend token with "Bearer" and one space. For example, Bearer authToken. |
| assetIds (String) | List of asset IDs on which you want to execute the script. Multiple comma-separated asset IDs can be provided. |
| assetTagIds (String) | List of asset tag IDs on which on which you want to execute the script. |
| excludedAssetIds (String) | Asset IDs on which you do not want the script to be executed. Multiple comma-separated asset IDs can be provided. |
| executionPolicyBypassEnabled (Boolean) | (Optional) Bypass the PowerShell execution policy set on the Windows host. When you set the input value to 'true', scripts will be executed irrespective of the PowerShell execution policy set on the host. If you do not provide this input parameter, or if you set the input value to 'false', CAR will honour the PowerShell execution policy set on the host for script execution. Note: This input parameter is applicable only for Windows PowerShell script execution. |

Sample

Request Body - Single Asset:

```
curl -X POST
'https://<qualys_base_url>/sm/v1/scripts/<scriptId>/execute' \
--header 'Content-Type: application/json' \
--header 'Authorization: Bearer <authToken>' \
--data '{
  "assetIds": [
    "<AssetID>"
  ],
  "executionPolicyBypassEnabled": <true/false>,
  "assetTagIds":
  [],
  "testMode":<true/false>,
  "excludedAssetIds": []}'
```

Request Body - Multiple Assets:

```
curl -X POST
https://<qualys_base_url>/sm/v1/scripts/72648/execute\
--header 'Content-Type: application/json' \
--header 'Authorization: Bearer <authToken>' \
--data-raw '{
{
  "testMode": false,
```

```
"assetIds": [
  "<ASSET ID1>", "<ASSET ID2>", "<ASSET ID3>"
],
"assetTagIds": [
  "<ASSET TAG ID1>", "<ASSET TAG ID2>", "<ASSET TAG ID3>"
],
"excludedAssetIds": [
  "<ASSET ID1>", "<ASSET ID2>", "<ASSET ID3>"
]
}
```

Request Body - Single Asset

"executionPolicyBypassEnabled" parameter set to 'true':

```
curl -X POST
https://<qualys_base_url>/sm/v1/scripts/72648/execute\
--header 'Content-Type: application/json' \
--header 'Authorization: Bearer <authToken>' \
--data-raw '{
  "testMode": false,
  "assetIds": [
    "<ASSET ID>"
  ],
  "assetTagIds": [],
  "excludedAssetIds": [],
  "executionPolicyBypassEnabled": true
}'
```

Response:

```
{
  "body": {
    "correlationUuid": "<CORRELATION UUID>"
  }
}
```

Note: Correlation UUID is returned when the script is executed. User can use this as filter in request body to find the job details using /jobs/search POST API.

See “List Script Jobs” on page 22.

Schedule Script Execution

`/sm/v1/scripts/scheduler`

[POST]

Create a schedule to enable script execution at a specific date and time in future. Schedules can be of two types:

- One-time schedule
- Recurring schedule

Notes:

- StartDate, EndDate, and StartTime are mandatory fields
- Recurring schedule job can be any of the following:
 - Hourly
 - Daily
 - Weekly
 - Monthly

You must have a unique title for the schedule. The following error message is displayed if another schedule already exists by the same title:

“Scheduler with the same title already exists: <Schedule Title>”

Response Code

- 201: Successfully scheduled a script
- 400: Bad request (Assets or Asset tags are empty OR based on configured schedule, the given trigger will never fire)
- 404: If script with id not found
- 409: Conflict (If duplicate schedule name is present)
- 500: Internal server error

Input Parameters

| | |
|---|--|
| activate (String) | Activate flag can be set to true if user wants to activate the schedule for execution of script. |
| Authorization (String) | (Required) Authorization token to authenticate to the Qualys Cloud Platform. Prepend token with "Bearer" and one space. For example, Bearer authToken. |
| assetTags: Uuid (String) , ID (Integer) | Provide the agent UUID and the Asset Tag ID. For example: <pre>[{UUId: "0479cf1f-46a8-47ac-af52-3984e60f825b", id: 119082623}]</pre> |
| Assets: UUID (String) , ID (Integer) | Provide the agent UUID and the asset ID. For example: <pre>[{UUId: "2a44cadf-beea-4ef7-9c5e-05639851018f", id: 21094690}]</pre> |
| Description (String) | Provide a description for the schedule. |
| excludedAssets: UUID (String), ID (Integer) | Asset IDs on which you do not want the script to be executed. Multiple comma-separated asset IDs can be provided. For example: <pre>excludedAssets: [{UUId: "322ff7aa-cc5a-4674-8201-bfb06bbf2c1f", id: 21789601}]</pre> |
| Script ID (String) | The ID of the script to be scheduled for execution. |
| Script title (String) | The title of the script to be executed. |
| title (String) | The title of the schedule. |
| user ID (String) | The customer UUID. |
| user name (String) | Customer's user name. |
| endDate (String) | Last date of the schedule. |
| startDate (String) | Date on which the schedule should start. |
| startTime (String) | Time at which the schedule should start. |
| scheduleType (String) | Recurrence type of the schedule - ONE_TIME, DAILY, HOURLY, WEEKLY. |
| hourlyInterval (Integer) | Only applicable to 'Hourly' schedule type. Indicates that the script is to be executed with an interval of the specified number of hours. |
| daysOfWeek (String) | Applicable only for 'Weekly' schedule type. Indicates that the script is to be executed with an interval of the specified number of days of the week. |
| recurrenceDate (Integer) | Applicable for 'Monthly' schedule type. Denotes on which date of the month the script is to be executed. |

| | |
|--|---|
| recurrenceMonth (Integer) | Applicable for 'Monthly' schedule type. Denotes on which month of the year the script is to be executed. |
| executionPolicyBypassEnabled (Boolean) | (Optional) Applicable only for schedules created using PowerShell scripts. Can be set to 'true' to indicate that scripts will be executed irrespective of the PowerShell execution policy set on the host. If you do not provide this input parameter, or if you set the input value to 'false', CAR will honour the PowerShell execution policy set on the host for script execution. |

Note: This input parameter is applicable only for Windows PowerShell script execution.

Sample

Request Body:

```
curl -X POST 'https://<qualys_base_url>/sm/v1/scripts/scheduler' \
--header 'Content-Type: application/json' \
--header 'Authorization: Bearer <authToken>' \
--data '{ "activate": true, "assetTags": [], "assets": [
{ "AGENT UUID>", "id": <ASSET ID> }
], "description": "", "excludedAssets": [], "scripts": [
{ "id":<SCRIPT ID>, "title": "<SCRIPT TITLE>"
} ], "title": "<SCHEDULER TITLE>", "user": { "id":
"<USER ID>", "name": "<USER NAME>" }, "endDate": "2025-
05-30", "startDate": "2023-12-01", "startTime": "04:15:00",
"scheduleType": "ONE_TIME"}
```

Request Body - One-time Schedule:

```
{
  "activate": true,
  "assetTags": [],
  "assets": [
    {
      "UUIId": "<AGENT UUID>",
      "id": <ASSET ID>
    }
  ],
  "description": "",
  "excludedAssets": [],
  "scripts": [
    {
      "id": "<SCRIPT ID>",
      "title": "<SCRIPT TITLE>"
    }
  ]
}
```

```
],  
"title": "SCHEDULE TITLE",  
"user": {  
  "id": "<USER ID>",  
  "name": "<USER NAME>"  
},  
  "endDate": "2022-05-11",  
  "startDate": "2022-05-11",  
"startTime": "07:25:00",  
"scheduleType": "ONE_TIME"  
}
```

Request Body - Recurring Monthly Schedule:

```
{  
  "activate": true,  
  "assetTags": [],  
  "assets": [  
    {  
      "UUId": "<AGENT UUID>",  
      "id": "<ASSET ID>"  
    }  
  ],  
  "description": "",  
  "excludedAssets": [],  
  "scripts": [  
    {  
      "id": "<SCRIPT ID>",  
      "title": "<SCRIPT TITLE>"  
    }  
  ],  
  "title": "<SCHEDULE TITLE>",  
  "user": {  
    "id": "<USER ID>",  
    "name": "<USER NAME>"  
  },  
  "endDate": "2022-12-31",  
  "startDate": "2022-05-12",  
  "startTime": "09:20:00",  
  "scheduleType": "MONTHLY",  
  "recurrenceDate": 7,  
  "recurrenceMonth": 1,  
  "monthlyScheduleType": "MONTHLY_DATE_OF_MONTH_JOB"  
}
```

Request Body - Recurring Weekly Schedule:

```
{
  "activate": true,
  "assetTags": [],
  "assets": [
    {
      "UUId": "<AGENT UUID>",
      "id": <ASSET ID>
    },
    {
      "UUId": "<AGENT UUID>",
      "id": <ASSET ID>
    }
  ],
  "description": "",
  "excludedAssets": [],
  "scripts": [
    {
      "id": <SCRIPT ID>,
      "title": "<SCRIPT TITLE>"
    }
  ],
  "title": "<SCHEDULE TITLE>",
  "user": {
    "id": "<USER ID>",
    "name": "<USER NAME>"
  },
  "endDate": "2022-05-16",
  "startDate": "2022-05-11",
  "startTime": "10:49:00",
  "scheduleType": "WEEKLY",
  "daysOfWeek": [
    "1",
    "2"
  ]
}
```

Request Body - Recurring Hourly Schedule:

```
{
  "activate": true,
  "assetTags": [],
  "assets": [
    {
      "UUId": "<AGENT UUID>",
      "id": <ASSET ID>
    }
  ]
}
```

```
],
"description": "",
"excludedAssets": [],
"scripts": [
  {
    "id": "<SCRIPT ID>",
    "title": "<SCRIPT TITLE>"
  }
],
"title": "<SCHEDULE TITLE>",
"user": {
  "id": "<USER ID>",
  "name": "<USER NAME>"
},
"endDate": "2022-05-16",
"startDate": "2022-05-11",
"startTime": "10:49:00",
"scheduleType": "HOURLY",
"hourlyInterval": 6
}
```

Request Body - Recurring Daily Schedule:

```
{
  "activate": false,
  "assetTags": [],
  "assets": [
    {
      "UUId": "<AGENT UUID>",
      "id": "<ASSET ID>"
    }
  ],
  "description": "",
  "excludedAssets": [],
  "scripts": [
    {
      "id": "<SCRIPT ID>",
      "title": "<SCRIPT TITLE>"
    }
  ],
  "title": "<SCHEDULE TITLE>",
  "user": {
    "id": "<USER ID>",
    "name": "<USER NAME>"
  },
  "endDate": "2022-05-15",
  "startDate": "2022-05-11",
}
```

```
"startTime": "09:42:00",  
"scheduleType": "DAILY"
```

```
}
```

Response:

```
{
```

```
"errorCode": "0",  
"message": "Script scheduler created successfully",  
"body": {  
  "id": "<Schedule ID>"
```

```
}
```

```
}
```

Deprecate, Reject, and Approve Scripts

[POST]

`/sm/v1/scripts/{scriptId}/{action}`

Deprecate, reject, or approve a script based on the script name or ID.

Sample

Request:

```
curl --location 'https://<qualys_base_url>
/sm/v1/scripts/<ScriptId>/Approve' \
--header 'Content-Type: application/json' \
--header 'Authorization: Bearer <authToken>' \
--data '{}'
```

Response:

```
200-OK {}
```


Chapter 7 - Schedule-based APIs

Use the following API functions to perform operations on schedules:

- [Count Number of Schedules](#)

Count Number of Schedules

sm/v1/scheduler/count

[POST]

This API lets you fetch the count of schedules that have been created.

Input Parameters

| Parameter | Mandatory? | Data Type | Description |
|---------------|------------|-----------|---|
| filter | No | string | Filter requests by providing a query using Qualys syntax. Refer to the “How to Search” topic in the online help for assistance. Some examples are: - name: “Weekly Schedule” - status: ACTIVE - createdBy: “adminuser” |
| startAt/endAt | No | string | Search for schedules by specifying the start date/end date. |
| groupBy | No | string | Group schedules by specifying parameters such as scheduler status, agent version, and so on. |

Sample 1: Get the total count of schedules by specifying startAt and endAt values

API Request:

```
curl -X POST 'https://<qualys_base_url> /sm/v1/scheduler/count' \  
--header 'Content-Type: application/json' \  
--header 'Authorization: Bearer <authToken>' \  
--data '{ "startAt": "2022-11-01T00:00:01.000Z", "endAt": "2024-01-11T23:59:59.999Z" }'
```

Request Body:

```
{  
  "startAt": "2022-11-01T00:00:01.000Z",  
  "endAt": "2023-01-11T23:59:59.999Z"  
}
```

Response:

```
{
  "body": {
    "count": 17
  }
}
```

Sample 2: Get the total count of schedules by specifying groupBy=status as query parameter

API Request:

```
curl -X POST 'https://<qualys_base_url> /sm/v1/scheduler/count' \
--header 'Authorization: Bearer <authToken>' \
--header 'Content-Type: application/json' \
--data-raw '{"groupBy":["status"]}'
```

Request Body:

```
{
  "groupBy":["status"]
}
```

Response:

```
{
  "body": {
    "ACTIVE": 133,
    "INACTIVE": 60
  }
}
```


Chapter 8 - Script Library APIs

Use the following API functions to perform operations on scripts:

- [Fetch List of Scripts from Library](#)
- [Get the details of Scripts from Library](#)
- [Import scripts](#)

Fetch List of Scripts

sm/v1/script-library/search

[POST]

This API lets you fetch the list of scripts from script library.

Response Code

- 200: Fetches the list of scripts from library.
- 400: Bad Request
- 500: Internal server error

Input Parameters

| Parameter | Mandatory/ Optional | Data Type | Description |
|----------------------|---------------------|-----------|--|
| filter | Optional | string | Filter the API results based on module code, script meta data and QID custom script meta data. |
| includeScriptContent | Optional | string | Use to include the script content in list result. |

Sample : Get the list of scripts from library

API Request:

```
curl -X POST 'https://<qualys_base_url> /sm/v1/script-library/search' \  
--header 'Content-Type: application/json' \  
--header 'Authorization: Bearer <authToken>' \  
--data '{"filter":"moduleCode:CAR ", "includeScriptContent":true}'
```

Response:

```
[  
  {  
    "body": {  
      "totalCount": 1,
```

```
    "list":  
  [  
    {  
      "severity": 0,  
      "scriptContent":  
"IyEvYmluL3NoCiMgVGhpcyBpcyBiYXNoIHByb2dyYW0gdG8gZGlzcGxheSBIZ  
WxsbyBxb3JZAplY2hvICIgSGVsbG8gV29ybGQgaW4gc2NyaXB0IDMiCg==",  
      "customScriptMetadata": null,  
      "moduleCode": "AUTOR",  
      "scriptLanguage":  
    {  
      "name": "Shell",  
      "id": 6  
    },  
      "created":  
    {  
      "dateTime": 1681122311775,  
      "user": null  
    },  
      "description": null,  
      "threshold": 0,  
      "title": "script4.sh",  
      "type":  
    {  
      "name": "Custom Script",  
      "id": 1  
    },  
      "platform": "LINUX",  
      "autorScriptsMetadata":  
    {  
      "tech":  
    [  
      "Windows 10",  
      "CentOS 7.x"  
    ],  
      "name": "script4.sh",  
      "policies":  
    [  
      "cis redhat 8 linux enterprise v3.1.0"  
    ],  
      "benchmarkType": "CIS",
```

```
    "cid": "7988"
  },
  .
  .
  .

LS0tLS0tLS0tLS0tIEVPUyBDSUQgMTA1MiAtLS0tLS0tLS0tLS0tLS0tLS0tLS0tLS
MK",
  "customScriptMetadata": null,
  "moduleCode": "AUTOR",
  "scriptLanguage":
{
  "name": "PowerShell-Script",
  "id": 4
},
  "created":
{
  "dateTime": 1681736085425,
  "user": null
},
  "description": null,
  "threshold": 0,
  "title": "1052.ps1",
  "type":
{
  "name": "Custom Script",
  "id": 1
},
  "platform": "WINDOWS",
  "autorScriptsMetadata": {
    "tech": [
      "Red Hat Linux 7.0",
      "Windows 10"
    ]
  },
  "name": "1052.ps1",
  "policies":
[
  "CIS Benchmark for Microsoft Windows 10 Enterprise
RTM (Release 1511), v1.1.0 [Scored, Level 1+ BitLocker and Level
2+
BitLocker] v.2.0"
],
  "benchmarkType": "CIS",
  "cid": "7337"
},
```

```
    "versions": [  
  {  
    "path": "AUTOR/Remediation/Custom  
Script/Windows/PowerShell-Script/v1/CIS/1052.ps1",  
    "version": "v1",  
    "sha": "d697ad836009ea29f86abf01d0bf1573e2ad563b"  
  }  
],  
  "vmdrScriptMetadata": null,  
  "id": "1039",  
  "lastUpdatedDateTime": 1681736085425,  
  "category": {  
    "name": "Remediation",  
    "id": 7  
  },  
  "disclaimer": null,  
  "status": null  
    }  
]  
}  
}
```

Get script details from library

/sm/v1/script-library/{id}

[GET]

This API lets you get the details of scripts from library.

Response Code

- 200: Get the script, content and meta data details (if meta data is available)
- 500: Internal server error

Input Parameters

| Parameter | Mandatory/Optional | Data Type | Description |
|---------------|--------------------|-----------|---|
| id | Mandatory | string | Provide Library ID for which you want to fetch the details from the script library. |
| authorization | Mandatory | string | Authorization token to authenticate to Qualys Cloud Platform |

Sample: Get the details of script from script library

API Request:

```
curl -X GET https://<qualys_base_url>/sm/v1/script-library/<Library-id>
--header 'Content-Type: application/json'
--header 'Authorization: Bearer <authToken>'
--data '{"filter":"includeScriptContent" : true}'
```

Response:

```
{
  "body":
  {
    "id": 18711,
    "title": "QID 91566 CVE-2019-9512 HTTPv2 Server Dos Vuln.ps1",
    "description": "To be fully protected from the vulnerabilities, an administrator needs to configure their server to limit the number of HTTPv2 packets accepted by registry key modification. This script performs the required post patch action as per MSRC.",
```

```
"disclaimer": "THIS SCRIPT IS PROVIDED TO YOU \"AS IS.\" TO THE  
EXTENT PERMITTED BY LAW, QUALYS HEREBY DISCLAIMS ALL WARRANTIES  
AND LIABILITY FOR THE PROVISION OR USE OF THIS SCRIPT. IN NO EVENT  
SHALL THESE SCRIPTS BE DEEMED TO BE CLOUD SERVICES AS PROVIDED BY  
QUALYS",  
  "category":  
{  
  "id": 0,  
  "name": "Post Patch"  
},  
  "platform": "WINDOWS",  
  "lastUpdatedDateTime": 1688550457688,  
  "severity": 0,  
  "threshold": 0,  
  "type": {  
    "id": 1,  
    "name": "Custom Script"  
  },  
  "language": {  
    "id": 4,  
    "name": "PowerShell-Script"  
  },  
  "created": {  
    "dateTime": 1688550457688  
  },  
  "content":  
"JHJ1Z21zdHJ5UGF0aCA9ICJIS0xNO1xTWVNURU1cQ3VycmVudENvbnRyb2xTZXRcU  
2Vydm1jZXNcSFRUUFxQYXJhbWV0ZXJzIgoKbmFtZSA9ICJIdHRwMk1heFBpbmdzUGV  
yTWludXRlIgoKdmFsdWUgPSAiMCiKCiRyZWdpc3RyeVBhdGxID0gIkhLTE06XFNZU  
1RFTVxDbDdXJyZW50Q29udHJvbFNldFw  
.  
.  
.  
AkbmFtZTYgYW5kIHZhbHVlICR2YWx1ZTYgYWxyZWfkeSBhZGRlZCIKICAgICAgICAg  
ICAgfQogICAgfQoJfQo=",  
  "versions": [  
    {  
      "version": "1",  
      "path": "VMDR/Post Patch/Custom  
Script/Windows/PowerShell-Script/1/QID 91566 CVE-2019-9512 HTTPv2  
Server Dos Vuln/QID 91566 CVE-2019-9512 HTTPv2 Server Dos  
Vuln.ps1",  
      "sha": "a19327ce3132382f3ac0df1b8ac7fa2fae5cc181"  
    }  
  ],  
  "importedFromScriptLibrary": true,
```

```
    "moduleCode": "VMDR",
    "vmdrScriptMetadata":
    {
      "name": "QID 91566 CVE-2019-9512 HTTPv2 Server Dos Vuln.ps1",
      "disclaimer": "THIS SCRIPT IS PROVIDED TO YOU \"AS IS.\" TO THE
EXTENT PERMITTED BY LAW, QUALYS HEREBY DISCLAIMS ALL WARRANTIES
AND LIABILITY FOR THE PROVISION OR USE OF THIS SCRIPT. IN NO EVENT
SHALL THESE SCRIPTS BE DEEMED TO BE CLOUD SERVICES AS PROVIDED BY
QUALYS",

      "description": "To be fully protected from the vulnerabilities,
an administrator needs to configure their server to limit the
number of HTTPv2 packets accepted by registry key modification.
This script performs the required post patch action as per MSRC.",
      "subType": "Post Patch",
      "detectionLogic": "Use Script",
      "qid": "91566",
      "returnCode": "1",
      "status": "Active",
      "severity": "5",
      "threshold": "500",
      "thresholdTimeUnit": null,
      "technology": null
    }
  }
}
```

Import Scripts

sm/v1/script-library/import

[POST]

This API lets you import scripts

Response Code

- 200: Imports list of scripts from library.

-400: Bad Request

- 500: Internal server error

Input Parameters

| Parameter | Mandatory/Optional | Data Type | Description |
|------------|--------------------|-----------|--|
| title | Mandatory | String | Name of the script to be imported |
| categoryID | Mandatory | String | Category ID of the script to be imported |
| approved | Mandatory | Boolean | Status of the script to be imported {true/false} |
| ID | Mandatory | String | ID of the script in the library |

Sample : Import scripts based on input parameters such as title, category, id and approved.

API Request:

```
curl -X GET https://<qualys_base_url> /sm/v1/script-library/import
--header 'Content-Type: application/json'
--header 'Authorization: Bearer <authToken>'
--data '{ "title": "File24.ps1", "categoryId":211, "id":
976931082, "approved": true, "Description":"***Disclaimer***}'
```

Response:

```
{ "errorCode": "0",
"message": "Script created from library successfully",
"body":
{
" id": 63509
}
}
```