



# Qualys Cloud Platform v2.x

## API Release Notes

Version 2.39  
May 30, 2019

Qualys Cloud Suite API gives you many ways to integrate your programs and API calls with Qualys capabilities. You'll find all the details in our user guides, available at the time of release. Just log in to your Qualys account and go to Help > Resources.

### What's New

[Web Application Scanning API: Enhanced Crawling](#)

[Asset Management & Tagging API: Search host assets using IBM attributes](#)

[Asset Management & Tagging API: New API for Azure Asset Data Connector](#)

### URL to the Qualys API Server

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

Account Location	API Server URL
Qualys US Platform 1	<a href="https://qualysapi.qualys.com">https://qualysapi.qualys.com</a>
Qualys US Platform 2	<a href="https://qualysapi.qg2.apps.qualys.com">https://qualysapi.qg2.apps.qualys.com</a>
Qualys US Platform 3	<a href="https://qualysapi.qg3.apps.qualys.com">https://qualysapi.qg3.apps.qualys.com</a>
Qualys EU Platform 1	<a href="https://qualysapi.qualys.eu">https://qualysapi.qualys.eu</a>
Qualys EU Platform 2	<a href="https://qualysapi.qg2.apps.qualys.eu">https://qualysapi.qg2.apps.qualys.eu</a>
Qualys India Platform 1	<a href="https://qualysapi.qg1.apps.qualys.in">https://qualysapi.qg1.apps.qualys.in</a>
Qualys Private Cloud Platform	<a href="https://qualysapi.&lt;customer_base_url&gt;">https://qualysapi.&lt;customer_base_url&gt;</a>

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

## Web Application Scanning API: Enhanced Crawling

API affected	<code>/qps/rest/3.0/get/was/optionprofile/&lt;id&gt;</code> <code>/qps/rest/3.0/create/was/optionprofile</code> <code>/qps/rest/3.0/update/was/optionprofile/&lt;id&gt;</code>
New or Updated APIs	Updated
DTD or XSD changes	Yes

You can now enable enhanced crawling in your option profile for your scans to improve scan coverage for your web application. With the enhanced crawling enabled, more links can be crawled and will improve scan coverage. We will re-crawl individual directories present in the links which are found during crawling.

For example, if the following link is found during crawling:

`https://www.example.com/foo/abc/xyz/register.php`

If the enhanced crawling is enabled, it will first make a request to `https://www.example.com/foo/abc/xyz`

and will then remove the directory "xyz/" from the URL and crawl, `https://www.example.com/foo/abc/`

and later it will further remove "abc/" and will crawl `https://www.example.com/foo/`.

All the links found during this process of removal and re-crawling will get added to the crawl queue thus improving the scan coverage.

### Sample 1 - Create Option Profile with enhanced crawling

#### API request:

```
curl -u "USERNAME:PASSWORD" -H "content-type: text/xml" -X "POST" --data-binary@-
"https://qualysapi.qualys.com/qps/rest/3.0/create/was/optionprofile/" <
file.xml
Note: "file.xml" contains the request POST data.
```

#### Request POST Data:

```
<ServiceRequest>
  <data>
    <OptionProfile>
      <name><![CDATA[Sample Option Profile]]></name>
      <enhancedCrawling>true</enhancedCrawling>
    </data>
  </ServiceRequest>
```

XML output:

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="http://qualysapi.qualys.com/qps/xsd/3.0/wa
s/optionprofile.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>1</count>
  <data>
    <OptionProfile>
      <id>78110</id>
      <name><![CDATA[Sample Option Profile]]></name>
      <owner>
        <id>337590</id>
        <username>user_john</username>
        <firstName><![CDATA[John]]></firstName>
        <lastName><![CDATA[Doe]]></lastName>
      </owner>
      <isDefault>>false</isDefault>
      <tags>
        <count>0</count>
      </tags>
      <formSubmission>BOTH</formSubmission>
      <maxCrawlRequests>300</maxCrawlRequests>
      <timeoutErrorThreshold>100</timeoutErrorThreshold>
      <unexpectedErrorThreshold>300</unexpectedErrorThreshold>
      <parameterSet>
        <id>0</id>
        <name>
          <![CDATA[Initial Parameters]]>
        </name>
      </parameterSet>
      <ignoreBinaryFiles>>false</ignoreBinaryFiles>
      <includeActionUriInFormId>>false</includeActionUriInFormId>
      <enhancedCrawling>true</enhancedCrawling>
      <smartScanSupport>>false</smartScanSupport>
      <performance>LOW</performance>
      <bruteforceOption>MINIMAL</bruteforceOption>
      <detection/>
      <comments>
        <count>0</count>
      </comments>
      ...
    </lastName>
  </updatedBy>
</OptionProfile>
</data>
</ServiceResponse>
```

## Sample 2 - Update an option profile

Let us disable enhanced crawling in an existing option profile.

### API request:

```
curl -u "USERNAME:PASSWORD" -H "content-type: text/xml" -X "POST"--data-binary@-  
"https://qualysapi.qualys.com/qps/rest/3.0/update/was/optionprofile/832265669" < file.xml  
Note: "file.xml" contains the request POST data.
```

### Request POST Data (file.xml):

```
<ServiceRequest>  
  <data>  
    <OptionProfile>  
      <enhancedCrawling>false</enhancedCrawling>  
    </OptionProfile>  
  </data>  
</ServiceRequest>
```

### XML output:

```
<?xml version="1.0" encoding="UTF-8"?>  
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"  
xsi:noNamespaceSchemaLocation="http://qualysapi.qualys.com/qps/xsd/3.0/was/optionprofile.xsd">  
  <responseCode>SUCCESS</responseCode>  
  <count>1</count>  
  <data>  
    <OptionProfile>  
      <id>832265669</id>  
    </OptionProfile>  
  </data>  
</ServiceResponse>
```

## Sample 3 - Get details of an option profile with enhanced crawling enabled

### API request:

```
curl -u "USERNAME:PASSWORD" " -X GET -H "Content-type: text/xml"  
"https://qualysapi.qualys.com/qps/rest/3.0/get/was/optionprofile/77683"
```

### XML output:

```
<?xml version="1.0" encoding="UTF-8"?>  
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"  
xsi:noNamespaceSchemaLocation="http://qualysapi.qualys.com/qps/xsd/3.0/was/optionprofile.xsd">
```

```
<responseCode>SUCCESS</responseCode>
<count>1</count>
<data>
  <OptionProfile>
    <id>77683</id>
    <name>
      <![CDATA[Sample Option Profile]]>
    </name>
    <owner>
      <id>337590</id>
      <username>user_john</username>
      <firstName>
        <![CDATA[John]]>
      </firstName>
      <lastName>
        <![CDATA[Doe]]>
      </lastName>
    </owner>
    <isDefault>>false</isDefault>
    <tags>
      <count>0</count>
    </tags>
    <formSubmission>BOTH</formSubmission>
    <maxCrawlRequests>300</maxCrawlRequests>
    <timeoutErrorThreshold>100</timeoutErrorThreshold>
    <unexpectedErrorThreshold>300</unexpectedErrorThreshold>
    <parameterSet>
      <id>0</id>
      <name>
        <![CDATA[Initial Parameters]]>
      </name>
    </parameterSet>
    <ignoreBinaryFiles>>false</ignoreBinaryFiles>
    <includeActionUriInFormId>>false</includeActionUriInFormId>
    <enhancedCrawling>true</enhancedCrawling>
    <smartScanSupport>>false</smartScanSupport>
    ...
  </OptionProfile>
</data>
</ServiceResponse>
```

## XSD Update

Changes in optionprofile.xsd (/qps/xsd/3.0/was/optionprofile.xsd).

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
elementFormDefault="qualified">
  ...
  <xs:element name="userAgent" type="Cdata" minOccurs="0"/>
  <xs:element name="parameterSet" type="ParameterSet" minOccurs="0"/>
  <xs:element name="ignoreBinaryFiles" type="xs:boolean" minOccurs="0"/>
  <xs:element name="includeActionUriInFormId" type="xs:boolean"
minOccurs="0"/>
  <xs:element name="enhancedCrawling" type="xs:boolean" minOccurs="0"/>
  <xs:element name="smartScanSupport" type="xs:boolean" minOccurs="0"/>
    <xs:element name="smartScanDepth" type="xs:long" minOccurs="0"/>
      <xs:element name="performance" default="LOW" minOccurs="0">
  ...
    </xs:element>
  </xs:all>
</xs:complexType>

</xs:schema>
```

## Asset Management & Tagging API: Search host assets using IBM attributes

API affected	/qps/rest/2.0/search/am/hostasset
New or Updated APIs	Updated
DTD or XSD changes	No

The Asset Management and Tagging API has been updated to allow searching host assets using IBM attributes.

### Input Parameters

New input parameters for IBM attributes are described below.

Parameter	Description
ibmId={value}	The ID of your IBM resource.
ibmTagKey={value}	Tag key of the IBM resource.
ibmTagValue={value}	Value of the IBM resource tag.
datacenterId={value}	ID of the datacenter in which the IBM resource if located.
ibmLocation={value}	Name of datacenter in which the IBM resource if located.

All parameters support text input with EQUALS operator.

### Sample - Searching IBM assets in your account

API request:

```
curl -u "USERNAME:PASSWORD" -H "content-type: text/xml" -X "POST"
--data-binary @-
"https://qualysapi.qualys.com/qps/rest/2.0/search/am/hostasset" <
file.xml
```

Note: "file.xml" contains the request POST data.

Request POST Data:

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceRequest>
  <filters>
    <Criteria field="ibmId" operator="EQUALS">64486457</Criteria>
  </filters>
</ServiceRequest>
```



XML output:

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="http://qualysapi.qualys.com/qps/xsd/2.0/am
/hostasset.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>1</count>
  <hasMoreRecords>>false</hasMoreRecords>
  <data>
    <HostAsset>
      <id>1940247</id>
      <name>COMW8X86-34-160</name>
      <created>2018-08-22T09:36:57Z</created>
      <modified>2019-05-08T03:48:10Z</modified>
      <type>HOST</type>
      <sourceInfo>
        <list>
          <IBMAssetSourceSimple>
            <assetId>1940247</assetId>
            <type>IBM</type>
            <ibmId>64486457</ibmId>
            <location>wdc07</location>
            <datacenterId>2017603</datacenterId>
            <deviceName>"sme-centos01.Qualys-
              Inc.cloud"</deviceName>
            <publicVlan>1330,1234</publicVlan>
            <domain>Qualys-Inc.cloud</domain>
            <privateVlan>1473,1474,1500</privateVlan>
            <publicIpAddress>169.61.80.147</publicIpAddress>
            <privateIpAddress>10.190.234.100</privateIpAddress>
          </IBMAssetSourceSimple>
          <AssetSource/>
        </list>
      </sourceInfo>
      <qwebHostId>27103</qwebHostId>
      <lastSystemBoot>2018-11-01T18:44:32Z</lastSystemBoot>
      <lastLoggedOnUser>root</lastLoggedOnUser>
      <domain>WORKGROUP</domain>
      <fqdn>sme-win01.Qualys-Inc.cloud.WORKGROUP</fqdn>
      <os>CentOS Linux 7.5.1804</os>
      <dnsHostName>sme-win01.Qualys-Inc.cloud</dnsHostName>
      <agentInfo>
        <agentVersion>2.1.0.494</agentVersion>
        <agentId>6710851f-1d18-4b2a-ac05-ea972e10ebb5</agentId>
        <status>STATUS_ACTIVE</status>
        <lastCheckedIn>2019-05-08T03:48:10Z</lastCheckedIn>
        <connectedFrom>10.11.66.60</connectedFrom>
        <chirpStatus>Inventory Scan Complete</chirpStatus>
      </agentInfo>
    </HostAsset>
  </data>
</ServiceResponse>
```

```
<platform>Windows</platform>
<activatedModule>AGENT_PC</activatedModule>
<agentConfiguration>
  <id>10001</id>
  <name>Suspend SelfPatch</name>
</agentConfiguration>
<activationKey>
  <activationId>28cf22f0-89a4-459c-b9ae-
    bc661901c4ff</activationId>
  <title>Accuracy T34 PC Windows</title>
</activationKey>
</agentInfo>
<address>10.11.65.144</address>
<trackingMethod>QAGENT</trackingMethod>
<manufacturer>Xen</manufacturer>
<model>HVM domU</model>
<totalMemory>986</totalMemory>
<timezone>-05:00</timezone>
<biosDescription>Xen 4.7.5-1.21 08/13/2018</biosDescription>
<openPort>
  <list>
    <HostAssetOpenPort>
      <port>5353</port>
      <protocol>UDP</protocol>
    </HostAssetOpenPort>
    ...
  </list>
</openPort>
<software>
  <list>
    <HostAssetSoftware>
      <name>cronie-anacron</name>
      <version>1.4.11-19.el7</version>
    </HostAssetSoftware>
    <HostAssetSoftware>
      <name>groff-base</name>
      <version>1.22.2-8.el7</version>
    </HostAssetSoftware>
    ...
  </list>
</software>
<processor>
  <list>
    <HostAssetProcessor>
      <name>Intel(R) Xeon(R) Gold 6130</name>
      <speed>2100</speed>
    </HostAssetProcessor>
  </list>
</processor>
```

```
<volume>
  <list>
    <HostAssetVolume>
      <name>/</name>
      <size>24694149120</size>
      <free>22382100480</free>
    </HostAssetVolume>
    ...
  </list>
</volume>
<account>
  <list>
    <HostAssetAccount>
      <username>root</username>
    </HostAssetAccount>
    ...
  </list>
</account>
<networkInterface>
  <list>
    <HostAssetInterface>
      <interfaceName>eth1</interfaceName>
      <macAddress>06:d2:2b:49:8d:9e</macAddress>
      <type>LOCAL</type>
      <address>fe80:0:0:0:4d2:2bff:fe49:8d9e</address>
      <gatewayAddress>169.61.80.145</gatewayAddress>
    </HostAssetInterface>
    ...
  </list>
</networkInterface>
  <isDockerHost>>false</isDockerHost>
</HostAsset>
</data>
</ServiceResponse>
```

## Asset Management & Tagging API: New API for Azure Asset Data Connector

API affected	<a href="#">/qps/rest/2.0/create/am/azureassetdataconnector</a> <a href="#">/qps/rest/2.0/update/am/azureassetdataconnector</a> <a href="#">/qps/rest/2.0/delete/am/azureassetdataconnector/&lt;id&gt;</a> <a href="#">/qps/rest/2.0/get/am/azureassetdataconnector</a> <a href="#">/qps/rest/2.0/search/am/awsassetdataconnector</a>
New or Updated APIs	New
DTD or XSD changes	Yes

We have now introduced new API for Azure connectors. You can create, update, delete or view the list of Azure connectors.

Let us view examples of various scenarios.

[Sample - Create Azure Connector](#)

[Sample - Update Azure Connector](#)

[Sample - Delete Azure Connector](#)

[Sample - List \(view\) specific Azure Connector](#)

[Sample - List all Azure Connectors](#)

[Sample - Search Azure Connector using connector name](#)

[Sample - Search Azure Connector by subscription ID](#)

### Create Azure Connectors

Creates an Azure connector.

Permissions required - Managers with full scope.

#### Sample - Create Azure Connector

API request:

```
curl -u "USERNAME:PASSWORD" -H "Content-type: text/xml" -X "POST" --data-binary @-  
"https://qualysapi.qualys.com/qps/rest/2.0/create/am/azureassetdataconnector" < file.xml  
Note: "file.xml" contains request POST data
```

### Request POST Data:

```
<ServiceRequest>
  <data>
    <AzureAssetDataConnector>
      <name>Azure Connector</name>
      <description>Sample Azure Connector</description>
      <defaultTags>
        <set>
          <TagSimple>
            <id>8523019</id>
          </TagSimple>
        </set>
      </defaultTags>
      <disabled>>false</disabled>
      <isGovCloudConfigured>>false</isGovCloudConfigured>
      <authRecord>
        <applicationId>333333333-3333-3333-3333-
333333333333</applicationId>
        <directoryId>22222222-2222-2222-2222-
222222222222</directoryId>
        <subscriptionId>11111111-1111-1111-1111-
111111111111</subscriptionId>

<authenticationKey>02LCb8/RcN01bGj6xcOGQPZlYG2z85aSmCxnoH01rog=</authenti
cationKey> <!-- this is sensitive info; will never be replayed back in GET
or SEARCH requests -->
      </authRecord>
    </AzureAssetDataConnector>
  </data>
</ServiceRequest>
```

### XML output:

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/xsd/2.0/a
m/azure_asset_data_connector.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>1</count>
  <data>
    <AzureAssetDataConnector>
      <id>289201</id>
      <name>Azure Connector</name>
      <description>Sample Azure Connector</description>
      <connectorState>QUEUED</connectorState>
      <type>AZURE</type>
      <defaultTags>
        <list>
```

```
<TagSimple>
  <id>8523019</id>
  <name>azure static tag</name>
</TagSimple>
</list>
</defaultTags>
<disabled>>false</disabled>
<isGovCloudConfigured>>false</isGovCloudConfigured>
<authRecord>
  <applicationId>33333333-3333-3333-3333-
333333333333</applicationId>
  <directoryId>22222222-2222-2222-2222-222222222222</directoryId>
  <subscriptionId>11111111-1111-1111-1111-
111111111111</subscriptionId>
</authRecord>
</AzureAssetDataConnector>
</data>
```

## Update Azure Connectors

Updates writable fields and collections.

Using the NOT EQUALS operator for updating Azure connectors could result in accidental update of unknown Azure connectors without any warning. To prevent accidental updates of unknown Azure connectors, we do not support NOT EQUALS operator for update actions.

Permissions required - Managers with full scope.

### Sample - Update Azure Connector

API request:

```
curl -u "USERNAME:PASSWORD" -H "Content-type: text/xml" -X "POST" --data-
binary @-
"https://qualysapi.qualys.com/qps/rest/2.0/update/am/azureassetdataconnec
tor" < file.xml
Note: "file.xml" contains request POST data
```

Request POST Data:

```
<ServiceRequest>
  <data>
    <AzureAssetDataConnector>
      <id>287603</id>
      <name>Sample Azure Connector</name>
      <description>Update sample Azure connector</description>
    </AzureAssetDataConnector>
  </data>
</ServiceRequest>
```

### XML output:

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/xsd/2.0/a
m/azure_asset_data_connector.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>1</count>
  <data>
    <AzureAssetDataConnector>
      <id>287603</id>
      <name>Sample Azure Connector</name>
      <description>Update sample Azure connector</description>
    </AzureAssetDataConnector>
  </data>
</ServiceResponse>
```

## Delete Azure Connectors

Delete one or more Azure connectors.

Using the NOT EQUALS operator for deleting Azure connectors could result in accidental deletion of Azure connectors without any warning. To prevent accidental deletion of unknown Azure connectors, we do not support NOT EQUALS operator for delete actions.

Permissions required - Managers with full scope.

### Sample - Delete Azure Connector

#### API request:

```
curl -u "USERNAME:PASSWORD" -H "Content-type: text/xml" -X "POST"
"https://qualysapi.qualys.com/qps/rest/2.0/delete/am/azureassetdataconnec
tor/289201"
```

#### XML output:

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/xsd/2.0/a
m/azure_asset_data_connector.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>1</count>
  <data>
    <AzureAssetDataConnector>
      <id>289201</id>
    </AzureAssetDataConnector>
  </data>
</ServiceResponse>
```

## Get Azure Connector Information

Returns a single Azure connector by ID.

Limit your results - Use the optional "fields" parameter to limit the amount of information returned for the Azure connector.

Permissions required - Managers with full scope.

### Sample - List (view) specific Azure Connector

#### API request:

```
curl -u "USERNAME:PASSWORD" -H "Content-type: text/xml" -X "GET"  
"https://qualysapi.qualys.com/qps/rest/2.0/get/am/azureassetdataconnector  
/287603"
```

#### XML output:

```
<?xml version="1.0" encoding="UTF-8"?>  
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"  
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/xsd/2.0/a  
m/azure_asset_data_connector.xsd">  
  <responseCode>SUCCESS</responseCode>  
  <count>1</count>  
  <data>  
    <AzureAssetDataConnector>  
      <id>287603</id>  
      <name>My Azure connector</name>  
      <description>Sample Connector</description>  
      <lastSync>2019-05-25T03:28:03Z</lastSync>  
      <connectorState>FINISHED_SUCCESS</connectorState>  
      <type>AZURE</type>  
      <defaultTags>  
        <list>  
          <TagSimple>  
            <id>8523019</id>  
            <name>azure static tag</name>  
          </TagSimple>  
        </list>  
      </defaultTags>  
      <disabled>>false</disabled>  
      <isGovCloudConfigured>>false</isGovCloudConfigured>  
      <authRecord>  
        <applicationId>333333333-3333-3333-3333-  
333333333333</applicationId>  
        <directoryId>22222222-2222-2222-2222-222222222222</directoryId>  
        <subscriptionId>11111111-1111-1111-1111-  
111111111111</subscriptionId>  
      </authRecord>
```



```
</AzureAssetDataConnector>  
</data>
```

## Sample - List all Azure Connectors

### API request:

```
curl -u "USERNAME:PASSWORD" -H "Content-type: text/xml" -X "POST"  
"https://qualysapi.qualys.com/qps/rest/2.0/search/am/azureassetdataconnec  
tor"
```

### XML output:

```
<?xml version="1.0" encoding="UTF-8"?>  
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"  
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/xsd/2.0/a  
m/azure_asset_data_connector.xsd">  
  <responseCode>SUCCESS</responseCode>  
  <count>2</count>  
  <hasMoreRecords>>false</hasMoreRecords>  
  <data>  
    <AzureAssetDataConnector>  
      <id>287603</id>  
      <name>My Azure connector</name>  
      <description>Sample Connector</description>  
      <lastSync>2019-05-27T06:26:29Z</lastSync>  
      <connectorState>QUEUED</connectorState>  
      <type>AZURE</type>  
      <defaultTags>  
        <list>  
          <TagSimple>  
            <id>8523019</id>  
            <name>azure static tag</name>  
          </TagSimple>  
        </list>  
      </defaultTags>  
      <disabled>>false</disabled>  
      <isGovCloudConfigured>>false</isGovCloudConfigured>  
      <authRecord/>  
    </AzureAssetDataConnector>  
    <AzureAssetDataConnector>  
      <id>289601</id>  
      <name>Sample Azure Connector</name>  
      <description>azure connector</description>  
      <lastSync>2019-05-26T02:26:30Z</lastSync>  
      <connectorState>QUEUED</connectorState>  
      <type>AZURE</type>  
      <defaultTags>  
        <list>  
          <TagSimple>
```

```
        <id>8523019</id>
        <name>azure static tag</name>
    </TagSimple>
</list>
</defaultTags>
<disabled>>false</disabled>
<isGovCloudConfigured>>false</isGovCloudConfigured>
<authRecord/>
</AzureAssetDataConnector>
</data>
</ServiceResponse>
```

## Search Connectors

Returns a list of Azure connectors that match the provided criteria.

Limit your results - Use the optional “fields” parameter to limit the amount of information returned for each AWS connector.

Pagination - A maximum of 100 instances are returned by default. To customize this specify a “preferences” tag in the POST body of your request.

Permissions required - Managers with full scope.

## Searchable Fields

Parameter	Description
id	(integer) The ID of the connector that you want to search.
name	(Text) Name is the name for the connector you want to search.
description	(Text) Description of the connector you want to search.
lastSync	(Date) Last sync date of the connector.
type	(AssetDataConnectorType) Azure, not writeable
authRecord.applicationId	(integer) Unique identifier of the application you create on Azure portal.
authRecord.directoryId	(integer) Unique identifier of your Azure Active Directory.
authRecord.subscriptionId	(integer) Unique identifier of your Microsoft Azure subscription.

## Sample - Search Azure Connector using connector name

### API request:

```
curl -u "USERNAME:PASSWORD" -H "Content-type: text/xml" -X "POST" --data-binary @-  
"https://qualysapi.qualys.com/qps/rest/2.0/search/am/azureassetdataconnector" < file.xml  
Note: "file.xml" contains request POST data
```

### Request POST Data:

```
<ServiceRequest>  
  <filters>  
    <Criteria field="name" operator="EQUALS">My Azure  
connector</Criteria>  
  </filters>  
</ServiceRequest>
```

### XML output:

```
<?xml version="1.0" encoding="UTF-8"?>  
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"  
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/xsd/2.0/a  
m/azure_asset_data_connector.xsd">  
  <responseCode>SUCCESS</responseCode>  
  <count>1</count>  
  <hasMoreRecords>>false</hasMoreRecords>  
  <data>  
    <AzureAssetDataConnector>  
      <id>287603</id>  
      <name>My Azure connector</name>  
      <description>Sample Connector</description>  
      <lastSync>2019-05-27T06:26:29Z</lastSync>  
      <connectorState>QUEUED</connectorState>  
      <type>AZURE</type>  
      <defaultTags>  
        <list>  
          <TagSimple>  
            <id>8523019</id>  
            <name>azure static tag</name>  
          </TagSimple>  
        </list>  
      </defaultTags>  
      <disabled>>false</disabled>  
      <isGovCloudConfigured>>false</isGovCloudConfigured>  
      <authRecord/>  
    </AzureAssetDataConnector>  
  </data>  
</ServiceResponse>
```

## Sample - Search Azure Connector by subscription ID

### API request:

```
curl -u "USERNAME:PASSWORD" -H "Content-type: text/xml" -X "POST" --data-binary @-  
"https://qualysapi.qualys.com/qps/rest/2.0/search/am/azureassetdataconnector/" < file.xml  
Note: "file.xml" contains request POST data
```

### Request POST Data:

```
<ServiceRequest>  
  <filters>  
    <Criteria field="authRecord.subscriptionId"  
operator="EQUALS">11111111-1111-1111-1111-111111111111</Criteria>  
  </filters>  
</ServiceRequest>
```

### XML output:

```
<?xml version="1.0" encoding="UTF-8"?>  
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"  
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/xsd/2.0/a  
m/azure_asset_data_connector.xsd">  
  <responseCode>SUCCESS</responseCode>  
  <count>1</count>  
  <hasMoreRecords>>false</hasMoreRecords>  
  <data>  
    <AzureAssetDataConnector>  
      <id>289601</id>  
      <name>My Sample Azure Connector</name>  
      <description>sample connector</description>  
      <lastSync>2019-05-26T02:26:30Z</lastSync>  
      <connectorState>QUEUED</connectorState>  
      <type>AZURE</type>  
      <defaultTags>  
        <list>  
          <TagSimple>  
            <id>8523019</id>  
            <name>azure static tag</name>  
          </TagSimple>  
        </list>  
      </defaultTags>  
      <disabled>>false</disabled>  
      <isGovCloudConfigured>>false</isGovCloudConfigured>  
      <authRecord/>  
    </AzureAssetDataConnector>  
  </data>  
</ServiceResponse>
```

## New XSD

We have introduced this new XSD: `azure_asset_data_connector.xsd`  
([http://qualysapi.qualys.com/qps/xsd/2.0/am/azure\\_asset\\_data\\_connector.xsd](http://qualysapi.qualys.com/qps/xsd/2.0/am/azure_asset_data_connector.xsd))

### Azure Connector (`azure_asset_data_connector.xsd`)

```
<?xml version="1.0" encoding="UTF-8"?>
<schema xmlns="http://www.w3.org/2001/XMLSchema"
targetNamespace="http://am.oxm.api.portal.qualys.com/v2"
xmlns:tns="http://am.oxm.api.portal.qualys.com/v2"
elementFormDefault="qualified">

  <include schemaLocation="asset_data_connector.xsd" />
  <include schemaLocation="azure_service.xsd" />

  <complexType name="AzureAssetDataConnector">
    <complexContent>
      <extension base="tns:AssetDataConnector">
        <sequence>
          <element name="authRecord"
type="tns:AzureAuthRecordSimple" />
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</schema>
```