



Qualys Cloud Platform (VM, PC) v8.x

API Release Notes

Version 8.21.3

October 8, 2019

This new version of the Qualys Cloud Platform (VM, PC) includes improvements to the Qualys API. 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

[New Support for CA PAM \(Privileged Access Manager\) Vault](#)

URL to the Qualys API Server

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

Account Location	API Server URL
Qualys US Platform 1	https://qualysapi.qualys.com
Qualys US Platform 2	https://qualysapi.qg2.apps.qualys.com
Qualys US Platform 3	https://qualysapi.qg3.apps.qualys.com
Qualys US Platform 4	https://qualysapi.qg4.apps.qualys.com
Qualys EU Platform 1	https://qualysapi.qualys.eu
Qualys EU Platform 2	https://qualysapi.qg2.apps.qualys.eu
Qualys Canada Platform 1	https://qualysapi.qg1.apps.qualys.ca
Qualys India Platform 1	https://qualysapi.qg1.apps.qualys.in
Qualys Private Cloud Platform	https://qualysapi.<customer_base_url>

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

New Support for CA PAM (Privileged Access Manager) Vault

APIs affected	/api/2.0/fo/vault/index.php/
New or Updated API	Updated
DTD or XSD changes	No
APIs affected	/api/2.0/fo/auth/windows/ /api/2.0/fo/auth/unix/
New or Updated API	Updated
DTD or XSD changes	Yes

This new vault type can be used to retrieve authentication credentials from CA PAM vault. We updated the authentication vault API (create, update, list, view) and the authentication record API (create, update, list) to support the new vault type. We updated the DTDs for listing Windows and Unix records.

Authentication Vault API

You can now create, update, list and view CA PAM vaults.

Create/Update CA PAM Authentication Vault

Use the parameter “action=create” or “action=update” to create/update a CA PAM vault in your account.

Parameter	Description
action=create	(Required)
title={value}	(Required to create and optional to update vault) The vault title.
type={value}	(Required) Specify type=CA PAM
comments={value}	(Optional) User defined comments.
ssl_verify={0 1}	(Required to create and update vault) When set to 1 (the default), our service will verify the SSL certificate of the web server to make sure the certificate is valid and trusted. When set to 0, our service will not verify the certificate of the web server.
url={value}	(Required to create and optional to update vault) The HTTP or HTTPS URL to access the CA PAM Vault HTTP API.
apikey_name={value}	(Required to create and optional to update vault) The user account that can call the CA PAM Vault HTTP API.
apikey={value}	(Required to create and optional to update vault) The password for the user account that can call the CA PAM Vault HTTP API.

Sample - Create CA PAM vault

API request:

```
curl -u "USERNAME:PASSWORD" -H "X-Requested-With: Curl" -d  
"action=create&type=CA PAM&title=My CA PAM Vault  
&url=https://ca pam.example.com:8443&ssl_verify=0  
&apikey_name=aaa&apikey=12345&comments=Creating CA PAM Vault"  
"https://qualysapi.qualys.com/api/2.0/fo/vault/index.php/"
```

XML Output:

```
<?xml version="1.0" encoding="UTF-8" ?>  
<!DOCTYPE SIMPLE_RETURN SYSTEM  
"https://qualysapi.qualys.com/api/2.0/simple_return.dtd">  
<SIMPLE_RETURN>  
  <RESPONSE>  
    <DATETIME>2016-09-30T06:10:02Z</DATETIME>  
    <TEXT>Success</TEXT>  
    <ITEM_LIST>  
      <ITEM>  
        <KEY>ID</KEY>  
        <VALUE>7004</VALUE>  
      </ITEM>  
    </ITEM_LIST>  
  </RESPONSE>  
</SIMPLE_RETURN>
```

Sample - Update CA PAM vault to set ssl_verify = 1

API request:

```
curl -u "USERNAME:PASSWORD" -H "X-Requested-With: Curl" -d  
"action=update&id=910196&type=CA PAM&title=My CA PAM  
Vault&ssl_verify=1"  
"https://qualysapi.qualys.com/api/2.0/fo/vault/index.php/"
```

XML Output:

```
<?xml version="1.0" encoding="UTF-8" ?>  
<!DOCTYPE SIMPLE_RETURN SYSTEM  
"https://qualysapi.qualys.com/api/2.0/simple_return.dtd">  
<SIMPLE_RETURN>  
  <RESPONSE>  
    <DATETIME>2016-09-30T06:10:02Z</DATETIME>  
    <TEXT>Success</TEXT>
```

```
<ITEM_LIST>
  <ITEM>
    <KEY>ID</KEY>
    <VALUE>910196</VALUE>
  </ITEM>
</ITEM_LIST>
</RESPONSE>
</SIMPLE_RETURN>
```

Sample - List Authentication Vault

API request:

```
curl -u "USERNAME:PASSWORD" -H "X-Requested-With: Curl" -d
"action=list"
"https://qualysapi.qualys.com/api/2.0/fo/vault/index.php/"
```

XML Output:

```
<?xml version="1.0" encoding="UTF-8" ?>
<!DOCTYPE AUTH_VAULT_LIST_OUTPUT SYSTEM
"https://qualysapi.qualys.com/api/2.0/fo/vault/vault_output.dtd">
<AUTH_VAULT_LIST_OUTPUT>
  <RESPONSE>
    <DATETIME>2019-09-30T07:10:36Z</DATETIME>
    <STATUS>Success</STATUS>
    <COUNT>1</COUNT>
    <AUTH_VAULTS>
      <AUTH_VAULT>
        <TITLE><![CDATA[CA_PAM_API_VAULT]]></TITLE>
        <VAULT_TYPE><![CDATA[CA_PAM]]></VAULT_TYPE>
        <LAST_MODIFIED>
          <DATETIME>2019-09-30T12:04:29Z</DATETIME>
          <BY>amp_at</BY>
        </LAST_MODIFIED>
        <ID>910196</ID>
      </AUTH_VAULT>
    </AUTH_VAULTS>
  </RESPONSE>
</AUTH_VAULT_LIST_OUTPUT>
```

Authentication Record API

Create, update, list authentication records with CA PAM vaults. You can use CA PAM vaults with Windows, Unix and Cisco records.

Create Authentication Record

Choose the CA PAM vault in your authentication record and provide details about the vault application and device/host information where your login credentials are stored..

Parameter	Description
action=create update	(Required)
login_type={ basic vault}	(Required to create/update vault information) Specify login_type=vault to add vault information. By default, the parameter is set to basic.
vault_id={value}	(Required when action=create and login_type=vault) A vault ID.
vault_type={value}	(Required when action=create and login_type=vault) Specify vault_type=CA PAM.
vault_app_name={value}	(Required) Application name for accessing a specific device.
vault_device_name={value}	(Optional) Specify the target device name for which you want to retrieve the credentials.

Use one or more variables in the target name to match several targets that use the same naming convention.

\${ip} - The IP address of the target, i.e. 10.20.30.40.

\${ip_dash} - The IP with dashes, i.e. 10-20-30-40.

\${dnshost} - DNS hostname of the target, i.e. host.domain.

\${host} - Hostname of the target, i.e. host before .domain.

\${nbhost} - (Windows only) The NetBIOS name of the target in upper-case, i.e. HOST_ABC.

Sample format for defining multiple variables:

\${ip}_\${host}@\${dnshost}_\${ip}

Example: \${ip_dash}-\${dnshost} -> 10-20-30-40-host.domain

Note

You must specify “vault_device_name” or “vault_device_host”, but not both.

Parameter	Description
vault_device_host={value}	(Optional) Specify the target device address for which you want to retrieve the credentials. Use one or more variables in the target name to match several targets that use the same naming convention. \${ip} - The IP address of the target, i.e. 10.20.30.40. \${ip_dash} - The IP with dashes, i.e. 10-20-30-40. \${dnshost} - DNS hostname of the target, i.e. host.domain. \${host} - Hostname of the target, i.e. host before .domain. \${nbhost} - (Windows only) The NetBIOS name of the target in upper-case, i.e. HOST_ABC. Sample format for defining multiple variables: \${ip}_\${host}@\${dnshost}_\${ip} Note You must specify "vault_device_name" or "vault_device_host", but not both.

Sample - Create Unix record with CA PAM Vault

API request:

```
curl -u "USERNAME:PASSWORD" -H "X-Requested-With: Curl" -d  
"action=create&title=API_Unix_Auth&username=root&ips=10.10.36.79&p  
ort=5857&login_type=vault&vault_id=1958818&vault_type=CA  
PAM&vault_app_name=Device1&vault_device_host=10.10.30.x"  
"https://qualysapi.qualys.com/api/2.0/fo/auth/unix/"
```

XML Output:

```
<?xml version="1.0" encoding="UTF-8" ?>  
<!DOCTYPE BATCH_RETURN SYSTEM  
"https://qualysapi.qualys.com/api/2.0/batch_return.dtd">  
<BATCH_RETURN>  
  <RESPONSE>  
    <DATETIME>2019-09-30T11:37:27Z</DATETIME>  
    <BATCH_LIST>  
      <BATCH>  
        <TEXT>Successfully Created</TEXT>  
        <ID_SET>  
          <ID>2013435</ID>  
        </ID_SET>  
      </BATCH>  
    </RESPONSE>  
  </BATCH_RETURN>
```

```
</BATCH_LIST>
</RESPONSE>
</BATCH_RETURN>
```

Sample - Create Window record with CA PAM Vault

API request:

```
curl -u "USERNAME:PASSWORD" -H "X-Requested-With: Curl" -d
"action=create&title=API_Windows_Auth&username=root&ips=10.10.36.7
9&use_agentless_tracking=1&require_smb_signing=1&login_type=vault&
vault_id=1958818&vault_type=CA_PAM&vault_app_name=Device1
&vault_device_host=10.10.30.x"
"https://qualysapi.qualys.com/api/2.0/fo/auth/windows/"
```

XML Output:

```
<?xml version="1.0" encoding="UTF-8" ?>
<!DOCTYPE BATCH_RETURN SYSTEM
"https://qualysapi.qualys.com/api/2.0/batch_return.dtd">
<BATCH_RETURN>
  <RESPONSE>
    <DATETIME>2019-09-30T11:37:27Z</DATETIME>
    <BATCH_LIST>
      <BATCH>
        <TEXT>Successfully Created</TEXT>
        <ID_SET>
          <ID>2013435</ID>
        </ID_SET>
      </BATCH>
    </BATCH_LIST>
  </RESPONSE>
</BATCH_RETURN>
```

DTD Updates

We added VAULT_APP_NAME, VAULT_DEVICE_HOST and VAULT_DEVICE_NAME to the Windows and Unix Authentication List Output DTDs. The Cisco authentication record uses Unix Authentication List Output DTD.

Windows Authentication Records List Output DTD

<baseURL>/api/2.0/fo/auth/windows/auth_windows_list_output.dtd

```
...
<!ELEMENT LOGIN_TYPE (#PCDATA)>
<!ELEMENT DIGITAL_VAULT (DIGITAL_VAULT_ID, DIGITAL_VAULT_TYPE,
DIGITAL_VAULT_TITLE, VAULT_FOLDER?, VAULT_FILE?,
VAULT_SECRET_NAME?, VAULT_SYSTEM_NAME?, VAULT_EP_NAME?,
VAULT_EP_TYPE?, VAULT_EP_CONT?, VAULT_NS_TYPE?, VAULT_NS_NAME?,
VAULT_ACCOUNT_NAME?, VAULT_AUTHORIZATION_NAME?,
VAULT_TARGET_NAME?, VAULT_SECRET_KV_PATH?, VAULT_SECRET_KV_NAME?,
VAULT_SECRET_KV_KEY?, VAULT_DEVICE_NAME?, VAULT_DEVICE_HOST?,
VAULT_APP_NAME?)>
<!ELEMENT DIGITAL_VAULT_ID (#PCDATA)>
<!ELEMENT DIGITAL_VAULT_TYPE (#PCDATA)>
<!ELEMENT DIGITAL_VAULT_TITLE (#PCDATA)>
<!ELEMENT VAULT_FOLDER (#PCDATA)>
<!ELEMENT VAULT_FILE (#PCDATA)>
<!ELEMENT VAULT_SECRET_NAME (#PCDATA)>
<!ELEMENT VAULT_SYSTEM_NAME (#PCDATA)>
<!ELEMENT VAULT_EP_NAME (#PCDATA)>
<!ELEMENT VAULT_EP_TYPE (#PCDATA)>
<!ELEMENT VAULT_EP_CONT (#PCDATA)>
<!ELEMENT VAULT_NS_TYPE (#PCDATA)>
<!ELEMENT VAULT_NS_NAME (#PCDATA)>
<!ELEMENT VAULT_ACCOUNT_NAME (#PCDATA)>
<!ELEMENT VAULT_AUTHORIZATION_NAME (#PCDATA)>
<!ELEMENT VAULT_TARGET_NAME (#PCDATA)>
<!ELEMENT VAULT_SECRET_KV_PATH (#PCDATA)>
<!ELEMENT VAULT_SECRET_KV_NAME (#PCDATA)>
<!ELEMENT VAULT_SECRET_KV_KEY (#PCDATA)>
<!ELEMENT VAULT_DEVICE_NAME (#PCDATA)>
<!ELEMENT VAULT_DEVICE_HOST (#PCDATA)>
<!ELEMENT VAULT_APP_NAME (#PCDATA)>
...
```

Unix Authentication Records List Output DTD

<baseURL>/api/2.0/fo/auth/unix/auth_unix_list_output.dtd

```
...
<!ELEMENT DIGITAL_VAULT (DIGITAL_VAULT_ID, DIGITAL_VAULT_TYPE,
DIGITAL_VAULT_TITLE, VAULT_USERNAME?, VAULT_FOLDER?, VAULT_FILE?,
VAULT_SECRET_NAME?, VAULT_SYSTEM_NAME?, VAULT_EP_NAME?,
VAULT_EP_TYPE?, VAULT_EP_CONT?, VAULT_NS_TYPE?, VAULT_NS_NAME?,
VAULT_ACCOUNT_NAME?, VAULT_AUTHORIZATION_NAME?,
VAULT_TARGET_NAME?, VAULT_SECRET_KV_PATH?, VAULT_SECRET_KV_NAME?,
VAULT_SECRET_KV_KEY?, VAULT_DEVICE_NAME?, VAULT_DEVICE_HOST?,
VAULT_APP_NAME?)>
<!ELEMENT DIGITAL_VAULT_ID (#PCDATA)>
<!ELEMENT DIGITAL_VAULT_TYPE (#PCDATA)>
<!ELEMENT DIGITAL_VAULT_TITLE (#PCDATA)>
<!ELEMENT VAULT_USERNAME (#PCDATA)>
<!ELEMENT VAULT_FOLDER (#PCDATA)>
<!ELEMENT VAULT_FILE (#PCDATA)>
<!ELEMENT VAULT_SECRET_NAME (#PCDATA)>
<!ELEMENT VAULT_SYSTEM_NAME (#PCDATA)>
<!ELEMENT VAULT_EP_NAME (#PCDATA)>
<!ELEMENT VAULT_EP_TYPE (#PCDATA)>
<!ELEMENT VAULT_EP_CONT (#PCDATA)>
<!ELEMENT VAULT_NS_TYPE (#PCDATA)>
<!ELEMENT VAULT_NS_NAME (#PCDATA)>
<!ELEMENT VAULT_ACCOUNT_NAME (#PCDATA)>
<!ELEMENT VAULT_AUTHORIZATION_NAME (#PCDATA)>
<!ELEMENT VAULT_TARGET_NAME (#PCDATA)>
<!ELEMENT VAULT_SECRET_KV_PATH (#PCDATA)>
<!ELEMENT VAULT_SECRET_KV_NAME (#PCDATA)>
<!ELEMENT VAULT_SECRET_KV_KEY (#PCDATA)>
<!ELEMENT VAULT_DEVICE_NAME (#PCDATA)>
<!ELEMENT VAULT_DEVICE_HOST (#PCDATA)>
<!ELEMENT VAULT_APP_NAME (#PCDATA)>
...
```