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Preface

This user guide is intended for application developers who will use the Qualys FIM 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 - Welcome

Welcome to File Integrity Monitoring API.

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 FIM 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.

Get API Notifications

Subscribe to our API Notifications RSS Feeds for announcements and latest news.

Qualys API Framework

The Qualys File Integrity Monitoring 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.

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;baseurl&gt;</td>
<td>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: <a href="https://gateway.qg1.apps.qualys.com">https://gateway.qg1.apps.qualys.com</a></td>
</tr>
<tr>
<td>&lt;module&gt;</td>
<td>The API module. For the FIM API, the module is: “fim”.</td>
</tr>
<tr>
<td>&lt;object&gt;</td>
<td>The module specific object.</td>
</tr>
<tr>
<td>&lt;object_id&gt;</td>
<td>(Optional) The module specific object ID, if appropriate.</td>
</tr>
<tr>
<td>&lt;operation&gt;</td>
<td>The request operation, such as count.</td>
</tr>
</tbody>
</table>

Qualys API URL

The Qualys API URL you should use for API requests depends on the Qualys platform where your account is located.
Click here to identify your Qualys platform and get the API URL

This documentation uses the API gateway URL for Qualys US Platform 1 (https://gateway.qg1.apps.qualys.com) in sample API requests. If you’re on another platform, 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 FIM 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 FIM APIs. Use the Qualys Authentication API to get the JWT.

For example,

```bash
```

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 FIM 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 FIM API calls. The token expires in 4 hours. You must regenerate the token to continue using the FIM 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/](https://curl.haxx.se/)

The following Curl options are used according to different situations:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>-X GET/POST</code></td>
<td>The GET method or the POST method is used as per requirement.</td>
</tr>
<tr>
<td><code>-H 'authorization: Bearer &lt;token&gt;'</code></td>
<td>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: Authorization: Bearer &lt;token&gt; For information about Qualys authentication API, see Authentication.</td>
</tr>
<tr>
<td><code>-H 'content-type: application/json'</code></td>
<td>Denotes that content is in JSON format.</td>
</tr>
<tr>
<td><code>-d @request.json</code></td>
<td>Provide a request.json file for parameter input.</td>
</tr>
<tr>
<td><code>--data-urlencode</code></td>
<td>Used to encode spaces and special characters in the URL/Parameter values.</td>
</tr>
</tbody>
</table>
The sample below shows a typical Curl request using options mentioned above and how they interact with each other.

```
curl -X POST
https://gateway.gql1.apps.qualys.com/fim/v2/events/search
-H
'authorization: Bearer <token>'
-H 'content-type: application/json'
-d @request.json
```

**Fetching more than ten thousand events**

FIM APIs are designed to fetch less than ten thousand (9999 events) per page for optimum performance. You can use the searchAfter parameter in order to fetch more than ten thousand events.

First you need to use the sort parameter to sort events using a filter that has unique values such as ID, name, etc. Each event is returned with an identifier called sortValue. To fetch events beyond the current page size, in subsequent API requests, provide the sortValue of an event to the searchAfter parameter to fetch events after that specific event.

searchAfter is supported for the following APIs:

- /fim/v2/events/search
- /fim/v2/events/ignore/search
- /fim/v2/incidents/{incidentId}/events/search
- /fim/v3/incidents/search

For example, suppose you have fifteen thousand FIM events in your account. The first API request will only return 9999 events. To get events beyond 9999, in a subsequent API request, provide the sortValue of the 9999th event in the searchAfter parameter. The second API request will now fetch the remaining events starting from the 10000th event.

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

**Example**

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

**Step 1) Search events using the sort parameter:**

**Request:**

```
curl -X POST
https://gateway.gql1.apps.qualys.com/fim/v2/events/search
-H
'authorization: Bearer <token>'
-H 'content-type: application/json'
-d @request.json
```

**Contents of request.json:**

```
{
    "sort": "[
        {"dateTime": "desc"},
        {"id": "desc"}
    ]",
    "pageSize": 10
}
```
Response:

```
[
    {
        "sortValues": [
            1556199372947,
            "9df007e9-9532-3558-a3a8-0b14d943670d"
        ],
        "data": {
            "dateTime": "2019-04-25T13:36:12.947+0000",
            "fullPath": "\Device\HarddiskVolume2\Windows\inf\setupapi.app.log",
            "severity": 4,
            "profiles": [
                {
                    "name": "Minimum Baseline for PCI for Windows OS_addTag",
                    "rules": [
                        {
                            "severity": 4,
                            "number": 6,
                            "name": "Rule-6",
                            "description": null,
                            "id": "9287a14c-8036-4403-af88-f98ae8f920fb",
                            "type": "directory"
                        }
                    ],
                    "id": "03dc1773-ae2a-4d5f-a5b3-e662e14afbd2",
                    "type": "WINDOWS",
                    "category": {
                        "name": "PCI",
                        "id": "2dab5022-2fdd-11e7-93ae-92361f002671"
                    }
                }
            ],
            "type": "File",
            "changedAttributes": null,
            "platform": "WINDOWS",
            "oldContent": null,
            "actor": {
                "process": "NPFInstall.exe",
                "processID": 8632,
                "imagePath": "\Device\HarddiskVolume2\Program Files\Npcap\NPFInstall.exe"
            }
        }
    }
],
"type": "File",
"changedAttributes": null,
"platform": "WINDOWS",
"oldContent": null,
"actor": {
    "process": "NPFInstall.exe",
    "processID": 8632,
    "imagePath": "\Device\HarddiskVolume2\Program Files\Npcap\NPFInstall.exe"
}
```
"userName": "MALWARELAB-IOC\Administrator",
"userID": "S-1-5-21-122566442-3410611961-1220210811-500"
],
"newContent": null,
"customerId": "58b888be-a90f-e3be-838d-88877aae572b",
"name": "setupapi.app.log",
"action": "Attributes",
"id": "9df007e9-9532-3558-a3a8-0b14d943670d",
"asset": {
  "agentId": "f2a0a778-e5b6-4486-826d-a16762588a2a",
  "interfaces": [
    {
      "hostname": "MALWARELAB-IOC",
      "macAddress": "00:50:56:AA:6B:B8",
      "address": "10.115.77.190",
      "interfaceName": "Intel(R) PRO/1000 MT Network Connection"
    }
  ],
  "lastCheckedIn": "2019-04-25T13:51:48.000Z",
  "created": "2018-11-01T04:58:21.000+0000",
  "hostId": "290890",
  "operatingSystem": "Microsoft Windows 7 Professional 6.1.7601 Service Pack 1 Build 7601",
  "tags": [
    "7650412",
    "7655820",
    "7895614"
  ],
  "assetType": "HOST",
  "system": {
    "lastBoot": "2019-03-13T21:49:47.500Z"
  },
  "ec2": null,
  "lastLoggedOnUser": ".\Administrator",
  "netbiosName": "MALWARELAB-IOC",
  "name": "MALWARELAB-IOC",
  "agentVersion": "3.0.0.101",
  "updated": "2019-04-25T13:51:48.729+0000"
},
"class": "Disk"}
Chapter 1 - Welcome
Introduction to FIM API Paradigm

"sortValues": [
  1556199372947,
  "05a9bbae-d03c-3bc3-9421-5d3cbb8ac630"
],
"data": {
  "dateTime": "2019-04-25T13:36:12.947+0000",
  "fullPath": "\Device\HarddiskVolume2\Windows\inf\setupapi.app.log",
  "severity": 4,
  "profiles": [
    {
      "name": "Minimum Baseline for PCI for Windows OS_addTag",
      "rules": [
        {
          "severity": 4,
          "number": 6,
          "name": "Rule-6",
          "description": null,
          "id": "9287a14c-8036-4403-af88-f98ae8f920fb",
          "type": "directory"
        }
      ],
      "id": "03dc1773-ae2a-4d5f-a5b3-e662e14afbd2",
      "type": "WINDOWS",
      "category": {
        "name": "PCI",
        "id": "2dab5022-2fdd-11e7-93ae-92361f002671"
      }
    }
  ],
  "type": "File",
  "changedAttributes": null,
  "platform": "WINDOWS",
  "oldContent": null,
  "actor": {
    "process": "NPFInstall.exe",
    "processID": 8632,
    "imagePath": "\Device\HarddiskVolume2\Program Files\Npcap\NPFInstall.exe",
    "userName": "MALWARELAB-IOC\Administrator",
    "userID": "S-1-5-21-122566442-3410611961-1220210811-500"
  },
  "newContent": null,
"customerId": "58b888be-a90f-e3be-838d-88877aee572b",
"name": "setupapi.app.log",
"action": "Attributes",
"id": "05a9bbea-d03c-3bc3-9421-5d3cbb8ac630",
"asset": {
  "agentId": "f2a0a778-e5b6-4486-826d-a16762588a2a",
  "interfaces": [
    {
      "hostname": "MALWARELAB-IOC",
      "macAddress": "00:50:56:AA:6B:B8",
      "address": "10.115.77.190",
      "interfaceName": "Intel(R) PRO/1000 MT Network Connection"
    }
  ],
  "lastCheckedIn": "2019-04-25T13:51:48.000Z",
  "created": "2018-11-01T04:58:21.000+0000",
  "hostId": "290890",
  "operatingSystem": "Microsoft Windows 7 Professional 6.1.7601 Service Pack 1 Build 7601",
  "tags": [
    "7650412",
    "7655820",
    "7895614"
  ],
  "assetType": "HOST",
  "system": {
    "lastBoot": "2019-03-13T21:49:47.500Z"
  },
  "ec2": null,
  "lastLoggedOnUser": ".\Administrator",
  "netbiosName": "MALWARELAB-IOC",
  "name": "MALWARELAB-IOC",
  "agentVersion": "3.0.0.101",
  "updated": "2019-04-25T13:51:48.729+0000"
},
"class": "Disk"
},
",
"
"sortValues": [1556199372946, "d47984c3-71d8-36b5-84d4-bb0ec34af828"],
"data": {
"dateTime": "2019-04-25T13:36:12.946+0000",
"fullPath": \\Device\\HarddiskVolume2\\Windows\\inf\\setupapi.app.log",
"severity": 4,
"profiles": [ 
  
  "name": "Minimum Baseline for PCI for Windows OS_addTag",
  "rules": [ 
    
    "severity": 4,
    "number": 6,
    "name": "Rule-6",
    "description": null,
    "id": "9287a14c-8036-4403-af88-f98ae8f920fb",
    "type": "directory"
  ]
],
"id": "03dc1773-ae2a-4d5f-a5b3-e662e14afbd2",
"type": "WINDOWS",
"category": { 
    "name": "PCI",
    "id": "2dab5022-2fdd-11e7-93ae-92361f002671"
}
],
"type": "File",
"changedAttributes": null,
"platform": "WINDOWS",
"oldContent": null,
"actor": { 
    "process": "NPFInstall.exe",
    "processID": 8632,
    "imagePath": \\Device\\HarddiskVolume2\\Program Files\\Npcap\\NPFInstall.exe",
    "userName": "MALWARELAB-IOC\Administrator",
    "userID": "S-1-5-21-122566442-3410611961-1220210811-500"
}
],
"newContent": null,
"customerId": "58b888be-a90f-e3be-838d-88877ae572b",
"name": "setupapi.app.log",
"action": "Attributes",
"id": "d47984c3-71d8-36b5-84d4-bb0ec34af828",
"asset": {
"agentId": "f2a0a778-e5b6-4486-826d-a16762588a2a",
"interfaces": [ 
  
  
  ],
"lastCheckedIn": "2019-04-25T13:51:48.000Z",
"created": "2018-11-01T04:58:21.000+0000",
"hostId": "290890",
"operatingSystem": "Microsoft Windows 7 Professional 6.1.7601 Service Pack 1 Build 7601",
"tags": [ 
  "7650412",
  "7655820",
  "7895614"
],
"assetType": "HOST",
"system": { 
  "lastBoot": "2019-03-13T21:49:47.500Z"
},
"ec2": null,
"lastLoggedOnUser": ".\Administrator",
"netbiosName": "MALWARELAB-IOC",
"name": "MALWARELAB-IOC",
"agentVersion": "3.0.0.101",
"updated": "2019-04-25T13:51:48.729+0000"
},
"class": "Disk"
],

{ "sortValues": [ 
  1556199372946,
  "0ac9f186-6787-339f-a768-929b39da6725"
],
"data": { 
  "dateTime": "2019-04-25T13:36:12.946+0000",
  "fullPath": 
  "\\Device\HarddiskVolume2\Windows\inf\setupapi.app.log",
  "severity": 4,
  "profiles": [ 
  ]
}
"name": "Minimum Baseline for PCI for Windows OS_addTag",
"rules": [
  {
    "severity": 4,
    "number": 6,
    "name": "Rule-6",
    "description": null,
    "id": "9287a14c-8036-4403-af88-f98ae8f920fb",
    "type": "directory"
  }
],
"id": "03dc1773-ae2a-4d5f-a5b3-e662e14afbd2",
"type": "WINDOWS",
"category": {
  "name": "PCI",
  "id": "2dab5022-2fdd-11e7-93ae-92361f002671"
}
],
"type": "File",
"changedAttributes": null,
"platform": "WINDOWS",
"oldContent": null,
"actor": {
  "process": "NPFInstall.exe",
  "processID": 8632,
  "imagePath": "C:\Device\HarddiskVolume2\ProgramFiles\Npcap\NPFInstall.exe",
  "userName": "MALWARELAB-IOC\Administrator",
  "userID": "S-1-5-21-122566442-3410611961-1220210811-500"
},
"newContent": null,
"customerId": "58b888be-a90f-e3be-838d-88877ae572b",
"name": "setupapi.app.log",
"action": "Attributes",
"id": "0ac9f186-6787-339f-a768-929b39da6725",
"asset": {
  "agentId": "f2a0a778-e5b6-4486-826d-a16762588a2a",
  "interfaces": [
    {
      "hostname": "MALWARELAB-IOC",
      "macAddress": "00:50:56:AA:6B:B8",
      "process": "NPFInstall.exe",
      "processID": 8632,
      "imagePath": "C:\Device\HarddiskVolume2\ProgramFiles\Npcap\NPFInstall.exe",
      "userName": "MALWARELAB-IOC\Administrator",
      "userID": "S-1-5-21-122566442-3410611961-1220210811-500"
    }
  ]
}
"address": "10.115.77.190",
"interfaceName": "Intel(R) PRO/1000 MT Network Connection"
}
],
"lastCheckedIn": "2019-04-25T13:51:48.000Z",
"created": "2018-11-01T04:58:21.000+0000",
"hostId": "290890",
"operatingSystem": "Microsoft Windows 7 Professional 6.1.7601 Service Pack 1 Build 7601",
"tags": [
    "7650412",
    "7655820",
    "7895614"
],
"assetType": "HOST",
"system": {
    "lastBoot": "2019-03-13T21:49:47.500Z"
},
"ec2": null,
"lastLoggedOnUser": ".\Administrator",
"netbiosName": "MALWARELAB-IOC",
"name": "MALWARELAB-IOC",
"agentVersion": "3.0.0.101",
"updated": "2019-04-25T13:51:48.729+0000"
},
"class": "Disk"
}
...

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

Request:

curl -X POST
https://gateway.qg1.apps.qualys.com/fim/v2/events/search -H
'authorization: Bearer <token>' -H 'content-type: application/json' -d @request.json

Contents of request.json:

{
    "sort": "["dateTime": "desc"], ["id": "desc"]",
    "pageSize": 10,
    "searchAfter": [1556199372947, "05a9b8fa-d03c-3bc3-9421-
Response:

```json
[
{
  "sortValues": [
    1556199372946,
    "d47984c3-71d8-36b5-84d4-bb0ec34af828"
  ],
  "data": {
    "dateTime": "2019-04-25T13:36:12.946+0000",
    "fullPath": "\Device\HarddiskVolume2\Windows\inf\setupapi.app.log",
    "severity": 4,
    "profiles": [
      {
        "name": "Minimum Baseline for PCI for Windows OS_addTag",
        "rules": [
          {
            "severity": 4,
            "number": 6,
            "name": "Rule-6",
            "description": null,
            "id": "9287a14c-8036-4403-af88-f98ae8f920fb",
            "type": "directory"
          }
        ],
        "id": "03dc1773-ae2a-4d5f-a5b3-e662e14afbd2",
        "type": "WINDOWS",
        "category": {
          "name": "PCI",
          "id": "2dab5022-2fdd-11e7-93ae-92361f002671"
        }
      }
    ],
    "type": "File",
    "changedAttributes": null,
    "platform": "WINDOWS",
    "oldContent": null,
    "actor": {
      "process": "NPFInstall.exe",
      "processID": 8632,
      "imagePath": "\Device\HarddiskVolume2\Program Files\Npcap\NPFInstall.exe"
    }
  }
}
```
"userName": "MALWARELAB-IOC\Administrator",
"userID": "S-1-5-21-122566442-3410611961-1220210811-500"
},
"newContent": null,
"customerId": "58b888be-a90f-e3be-838d-88877aee572b",
"name": "setupapi.app.log",
"action": "Attributes",
"id": "d47984c3-71d8-36b5-84d4-bb0ec34af828",
"asset": {
  "agentId": "f2a0a778-e5b6-4486-826d-a16762588a2a",
  "interfaces": [
    {
      "hostname": "MALWARELAB-IOC",
      "macAddress": "00:50:56:AA:6B:B8",
      "address": "10.115.77.190",
      "interfaceName": "Intel(R) PRO/1000 MT Network Connection"
    }
  ],
  "lastCheckedIn": "2019-04-25T13:51:48.000Z",
  "created": "2018-11-01T04:58:21.000+0000",
  "hostId": "290890",
  "operatingSystem": "Microsoft Windows 7 Professional 6.1.7601 Service Pack 1 Build 7601",
  "tags": [
    "7650412",
    "7655820",
    "7895614"
  ],
  "assetType": "HOST",
  "system": {
    "lastBoot": "2019-03-13T21:49:47.500Z"
  },
  "ec2": null,
  "lastLoggedOnUser": ".\Administrator",
  "netbiosName": "MALWARELAB-IOC",
  "name": "MALWARELAB-IOC",
  "agentVersion": "3.0.0.101",
  "updated": "2019-04-25T13:51:48.729+0000"
},
"class": "Disk"
},


"sortValues": [ 
  1556199372946, 
  "0ac9f186-6787-339f-a768-929b39da6725"
],
"data": { 
  "dateTime": "2019-04-25T13:36:12.946+0000",
  "fullPath": "\Device\HarddiskVolume2\Windows\inf\setupapi.app.log",
  "severity": 4,
  "profiles": [ 
    {
      "name": "Minimum Baseline for PCI for Windows OS_addTag",
      "rules": [ 
        {
          "severity": 4,
          "number": 6,
          "name": "Rule-6",
          "description": null,
          "id": "9287a14c-8036-4403-af88-f98ae8f920fb",
          "type": "directory"
        }
      ],
      "id": "03dc1773-ae2a-4d5f-a5b3-e662e14afbd2",
      "type": "WINDOWS",
      "category": { 
        "name": "PCI",
        "id": "2dab5022-2fdd-11e7-93ae-92361f002671"
      }
    }
  ],
  "type": "File",
  "changedAttributes": null,
  "platform": "WINDOWS",
  "oldContent": null,
  "actor": { 
    "process": "NPFInstall.exe",
    "processID": 8632,
    "imagePath": "\Device\HarddiskVolume2\Program Files\Npcap\NPFInstall.exe",
    "userName": "MALWARELAB-IOC\Administrator",
    "userID": "S-1-5-21-122566442-3410611961-1220210811-500"
  },
  "newContent": null,
}
"customerId": "58b888be-a90f-e3be-838d-88877ae572b",
"name": "setupapi.app.log",
"action": "Attributes",
"id": "0ac9f186-6787-339f-a768-929b39da6725",
"asset": {
  "agentId": "f2a0a778-e5b6-4486-826d-a16762588a2a",
  "interfaces": [
    {
      "hostname": "MALWARELAB-IOC",
      "macAddress": "00:50:56:AA:6B:B8",
      "address": "10.115.77.190",
      "interfaceName": "Intel(R) PRO/1000 MT Network Connection"
    }
  ],
  "lastCheckedIn": "2019-04-25T13:51:48.000Z",
  "created": "2018-11-01T04:58:21.000+0000",
  "hostId": "290890",
  "operatingSystem": "Microsoft Windows 7 Professional 6.1.7601 Service Pack 1 Build 7601",
  "tags": ["7650412",
            "7655820",
            "7895614"
          ],
  "assetType": "HOST",
  "system": {
    "lastBoot": "2019-03-13T21:49:47.500Z"
  },
  "ec2": null,
  "lastLoggedOnUser": ".\Administrator",
  "netbiosName": "MALWARELAB-IOC",
  "name": "MALWARELAB-IOC",
  "agentVersion": "3.0.0.101",
  "updated": "2019-04-25T13:51:48.729+0000"
},
"class": "Disk"},

{ "sortValues": [1556199372943, "eea0d64e-31ca-3269-91ed-cfbl1l2fbb17"],
  "data": {
"dateTime": "2019-04-25T13:36:12.943+0000",
"fullPath": "C:\\Device\\HarddiskVolume2\\Windows\\inf\\setupapi.app.log",
"severity": 4,
"profiles": [
    {
        "name": "Minimum Baseline for PCI for Windows",
        "OS_addTag",
        "rules": [
            {
                "severity": 4,
                "number": 6,
                "name": "Rule-6",
                "description": null,
                "id": "9287a14c-8036-4403-af88-f98ae8f920fb",
                "type": "directory"
            }
        ],
        "id": "03dc1773-ae2a-4d5f-a5b3-e662e14afbd2",
        "type": "WINDOWS",
        "category": {
            "name": "PCI",
            "id": "2dab5022-2fdd-11e7-93ae-92361f002671"
        }
    },
],
"type": "File",
"changedAttributes": null,
"platform": "WINDOWS",
"oldContent": null,
"actor": {
    "process": "NPFInstall.exe",
    "processID": 8632,
    "imagePath": "C:\\Device\\HarddiskVolume2\\Program Files\\Npcap\\NPFInstall.exe",
    "userName": "MALWARELAB-IOC\\Administrator",
    "userID": "S-1-5-21-122566442-3410611961-1220210811-500"
},
"newContent": null,
"customerId": "58b888be-a90f-e3be-838d-88877ae572b",
"name": "setupapi.app.log",
"action": "Attributes",
"id": "eaa0d64e-31ca-3269-91ed-cfb1112f6f17",
"asset": {
Chapter 2 - FIM Events API

Use these API functions to fetch FIM event data.

Fetch events
Get event count
Fetch event details

Fetch events

/fim/v2/events/search

[POST]

Get FIM events from the user account.

Input Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>filter (String)</td>
<td>Filter the events list by providing a query using Qualys syntax. Refer to the &quot;How to Search&quot; topic in the online help for assistance with creating your query. For example - dateTime:['2019-02-25T18:30:00.000Z'..'2019-02-26T18:29:59.999Z'] AND action: ‘Create’ You can filter events based on the time they are generated on the asset (dateTime) or based on the time they are processed at Qualys (processedTime). Note: For the dateTime filter start date should not be lower than 2017-01-01. The processedTime filter can be used only for events generated post FIM release 2.0.2.</td>
</tr>
<tr>
<td>pageNumber (String)</td>
<td>The page to be returned. Starts from zero.</td>
</tr>
<tr>
<td>pageSize (String)</td>
<td>The number of records per page to be included in the response. Default is 10.</td>
</tr>
<tr>
<td>sort (String)</td>
<td>Sort the results using a Qualys token. For example - [{&quot;action&quot;:&quot;asc&quot;}]</td>
</tr>
<tr>
<td>incidentContext (Boolean)</td>
<td>Search within incidents. Default is false.</td>
</tr>
<tr>
<td>incidentIds (String)</td>
<td>List of incident IDs to be included while searching for events in incidents.</td>
</tr>
<tr>
<td>Authorization (String)</td>
<td>(Required) Authorization token to authenticate to the Qualys Cloud Platform. Prepend token with &quot;Bearer&quot; and one space. For example - Bearer authToken</td>
</tr>
</tbody>
</table>
Sample

Request:

```bash
curl -X POST
https://gateway.qgl.apps.qualys.com/fim/v2/events/search -H
'authorization: Bearer <token>' -H 'content-type:
application/json' -d @request.json
```

Contents of request.json:

```json
{
  "pageSize":100,
  "filter":"profiles.name: Windows Profile - PCI(NJJ)"
}
```

Response:

```json
[
  {
    "sortValues": [],
    "data": {
      "dateTime": "2018-04-25T17:33:29.806+0000",
      "fullPath": "\Device\HarddiskVolume2\Windows\System32\config\systemprofile\ntuser.dat",
      "severity": 4,
      "profiles": [
        {
          "name": "Windows Profile - PCI(NJJ)",
          "rules": [
            {
              "severity": 4,
              "description": null,
              "id": "d6eb7f77-3726-47b3-90d8-3ecc8d8978e0",
              "type": "directory"
            }
          ],
          "id": "1c3b44f4-fd76-4c4d-8a4e-bebdad5fa124",
          "type": "WINDOWS",
          "category": null
        }
      ],
      "type": "File",
      "changedAttributes": [2, 4, 8, 16]
    }
  }
]```
`,
"platform": "WINDOWS",
"oldContent": null,
"actor": {
  "process": "QualysAgent.exe",
  "processID": 11280,
  "imagePath": "\Device\HarddiskVolume2\Program Files\Qualys\QualysAgent\QualysAgent.exe",
  "userName": "NT AUTHORITY\SYSTEM",
  "userID": "S-1-5-18"
},
"newContent": null,
"customerId": "58b888be-a90f-e3be-838d-88877aee572b",
"name": "ntuser.dat",
"action": "Attributes",
"id": "af8b4ba2-d773-307a-834b-415e6b28d31f",
"asset": {
  "agentId": "04b3dd30-e731-4d0d-a921-20b6b2d2997c",
  "interfaces": [
    {
      "hostname": "CAAUTOMATION-PC",
      "macAddress": "00:50:56:9F:FF:54",
      "address": "10.113.197.104",
      "interfaceName": "Intel(R) PRO/1000 MT Network Connection"
    }
  ],
  "lastCheckedIn": "2018-04-26T05:52:19.000Z",
  "created": 1523941162000,
  "hostId": null,
  "operatingSystem": "Microsoft Windows 7 Professional 6.1.7601 Service Pack 1 Build 7601",
  "tags": [
    "7650412",
    "7655820",
    "7895614"
  ],
  "assetType": "HOST",
  "system": {
    "lastBoot": "2018-01-15T12:37:35.000Z"
  },
  "ec2": null,
  "lastLoggedOnUser": ".\Administrator",
  "netbiosName": "CAAUTOMATION-PC",
  "name": "CAAUTOMATION-PC",
  "agentVersion": "2.0.6.1"
"updated": 1524721941789
},
"class": "Disk"
]
Get event count

/fim/v2/events/count

[POST]

Get number of FIM events logged.

**Input Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>filter (String)</td>
<td>Filter the events list by providing a query using Qualys syntax. Refer to the “How to Search” topic in the Online help for assistance with creating your query. For example - date(\text{Time}:[\text{2019-02-25T18:30:00.000Z},\text{2019-02-26T18:29:59.999Z}] ) AND action: ‘Content’ You can filter events based on the time they are generated on the asset (date(\text{Time})) or based on the time they are processed at Qualys (processed(\text{Time})). Note: For the date(\text{Time}) filter start date should not be lower than 2017-01-01. The processed(\text{Time}) filter can be used only for events generated post FIM release 2.0.2.</td>
</tr>
<tr>
<td>groupBy (String)</td>
<td>Group results based on certain parameters (provide comma separated list). For example - action</td>
</tr>
<tr>
<td>limit (String)</td>
<td>Limit the number of rows fetched by the groupBy function.</td>
</tr>
<tr>
<td>sort (String)</td>
<td>Sort the results using a Qualys token. For example - [[&quot;\text{dateTime}&quot;:&quot;\asc&quot;]]]</td>
</tr>
<tr>
<td>interval (String)</td>
<td>GroupBy interval for date fields. Valid values are y(year), q(quarter), M(month), w(week), d(day), h(hour), m(minute), s(second). For example - 1d An interval lower than a second is not supported. Note: Value for each interval period should be 1. For example, you can specify an interval of 1y, 1M, 1w, and so on, but not 2y, 3M, etc.</td>
</tr>
<tr>
<td>incidentContext (Boolean)</td>
<td>Search within incidents. Default is false.</td>
</tr>
<tr>
<td>incidentIds (String)</td>
<td>List of incident IDs to be included while searching for events in incidents.</td>
</tr>
<tr>
<td>Authorization (String)</td>
<td>(Required) Authorization token to authenticate to the Qualys Cloud Platform. Prepend token with &quot;Bearer&quot; and one space. For example - Bearer authToken</td>
</tr>
</tbody>
</table>

**Sample**

**Request:**

```
curl -X POST
https://gateway.qg1.apps.qualys.com/fim/v2/events/count -H 'authorization: Bearer <token>' -H 'content-type: application/json' -d @request.json
```
Contents of request.json:

```json
{
    "groupBy": ["profiles.rules.type","profiles.rules.severity","profiles.rules.id"]
}
```

Response:

```json
{
    "directory": {
        "1": {
            "290f7715-125b-4514-817b-7974444ac59d": 8548,
            "25e681d0-522b-4a2c-b0e6-86b25b47f77f": 7699,
            "611c3a90-1ad5-4b5b-ad88-9edd62182031": 7699,
            "3e447775-418a-424c-8279-5567a89cf811": 1455,
            "d82d238e-53a3-49b8-8e5b-a5e3244e4f07": 474,
            "ae25c204-a184-4c71-b7df-b1267692666a": 238,
            "9c10eaaaf-8725-426b-8eb8-793364269b6c": 33,
            "61993871-66cb-4966-a3ab-9b3ec6066858": 1
        },
        "2": {
            "df74b8e2-704b-419e-818e-3c7f4e4a2838": 49274,
            "c9a0d542-2d00-4a34-8fffd-b07a4826739a": 49274,
            "9ca5cb5e-f638-4c9f-b007-fa2a37e1fc49": 37664,
            "828d233b-5958-4867-bb8f-8514afd0a697": 12976,
            "8bf9c8c6-03a7-44be-9f4b-fb52ca0b14a4": 1652,
            "9e923f5d-851b-42eb-beba-2021e56609af": 698,
            "838a1bd0-910b-467a-88d0-ab5fa7ac9ba6": 28,
            "0a514a18-6ee0-47c1-98da-071a5c0b3dd6": 28,
            "df742229-0abd-4038-b39c-1e99b4c97273": 26,
            "69482025-4b82-4c68-8e36-16ddd4cfbe69": 14
        },
        "3": {
            "e8b4dc7b-3450-4cb2-a265-2d49534a7c62": 1760,
            "b7518092-541a-432e-81d6-8bda04e4ead4": 1277,
            "94963cf2-e01d-44da-a320-9ce6b832670f": 942,
            "9bed868e-750c-4b5b-841a-5827d4d2186a": 395,
            "158a1aad-bd57-4a35-8fee-937181bce082": 364,
            "9d9ce724-a0ba-42f0-9305-1019d57b9024": 296,
            "c996bcb2-2915-4ef3-a518-bfribac16e03": 239,
            "9a0d542-2d00-4a34-8fffd-b07a4826739a": 49,
            "df742229-0abd-4038-b39c-1e99b4c97273": 26,
            "df74b8e2-704b-419e-818e-3c7f4e4a2838": 26
        }
    }
}
```
Chapter 2 - FIM Events API
Get event count

},
"4": {
  "29724aad-2279-4664-bfle-a4e5cdf458f8": 8912801,
  "37118a46-f57f-4db4-8f90-b3ddd9d27796": 214872,
  "9287a14c-8036-4403-aff8-f98ae8f920fb": 79785,
  "04ae6b37-c9b1-4b19-a6e0-ae0e1035b8eb": 63629,
  "e75ce246-5d15-4562-9825-13a93787228": 55542,
  "67988aae-9af9-4623-84a2-097e46dadec": 28026,
  "881e94f9-2c12-4182-a790-4d408080ac2ad": 24935,
  "7af95303-9cf8-477b-980c-1dc52003ae28": 24387,
  "304501ca-f8a6-4190-a752-2fbbf21c0613": 22169,
  "939cd6a9-f651-4a2e-aa9d-395af0b04592": 19797
},
"5": {
  "97e14351-ba9e-4af3-bca9-6433d7c3410": 493263,
  "fccc66e3-bb79-460e-8b26-11dd82799e14": 136166,
  "3c167cbf-ef59-43ce-8a38-95ccc6a9d93e": 109226,
  "c9a0542-2b00-4a34-8fdd-b07a4826739a": 49283,
  "df74be2-704b-419e-818e-3c7f4e42838": 49274,
  "9ca5e56b-a39f-fb07-2a37e1fe49": 37664,
  "1bd2e8b-3de0-4ec5-97a-dc192691961": 29212,
  "f7c128f8-f94e-4060-a7e7-7475f47af9a": 19651,
  "637df747-96b4-43e3-4ac-d3c50277b38": 17145,
  "f8d234e-7efb-4cb9-8273-edeb440f7c": 16584
}
},
"file": {
  "1": {
    "ae25c204-a184-4c71-b7df-b1267692666": 14,
    "57fd59b2-c0ca-47bb-96b2-9cd0119e3bb": 14
  },
  "3": {
    "57fd59b2-c0ca-47bb-96b2-9cd0119e3bb": 2,
    "9ad7a143-b2e4-440f-be68-26042c0f8e3f": 2,
    "ae25c204-a184-4c71-b7df-b1267692666": 2,
    "80bda0f3-a37b-40c3-af41-ed51eb70da7e": 1
  },
  "4": {
    "80bda0f3-a37b-40c3-af41-ed51eb70da7e": 145,
    "fe0b4a7e-cbb0-4589-92e-0867afbf1d4": 144,
    "1a087a1d-001a-49a2-91c8-ac7127ed84": 3,
    "9ad7a143-b2e4-440f-be68-26042c0f8e3f": 1
  },
  "5": {
    "fe0b4a7e-cbb0-4589-92e-0867afbf1d4": 144,
Fetch event details

/fim/v2/events/{eventId}

[GET]

Fetch details for an event.

Input Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>eventId (String)</td>
<td>(Required) ID of the event you want to fetch the details for.</td>
</tr>
<tr>
<td>Authorization (String)</td>
<td>(Required) Authorization token to authenticate to the Qualys Cloud Platform. Prepend token with &quot;Bearer&quot; and one space. For example - Bearer authToken</td>
</tr>
</tbody>
</table>

Sample

Request:

```bash
```

Response:

```json
{
    "dateTime": "2018-04-25T17:33:29.806+0000",
    "fullPath": "\Device\HarddiskVolume2\Windows\System32\config\systemprofile\ntuser.dat",
    "severity": 4,
    "profiles": [
        {
            "name": "Windows Profile - PCI (NJJ)",
            "rules": [

```
"severity": 4,
"description": null,
"id": "d6eb7f77-3726-47b3-90d8-3ecc8d8978e0",
"type": "directory"
}
],
"id": "1c3b44f4-fd76-4c4d-8a4e-bebdad5fa124",
"type": "WINDOWS",
"category": null
}
],
"type": "File",
"changedAttributes": [
  2,
  4,
  8,
  16
],
"platform": "WINDOWS",
"oldContent": null,
"actor": {
  "process": "QualysAgent.exe",
  "processID": 11280,
  "imagePath": "\Device\HarddiskVolume2\Program Files\Qualys\QualysAgent\QualysAgent.exe",
  "userName": "NT AUTHORITY\SYSTEM",
  "userID": "S-1-5-18"
},
"newContent": null,
"customerId": "58b888be-a90f-e3be-838d-88877aee572b",
"name": "ntuser.dat",
"action": "Attributes",
"attributes": {
  "old": null,
  "new": [
    "Archive"
  ]
},
"id": "af8b4ba2-d773-307a-834b-415e6b28d31f",
"asset": {
  "agentId": "04b3dd30-e731-4d0d-a921-20b6b2d2997c",
  "interfaces": [
    {
      "hostname": "CAAUTOMATION-PC",
      "macAddress": "00:50:56:9F:FF:54",
      "address": "10.113.197.104",
      "platform": "WINDOWS",
      "category": null
    }
  ]
}
"interfaceName": "Intel(R) PRO/1000 MT Network Connection",
}
,
"lastCheckedIn": "2018-04-26T05:52:19.000Z",
"created": 1523941162000,
"hostId": null,
"operatingSystem": "Microsoft Windows 7 Professional 6.1.7601 Service Pack 1 Build 7601",
"tags": [
  "7650412",
  "7655820",
  "7895614"
],
"assetType": "HOST",
"system": {
  "lastBoot": "2018-01-15T12:37:35.000Z"
},
"ec2": null,
"lastLoggedOnUser": ".\Administrator",
"netbiosName": "CAAUTOMATION-PC",
"name": "CAAUTOMATION-PC",
"agentVersion": "2.0.6.1",
"updated": 1524721941789
},
"class": "Disk"}
Chapter 3 - Ignored FIM Events API

Use these API functions to fetch FIM event data for ignored events.

Fetch ignored events
Get ignored events count
Fetch ignored event details

Fetch ignored events

/fim/v2/events/ignore/search

[POST]

Get FIM events that are ignored.

Input Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>filter (String)</td>
<td>Filter the events list by providing a query using Qualys syntax. Refer to the &quot;How to Search&quot; topic in the online help for assistance with creating your query. For example - dateTime:['2019-02-25T18:30:00.000Z'..'2019-02-26T18:29:59.999Z'] You can filter events based on the time they are generated on the asset (dateTime) or based on the time they are processed at Qualys (processedTime). Note: For the dateTime filter start date should not be lower than 2017-01-01. The processedTime filter can be used only for events generated post FIM release 2.0.2.</td>
</tr>
<tr>
<td>pageNumber (String)</td>
<td>The page to be returned. Starts from zero.</td>
</tr>
<tr>
<td>pageSize (String)</td>
<td>The number of records per page to be included in the response. Default is 10.</td>
</tr>
<tr>
<td>sort (String)</td>
<td>Sort the results using a Qualys token. For example - [&quot;&quot;action\&quot;&quot;asc\&quot;]</td>
</tr>
<tr>
<td>Authorization (String)</td>
<td>(Required) Authorization token to authenticate to the Qualys Cloud Platform. Prepend token with &quot;Bearer&quot; and one space. For example - Bearer authToken</td>
</tr>
</tbody>
</table>

Sample

Request:

curl -X POST
https://gateway.qgl.apps.qualys.com/fim/v2/events/ignore/search -H 'authorization: Bearer <token>' -H 'content-type: application/json' -d @request.json
Contents of request.json:

```json
{
  "pageSize": 1,
  "filter": "dateTime: ['2018-06-25T18:30:00.000Z'..'2019-02-20T18:29:59.999Z']"
}
```

Response:

```
[
  {
  "sortValues": [],
  "data": {
    "dateTime": "2018-07-12T15:19:33.704+0000",
    "fullPath": "\\Device\\HarddiskVolume2\\FIM\\MobaXterm_installer.msi",
    "severity": 5,
    "profiles": [
      {
        "name": "Bug_Test_1",
        "rules": [
          {
            "severity": 2,
            "description": "",
            "id": "df74b8e2-704b-419e-818e-3c7f4e4a2838",
            "type": "directory"
          }
        ],
        "id": "a0f61a71-fc03-4d9e-a234-fb39afa35d66",
        "type": "WINDOWS",
        "category": {
          "name": "PCI",
          "id": "2dab5022-2fdd-11e7-93ae-92361f002671"
        }
      },
      {
        "name": "Bug_Test_Profile",
        "rules": [
          {
            "severity": 5,
            "description": "",
            "id": "c9a0d542-2d00-4a34-8ffd-b07a4826739a",
            "type": "directory"
          }
        ],
        "id": "f214c35a-441e-450a-b817-2f162add6854"
      }
    ]
  }
}
```
"type": "WINDOWS",
"category": {
  "name": "PCI",
  "id": "2dab5022-2fdd-11e7-93ae-92361f002671"
}
],
"type": "File",
"changedAttributes": null,
"platform": "WINDOWS",
"oldContent": null,
"actor": {
  "process": "Explorer.EXE",
  "processID": 312,
  "imagePath": "\\Device\\HarddiskVolume2\\Windows\\Explorer.EXE",
  "userName": "CAAUTOMATION-PC\Administrator",
  "userID": "S-1-5-21-3436480518-4193688097-2835352598-500"
},
"newContent": null,
"ignoreDate": "2018-07-24",
"customerId": "58b888be-a90f-e3be-838d-88877aee572b",
"name": "MobaXterm_installer.msi",
"action": "Delete",
"id": "c6d7929c-85cb-3791-b6ed-2bcd9a7682cb",
"asset": {
  "agentId": "fe94430f-f12c-4c6d-a9c2-a66049d69e5",
  "interfaces": [
    {
      "hostname": "CAAUTOMATION-PC",
      "macAddress": "00:50:56:9F:FF:54",
      "address": "10.113.197.104",
      "interfaceName": "Intel(R) PRO/1000 MT Network Connection"
    }
  ],
  "lastCheckedIn": "2018-07-12T15:07:23.000Z",
  "created": 1531195694000,
  "hostId": null,
  "operatingSystem": "Microsoft Windows 7 Professional 6.1.7601 Service Pack 1 Build 7601",
  "tags": [
    "8072536",
    "7895614",
    "7655820",
    "7650412"
Chapter 3 - Ignored FIM Events API

Get ignored events count

/fim/v2/events/ignore/count

[POST]

Get number of ignored events logged.

Input Parameters

**filter (String)**
Filter the events list by providing a query using Qualys syntax. Refer to the "How to Search" topic in the online help for assistance with creating your query. For example - dateTime:['2019-02-25T18:30:00.000Z'.,'2019-02-26T18:29:59.999Z'] AND action:'Content' You can filter events based on the time they are generated on the asset (dateTime) or based on the time they are processed at Qualys (processedTime). Note: For the dateTime filter start date should not be lower than 2017-01-01. The processedTime filter can be used only for events generated post FIM release 2.0.2.

**groupBy (String)**
Group results based on certain parameters (provide comma separated list). For example - action

**limit (String)**
Limit the number of rows fetched by the groupBy function.

**sort (String)**
Sort the results using a Qualys token. For example - ['\dateTime\asc']
Sample

Request:

```bash
curl -X POST
'authorization: Bearer <token>' -H 'content-type: application/json' -d @request.json
```

Contents of request.json:

```json
{
  "filter":"dateTime:['2018-06-25T18:30:00.000Z'..'2019-06-20T18:29:59.999Z']"
}
```

Response:

```json
{
  "count":234
}
```
Fetch ignored event details

/fim/v2/events/ignore/{ignoredEventId}

[GET]
Fetch details for an ignored event.

**Input Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>eventId (String)</td>
<td>(Required) ID of the ignored event you want to fetch the details for.</td>
</tr>
<tr>
<td>Authorization (String)</td>
<td>(Required) Authorization token to authenticate to the Qualys Cloud Platform. Prepend token with &quot;Bearer&quot; and one space. For example - Bearer authToken</td>
</tr>
</tbody>
</table>

**Sample**

**Request:**


**Response:**

```json
{
  "dateTime": "2018-06-19T07:09:07.116+0000",
  "fullPath": "\Device\HarddiskVolume2\FIM\ProdCerts",
  "severity": 3,
  "profiles": [
    {
      "name": "Bug_Test_Profile",
      "rules": [
        {
          "severity": 3,
          "description": "",
          "id": "c9a0d542-2d00-4a34-8ffd-b07a4826739a",
          "type": "directory"
        }
      ],
      "id": "f214c35a-441e-450a-b817-2f162add6854",
      "type": "WINDOWS",
      "category": {
        "name": "PCI",
        "id": "2dab5022-2fdd-11e7-93ae-92361f002671"
      }
    }
  ]
}
```
Chapter 3 - Ignored FIM Events API
Fetch ignored event details

`,
  "type": "Directory",
  "changedAttributes": null,
  "platform": "WINDOWS",
  "oldContent": null,
  "actor": {
    "process": "Explorer.EXE",
    "processID": 312,
    "imagePath": "\Device\HarddiskVolume2\Windows\Explorer.EXE",
    "userName": "CAAUTOMATION-PC\Administrator",
    "userID": "S-1-5-21-3436480518-4193688097-2835352598-500"
  },
  "newContent": null,
  "ignoreDate": "2018-06-19",
  "customerId": "58b888be-a90f-e3be-838d-88877aee572b",
  "name": "ProdCerts",
  "action": "Delete",
  "id": "5ca3af2b-991d-3154-acce-6ebbad2a6cc1",
  "asset": {
    "agentId": "b1362e7f-a29c-4226-a9a2-f91747f7e009",
    "interfaces": [
      {
        "hostname": "CAAUTOMATION-PC",
        "macAddress": "00:50:56:9F:FF:54",
        "address": "10.113.197.104",
        "interfaceName": "Intel(R) PRO/1000 MT Network Connection"
      }
    ],
    "lastCheckedIn": "2018-06-19T07:02:08.000Z",
    "created": 1529071987000,
    "hostId": null,
    "operatingSystem": "Microsoft Windows 7 Professional 6.1.7601 Service Pack 1 Build 7601",
    "tags": [
      "7895614",
      "7655820",
      "7650412",
      "8072536"
    ],
    "assetType": "HOST",
    "system": {
      "lastBoot": "2018-06-14T16:29:03.000Z"
    },
    "ec2": null,
    "lastLoggedOnUser": ".\Administrator",
  },
"netbiosName": "CAAUTOMATION-PC",
"name": "CAAUTOMATION-PC",
"agentVersion": "2.0.6.1",
"updated": 1529391745750
},
"class": "Disk"}
Chapter 4 - FIM Incidents API

Use these API functions to fetch FIM Incident data.

- Fetch incident count
- Fetch incidents
- Get event count for an incident
- Fetch events for an Incident
- Create manual Incident
- Approve the given incident
Fetch incident count

/fim/v2/incidents/count

[POST]

Get number of Incidents in an user account.

Response Code

- 200: Successful
- 401: Unauthorized
- 503: Service unavailable

Input Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>filter</td>
<td>Filter the incidents list by providing a query using Qualys syntax. Refer to the “How to Search” topic in the Online help for assistance with creating your query. For example - status: OPEN</td>
</tr>
<tr>
<td>groupBy</td>
<td>Group results based on certain parameters (provide comma separated list). For example - action</td>
</tr>
<tr>
<td>interval</td>
<td>GroupBy interval for date fields. Valid values are y(year), q(quarter), M(month), w(week), d(day), h(hour), m(minute), s(second). For example - 1d An interval lower than a second is not supported. Note: Value for each interval period should be 1. For example, you can specify an interval of 1y, 1M, 1w, and so on, but not 2y, 3M, etc.</td>
</tr>
<tr>
<td>limit</td>
<td>Limit the number of rows fetched by the groupBy function.</td>
</tr>
<tr>
<td>sort</td>
<td>Sort the results using a Qualys token. For example - [{&quot;name&quot;:&quot;asc&quot;}]</td>
</tr>
</tbody>
</table>

Sample

Request:

curl -X POST
https://gateway.qg1.apps.qualys.com/fim/v2/incidents/count -H 'authorization: Bearer <token>' -H 'content-type: application/json' -d @request.json

Contents of request.json:

```json
{
  "filter":"status:OPEN",
  "groupBy":["approvalType","name","id"]
}
```
Response:
{
  "MANUAL": {
    "Incident-3a899bb5-493e-40b8-a348-408dee7b2314-pod01_rule_15": {
      "af72cee0-3dd7-4173-b6ff-c0dfdlad0465": 1,
      "70da411-35df-40a2-b20d-9878389d63d9": 1,
      "435d4e5b-753e-455f-bc64-7e8bbdab38cad": 1
    },
    "Incident-4b5c6f12-a3dc-48d3-b9f5-be01d35449e7-pod01_rule_16": {
      "689ea586-5c41-462e-b9f9-41635fa71889": 1,
      "b9760652-e642-43e3-ab6c-27441bd590c8": 1,
      "56660ef6-a0ed-447e-8738-4d2b26f44026": 1
    },
    "Incident-d353f6bc-11d8-480e-a26a-3fb3a4324689-pod01_rule_14": {
      "d31f45da-f3b2-4a91-a84a-36992966666ec": 1,
      "7556fcee-a928-43b4-9724-1849f0e50db1": 1,
      "45630e2e-bbee-44a8-9b89-966b95ef62a3": 1
    },
    "Incident-aa85ac30-ce17-4370-bald-7471d8a0fa35-pod01_rule_29": {
      "e24ec4e4-87e1-49dd-b3ed-91959673a32": 1,
      "85eb37a0-0b64-45de-95b9-668eaa58eca8": 1
    },
    "Incident-47a9f3e9-2b4c-4d2a-ab84-9853a41225d7-pod01_rule_27": {
      "7f41087e-2d1d-4514-806f-d51fd7e8312c": 1,
      "e913313d-eda2-4c4d-9550-32ca56f4b7": 1
    },
    "Incident-f534db2b-d4fa-43cb-a550-c2cc4402f4-pod01_rule_25": {
      "3907d4bd-3755-4191-89c3-d6f4e31fcd6e": 1,
      "f29cb285-e2a0-434e-9240-63b00bd420df": 1
    },
    "Incident-70060303-29a1-47b7-bd7a-17409cf1049b-pod01_rule_33": {
      "b8b89269-f82d-4e08-bed5-607540930baa": 1,
      "ae70ad1b-f841-4ad9-9a92-49a481dd0383": 1
    },
    "Incident-84e3c230-5ce9-49bd-9a19-7ab9a63f5f48-pod01_rule_28": {
      "50f8cfb8-383d-4605-85a8-e85968e6f8ef": 1,
      "4f93fde4-cd94-444c-a3c0-f5e99f835069": 1,
      "3f050f06-7f87-4c7d-bf8f-53f972f9812b": 1,
      "699e3f4a-e539-45cd-a8ff-f89472f843c1": 1,
      "96660ef6-a0ed-447e-8738-4d2b26f44026": 1
    }
  }
}

Chapter 4 - FIM Incidents API
Fetch incident count
"3e020d72-c903-4076-bd43-f0a85b3275bf": 1,

"Incident-a170f7bf-e74d-41bc-bb76-0ddbed938794-pod01_rule_21": {
  "1f995877-6123-4308-ae71-7086a597972e": 1,
  "d20a61d4-9ec0-43ca-b6c1-c7ca93933ed3": 1
},

"Incident-f050635e-f1ce-4059-beed-f144b66de3c2-pod01_rule_24": {
  "0678d417-af29-4ca9-9dc5-6cefacb459c9": 1,
  "65e51413-4802-415c-b8a5-469f7cd5f151": 1
}
Fetch incidents
/fim/v3/incidents/search

[POST]
Get FIM incidents for an user account.

Response Code
- 200: Successful
- 401: Unauthorized
- 503: Service unavailable

Input Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>filter (String)</td>
<td>Filter the incidents list by providing a query using Qualys syntax. Refer to the &quot;How to Search&quot; topic in the online help for assistance with creating your query. For example - status: 'OPEN'</td>
</tr>
<tr>
<td>pageNumber (String)</td>
<td>The page to be returned. Starts from zero.</td>
</tr>
<tr>
<td>pageSize (String)</td>
<td>The number of records per page to be included in the response. Default is 10.</td>
</tr>
<tr>
<td>sort (String)</td>
<td>Sort the results using a Qualys token. For example - &quot;sort&quot;:([{&quot;name&quot;:&quot;asc&quot;&quot;]}&quot;</td>
</tr>
<tr>
<td>attributes (String)</td>
<td>Search based on certain attributes (provide comma separated list).</td>
</tr>
<tr>
<td>searchAfter</td>
<td>(Required) This parameter is required to fetch more than 10,000 rows.</td>
</tr>
</tbody>
</table>

Sample

Request:

curl -X POST
https://gateway.qgl1.apps.qualys.com/fim/v3/incidents/search -H 'authorization: Bearer <token>' -H 'content-type: application/json' -d @request.json

Contents of request.json:

```json
{
    "attributes":"reviewers,name",
    "filter":"changeType:AUTOMATED",
    "pageSize":2,
    "pageNumber":0,
    "sort":"[{"name":"asc\""]}"
}
```
Response:

```
[
    {
        "sortValues": [
            "incident_01"
        ],
        "data": {
            "name": "incident_01",
            "id": "xxx9xx4x-2x73-4x6x-95x6-29x3x4x4x013",
            "reviewers": [
                "quays_fa"
            ]
        }
    },
    {
        "sortValues": [
            "incident_02"
        ],
        "data": {
            "name": "incident_02",
            "id": "7992xxxx-x161-494x-x761-323xx67844x8",
            "reviewers": [
                "quays_fa"
            ]
        }
    }
]
```
Get event count for an incident

/\fim/v2/incidents/{incidentId}/events/count

[POST]

Get number of events logged for an incident.

Response Code
- 200: Successful
- 401: Unauthorized
- 503: Service unavailable

Input Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>incidentId</td>
<td>(Required) ID of the incident you want to fetch the events for.</td>
</tr>
<tr>
<td>filter</td>
<td>Filter the incidents list by providing a query using Qualys syntax. Refer to the &quot;How to Search&quot; topic in the online help for assistance with creating your query. For example - status:'OPEN'</td>
</tr>
<tr>
<td>groupBy</td>
<td>Group results based on certain parameters (provide comma separated list).</td>
</tr>
<tr>
<td>limit</td>
<td>Limit the number of rows fetched by the groupBy function.</td>
</tr>
<tr>
<td>sort</td>
<td>Sort the results using a Qualys token. For example - [{&quot;name&quot;:&quot;&quot;asc&quot;}]</td>
</tr>
<tr>
<td>interval</td>
<td>GroupBy interval for date fields. Valid values are y(year), q(quarter), M(month), w(week), d(day), h(hour), m(minute), s(second). For example - 1d An interval lower than a second is not supported. Note: Value for each interval period should be 1. For example, you can specify an interval of 1y, 1M, 1w, and so on, but not 2y, 3M, etc.</td>
</tr>
<tr>
<td>Authorization</td>
<td>(Required) Authorization token to authenticate to the Qualys Cloud Platform. Prepend token with &quot;Bearer&quot; and one space. For example - Bearer authToken</td>
</tr>
</tbody>
</table>

Sample

Request:
curl -X POST https://gateway.qgl1.apps.qualys.com/fim/v2/incidents/{incidentId}/events/count -H 'authorization: Bearer <token>' -H 'content-type: application/json' -d @request.json
Contents of request.json:
{
    "groupBy": ["action", "dateTime"],
    "limit": 2
}

Response:
{
    "Delete": {
        "2019-01-01T00:00:00.000Z": 1551
    },
    "Attributes": {
        "2019-01-01T00:00:00.000Z": 1159
    }
}
Fetch events for an Incident

/fim/v2/incidents/{incidentId}/events/search

[POST]

Get events logged under an incident.

Response Code

- 200: Successful
- 401: Unauthorized
- 503: Service unavailable

Input Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>incidentId (String)</td>
<td>(Required) ID of the incident you want to fetch the events for.</td>
</tr>
<tr>
<td>filter (String)</td>
<td>Filter the events list by providing a query using Qualys syntax. Refer to the “How to Search” topic in the online help for assistance with creating your query. For example - status:'OPEN'</td>
</tr>
<tr>
<td>pageNumber (String)</td>
<td>The page to be returned. Starts from zero.</td>
</tr>
<tr>
<td>pageSize (String)</td>
<td>The number of records per page to be included in the response. Default is 10.</td>
</tr>
<tr>
<td>sort (String)</td>
<td>Sort the results using a Qualys token. For example - [{&quot;name&quot;:&quot;&quot;asc&quot;&quot;}]</td>
</tr>
<tr>
<td>attributes (String)</td>
<td>Search based on certain attributes (provide comma separated list).</td>
</tr>
<tr>
<td>Authorization (String)</td>
<td>(Required) Authorization token to authenticate to the Qualys Cloud Platform. Prepend token with &quot;Bearer&quot; and one space. For example - Bearer authToken</td>
</tr>
</tbody>
</table>

Sample

Request:

curl -X POST https://gateway.qg1.apps.qualys.com/fim/v2/incidents/{incidentId}/events/search -H 'authorization: Bearer <token>' -H 'content-type: application/json' -d @request.json

Contents of request.json:

```json
{
    "sort": "[{"name": "desc"}]",
    "pageNumber": 2,
    "attributes": "name"
}
```
Response:
[
  
  "sortValues": [
  
    "x86_microsoft-windows-tericesframework-msctf_31bf3856ad364e35_6.1.7601.23915_none_78558f3c6624167c"
    ],
  "data": {
    "name": "x86_microsoft-windows-tericesframework-msctf_31bf3856ad364e35_6.1.7601.23915_none_78558f3c6624167c",
    "id": "8x340728-411x-37x1-x028-0xxx41362xxx"
  }
  
},

  "sortValues": [
    "x86_microsoft-windows-tericesframework-msctf_31bf3856ad364e35_6.1.7601.23915_none_78558f3c6624167c"
  ],
  "data": {
    "name": "x86_microsoft-windows-tericesframework-msctf_31bf3856ad364e35_6.1.7601.23915_none_78558f3c6624167c",
    "id": "6f5878be-3abe-32b7-a943-d9b6c982190f"
  }
  
},

  "sortValues": [
    "x86_microsoft-windows-tericesframework-msctf_31bf3856ad364e35_6.1.7601.23915_none_78558f3c6624167c"
  ],
  "data": {
    "name": "x86_microsoft-windows-tericesframework-msctf_31bf3856ad364e35_6.1.7601.23915_none_78558f3c6624167c",
    "id": "c9f2dea8-a14c-34e8-b2dc-a20d282bee73"
  }
  
},

  "sortValues": [
    "x86_microsoft-windows-tericesframework-msctf_31bf3856ad364e35_6.1.7601.23915_none_78558f3c6624167c"
  ],
  "data": {
    "name": "x86_microsoft-windows-tericesframework-msctf_31bf3856ad364e35_6.1.7601.23915_none_78558f3c6624167c",
    "id": "87x0x9x7-0518-3974-86x3-x48712323147"
  }
]
Chapter 4 - FIM Incidents API

Fetch events for an Incident

```json
{
  "sortValues": [
    "x86_microsoft-windows-shdocvw_31bf3856ad364e35_6.1.7601.23896_none_e9b14bab8385266b",
    "data": {
      "name": "x86_microsoft-windows-shdocvw_31bf3856ad364e35_6.1.7601.23896_none_e9b14bab8385266b",
      "id": "3e68b55b-eff3-35ab-9c7f-95ad3be33c34"
    }
  },
  {
    "sortValues": [
      "x86_microsoft-windows-shdocvw_31bf3856ad364e35_6.1.7601.23896_none_e9b14bab8385266b",
      "data": {
        "name": "x86_microsoft-windows-shdocvw_31bf3856ad364e35_6.1.7601.23896_none_e9b14bab8385266b",
        "id": "e5bd74f2-03b9-301d-ba96-34b3d8a6bd7c"
      }
    },
    {
      "sortValues": [
        "x86_microsoft-windows-shdocvw.resources_31bf3856ad364e35_6.1.7601.23896_en-us_c9ff1fadd1da973e",
        "data": {
          "name": "x86_microsoft-windows-shdocvw.resources_31bf3856ad364e35_6.1.7601.23896_en-us_c9ff1fadd1da973e",
          "id": "ea9e8bc7-1895-34fc-b2a7-f6c42be0ed0a"
        }
      }
    },
    {
      "sortValues": [
        "x86_microsoft-windows-shdocvw.resources_31bf3856ad364e35_6.1.7601.23896_en-us_c9ff1fadd1da973e",
        "data": {
          "name": "x86_microsoft-windows-shdocvw.resources_31bf3856ad364e35_6.1.7601.23896_en-us_c9ff1fadd1da973e",
          "id": "ea9e8bc7-1895-34fc-b2a7-f6c42be0ed0a"
        }
      }
    }
  ]
}
```
"id": "a5d68c5e-5f9e-3cc5-976f-8331e4404a73"
}
],
{
  "sortValues": [
    "x86_microsoft-windows-shdocvw.resources_31bf3856ad364e35_6.1.7601.23896_en-us_c9ff1fadd1da973e"
  ],
  "data": {
    "name": "x86_microsoft-windows-shdocvw.resources_31bf3856ad364e35_6.1.7601.23896_en-us_c9ff1fadd1da973e",
    "id": "452af9e5-c926-39a5-8a7d-e6b25a43a828"
  }
],
{
  "sortValues": [
    "x86_microsoft-windows-security-credssp_31bf3856ad364e35_6.1.7601.23915_none_c64a109218ef01b4"
  ],
  "data": {
    "name": "x86_microsoft-windows-security-credssp_31bf3856ad364e35_6.1.7601.23915_none_c64a109218ef01b4",
    "id": "249e4bdf-aad5-3ddd-bbbf-03f45eecd137"
  }
}
Create manual Incident

/fim/v3/incidents/create

[POST]
Create manual incidents of type "DEFAULT".

Response Code
- 201: Successful
- 401: Unauthorized
- 503: Service unavailable

Input Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>comment (String)</td>
<td>Comments for approval of the Incidents.</td>
</tr>
<tr>
<td>filters (Required)</td>
<td>Filter the events list by providing a query using Qualys syntax.</td>
</tr>
<tr>
<td>name (String) (Required)</td>
<td>The name of the incident. Accepted length: Between 1 to 128 characters.</td>
</tr>
<tr>
<td>reviewers (String)</td>
<td>Reviewers who will approve the incident.</td>
</tr>
<tr>
<td>type</td>
<td>This is set to &quot;DEFAULT&quot; always.</td>
</tr>
<tr>
<td>userInfo</td>
<td>Information about the user.</td>
</tr>
</tbody>
</table>

Sample
Request:
```
```

Contents of request.json:
```
{
  "name": "Incident_001",
  "reviewers": [
    "quays_fa"
  ],
  "filters": [
    "dateTime: ['2020-05-17T18:30:00.00Z'..'2020-05-18T18:29:59.999Z'] and (action:`Attributes`)"
  ]
}
```
Chapter 4 - FIM Incidents API
Create manual Incident

],
"comment": "comment for an incident",
"type": "DEFAULT",
"userInfo": {
"user": {
"name": "quays_fa",
"id": "228xxxx1-4xx2-6xxx-82x9-287x5x441xxx"
}
}
}

Response:
{
"comment": "comment for an incident",
"approvalType": "MANUAL",
"type": "DEFAULT",
"id": "xx91xx81-2116-4x92-967x-4133422421xx",
"userInfo": {
"user": {
"id": "51xxxx4x-5xx5-xxx6-8141-5x7887xx557x",
"name": "FIM Automation"
}
"date": 1590598106811
,
"customerId": "25x14x60-80x1-4x25-8166-6653x4x2x094",
"name": "Incident_001",
"filters": ["dateTime: ['2020-05-17T18:30:00.000Z'..'2020-05-18T18:29:59.999Z'] and (action:`Attributes`)
],
"reviewers": ["quays_fa"
]}
}
Approve the given incident

/fim/v3/incidents/{incidentId}/approve

[POST]

For approving an incident.

Response Code
- 200: Successful
- 401: Unauthorized
- 404: Not found
- 503: Service unavailable

Input Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>approvalStatus</td>
<td>(Required) The approval status of the incident created by the rule. Allowed values: &quot;APPROVED&quot;, &quot;POLICY_VIOLATION&quot;, &quot;UNAPPROVED&quot;, &quot;NA&quot;.</td>
</tr>
<tr>
<td>changeType</td>
<td>(Required) Type of Incidents created by the rule. Allowed values: &quot;MANUAL&quot;, &quot;AUTOMATED&quot;, &quot;COMPROMISE&quot;, &quot;OTHER&quot;.</td>
</tr>
<tr>
<td>comment</td>
<td>(String) (Required) Comments for Incidents created by rule.</td>
</tr>
<tr>
<td>dispositionCategory</td>
<td>(Required). The category of the Incident created by the rule. Allowed values: &quot;PATCHING&quot;, &quot;PRE_APPROVED_CHANGE_CONTROL&quot;, &quot;CONFIGURATION_CHANGE&quot;, &quot;HUMAN_ERROR&quot;, &quot;DATA_CORRUPTION&quot;, &quot;EMERGENCY_CHANGE&quot;, &quot;CHANGE_CONTROL_VIOLATION&quot;, &quot;GENERAL_HACKING&quot;, &quot;MALWARE&quot;</td>
</tr>
</tbody>
</table>

Sample

Request:
```
curl -X POST
https://gateway.qgl.apps.qualys.com/fim/v3/incidents/{incidentId}/approve
- H 'authorization: Bearer <token>'
- H 'content-type: application/json'
-d @request.json
```

Contents of request.json:
```
{
  "approvalStatus": "APPROVED",
  "changeType": "MANUAL",
  "comment": "new incident",
}
"dispositionCategory": "PATCHING"
}

Response:
{
  "customerId": "003x9084-643x-x4xx-8336-x2530663x0x2",
  "type": "DEFAULT",
  "id": "56x58733-1485-4x29-x4xx-x96x91x8530",
  "filterFromDate": "2020-02-09T18:30:00.000+0000",
  "filterToDate": "2020-03-11T18:29:59.999+0000",
  "name": "new_incident_tests",
  "filters": [
    "dateTime: ['2020-02-09T18:30:00.000Z'..'2020-03-11T18:29:59.9992'] and name:image.gif"
  ],
  "status": "CLOSED",
  "reviewers": [
    "quays_hs"
  ],
  "comment": "new incident",
  "assignDate": "2020-03-11T11:14:39.498+0000",
  "approvalDate": "2020-03-12T06:33:02.554+0000",
  "approvalStatus": "APPROVED",
  "dispositionCategory": "PATCHING",
  "changeType": "MANUAL",
  "approvalType": "MANUAL",
  "createdById": null,
  "createdByName": null,
  "createdDate": "2020-03-11T11:14:39.497+0000",
  "lastUpdatedById": "228xxxx1-4xx2-6xxx-82x9-287x5x441xxx",
  "lastUpdatedByName": "John Doe",
  "lastUpdatedDate": "2020-03-11T11:21:33.025+0000",
  "filterUpdatedDate": "2020-03-11T11:21:33.024+0000",
  "deleted": false,
  "marked": false,
  "moved": null,
  "markupStatus": null,
  "ruleId": null,
  "ruleName": null
}
Chapter 4 - FIM Incidents API

Approve the given incident
Chapter 5 - FIM Alerting API

Use these API functions to fetch FIM Alerting data.

Alerting Action API

Fetch all Alert Actions
Fetch Alert Actions for an Action ID

Fetch all Alert Actions

/fim/v3/alert/actions/search

[POST]
To search all the Alert actions created.

Response Code
- 200: Successful
- 401: Unauthorized
- 503: Service unavailable

Sample

Request:

curl -X POST
'authorization: Bearer <token>' -H 'content-type: application/json'

Response:

{
  "customerId": "x5x0514x-x211-x1x4-809x-x3x2xx667xxx",
  "applicationName": "FIM",
  "id": "xxx13x40-11x0-11xx-x12x-xx6083x5x695",
  "name": "Email - Alerting regression",
  "description": "Alerting regression",
  "actionType": "qemail",
  "createdBy": "John Doe",
  "createdById": "quays_jd2",
  "updatedBy": "John Doe",
  "updatedById": "quays_jd2",
  "created": 1574919350308,
}
"updated": 1574919362952,
"alert": "Email- Alerting regression",
"subject": "Email- Alerting regression",
"smtpHost": "mta01.eng.sjc01.qualys.com",
"smtpPort": 25,
"emailRecipients": [
  "jd2@qualys.com",
  "jd1@qualys.com",
  "jd@qualys.com"
],
"emailFromAddress": "noreply@qualys.com",
"emailReplyTo": "noreply@qualys.com",
"slackWebhookUri": null,
"slackChannel": null,
"pagerdutyServiceKey": null,
"pagerdutyEventType": null,
"pagerdutyClient": null,
"activeRules": 1,
"disabledRules": 2,
"smtpUser": null
}
Fetch Alert Actions for an Action ID

/fim/v3/alert/actions/{actionId}

[GET]

To search the Alert actions for an Action ID.

Response Code
- 200: Successful
- 401: Unauthorized
- 404: Not found
- 503: Service unavailable

Input Parameters

| actionId | (Required) ID of the action you want to fetch the action for. |

Sample

Request:

```bash
```

Response:

```
{
  "customerId": "x5x0514x-x211-x1x4-809x-x3x2xx667xxx",
  "applicationName": "FIM",
  "id": "xxx13x40-11x0-11xx-x12x-xx6083x5x695",
  "name": "Email - Alerting regression",
  "description": "Alerting regression",
  "actionType": "qemail",
  "createdBy": "John Doe",
  "createdById": "quays_jd2",
  "updatedBy": "John Doe",
  "updatedById": "quays_jd2",
  "created": 1574919350308,
  "updated": 1574919362952,
  "alert": "Email - Alerting regression",
  "subject": "Email - Alerting regression",
  "smtpHost": "mta01.eng.sjc01.qualys.com",
  "smtpPort": 25,
  "emailRecipients": {
```

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"jd2@qualys.com",
"jd1@qualys.com",
"jd@qualys.com"
},
"emailFromAddress": "noreply@qualys.com",
"emailReplyTo": "noreply@qualys.com",
"slackWebhookUri": null,
"slackChannel": null,
"pagerdutyServiceKey": null,
"pagerdutyEventType": null,
"pagerdutyClient": null,
"activeRules": 1,
"disabledRules": 2,
"smtpUser": null
}
Alerting Rules API

Fetch Alert Rules
Fetch details for Alert Rule
Enable Alert Rule
Disable Alert Rule
Delete a Alert Rule

Fetch Alert Rules

/fim/v3/alert/rules/search

[POST]
To search all the alert rules.

Note: The API will return the default value for the following fields:
For Single Match: slideTime, matchCount, aggregate, aggregationKeys.
For Time-Window Scheduled Match: slideTime, matchCount.

Response Code
- 200: Successful
- 401: Unauthorized
- 503: Service unavailable

Sample

Request:
curl -X POST https://gateway.qg1.apps.qualys.com

Response:
{
  "customerId":"x5x0514x-x211-x1x4-809x-x3x2xx667xxx",
  "applicationName":"FIM",
  "id":"8xx98x30-xx5x-11x9-9036-339x439x1x4x",
  "datasource":"EVENTS",
  "ruleType":"simple_alert",
  "name":"Rule - Alerting 2.1.2 testing updating",
  "description":"Rule - Alerting 2.1.2 testing",
  "qql":":(file.fullPath:'*\System32\*' and action:Attributes""}
"windowTime":0,
"slideTime":900000,
"matchCount":3,
"fromHour":0,
"fromMinute":0,
"duration":0,
"aggregate":true,
"aggregationKeys":{
  "tokens"
},
"actions":[
  {
    "id":"54x62750-xx5x-11x9-9525-51f120x87xx9",
    "actionType":"qemail",
    "name":"Alerting 2.1.2 Testing",
    "subject":"Alerting 2.1.2 Testing",
    "alert":"Alerting 2.1.2 Testing",
    "emailRecipients":[
      "jd1@qualys.com",
      "jd2@qualys.com",
      "jd@qualys.com"
    ],
    "slackChannel":null,
    "subjectParameters":[
    ],
    "bodyParameters":[
    ]
  }
],
"created":1569172952451,
"createdBy":"John Doe",
"createdById":"quays_jd2",
"updated":1569332877053,
"updatedBy":"John Doe",
"updatedById":"quays_jd2",
"lastRun":1569312595868,
"active":false,
"ruleState":"DISABLED",
"actionNames":[
  "Alerting 2.1.2 Testing"
],
"trigger":"Single Match"}
Fetch details for Alert Rule

/fim/v3/alert/rules/{ruleId}

[GET]

To search the details for the given rule id.

Note: The API will return the default value for the following fields:
For Single Match: slideTime, matchCount, aggregate, aggregationKeys.
For Time-Window Scheduled Match: slideTime, matchCount.

Response Code
- 200: Successful
- 401: Unauthorized
- 404: Not found
- 503: Service unavailable

Input Parameters

<table>
<thead>
<tr>
<th>ruleId</th>
<th>(Required) ID of the alert rule you want the details for.</th>
</tr>
</thead>
</table>

Sample

Request:

curl -X GET
'authorization: Bearer <token>' -H 'content-type: application/json'

Response:

```json
{
    "customerId": "x5x0514x-x211-x1x4-809x-x3x2xx667xxx",
    "applicationName": "FIM",
    "id": "8xx98x30-xx5x-11x9-9036-339x439x1x4x",
    "datasource": "EVENTS",
    "ruleType": "simple_alert",
    "name": "",
    "description": "",
    "qql": "(file.fullPath:'*\System32\*' and action:Attributes",
    "windowTime": 0,
    "slideTime": 900000,
    "matchCount": 3,
    "fromHour": 0,
}"
```
"fromMinute": 0,
"duration": 0,
"aggregate": true,
"aggregationKeys": [
  "tokens"
],
"actions": [{
  "id": "54x62750-xx5x-11x9-9525-51x120x87xx9",
  "actionType": "qemail",
  "name": "Alerting 2.1.2 Testing",
  "subject": "Alerting 2.1.2 Testing",
  "alert": "Alerting 2.1.2 Testing",
  "emailRecipients": [
    "jd1@qualys.com",
    "jd2@qualys.com",
    "jd@qualys.com"
  ],
  "slackChannel": null,
  "subjectParameters": [],
  "bodyParameters": []
},
"created": 1569172952451,
"createdBy": "John Doe",
"createdById": "quays_jd2",
"updated": 1569332877053,
"updatedBy": "John Doe",
"updatedById": "quays_jd2",
"lastRun": 1569312595868,
"active": false,
"ruleState": "DISABLED",
"actionNames": [
  "Alerting 2.1.2 Testing"
],
"trigger": "Single Match"}
Enable Alert Rule

/\fim/v3/alert/rules/{ruleId}/enable

[POST]
To enable an Alert rule.

Response Code
- 200: Successful
- 401: Unauthorized
- 404: Not Found
- 503: Service unavailable

Input Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ruleId</td>
<td>(Required) ID of the alert rule you want to enable.</td>
</tr>
</tbody>
</table>

Sample

Request:

curl -X POST
https://gateway.qgl.apps.qualys.com/fim/v3/alert/rules/{ruleId}/enable
-H 'authorization: Bearer <token>' -H 'content-type: application/json'

Response:

{
  "enabled": true
}
Disable Alert Rule

/fim/v3/alert/rules/{ruleId}/disable

[POST]
To disable an alert rule.

**Response Code**
- 200: Successful
- 401: Unauthorized
- 404: Not Found
- 503: Service unavailable

**Input Parameters**

<table>
<thead>
<tr>
<th>ruleId</th>
<th>(Required) ID of the alert rule you want to disable.</th>
</tr>
</thead>
</table>

**Sample**

**Request:**
```
curl -X POST
-H 'authorization: Bearer <token>' -H 'content-type: application/json'
```

**Response:**
```
{
  "disabled": true
}
```
Delete a Alert Rule

/fim/v3/alert/rules/{ruleId}/delete

[POST]
To delete an alert rule.

Response Code
- 201: Successful
- 401: Unauthorized
- 404: Not Found
- 503: Service unavailable

Input Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ruleId</td>
<td>(Required) ID of the alert rule you want to delete.</td>
</tr>
</tbody>
</table>

Sample

Request:

```bash
curl -X POST
-H 'authorization: Bearer <token>' -H 'content-type: application/json'
```

Response:

```json
{
  "deleted": true
}
```
Alerting Activities API

Fetch the generated alerts for FIM
Count Number of Alerts Generated for FIM

Fetch the generated alerts for FIM
/fim/v3/alert/activities/search

[POST]
To search all the Alerting activities for FIM.

Response Code
- 200: Successful
- 401: Unauthorized
- 503: Service unavailable

Input Parameters

<table>
<thead>
<tr>
<th>Filter (String)</th>
<th>Filter the alerts 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: ruleName:<code>POD12: Email Rule</code></th>
</tr>
</thead>
<tbody>
<tr>
<td>pageNumber</td>
<td>The page number to be returned. The number starts from zero.</td>
</tr>
<tr>
<td>pageSize</td>
<td>The number of records per page to be included in the response. Default is 10.</td>
</tr>
<tr>
<td>sort (String)</td>
<td>Sort the results using a Qualys token. For example - &quot;sort&quot;:[&quot;status&quot;:&quot;desc&quot;]&quot;</td>
</tr>
</tbody>
</table>

Sample

Request:
```
curl -X POST
-H 'authorization: Bearer <token>' -H 'content-type: application/json' -d @request.json
```

Contents of request.json:
```
{
   "filter": "string",
   "pageNumber": {},
   "pageSize": {},
   "sort": "string"
}
```
Response:
[
  "statusDate": 1560569128488,
  "subject": "PagerDuty Test Action with John's Service Key",
  "identifiers": [
    "xx18x49x-1x2x-3xxx-x7x1-4787xxx5xxxx"
  ],
  "emailRecipients": [],
  "matches": 1,
  "ruleDescription": "Rule to test PagerDuty account",
  "aggregate": true,
  "actionType": "pagerduty",
  "createdBy": "John Doe",
  "alert": "Testing the pager duty account, to check the calls and sms Security\nJohn Linux FIM\nCentOS Linux 7.5.1804\n[[f0534cd2-8f19-4a1d-986f-414d8ef5825d]]\nchgrp
/usr/bin/chgrp
2.4.0.72
[My category JD]
"datasource": "EVENTS",
  "customerId": "x5x0514x-x211-x1b4-809x-x3x2xx667xxx",
  "actionId": "xx3xx0x0-8x68-11x9-9xx1-058683x890x9",
  "ruleName": "Rule to test PagerDuty account",
  "id": "x51xxxx1-8x9x-11x9-88x1-x97xx3100467",
  "ruleId": "x5xx0190-8x68-11x9-x24x-87456x2x93x3",
  "applicationName": "FIM",
  "createdById": "quays_jd2",
  "actionName": "PagerDuty Test Action",
  "status": "SUCCESS"
]
Count Number of Alerts Generated for FIM

/fim/v3/alert/activities/count

[POST]
To count the alerting activities for FIM.

Response Code
- 200: Successful
- 401: Unauthorized
- 503: Service unavailable

Input Parameters

| filter (String) | Filter the alerts 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 - ruleName:‘POD12: Email Rule’ |

Sample

Request:
curl -X POST https://gateway.qg1.apps.qualys.com
/fim/v3/alert/activities/count -H 'authorization: Bearer <token>'
-H 'content-type: application/json' -d @request.json

Contents of request.json:

```json
{
  "filter": "string"
}
```

Response:

```json
{
  "count": 86457
}
```
Chapter 6 - FIM Correlation API

Use these API functions to fetch FIM Correlation data.

- Fetch all Correlation Rules
- Fetch Correlation Rule Details for a particular Rule ID
- Fetch the count of Correlation Rules
- Create Correlation Rules
- Update Correlation Rule
- Activate Correlation Rule
- Deactivate Correlation Rule
- Delete Correlation Rule
Fetch all Correlation Rules
/fim/v3/autocorrelation/rules/search

[POST]
To search all the Correlation rules.

Response Code
- 200: Successful
- 401: Unauthorized
- 503: Service unavailable

Input Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>attributes</td>
<td>(Optional) The list of comma-separated attributes that you want to include in the response.</td>
</tr>
<tr>
<td>filter</td>
<td>(Optional) Filter the correlation rules 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 - scheduleType: DAILY</td>
</tr>
<tr>
<td>pageNumber</td>
<td>(Optional) The page number to be returned. The number starts from zero.</td>
</tr>
<tr>
<td>pageSize</td>
<td>(Optional) The number of records per page to be included in the response. Default is 10.</td>
</tr>
<tr>
<td>sort</td>
<td>(Optional) Sort the results using correlation rule attributes. Example: &quot;sort&quot;: [{&quot;ruleName&quot;: &quot;asc&quot;}]&quot;</td>
</tr>
</tbody>
</table>

Sample

Request:
curl -X POST
https://gateway.q1.apps.qualys.com/fim/v3/autocorrelation/rules/search
-H 'authorization: Bearer <token>' -H 'content-type: application/json' -d @request.json

Contents of request.json:

```json
{
    "pageSize":1,
    "pageNumber":1,
    "filter":"approvalType:MANUAL",
    "sort": [{"ruleName": "asc"}]
}
```
Response:

[
  {
    "fixDate": "2020-03-27",
    "approvalStatus": null,
    "updatedBy": {
      "date": 1585289546339
    },
    "changeType": null,
    "approvalType": "MANUAL",
    "description": "",
    "reviewers": [
      "quays_fa"
    ],
    "deletedBy": null,
    "deleted": false,
    "scheduleType": "ONETIME",
    "dayOfMonth": null,
    "createdBy": {
      "date": 1585289546339
    },
    "customerId": "25x14x60-80x1-4x25-8166-6653x4x2x094",
    "ruleName": "*",
    "days": [],
    "startTime": "06:30:00",
    "dispositionCategory": null,
    "comment": "",
    "id": "1xxx7x30-x730-4x94-xx03-xx98x4x28x1",
    "endTime": "08:00:00",
    "filterQuery": "action:Create",
    "status": "ACTIVATED"
  }
]
Fetch Correlation Rule Details for a particular Rule ID

/fim/v3/autocorrelation/rules/{autoCorrelationRuleId}

[GET]

To search Correlation rule details for a particular Rule ID

Response Code
- 200: Successful
- 401: Unauthorized
- 404: Not found
- 503: Service unavailable

Input Parameters

<table>
<thead>
<tr>
<th>RuleId</th>
<th>(Required) ID of the correlation rule you want to fetch the details for.</th>
</tr>
</thead>
</table>

Sample

Request:

curl -X GET

Response:

```json
{
  "customerId": "003x084-643x-x4xx-8336-x2530663x0x2",
  "id": "479886xx-0xx7-46xx-x00x-1xxx9x07x58x",
  "ruleName": "dyno_007",
  "filterQuery": "file.name:yesyes.txt",
  "description": "",
  "startTime": "11:32:00",
  "endTime": "11:33:00",
  "scheduleType": "DAILY",
  "days": null,
  "fixDate": null,
  "changeType": "MANUAL",
  "dispositionCategory": "PATCHING",
  "approvalType": "AUTOMATED",
  "approvalStatus": "UNAPPROVED",
  "reviewers": [
    "quays_hs"
  ]
}```
null}
Fetch the count of Correlation Rules

/fim/v3/autocorrelation/rules/count

[POST]

To get the count of Correlation rules.

Response Code

- 200: Successful
- 401: Unauthorized
- 503: Service unavailable

Input Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>filter (String)</td>
<td>(Optional) Filter the rule 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 - scheduleType: DAILY</td>
</tr>
<tr>
<td>groupBy (String)</td>
<td>Group results based on certain parameters (provide comma separated list). For example - ruleName</td>
</tr>
<tr>
<td>interval (String)</td>
<td>(Optional) GroupBy interval for date fields. Valid values are y(year), q(quarter), M(month), w(week), d(day), h(hour), m(minute), s(second). For example - 1d An interval lower than a second is not supported. Note: Value for each interval period should be 1. For example, you can specify an interval of 1y, 1M, 1w, and so on, but not 2y, 3M, etc.</td>
</tr>
<tr>
<td>limit</td>
<td>(Optional) Limit the number of rows fetched by the groupBy function.</td>
</tr>
<tr>
<td>sort (String)</td>
<td>(Optional) Sort the results using a Qualys token. For example - {[&quot;ruleName&quot;:&quot;asc&quot;]}</td>
</tr>
</tbody>
</table>

Sample

Request:

curl -X POST
-H 'authorization: Bearer <token>' -H 'content-type: application/json'
-d @request.json

Contents of request.json:

```json
{}
```
"groupBy": ["approvalType"],
"limit": 2,
"filter": "reviewers: quays_fa"
}

Response:
{
  "MANUAL": 105,
  "AUTOMATED": 10
}
Create Correlation Rules

/fim/v3/autocorrelation/rules/create

[POST]

To create Correlation rules.

Response Code

- 201: Successful
- 401: Unauthorized
- 503: Service unavailable

Input Parameters

<table>
<thead>
<tr>
<th>Input Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ruleName (String)</td>
<td>(Required) The name of the correlation rule. The length should be between 1 to 112 characters.</td>
</tr>
<tr>
<td>description (String)</td>
<td>The description for the correlation rule.</td>
</tr>
<tr>
<td>filterQuery (String)</td>
<td>(Required) Filter query using Qualys syntax to match the events with the incidents. Refer to the &quot;How to Search&quot; topic in the Online help for assistance with creating your query.</td>
</tr>
<tr>
<td>reviewers (String)</td>
<td>(Required) A list of comma separated user names to review the incidents created from the rule.</td>
</tr>
<tr>
<td>approvalType</td>
<td>(Required) Approval Type of the Incident created by this rule. Allowed values: &quot;AUTOMATED&quot; or &quot;MANUAL&quot;</td>
</tr>
<tr>
<td>approvalStatus</td>
<td>(Required if the Approval Type is Automated) The approval status of the incident created by the rule. Allowed values: &quot;APPROVED&quot;, &quot;POLICY_VIOLATION&quot;, &quot;UNAPPROVED&quot;, &quot;NA&quot;.</td>
</tr>
<tr>
<td>changeType</td>
<td>(Required if approval type is Automated) Type of Incidents created by the rule. Allowed values: &quot;MANUAL&quot;, &quot;AUTOMATED&quot;, &quot;COMPROMISE&quot;, &quot;OTHER&quot;.</td>
</tr>
<tr>
<td>comment (String)</td>
<td>(Required if approval type is Automated) Comments for Incidents created by rule.</td>
</tr>
<tr>
<td>dispositionCategory</td>
<td>(Required if approval type is Automated). The category of the Incident created by the rule. Allowed values: &quot;PATCHING&quot;, &quot;PRE_APPROVED_CHANGE_CONTROL&quot;, &quot;CONFIGURATION_CHANGE&quot;, &quot;HUMAN_ERROR&quot;, &quot;DATA_CORRUPTION&quot;, &quot;EMERGENCY_CHANGE&quot;, &quot;CHANGE_CONTROL_VIOLATION&quot;, &quot;GENERAL_HACKING&quot;, &quot;MALWARE&quot;</td>
</tr>
<tr>
<td>scheduleType</td>
<td>(Required) The schedule for the rule: Allowed values: &quot;ONETIME&quot;, &quot;DAILY&quot;, &quot;WEEKLY&quot;, &quot;MONTHLY&quot;</td>
</tr>
</tbody>
</table>
## Create Correlation Rules

**Sample Request:**

```bash
```

**Contents of request.json:**

```json
{
    "fixDate": "2020-06-04",
    "approvalStatus": "APPROVED",
    "changeType": "AUTOMATED",
    "approvalType": "AUTOMATED",
    "description": "test",
    "reviewers": [
        "quays_wk29"
    ],
    "scheduleType": "ONETIME",
    "ruleName": "rulename_2_3",
    "startTime": "12:00:00",
    "dispositionCategory": "PRE_APPROVED_CHANGE_CONTROL",
    "comment": "some comment ",
    "endTime": "23:59:00",
    "filterQuery": "action:Create"
}
```

<table>
<thead>
<tr>
<th><strong>Parameter</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>startTime</strong></td>
<td>(Required) Time when the Correlation rule must start. Format: &quot;HH:mm:ss&quot; Note: The time must be mentioned in UTC format.</td>
</tr>
<tr>
<td><strong>endTime</strong></td>
<td>(Required if Schedule Type is selected as &quot;ONETIME&quot;) Time when the Correlation rule should end. Format: &quot;HH:mm:ss&quot;. Note: The time must be mentioned in UTC format.</td>
</tr>
<tr>
<td><strong>fixDate</strong></td>
<td>(Required if Schedule Type is selected as &quot;ONETIME&quot;) The date on which the rule is executed. Format: &quot;yyyy-MM-dd&quot;. Note: Value should not be a past date. Note: The date must be mentioned in UTC format.</td>
</tr>
<tr>
<td><strong>dayOfMonth</strong></td>
<td>(Required if Schedule Type is selected as &quot;MONTHLY&quot;) The days of the month on which rule is executed. Allowed values: integer (1-31).</td>
</tr>
<tr>
<td><strong>days</strong></td>
<td>For recurring weekly schedules, it is the list of days on which rule is executed. Allowed values: Allowed values: integer (1-7), where Sunday (1) and Saturday (7). Default value is 1 (Sunday).</td>
</tr>
</tbody>
</table>
Response:
{
    "customerId": "25x14x60-80x1-4x25-8166-6653x4x2x094",
    "id": "5438x40c-x469-4x37-xxxx-9xx19x10x8x9",
    "ruleName": "ruleName_2_3",
    "filterQuery": "action:Create",
    "description": "test",
    "startTime": "12:00:00",
    "endTime": "23:59:00",
    "scheduleType": "ONETIME",
    "days": [],
    "fixDate": "2020-06-04",
    "changeType": "AUTOMATED",
    "dispositionCategory": "PRE_APPROVED_CHANGE_CONTROL",
    "approvalType": "AUTOMATED",
    "approvalStatus": "APPROVED",
    "reviewers": [
        "quays_wk29"
    ],
    "comment": "some comment ",
    "createdBy": {
        "user": {
            "id": "51xxxx4x-5xx5-xxx6-8141-5x7887xx557x",
            "name": "FIM Automation"
        },
        "date": 1591164238040
    },
    "updatedBy": {
        "user": {
            "id": "51xxxx4x-5xx5-xxx6-8141-5x7887xx557x",
            "name": "FIM Automation"
        },
        "date": 1591164238040
    }
}
### Update Correlation Rule

**/fim/v3/autocorrelation/rules/{autoCorrelationRuleId}/update**

[POST]

To update a Correlation rule.

**Response Code**

- 200: Successful
- 401: Unauthorized
- 404: Not found
- 503: Service unavailable

**Input Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>description (String)</td>
<td>The description for the correlation rule.</td>
</tr>
<tr>
<td>reviewers (String)</td>
<td>A list of comma separated user names to review the incidents created from the rule.</td>
</tr>
<tr>
<td>approvalType</td>
<td>Approval Type of the Incident created by this rule.</td>
</tr>
<tr>
<td></td>
<td>Allowed values: “AUTOMATED” or “MANUAL”</td>
</tr>
<tr>
<td>approvalStatus</td>
<td>(Required if the Approval Type is Automated) The approval status of the incident created by the rule.</td>
</tr>
<tr>
<td></td>
<td>Allowed values: “APPROVED”, “POLICY_VIOLATION”, “UNAPPROVED”, “NA”.</td>
</tr>
<tr>
<td>changeType</td>
<td>(Required if approval type is Automated) Type of Incidents created by the rule.</td>
</tr>
<tr>
<td></td>
<td>Allowed values: “MANUAL”, “AUTOMATED”, “COMPROMISE”, “OTHER”.</td>
</tr>
<tr>
<td>comment (String)</td>
<td>(Required if approval type is Automated) Comments for Incidents created by rule.</td>
</tr>
<tr>
<td>dispositionCategory</td>
<td>(Required if approval type is Automated) The category of the Incident created by the rule.</td>
</tr>
<tr>
<td>scheduleType</td>
<td>The schedule for the rule.</td>
</tr>
<tr>
<td></td>
<td>Allowed values: “ONETIME”, “DAILY”, “WEEKLY”, “MONTHLY”</td>
</tr>
<tr>
<td></td>
<td>Note: This parameter cannot be updated from:</td>
</tr>
<tr>
<td></td>
<td>-ONETIME to WEEKLY, MONTHLY, DAILY or</td>
</tr>
<tr>
<td></td>
<td>-WEEKLY, MONTHLY, DAILY to ONETIME</td>
</tr>
<tr>
<td></td>
<td>Also, ONETIME Rule cannot be updated after END time is over.</td>
</tr>
</tbody>
</table>
### Chapter 6 - FIM Correlation API

#### Update Correlation Rule

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Format</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>startTime</strong></td>
<td>Time when the Correlation rule must start.</td>
<td>&quot;HH:mm:ss&quot;</td>
<td>The time must be mentioned in UTC format.</td>
</tr>
<tr>
<td><strong>endTime</strong></td>
<td>(Required if Schedule Type is selected as &quot;ONETIME&quot;) Time when the Correlation rule should end.</td>
<td>&quot;HH:mm:ss&quot;</td>
<td>The time must be mentioned in UTC format.</td>
</tr>
<tr>
<td><strong>fixDate</strong></td>
<td>(Required if Schedule Type is selected as &quot;ONETIME&quot;) The date on which the rule is executed.</td>
<td>&quot;yyyy-MM-dd&quot;</td>
<td>Its value should not be a past date. The date must be mentioned in UTC format.</td>
</tr>
<tr>
<td><strong>dayOfMonth</strong></td>
<td>(Required if Schedule Type is selected as &quot;MONTHLY&quot;) The days of the month on which rule is executed.</td>
<td>integer (1-31)</td>
<td>Allowed values: integer (1-31).</td>
</tr>
<tr>
<td><strong>days</strong></td>
<td>For recurring weekly schedules, it is the list of days on which rule is executed.</td>
<td>integer (1-7), where Sunday (1) and Saturday (7). Default value is 1 (Sunday).</td>
<td></td>
</tr>
</tbody>
</table>

#### Sample

**Request:**

```
```

**Contents of request.json:**

```json
{
    "fixDate": "2020-06-09",
    "endTime": "13:00:00",
    "startTime": "06:30:00",
    "description": "update description",
    "reviewers": [
        "updated_reviewer"
    ]
}
```

**Response:**

```json
{
    "customerId": "25x14x60-80x1-4x25-8166-6653x4e2x094",
    "id": "5438e40c-a469-4e37-aaac-9ff19c10e8f9",
    "ruleName": "rulename_2_3",
    "filterQuery": "action:Create",
    "description": "update description",
```
"startTime": "06:30:00",
"endTime": "13:00:00",
"scheduleType": "ONETIME",
"days": null,
"fixDate": "2020-06-09",
"changeType": "AUTOMATED",
"dispositionCategory": "PRE_APPROVED_CHANGE_CONTROL",
"approvalType": "AUTOMATED",
"approvalStatus": "APPROVED",
"reviewers": [
  "updated_reviewer"
],
"deleted": false,
"status": "ACTIVATED",
"dayOfMonth": null,
"comment": "some comment ",
"createdById": "51xxxx4x-5xx5-xxx6-8141-5x7887xx557x",
"createdByName": "FIM Automation",
"createdDate": "2020-06-03T06:03:58.040+0000",
"updatedById": "51fbdb4b-fb5-fdf6-8141-5a7887ec557b",
"updatedByName": "FIM Automation",
"updatedDate": "2020-06-03T06:38:55.092+0000",
"deletedById": null,
"deletedByName": null,
"deletedDate": null}
Activate Correlation Rule

/fim/v3/autocorrelation/rules/{autoCorrelationRuleId}/activate

[POST]

To update the Correlation rule to activate state.
Note: After a Correlation rule is created, it is default in an active state.

Response Code
- 201: Successful
- 404: Not found
- 401: Unauthorized
- 503: Service unavailable

Input Parameters

| autoCorrelationRuleId | (Required) ID of the rule you want to activate. |

Sample

Request:
```
curl -X POST
-H 'authorization: Bearer <token>'
-H 'content-type: application/json'
```

Response:
```
{
  "status": "ACTIVATED"
}
```
Deactivate Correlation Rule

/fim/v3/autocorrelation/rules/{autoCorrelationRuleId}/deactivate

[POST]

To deactivate auto correlation rule.

Response Code

- 200: Successful
- 404: Not found
- 401: Unauthorized
- 503: Service unavailable

Input Parameters

autoCorrelationRuleId (Required) ID of the rule you want to deactivate.

Sample

Request:

```bash
curl -X POST
```

Response:

```json
{
  "status": "DEACTIVATED"
}
```
Delete Correlation Rule

/fim/v3/autocorrelation/rules/{autoCorrelationRuleId}/delete

[POST]
To delete Correlation rule.

Response Code
- 200: Successful
- 404: Not found
- 401: Unauthorized
- 503: Service unavailable

Input Parameters

| autoCorrelationRuleId | (Required) ID of the rule you want to delete. |

Sample

Request:

curl -X POST

Response:

{  
  "deleted": true
}

Chapter 7 - FIM Profile APIs

Use these API functions to fetch FIM Profile data.

Search a Profile
Activate a Profile
Assign an Asset to a Profile
Assign Tags to a Profile
Export the Profile in XML Format
Export a Profile in JSON format
Import a Profile from XML File Inputs
Import a Profile from JSON File Inputs
List the Profile Categories
Deactivate a Profile
Search a Profile

/fim/v3/profiles/search

[POST]

To search Profile.

Response Code

- 200: Successful
- 401: Unauthorized
- 404: Profile not found
- 500: Internal Server error

Input Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>attributes</td>
<td>(Required) The list of comma-separated attributes that you want to include in the response. By default, all attributes will be returned in the result.</td>
</tr>
<tr>
<td>filter</td>
<td>(Required) Filter the Profile rules 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 - action: 'Content'</td>
</tr>
<tr>
<td>pageNumber</td>
<td>(Required) The page number to be returned. The number starts from zero.</td>
</tr>
<tr>
<td>pageSize</td>
<td>(Required) The number of records per page to be included in the response. Default is 10.</td>
</tr>
<tr>
<td>sort</td>
<td>(Required) Sort the results using Profile rule attributes.</td>
</tr>
</tbody>
</table>

Sample

Request:

curl -X POST

Contents of request.json:

```
{
    "attributes": "string",
    "filter": "string",
    "pageNumber": "number",
    "pageSize": "number",
    "sort": "string",
}
```
Response:

```json
{
    "updatedBy": {
        "date": 1582023188082,
        "user": {
            "name": "John Doe",
            "id": "x37x1x6x-x023-x948-80xx-2xx6022x3436"
        }
    },
    "assetTagIds": [],
    "assetIds": [],
    "type": "LINUX",
    "version": "1.0",
    "syncFromId": "00000000-0000-0001-0000-000000000001",
    "deletedBy": null,
    "deleted": false,
    "createdBy": {
        "date": 1581935157993,
        "user": {
            "name": "John Doe",
            "id": "x37x1x6x-x023-x948-80xx-2xx6022x3436"
        }
    },
    "name": "Linux testing FIM-3387",
    "customerId": "x5x0514x-x211-x1x4-809x-x3x2xx667xxx",
    "id": "x444920x-81xx-4xx6-x018-x44b0xx2xx22",
    "category": {
        "name": "PCI",
        "id": "2xxx5022-2xx-11x7-93xx-92361f002671"
    },
    "syncType": "NOT_APPLICABLE",
    "status": "DEACTIVATED"
}
```
Activate a Profile

/fim/v3/profiles/{profileId}/activate

[POST]

To activate a Profile

Response Code

- 200: Successful
- 401: Unauthorized
- 404: Profile not found
- 409: Conflict if the profile is activated.
- 500: Internal Server error

Input Parameters

| profileId       | (Required) ID of the profile that is to be activated. |

Sample

Request:

curl -X POST
https://gateway.qg1.apps.qualys.com/fim/v3/profiles/{profileId}/activate
-H 'authorization: Bearer <token>' -H 'content-type: application/json'

Response:

```json
{
    "status": "ACTIVATED"
}
```
Assign an Asset to a Profile

/fim/v3/profiles/{profileId}/assets

[POST]
To assign an asset to a Profile.

Response Code
- 200: Successful
- 401: Unauthorized
- 404: Profile not found
- 500: Internal Server error

Input Parameters

| assetIdsForProfile | (Required) The UUID of the asset you want to assign to the profile. |

Sample

Request:

```bash
curl -X POST
https://gateway.qgl.apps.qualys.com/fim/v3/profiles/{profileId}/assets
-H 'authorization: Bearer <token>' -H 'content-type: application/json' -d @request.json
```

Contents of request.json:

```json
{
"assetIdsForProfile": [
    "asset uuid 1", "asset uuid2"
]
}
```

Response:

```json
{
  "assetsAdded": true
}
```
Assign Tags to a Profile

/fim/v3/profiles/{profileId}/assettags

[POST]

To assign a tag to a Profile.

Note: Using this API, only tags that contain FIM activated assets can be assigned to profile.

Response Code

- 200: Successful
- 400: Profile ID does not exist
- 401: Unauthorized
- 404: Profile not found
- 500: Internal Server error

Input Parameters

| assetTagIdsForProfile | (Required) List of asset tag ids to which you want to assign to the profiles. |

Sample

Request:

curl -X POST
-H 'authorization: Bearer <token>' -H 'content-type: application/json' -d @request.json

Contents of request.json:

```
{
  "assetTagIdsForProfile": [
    "tag id 1", "tag id 2"
  ]
}
```

Response:

```
{
  "assetTagsAdded": true
}
```
Export the Profile in XML Format

/fim/v3/profiles/{profileId}/exportxml

[POST]

To export the Profile in XML format.

Response Code

- 200: Successful
- 400: Profile ID does not exist
- 401: Unauthorized
- 404: Profile not found
- 500: Internal Server error

Input Parameters

| profileId | (Required) The ID for the profile that needs to be exported. |

Sample

Request:

curl -X POST
https://gateway.qg1.apps.qualys.com/fim/v3/profiles/{profileId}/exportxml '
-H 'authorization: Bearer <token>' -H 'content-type: application/json'

Response:

<?xml version="1.0" encoding="UTF-8"?>
<profile>
  <id>20x213xx-xx2x-44x0-xxx3-x95940x49x62</id>
  <name>FIM-2998 windows</name>
  <version>1.0</version>
  <description />
  <type>WINDOWS</type>
  <category>
    <id>9xx0154x-70x8-4807-90xx-xxxxx6xx59xx</id>
    <name>PCI</name>
  </category>
  <rules>
    <rule>
      <id>32xxx356-xx8x-4334-x972-33x6x428xx79</id>
      <type>directory</type>
      <imagePath>C:\\Windows\\System32\\</imagePath>
      <description>Rule Description</description>
  </rules>
</profile>
<recursiveDepth>2</recursiveDepth>
<notifyFor>
  <directory>
    <notify>rename</notify>
    <notify>modifyMetadata</notify>
    <notify>delete</notify>
    <notify>modifySecuritySettings</notify>
    <notify>create</notify>
  </directory>
  <file>
    <notify>rename</notify>
    <notify>modifyContent</notify>
    <notify>delete</notify>
    <notify>modifyMetadata</notify>
    <notify>create</notify>
    <notify>modifySecuritySettings</notify>
  </file>
</notifyFor>
<inclusions>
  <inclusion>
    <objectType>file</objectType>
    <patterns>
      <pattern>C:\Windows\*.txt</pattern>
    </patterns>
  </inclusion>
</inclusions>
<exclusions>
  <exclusion>
    <objectType>file</objectType>
    <patterns>
      <pattern>C:\Windows\*.log</pattern>
    </patterns>
  </exclusion>
</exclusions>
<severity>3</severity>
<name>Rule Name 2</name>
</rule>

</rules>
</profile>
Export the Profile in JSON Format

/fim/v3/profiles/{profileId}/exportjson

[POST]

To export the profile in JSON format.

Response Code

- 200: Successful
- 400: Profile ID does not exist
- 401: Unauthorized
- 404: Profile not found
- 500: Internal Server error

Input Parameters

| profileId | (Required) The ID for the profile that needs to be exported. |

Sample

Request:

curl -X POST
https://gateway.qg1.apps.qualys.com/fim/v3/profiles/{profileId}/exportjson
-H 'authorization: Bearer <token>' -H 'content-type: application/json'

Response:

```
{
    "id": "20x213xx-xx2x-44x0-xxx3-x95940x49x62",
    "name": "FIM-2998 windows",
    "version": "1.0",
    "description": "Profile Description",
    "type": "WINDOWS",
    "category": {
        "id": "9xx0154x-70x8-4807-90xx-xxxxx6xx59xx",
        "name": "PCI 1"
    },
    "rules": [
        {
            "id": "32xxx356-xx8x-4334-x972-33x6x428xx79",
            "type": "directory",
            "imagePath": "C:\Windows",
            "description": "",
            "recursiveDepth": "2",
```
"notify": {
    "directory": [
        "rename",
        "modifyMetadata",
        "delete",
        "modifySecuritySettings",
        "create"
    ],
    "file": [
        "rename",
        "modifyContent",
        "delete",
        "modifyMetadata",
        "create",
        "modifySecuritySettings"
    ],
    "monitorOwnership": false,
    "inclusionFilter": [
        {
            "objectType": "file",
            "patterns": [
                "C:\Windows\*.txt"
            ],
        },
        {
            "objectType": "file",
            "patterns": [
                "C:\Windows\*.log"
            ],
        }
    ],
    "exclusionFilter": [
    ],
    "severity": 3,
    "name": "Rule 1"
},
{
    "id": "x540x323-xxx7-439x-x247-x33xx6x42x71",
    "type": "directory",
    "imagePath": "D:\MyDir",
    "description": "Description",
    "recursiveDepth": "None",
    "notify": {

Export the Profile in JSON Format

```json
{
    "directory": [
        "rename",
        "delete"
    ],
    "file": [
        "delete"
    ],
    "monitorOwnership": false,
    "inclusionFilter": [
        {
            "objectType": "file",
            "patterns": ["C:\Windows\*.txt"]
        },
        {
            "objectType": "file",
            "patterns": ["C:\Windows\*.log"]
        }
    ],
    "exclusionFilter": [],
    "severity": 3,
    "name": "Rule 2"
}
```
Import a Profile from XML File Inputs

/fim/v3/profiles/importxml

[POST]
To create a profile from XML inputs.

Response Code
- 201: Successful
- 401: Unauthorized
- 404: Profile not found
- 500: Internal Server error

Input Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name (String)</td>
<td>The name of the profile.</td>
</tr>
<tr>
<td>description (String)</td>
<td>Description of the profile.</td>
</tr>
<tr>
<td>category.id</td>
<td>The ID of the category.</td>
</tr>
<tr>
<td>category.name</td>
<td>Name of the Category</td>
</tr>
<tr>
<td>type</td>
<td>Type of profile. Example: WINDOWS or LINUX.</td>
</tr>
<tr>
<td>rules.FimRuleExternal.type</td>
<td>Type of the Rule. Example: file/directory</td>
</tr>
<tr>
<td>rules.severity</td>
<td>Severity of Rule. Allowed values 1,2,3,4,5</td>
</tr>
<tr>
<td>rules.FimRuleExternal.imagePath</td>
<td>Path on the asset which needs to be monitored.</td>
</tr>
<tr>
<td>rules.FimRuleExternal.description</td>
<td>Description of the Rule.</td>
</tr>
<tr>
<td>rules.FimRuleExternal.recursiveDepth</td>
<td>Depth of directory we need to monitor. Allowed values: 1,2,3,4,5,6,7,8,9,None,All</td>
</tr>
<tr>
<td>rules.FimRuleExternal.notify.directory</td>
<td>List of directory attributes which needs to be monitored. Allowed values: create, delete, rename, modifyMetadata, modifySecuritySettings</td>
</tr>
<tr>
<td>rules.FimRuleExternal.notify.file</td>
<td>List of file attributes which needs to be monitored. Allowed values - create, delete, rename, modifyContent, modifyMetadata, modifySecuritySettings</td>
</tr>
<tr>
<td>rules.FimRuleExternal.inclusions.FimRuleInclusions.objectType</td>
<td>Type of the object that needs to be in inclusion Filter of the rule. file/directory</td>
</tr>
<tr>
<td>rules.FimRuleExternal.inclusions.FimRuleInclusions.patterns</td>
<td>List of paths to be added as inclusion filters. For example: C:\System32*.log</td>
</tr>
</tbody>
</table>
Chapter 7 - FIM Profile APIs
Import a Profile from XML File Inputs

Sample Request:
curl -X POST
'authorization: Bearer <token>' -H 'content-type:
application/json' -d @request.json

Contents of request.json:
<?xml version="1.0" encoding="UTF-8"?>
<profile>
  <name>Monitoring Profile 1</name>
  <description>Description of the Profile</description>
  <category>
    <id>string</id>
    <name>string</name>
  </category>
  <type>WINDOWS</type>
  <rules>
    <FimRuleExternal>
      <name>string</name>
      <description>string</description>
      <type>file</type>
      <severity>2</severity>
      <imagePath>string</imagePath>
      <recursiveDepth>9</recursiveDepth>
      <notify>
        <directory>
          <directory>rename</directory>
        </directory>
        <file>
          <file>rename</file>
        </file>
      </notify>
      <inclusions>
        <FimRuleInclusions>
          <objectType>file</objectType>
          <patterns>
            <pattern>path 1</pattern>
            <!-- Add more patterns as needed -->
          </patterns>
        </FimRuleInclusions>
        <!-- Add more inclusions as needed -->
      </inclusions>
    </FimRuleExternal>
    <!-- Add more rules as needed -->
  </rules>
</profile>

Rules:
- **FimRuleExternal**: Represents an external FIM rule.
- **FimRuleInclusions**: Represents rules for including or excluding objects.
  - **objectType**: Type of the object (e.g., file, directory).
  - **patterns**: List of paths to include or exclude.

Sample Table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>rules.FimRuleExternal.exclusions.FimRuleExclusions.objectType</td>
<td>Type of the object that needs to be added in exclusion Filter of the rule.</td>
</tr>
<tr>
<td>rules.FimRuleExternal.exclusions.FimRuleExclusionspatterns</td>
<td>List of paths to be added in exclusion filters.</td>
</tr>
<tr>
<td></td>
<td>For example: C:\System32*.log</td>
</tr>
</tbody>
</table>
Chapter 7 - FIM Profile APIs
Import a Profile from XML File Inputs

<pattern>path 2</pattern>
</patterns>
</FimRuleInclusions>
</inclusions>
<exclusions>
<FimRuleExclusions>
<objectType>file</objectType>
<patterns>
<pattern>path 1</pattern>
<pattern>path 2</pattern>
</patterns>
</FimRuleExclusions>
</exclusions>
</FimRuleExternal>
</rules>
</profile>
**Import a Profile from JSON File Inputs**

`/fim/v3/profiles/importjson`

[POST]

To create a profile from JSON file inputs.

**Response Code**
- 201: Successful
- 401: Unauthorized
- 404: Profile not found
- 500: Internal Server error

**Input Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name (String)</td>
<td>The name of the profile.</td>
</tr>
<tr>
<td>type</td>
<td>Type of profile. Example: WINDOWS or LINUX.</td>
</tr>
<tr>
<td>category.id</td>
<td>The ID of the category.</td>
</tr>
<tr>
<td>category.name</td>
<td>Name of the Category</td>
</tr>
<tr>
<td>description (String)</td>
<td>Description of the profile.</td>
</tr>
<tr>
<td>rules.name</td>
<td>Name of the rule.</td>
</tr>
<tr>
<td>rules.description</td>
<td>Description of the rule</td>
</tr>
<tr>
<td>rules.type</td>
<td>Type of the Rule. Example: file/directory</td>
</tr>
<tr>
<td>rules.imagePath</td>
<td>Path which needs to be monitored.</td>
</tr>
<tr>
<td>rules.recursiveDepth</td>
<td>In case of directory rule, depth of directory we want to monitor. Allowed values: 1,2,3,4,5,6,7,8,9,None,All</td>
</tr>
<tr>
<td>rules.severity</td>
<td>Severity of Rule. Example: 1,2,3,4,5</td>
</tr>
<tr>
<td>rules.notify.directory</td>
<td>List of directory attributes that needs to be monitored. Allowed values: create, delete, rename, modifyMetadata, modifySecuritySettings.</td>
</tr>
<tr>
<td>rules.notify.file</td>
<td>List of file attributes that needs to be monitored. Allowed values: create, delete, rename, modifyContent, modifyMetadata,modifySecuritySettings.</td>
</tr>
<tr>
<td>rules.inclusionFilter.objectType</td>
<td>Type of the object which needs to be in inclusion Filter of the rule. file/directory</td>
</tr>
<tr>
<td>rules.inclusionFilter.patterns</td>
<td>List of paths to be added as inclusion filters For example: C:\System32*.txt</td>
</tr>
</tbody>
</table>
Chapter 7 - FIM Profile APIs
Import a Profile from JSON File Inputs

Sample Request:
```
curl -X POST 
-H 'authorization: Bearer <token>' -H 'content-type: application/json' 
-d @request.json
```

Contents of request.json:
```json
{
  "name": "Profile name",
  "type": "WINDOWS",
  "category": {
    "id": "string",
    "name": "string"
  },
  "description": "Profile Description",
  "rules": [
    {
      "name": "Rule Name",
      "description": "string",
      "type": "file",
      "imagePath": "string",
      "recursiveDepth": "Nine",
      "severity": 2,
      "notify": {
        "directory": [
          "rename",
          "delete",
          "create",
          "modifyMetadata",
          "modifySecuritySettings"
        ],
        "file": [
          "rename",
          "delete",
          "create",
          "modifyMetadata",
          "modifyContent",
          "modifySecuritySettings"
        ]
      }
    }
  ],
  "rules.exclusionFilter.objectType": "file/directory",
  "rules.exclusionFilter.patterns": ["C:\System32\*.log"
```
[{
  "objectType": "file",
  "patterns": [
    "C:\Windows\*.txt"
  ]
},
{
  "objectType": "file",
  "patterns": [
    "C:\Windows\*.log"
  ]
}]
},
"inclusionFilter": [
  {
    "objectType": "file",
    "patterns": [
      "C:\Windows\*.txt"
    ]
  }
],
"exclusionFilter": [
  {
    "objectType": "file",
    "patterns": [
      "C:\Windows\*.log"
    ]
  }
]
List the Profile Categories

/fim/v3/categories/search

[POST]
To search the categories of Profile.

Response Code
- 200: Successful
- 401: Unauthorized
- 404: Profile not found
- 500: Internal Server error

Sample

Request:
curl -X POST

Contents of request.json:
[

  {
    "id": "2xxx5022-2xxx-11x7-93xx-92361x002671",
    "name": "PCI",
    "createdBy": {
      "user": {
        "id": "2xxx5270-2xxx-11x7-93xx-92361x002671",
        "name": "System"
      },
      "date": 1493813100000
    },
    "system": true,
    "deleted": false

  },

  {
    "id": "2xxb5374-2xxx-11x7-93xx-92361x002671",
    "name": "HIPAA",
    "createdBy": {
      "user": {
        "id": "2xxx5270-2xxx-11x7-93xx-92361x002671",
        "name": "System"
      },
      "date": 1493813100000
    }
  }
]
"system": true,
"deleted": false
}]
]
Deactivate a Profile

/fim/v3/profiles/{profileId}/deactivate

[POST]

To deactivate a Profile.

Response Code

- 200: Successful
- 401: Unauthorized
- 404: Profile not found
- 409: Conflict if profile is already deactivated.
- 500: Internal Server error

Input Parameters

| profileId | (Required) ID of the profile which needs to be deactivated. |

Sample

Request:

```
curl -X POST
https://gateway.qg1.apps.qualys.com/fim/v3/profiles/{profileId}/deactivate
-H 'authorization: Bearer <token>'
-H 'content-type: application/json'
```

Response:

```
{
  "status": "DEACTIVATED"
}
```
Chapter 8 - FIM Asset APIs

Use these API functions to fetch FIM Asset data.

Search Assets
Count the Assets
Search Assets

/fim/v3/assets/search

[POST]

To search Assets based on a criteria.

Response Code

- 200: Successful
- 400: Bad Request
- 500: Internal Server error

Input Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorization (String)</td>
<td>(Required) Authorization token to authenticate to the Qualys Cloud Platform. Prepend token with &quot;Bearer&quot; and one space. For example - Bearer authToken</td>
</tr>
<tr>
<td>attributes (String)</td>
<td>(Optional) The list of comma-separated attributes that you want to include in the response. By default, all attributes will be returned in the result.</td>
</tr>
<tr>
<td>filter (String)</td>
<td>(Optional) Filter the Assets 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 - operatingSystem:’Microsoft Windows 10’</td>
</tr>
<tr>
<td>pageNumber</td>
<td>(Optional) The page number to be returned. The number starts from zero.</td>
</tr>
<tr>
<td>pageSize</td>
<td>(Optional) The number of records per page to be included in the response. Default is 10.</td>
</tr>
<tr>
<td>includeTagData</td>
<td>(Optional) Set the flag to “true” if you want the tags related information in the response. Else, set it to false.</td>
</tr>
<tr>
<td>searchAfter</td>
<td>(Optional) This parameter is required to fetch more than 10,000 rows.</td>
</tr>
<tr>
<td>notSentEventsForHours</td>
<td>(Optional) List those assets that have not sent any events in last &quot;&lt;enter value&gt;&quot; hours. This integer input e.g 10.</td>
</tr>
<tr>
<td>sort (String)</td>
<td>(Optional) Sort the results using Asset rule attributes.</td>
</tr>
</tbody>
</table>

Sample Request:

curl -X POST
https://gateway.qgl.apps.qualys.com/fim/v3/assets/search
-H 'authorization: Bearer <token>'
-H 'content-type: application/json'
-d @request.json
Contents of request.json:
{
  "attributes": "customerUuid,name,manifest,operatingSystem",
  "filter": "interfaces.address:10.112.113.114",
  "pageNumber": 0,
  "pageSize": 2
  "includeTagData": true,
}

Response:
[
{
  "sortValues": [],
  "data": {
    "interfaces": [
      {
        "hostname": "WIN-FMEI8HBTFBQ",
        "macAddress": "00:50:56:AA:0E:F7",
        "address": "10.115.110.43",
        "interfaceName": "Intel(R) 82574L Gigabit Network Connection"
      }
    ],
    "lastCheckedIn": 1603954630000,
    "manifest": {
      "id": "857016x0-xx3x-4x39-80x1-67x85x358x03",
      "updatedDate": 1603878321548,
      "status": "FIM_MANIFEST_ASSIGNED"
    },
    "created": 1602834506184,
    "profiles": [
      {
        "createdBy": {
          "date": 1603877617167,
          "user": {
            "name": "John D",
            "id": "xx390990-xx37-x1x5-82xx-1x112xxx897"
          }
        },
        "name": "Cloned Profile demo",
        "customerId": "269773x8-x767-x0xx-802x-6x735x0xx32x",
        "id": "xx3221xx-x0xx-422x-9184-x35xxx531xx1",
        "type": "WINDOWS",
        "category": {

"name": "PCI",
"id": "2xxx5022-2xxx-11x7-93xx-92361x002671"
},
"version": "1.0",
"status": "DEACTIVATED"
},
{
"osVersions": [],
"createdBy": {
"date": 1588135956893,
"user": {
"name": "John D",
"id": "xx390990-xx37-x1x5-82xx-1x11x2xxx897"
}
},
"name": "FIM 25 tag based from CAUI",
"customerId": "269773x8-e767-x0xx-802x-6x735x0xx32x",
"id": "x748xx72-xxx1-4015-xx00-95240x463x5",
"type": "WINDOWS",
"category": {
"name": "PCI",
"id": "2xxx5022-2xxx-11x7-93xx-92361x002671"
}
},
"version": "1.0",
"status": "ACTIVATED"
},
{
"osVersions": [],
"createdBy": {
"date": 1598624329303,
"user": {
"name": "John D",
"id": "xx390990-xx37-x1x5-82xx-1f11x2xxx897"
}
},
"name": "25 106 62 asset based",
"customerId": "269773x8-x767-x0xx-802x-6e735x0xx32x",
"id": "x91xx99-8563-4530-8x25-453x88xxx5xx",
"type": "WINDOWS",
"category": {
"name": "PCI",
"id": "2xxx5022-2xxx-11x7-93xx-92361x002671"
}
},
"version": "1.0",
"status": "DEACTIVATED"
Chapter 8 - FIM Asset APIs

Search Assets

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{
   "osVersions": [],
   "createdBy": {
      "date": 1598623903641,
      "user": {
         "name": "John D",
         "id": "xx390990-xx37-x1x5-82xx-1x11x2xxx897"
      }
   },
   "name": "FIM 25 110 43",
   "customerId": "269773x8-x767-x0xx-802x-6x735x0xx32x",
   "id": "x9603xxx-9x7x-4x85-x522-1xxx70x58x30",
   "type": "WINDOWS",
   "category": {
      "name": "PCI",
      "id": "2xxx5022-2xxx-11x7-93xx-92361f002671"
   },
   "version": "1.0",
   "status": "ACTIVATED"
}

"agentService": null,
"hostId": 0,
"operatingSystem": "Microsoft Windows Server 2016 Standard 10.0.14393 64-bit N/A Build 14393",
"lastLoggedonUser": ".\\Administrator",
"tags": [
   "xx9757xx-98xx-4761-9xx8-580xx2x8xx32",
   "x674613x-x694-4x05-8x74-20x5973x2xx3",
   "x10x8296-xxx5-4x73-xxx6-x34xxx510786"
],
"customerUuid": "269773x8-x767-x0xx-802x-6x735x0xx32x",
"system": {
   "lastBoot": 1603954630000
},
"ec2": null,
"assetId": 15948111,
"netbiosName": "WIN-FMEI8HBTFBQ",
"customerId": 760183,
"name": "WIN-FMEI8HBTFBQ",
"agentVersion": "4.1.0.58",
"id": "144x78xx-3x28-42xx-855x-5x53x92408xx",
"agentUuid": "144x78xx-3x28-42xx-855x-5x53x92408xx",
"activationDate": 1602834506184"
Chapter 8 - FIM Asset APIs

Search Assets

```json
}
]
```
Count the Assets
/fim/v3/assets/count

[POST]
To count the assets based on a criteria.

Response Code
- 200: Successful
- 400: Bad Request
- 500: Internal Server error

Input Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorization (String)</td>
<td>(Required) Authorization token to authenticate to the Qualys Cloud Platform. Prepend token with &quot;Bearer&quot; and one space. For example - Bearer authToken</td>
</tr>
<tr>
<td>filter (String)</td>
<td>(Optional) Filter the Assets 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 - operatingSystem:'Microsoft Windows 10'</td>
</tr>
<tr>
<td>groupBy (String)</td>
<td>(Optional) Group results based on certain parameters (provide comma separated list). For example - operatingSystem</td>
</tr>
<tr>
<td>interval (String)</td>
<td>(Optional) GroupBy interval for date fields. Valid values are y(year), q(quarter), M(month), w(week), d(day), h(hour), m(minute), s(second). For example - 1d An interval lower than a second is not supported. Note: Value for each interval period should be 1. For example, you can specify an interval of 1y, 1M, 1w, and so on, but not 2y, 3M, etc.</td>
</tr>
<tr>
<td>limit (String)</td>
<td>(Optional) Limit the number of rows fetched by the groupBy function.</td>
</tr>
<tr>
<td>sort (String)</td>
<td>(Optional) Sort the results using a Qualys token. For example - [&quot;&quot;operatingSystem&quot;&quot;:&quot;asc&quot;]</td>
</tr>
</tbody>
</table>

Sample

Request:
curl -X POST
https://gateway.qg1.apps.qualys.com/fim/v3/assets/count -H 'authorization: Bearer <token>' -H 'content-type: application/json' -d @request.json
Contents of request.json:

```json
{
    "filter": "interfaces.address:10.112.113.114",
    "limit": 5,
    "groupBy": ["manifest.status"]
}
```

Response:

```json
{
    "FIM_MANIFEST_PUBLISHED": 20010,
    "FIM_ACTIVATION_REQUEST_RECEIVED": 10027
}
```