



Qualys Cloud Platform (VM, PC) v8.x

API Release Notes

Version 8.20

May 22, 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 Database UDCs for Oracle and MSSQL](#)

[Control List Output - DTD Change](#)

[Policy Export Output - DTD Change](#)

[Subscription API - Import/Export Email Notification Settings for Password Expiry](#)

[Subscription API - Import/Export Session Timeout Settings for User Roles](#)

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 EU Platform 1	https://qualysapi.qualys.eu
Qualys EU Platform 2	https://qualysapi.qg2.apps.qualys.eu
Qualys India Platform 1	https://qualysapi.qg1.apps.qualys.in
Qualys Private Cloud Platform	<a href="https://qualysapi.<customer_base_url>">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 Database UDCs for Oracle and MSSQL

APIs affected	<code>/api/2.0/fo/compliance/posture/info/?action=list</code> <code>/api/2.0/fo/compliance/control/?action=list</code> <code>/api/2.0/fo/compliance/policy/?action=export</code> <code>/api/2.0/fo/subscription/option_profile/pc/</code>
New or Updated API	Updated
DTD or XSD changes	Yes

With this release you can now create custom controls for Oracle database and MSSQL database. To support database controls, we've added new elements to the XML output and DTDs for Control List Output, Policy Export Output, Posture Info List Output, Option Profiles, and the ImportableControl.xsd schema.

You'll see these changes:

- New database controls allow you to ignore errors and set the status to Pass or Fail. The new element `ERROR_SET_STATUS` indicates the Pass/Fail setting for each control. This appears in the XML output for Control List and Policy Export.
- The SQL query configured for a database control appears in the new `DB_QUERY` element, and the description configured for the control appears in the new `DESCRIPTION` element. These appear in the XML output for Control List and Policy Export.
- In the Policy Export API output you'll see these new elements added to the `DP` element in the Evaluate tag: Data Type (`DT`) and DB Column name (`DBCOL`).
- When the Posture API output includes database controls, the values returned for the database controls are shown in a tabular format. You'll see these new elements in the output: Header (`H`), Row (`R`) and Column (`C`).
- We updated the `ImportableControl.xsd` schema to include new enumeration values for the `CHECK_TYPE` element: MSSQL Database Check and Oracle Database Check. You'll also see new elements `ERROR_SET_STATUS`, `DB_QUERY`, `DESCRIPTION` and `DATAPOINT` which were added to support database controls.
- We have added parameters `DATABASE_PREFERENCE_KEY`, `mssql_db_udc_restriction`, `mssql_db_udc_limit`, `oracle_db_udc_restriction`, and `oracle_db_udc_limit` to the Options Profile API to help you set limit on number of rows returned per scan for the MS SQL and Oracle UDC. Default and maximum allowed limit for MS SQL is 256 rows and for Oracle is 5000 rows.

Sample - Control API for MSSQL

API request:

```
curl -u "username:password" -H "Content-type: text/xml" -X "POST"  
-d "action=list&details=All&ids=100022"  
"https://qualysapi.qualys.com/api/2.0/fo/compliance/control/">  
MSSQLControlAPI.xml
```

XML output:

```
<?xml version="1.0" encoding="UTF-8" ?>  
<!DOCTYPE CONTROL_LIST_OUTPUT SYSTEM  
"https://qualysapi.qualys.com/api/2.0/fo/compliance/control/control_list_  
output.dtd">  
<CONTROL_LIST_OUTPUT>  
  <RESPONSE>  
    <DATETIME>2019-05-08T18:31:17Z</DATETIME>  
    <CONTROL_LIST>  
      <CONTROL>  
        <ID>100022</ID>  
        <UPDATE_DATE>2019-05-08T18:31:08Z</UPDATE_DATE>  
        <CREATED_DATE>2019-04-29T20:21:11Z</CREATED_DATE>  
        <CATEGORY>Access Control Requirements</CATEGORY>  
        <SUB_CATEGORY><![CDATA[Account Creation/User  
Management]]></SUB_CATEGORY>  
        <STATEMENT><![CDATA[CustomerData]]></STATEMENT>  
        <CRITICALITY>  
          <LABEL><![CDATA[URGENT]]></LABEL>  
          <VALUE>5</VALUE>  
        </CRITICALITY>  
        <CHECK_TYPE><![CDATA[MSSQL Database Check]]></CHECK_TYPE>  
        <COMMENT><![CDATA[testComment]]></COMMENT>  
        <IGNORE_ERROR>1</IGNORE_ERROR>  
        <ERROR_SET_STATUS>PASS</ERROR_SET_STATUS>  
        <TECHNOLOGY_LIST>  
          <TECHNOLOGY>  
            <ID>22</ID>  
            <NAME>Microsoft SQL Server 2008</NAME>  
            <RATIONALE><![CDATA[select all from customer]]></RATIONALE>  
            <DB_QUERY><![CDATA[select * from customers;]]></DB_QUERY>  
            <DESCRIPTION><![CDATA[select all the rows from  
customers]]></DESCRIPTION>  
          </TECHNOLOGY>  
        </TECHNOLOGY_LIST>  
      </CONTROL>  
    </CONTROL_LIST>  
  </RESPONSE>  
</CONTROL_LIST_OUTPUT>
```

Sample - Control API for Oracle

API request:

```
curl -u "username:password" -H "Content-type: text/xml" -X "POST"  
-d "action=list&details=All&ids=100060"  
"https://qualysapi.qualys.com/api/2.0/fo/compliance/control/">  
OracleControlAPI.xml
```

XML output:

```
<?xml version="1.0" encoding="UTF-8" ?>  
<!DOCTYPE CONTROL_LIST_OUTPUT SYSTEM  
"https://qualysapi.qualys.com/api/2.0/fo/compliance/control/control_list_  
output.dtd">  
<CONTROL_LIST_OUTPUT>  
  <RESPONSE>  
    <DATETIME>2019-05-08T18:32:46Z</DATETIME>  
    <CONTROL_LIST>  
      <CONTROL>  
        <ID>100060</ID>  
        <UPDATE_DATE>2019-05-08T18:32:04Z</UPDATE_DATE>  
        <CREATED_DATE>2019-05-03T19:32:18Z</CREATED_DATE>  
        <CATEGORY>Database Settings</CATEGORY>  
        <SUB_CATEGORY><![CDATA[DB Access Controls]]></SUB_CATEGORY>  
        <STATEMENT><![CDATA[OracleselectAllCustomerData]]></STATEMENT>  
        <CRITICALITY>  
          <LABEL><![CDATA[MINIMAL]]></LABEL>  
          <VALUE>1</VALUE>  
        </CRITICALITY>  
        <CHECK_TYPE><![CDATA[Oracle Database Check]]></CHECK_TYPE>  
        <COMMENT><![CDATA[Gather All Data ]]></COMMENT>  
        <IGNORE_ERROR>1</IGNORE_ERROR>  
        <ERROR_SET_STATUS>FAIL</ERROR_SET_STATUS>  
        <TECHNOLOGY_LIST>  
          <TECHNOLOGY>  
            <ID>7</ID>  
            <NAME>Oracle 9i</NAME>  
            <RATIONALE><![CDATA[GatherAllData]]></RATIONALE>  
            <DB_QUERY><![CDATA[SELECT * FROM Customers WHERE ROWNUM =>  
3;]]></DB_QUERY>  
            <DESCRIPTION><![CDATA[select all the data]]></DESCRIPTION>  
          </TECHNOLOGY>  
          <TECHNOLOGY>  
            <ID>8</ID>  
            <NAME>Oracle 10g</NAME>  
            <RATIONALE><![CDATA[GatherAllData]]></RATIONALE>  
            <DB_QUERY><![CDATA[select * from Customers;]]></DB_QUERY>  
            <DESCRIPTION><![CDATA[select all the data]]></DESCRIPTION>
```

```
        </TECHNOLOGY>
        ...
    </RESPONSE>
</CONTROL_LIST_OUTPUT>
```

DTD update:

DTD: <platform>/api/2.0/fo/compliance/control/control_list_output.dtd

```
<!-- QUALYS CONTROL_LIST_OUTPUT DTD -->
<!-- $Revision$ -->
<!ELEMENT CONTROL_LIST_OUTPUT (REQUEST?,RESPONSE)>
...
<!ELEMENT CONTROL_LIST (CONTROL+)>
<!ELEMENT CONTROL (ID, UPDATE_DATE, CREATED_DATE, CATEGORY, SUB_CATEGORY,
STATEMENT, CRITICALITY?, DEPRECATED?, DEPRECATED_DATE?,
CHECK_TYPE?, COMMENT?, USE_AGENT_ONLY?, AUTO_UPDATE?,
IGNORE_ERROR?, (IGNORE_ITEM_NOT_FOUND|ERROR_SET_STATUS)?,
SCAN_PARAMETERS?, TECHNOLOGY_LIST, FRAMEWORK_LIST?)>
<!ELEMENT ID (#PCDATA)>
<!ELEMENT UPDATE_DATE (#PCDATA)>
<!ELEMENT CREATED_DATE (#PCDATA)>
<!ELEMENT CATEGORY (#PCDATA)>
<!ELEMENT SUB_CATEGORY (#PCDATA)>
<!ELEMENT STATEMENT (#PCDATA)>
<!ELEMENT CRITICALITY (LABEL, VALUE)>
<!ELEMENT LABEL (#PCDATA)>
<!ELEMENT DEPRECATED (#PCDATA)>
<!ELEMENT DEPRECATED_DATE (#PCDATA)>
<!ELEMENT CHECK_TYPE (#PCDATA)>
<!ELEMENT COMMENT (#PCDATA)>
<!ELEMENT USE_AGENT_ONLY (#PCDATA)>
<!ELEMENT AUTO_UPDATE (#PCDATA)>
<!ELEMENT IGNORE_ERROR (#PCDATA)>
<!ELEMENT IGNORE_ITEM_NOT_FOUND (#PCDATA)>
<!ELEMENT ERROR_SET_STATUS (#PCDATA)>
...
<!ELEMENT DB_QUERY (#PCDATA)>

<!ELEMENT WIN_PERMISSIONS (WIN_BASIC_PERMISSIONS?,
WIN_ADVANCED_PERMISSIONS?)>
<!ELEMENT WIN_BASIC_PERMISSIONS (WIN_BASIC_PERMISSION_TYPE+)>
<!ELEMENT WIN_ADVANCED_PERMISSIONS (WIN_ADVANCED_PERMISSION_TYPE+)>
<!ELEMENT WIN_BASIC_PERMISSION_TYPE (#PCDATA)>
<!ELEMENT WIN_ADVANCED_PERMISSION_TYPE (#PCDATA)>

<!ELEMENT SPECIAL (USER, GROUP, DELETION)>
<!ELEMENT USER (#PCDATA|READ|WRITE|EXECUTE)*>
```

```
<!ELEMENT GROUP (#PCDATA|READ|WRITE|EXECUTE)*>
<!ELEMENT OTHER (READ, WRITE, EXECUTE)>
<!ELEMENT DELETION (#PCDATA)>
<!ELEMENT READ (#PCDATA)>
<!ELEMENT WRITE (#PCDATA)>
<!ELEMENT EXECUTE (#PCDATA)>
<!ELEMENT INTEGRITY_CHECK_TIME_LIMIT (#PCDATA)>
<!ELEMENT INTEGRITY_CHECK_MATCH_LIMIT (#PCDATA)>
<!ELEMENT DIGEST_HASH (#PCDATA)>

<!ELEMENT DATA_TYPE (#PCDATA)>
<!ELEMENT DESCRIPTION (#PCDATA)>
<!ELEMENT TECHNOLOGY_LIST (TECHNOLOGY+)>
<!ELEMENT TECHNOLOGY (ID, NAME, RATIONALE, DATAPOINT?, USE_SCAN_VALUE?,
DB_QUERY?, DESCRIPTION?)>
<!ELEMENT NAME (#PCDATA)>
```

Sample - Policy API

API request:

```
curl -u "username:password" -H "Content-type: text/xml" -X "POST"
-d "action=export&id=1358790&show_user_controls=1"
"https://qualysapi.qualys.com/api/2.0/fo/compliance/policy/">
PolicyExportAPI.xml
```

XML output:

```
<?xml version="1.0" encoding="UTF-8" ?>
<!DOCTYPE POLICY_EXPORT_OUTPUT SYSTEM
"https://qualysapi.qualys.com/api/2.0/fo/compliance/policy/policy_export_
output.dtd">
<POLICY_EXPORT_OUTPUT>
  <RESPONSE>
    <DATETIME>2019-05-21T18:49:06Z</DATETIME>
  <POLICY>
    <TITLE><![CDATA[Objects_Check]]></TITLE>
    <EXPORTED><![CDATA[2019-05-21T18:49:06Z]]></EXPORTED>
    <COVER_PAGE><![CDATA[]]></COVER_PAGE>
    <STATUS><![CDATA[active]]></STATUS>
    ...
    <USER_DEFINED_CONTROL>
      <ID>100338</ID>
      <UDC_ID>e9ff3da7-9d0c-4a64-8055-e49a3f88f838</UDC_ID>
      <CHECK_TYPE>Oracle Database Check</CHECK_TYPE>
      <CATEGORY>
        <ID>5</ID>
        <NAME><![CDATA[Services]]></NAME>
      </CATEGORY>
```

```

    <SUB_CATEGORY>
      <ID>1024</ID>
      <NAME><![CDATA[Support]]></NAME>
    </SUB_CATEGORY>
    <STATEMENT><![CDATA[STMT:SELECT * FROM
user_tables;]]></STATEMENT>
    <CRITICALITY>
      <LABEL><![CDATA[MEDIUM]]></LABEL>
      <VALUE>2</VALUE>
    </CRITICALITY>
    <COMMENT><![CDATA[SELECT * FROM
user_tables]]></COMMENT>
    <IGNORE_ERROR>1</IGNORE_ERROR>
    <ERROR_SET_STATUS>PASS</ERROR_SET_STATUS>
    <TECHNOLOGIES total="1">
      <TECHNOLOGY>
        <ID>8</ID>
        <NAME>Oracle 10g</NAME>

    <EVALUATE><CTRL><AND><OR><DP><K>custom.oracle_query.1661091</K><OP>xre</O
P><CD>matches</CD><FV set="1">No data
found</FV><DT>5</DT><V><![CDATA[. *]]></V><DBCOL><![CDATA[STATUS]]></DBCOL
></DP></OR><DP><K>custom.oracle_query.1661091</K><L>0</L><OP>eq</OP><DT>4
</DT><CD>match
all</CD><V>2</V><DBCOL>NUM_ROWS</DBCOL></DP></AND></CTRL></EVALUATE>
      <RATIONALE><![CDATA[rat:SELECT * FROM
user_tables]]></RATIONALE>
      <DB_QUERY><![CDATA[SELECT * FROM
user_tables;]]></DB_QUERY>
      <DESCRIPTION><![CDATA[des:SELECT * FROM
user_tables]]></DESCRIPTION>
    </TECHNOLOGY>
  </TECHNOLOGIES>
  <REFERENCE_LIST/>
</USER_DEFINED_CONTROL>
...
  </RESPONSE>
</POLICY_EXPORT_OUTPUT>

```

DTD update:

DTD: <platform>/api/2.0/fo/compliance/policy/policy_export_output

```

<!-- QUALYS POLICY_EXPORT_OUTPUT DTD -->
<!-- $Revision: 62328 $ -->
<!ELEMENT POLICY_EXPORT_OUTPUT (REQUEST?, RESPONSE)>
...
<!ELEMENT TECHNOLOGY (ID, NAME?, EVALUATE?, RATIONALE?, DATAPOINT?,
USE_SCAN_VALUE?, DB_QUERY?, DESCRIPTION?)>

```



```
<!ELEMENT NAME (#PCDATA)>
<!ELEMENT EVALUATE (CTRL*)>
<!ELEMENT RATIONALE (#PCDATA)>
<!ELEMENT CTRL (AND|OR|NOT|DP)+>
<!ELEMENT AND (AND|OR|NOT|DP)+>
<!ELEMENT OR (AND|OR|NOT|DP)+>
<!ELEMENT NOT (AND|OR|NOT|DP)+>
<!ELEMENT DP (K|OP|CD|L|V|FV|DBCOL|DT)>
<!ELEMENT K (#PCDATA)>
<!ELEMENT OP (#PCDATA)>
<!ELEMENT CD (#PCDATA)>
<!ELEMENT L (#PCDATA)>
<!ELEMENT V (#PCDATA)>
<!ELEMENT FV (#PCDATA)>
<!ATTLIST FV set CDATA #IMPLIED>
<!ELEMENT DBCOL (#PCDATA)>
<!ELEMENT DT (#PCDATA)>
...
<!ELEMENT USER_DEFINED_CONTROL (ID, UDC_ID, CHECK_TYPE, CATEGORY,
SUB_CATEGORY, STATEMENT, CRITICALITY?, COMMENT?, USE_AGENT_ONLY?,
AUTO_UPDATE?, IGNORE_ERROR, (IGNORE_ITEM_NOT_FOUND|ERROR_SET_STATUS)?,
SCAN_PARAMETERS?, REFERENCE_TEXT?, TECHNOLOGIES, REFERENCE_LIST)>
<!ELEMENT UDC_ID (#PCDATA)>
<!ELEMENT CHECK_TYPE (#PCDATA)>
...
<!ELEMENT URL (#PCDATA)>
<!ELEMENT ERROR_SET_STATUS (#PCDATA)>
...
<!ELEMENT DATA_TYPE (#PCDATA)>
<!ELEMENT DB_QUERY (#PCDATA)>

<!ELEMENT PERMISSIONS (SPECIAL, USER, GROUP, OTHER)>
...
```

Sample - Posture API

API request:

```
curl -u "username:password" -H "Content-type: text/xml" -X "POST"
-d "action=list&policy_id=1303776&details=All&include_dp_name=1"
"https://qualysapi.qualys.com/api/2.0/fo/compliance/posture/info/"
PostureInfo.xml
```

XML output:

```
<?xml version="1.0" encoding="UTF-8" ?>
<!DOCTYPE POSTURE_INFO_LIST_OUTPUT SYSTEM
"https://qualysapi.qualys.com/api/2.0/fo/compliance/posture/info/posture_
info_list_output.dtd">
```

```
<POSTURE_INFO_LIST_OUTPUT>
  <RESPONSE>
    <DATETIME>2019-05-03T19:24:32Z</DATETIME>
    <INFO_LIST>
      <INFO>
        <ID>6413404</ID>
        <HOST_ID>1843205</HOST_ID>
        <CONTROL_ID>100022</CONTROL_ID>
        <TECHNOLOGY_ID>22</TECHNOLOGY_ID>
        <INSTANCE>MSSQL 2008:1:1433:MSSQLSERVER:master</INSTANCE>
        <STATUS>Failed</STATUS>
        <POSTURE_MODIFIED_DATE>2019-04-
29T20:38:08Z</POSTURE_MODIFIED_DATE>
        <EVIDENCE>
          <BOOLEAN_EXPR><![CDATA[(!(:dp_2 matches $tp_2))]]></BOOLEAN_EXPR>
          <DPV_LIST>
            <DPV lastUpdated="2019-05-03T00:33:14Z">
              <LABEL>:dp_2</LABEL>
              <V>
                <H>
                  <C><![CDATA[CustomerID]]></C>
                  <C><![CDATA[CustomerName]]></C>
                  <C><![CDATA[ContactName]]></C>
                  <C><![CDATA[Address]]></C>
                  <C><![CDATA[City]]></C>
                  <C><![CDATA[PostalCode]]></C>
                  <C><![CDATA[Country]]></C>
                </H>
                <R>
                  <C><![CDATA[1]]></C>
                  <C><![CDATA[Alfreds Futterkiste]]></C>
                  <C><![CDATA[Maria Anders]]></C>
                  <C><![CDATA[Obere Str. 57]]></C>
                  <C><![CDATA[Berlin]]></C>
                  <C><![CDATA[12209]]></C>
                  <C><![CDATA[Germany]]></C>
                </R>
                <R>
                  <C><![CDATA[2]]></C>
                  <C><![CDATA[Ana Trujillo Emparedados y helados]]></C>
                  <C><![CDATA[Ana Trujillo]]></C>
                  <C><![CDATA[Avda. de la Constitucion 2222]]></C>
                  <C><![CDATA[Mexico D.F.]]></C>
                  <C><![CDATA[05021]]></C>
                  <C><![CDATA[Mexico]]></C>
                </R>
                <R>
                  <C><![CDATA[3]]></C>
                  <C><![CDATA[Antonio Moreno Taqueria]]></C>
                </R>
              </V>
            </DPV_LIST>
          </EVIDENCE>
        </INFO>
      </INFO_LIST>
    </RESPONSE>
  </POSTURE_INFO_LIST_OUTPUT>
```

```
        <C><![CDATA[Antonio Moreno]]></C>  
        <C><![CDATA[Mataderos 2312]]></C>  
        <C><![CDATA[Mexico D.F.]]></C>  
        <C><![CDATA[05023]]></C>  
        <C><![CDATA[Mexico]]></C>  
    </R>  
    ...  
    </GLOSSARY>  
  </RESPONSE>  
</POSTURE_INFO_LIST_OUTPUT>
```

DTD update:

DTD: <platform>/api/2.0/fo/compliance/posture/info/posture_info_list_output.dtd

```
<!-- QUALYS POSTURE_INFO_LIST_OUTPUT DTD -->  
<!-- $Revision$ -->  
<!ELEMENT POSTURE_INFO_LIST_OUTPUT (REQUEST?,RESPONSE)>  
  ...  
<!ELEMENT EVIDENCE (BOOLEAN_EXPR, DPV_LIST?)>  
<!ELEMENT BOOLEAN_EXPR (#PCDATA)>  
<!ELEMENT DPV_LIST (DPV+)>  
<!ELEMENT DPV (LABEL, (ERROR|V)+, TM_REF?)>  
<!ATTLIST DPV lastUpdated CDATA #IMPLIED>  
<!ELEMENT V (#PCDATA|H|R)*>  
<!ELEMENT H (C+)>  
<!ELEMENT R (C+)>  
  
<!ELEMENT CAUSE_OF_FAILURE (DIRECTORY_FIM_UDC, UNEXPECTED?, MISSING?,  
  ADDED_DIRECTORIES?, REMOVED_DIRECTORIES?, PERMISSON_CHANGED_DIRECTORIES?,  
  CONTENT_CHANGED_DIRECTORIES?)>  
<!ELEMENT DIRECTORY_FIM_UDC (#PCDATA)>  
<!ELEMENT UNEXPECTED (V*)>  
<!ELEMENT MISSING (V*)>  
<!ATTLIST MISSING logic CDATA #FIXED "OR">  
<!ELEMENT ADDED_DIRECTORIES (V*)>  
<!ELEMENT REMOVED_DIRECTORIES (V*)>  
<!ELEMENT PERMISSON_CHANGED_DIRECTORIES (V*)>  
<!ELEMENT CONTENT_CHANGED_DIRECTORIES (V*)>  
  
<!ELEMENT LABEL (#PCDATA)>  
<!ELEMENT ERROR (#PCDATA)>  
<!ELEMENT TM_REF (#PCDATA)>  
<!ELEMENT C (#PCDATA)>  
  ...
```

Schema update:

The ImportableControl.xsd schema is used when importing and exporting controls.

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
elementFormDefault="qualified">

...
  <xs:element name="CONTROL">
    <xs:complexType>
      <xs:sequence>
        <xs:element ref="ID" minOccurs="0" maxOccurs="1" />
        <xs:element ref="UDC_ID" minOccurs="0" maxOccurs="1" />
        <xs:element ref="CHECK_TYPE" maxOccurs="1" />
        <xs:element ref="CATEGORY" minOccurs="0" maxOccurs="1" />
        <xs:element ref="SUB_CATEGORY" minOccurs="0" maxOccurs="1"
/>

        <xs:element ref="STATEMENT" maxOccurs="1" />
        <xs:element ref="CRITICALITY" minOccurs="0" maxOccurs="1"
/>

        <xs:element ref="COMMENT" minOccurs="0" maxOccurs="1" />
        <xs:element ref="USE_AGENT_ONLY" minOccurs="0"
maxOccurs="1" />
        <xs:element ref="AUTO_UPDATE" minOccurs="0" maxOccurs="1"
/>

        <xs:element ref="IGNORE_ERROR" minOccurs="0" maxOccurs="1"
/>

        <xs:element ref="ERROR_SET_STATUS" minOccurs="0"
maxOccurs="1" />
        <xs:element ref="IGNORE_ITEM_NOT_FOUND" minOccurs="0"
maxOccurs="1" />
        <xs:element ref="SCAN_PARAMETERS" minOccurs="0"
maxOccurs="1" />
        <xs:element ref="TECHNOLOGY_LIST" maxOccurs="1" />
        <xs:element ref="REFERENCE_LIST" maxOccurs="1" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>

...
  <xs:element name="CHECK_TYPE">
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:enumeration value="Registry Key Existence" />
        <xs:enumeration value="Registry Value Existence" />
        <xs:enumeration value="Registry Value Content Check" />
        <xs:enumeration value="Registry Permission" />
        <xs:enumeration value="Window File/Directory Existence" />
        <xs:enumeration value="Window File/Directory Permission" />
      </xs:restriction>
    </xs:simpleType>
  </xs:element>
</xs:schema>
```

```

        <xs:enumeration value="Unix File/Directory Permission" />
        <xs:enumeration value="Unix File Content Check" />
        <xs:enumeration value="Unix File/Directory Existence" />
        <xs:enumeration value="Window File Integrity Check" />
        <xs:enumeration value="Unix File Integrity Check" />
        <xs:enumeration value="WMI Query Check" />
        <xs:enumeration value="Share Access Check" />
        <xs:enumeration value="Unix Directory Search Check" />
        <xs:enumeration value="Windows Directory Search Check" />
        <xs:enumeration value="Windows Group Membership Check" />
        <xs:enumeration value="Windows Directory Integrity Check"
/>

        <xs:enumeration value="Unix Directory Integrity Check" />
        <xs:enumeration value="MSSQL Database Check" />
        <xs:enumeration value="Oracle Database Check" />
    </xs:restriction>
</xs:simpleType>
</xs:element>
...
<xs:element name="ERROR_SET_STATUS">
    <xs:simpleType>
        <xs:restriction base="xs:string">
            <xs:enumeration value="FAIL" />
            <xs:enumeration value="PASS" />
        </xs:restriction>
    </xs:simpleType>
</xs:element>
...
<xs:element name="TECHNOLOGY">
    <xs:complexType>
        <xs:sequence>
            <xs:element ref="ID" maxOccurs="1"/>
            <xs:element ref="TECH_NAME" maxOccurs="1" />
            <xs:element ref="RATIONALE" maxOccurs="1" />
            <xs:element ref="DATAPOINT" minOccurs="0" maxOccurs="1" />
            <xs:element ref="USE_SCAN_VALUE" minOccurs="0"
maxOccurs="1" />
            <xs:element ref="DB_QUERY" minOccurs="0" maxOccurs="1" />
            <xs:element ref="DESCRIPTION" minOccurs="0" maxOccurs="1"
/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
...
<xs:element name="DB_QUERY">
    <xs:simpleType>
        <xs:restriction base="xs:string">
            <xs:minLength value="0"/>
            <xs:maxLength value="4000"/>

```

```
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
  ...
```

Sample - Options Profile API: Create

Create with Database Preference Key and custom Limit set for MS SQL and Oracle

API request:

```
curl -u "username:password" -H "Content-type: text/xml" -X "POST"
-d "action=create&title=API-PC-OP-
Oracle&scan_ports=targeted&oracle_db_udc_restriction=1&oracle_db_udc_limit=10&mssql_db_udc_restriction=1&mssql_db_udc_limit=250"
"https://qualysapi.qualys.com/api/2.0/fo/subscription/option_profile/pc/"
>CreateOptionProfile.xml
```

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>2019-05-20T19:16:41Z</DATETIME>
    <TEXT>Compliance Option profile successfully added.</TEXT>
    <ITEM_LIST>
      <ITEM>
        <KEY>ID</KEY>
        <VALUE>1710286</VALUE>
      </ITEM>
    </ITEM_LIST>
  </RESPONSE>
</SIMPLE_RETURN>
```

Sample - Options Profile API: Update

Update Option Profile with Oracle Database Preference Key

API request:

```
curl -u "username:password" -H "Content-type: text/xml" -X "POST"
-d "action=update&id=1709710&title=API-PC-OP-Oracle-custom-
limit&scan_ports=targeted&oracle_db_udc_restriction=1&oracle_db_udc_limit=100"
"https://qualysapi.qualys.com/api/2.0/fo/subscription/option_profile/pc/"
```

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>2019-05-20T06:45:00Z</DATETIME>
    <TEXT>Compliance Option profile successfully updated.</TEXT>
    <ITEM_LIST>
      <ITEM>
        <KEY>ID</KEY>
        <VALUE>1709710</VALUE>
      </ITEM>
    </ITEM_LIST>
  </RESPONSE>
</SIMPLE_RETURN>
```

Sample - Options Profile API: List

List the database preference key setting and it's corresponding value in Option Profile for MS SQL and Oracle

API request:

```
curl -u "username:password" -H "Content-type: text/xml" -X -d
"action=list&id=1710150"
"https://qualysapi.qualys.com/api/2.0/fo/subscription/option_profile/pc/"
>optionProfileList.xml
```

XML output:

```
<?xml version="1.0" encoding="UTF-8" ?>
<!DOCTYPE OPTION_PROFILES SYSTEM
"https://qualysapi.qualys.com/api/2.0/fo/subscription/option_profile/opti
on_profile_info.dtd">
<OPTION_PROFILES>
  <OPTION_PROFILE>
    <BASIC_INFO>
      <ID>1710150</ID>
      ...
    </SCAN_BY_POLICY>
    </SCAN_RESTRICTION>
    <DATABASE_PREFERENCE_KEY>
      <MSSQL>
        <DB_UDC_RESTRICTION>1</DB_UDC_RESTRICTION>
        <DB_UDC_LIMIT>250</DB_UDC_LIMIT>
      </MSSQL>
```

```
<ORACLE>
  <DB_UDC_RESTRICTION>1</DB_UDC_RESTRICTION>
  <DB_UDC_LIMIT>10</DB_UDC_LIMIT>
</ORACLE>
</DATABASE_PREFERENCE_KEY>
<FILE_INTEGRITY_MONITORING>
  <AUTO_UPDATE_EXPECTED_VALUE>0</AUTO_UPDATE_EXPECTED_VALUE>
</FILE_INTEGRITY_MONITORING>
</SCAN>
...
</ADDITIONAL>
</OPTION_PROFILE>
</OPTION_PROFILES>
```

Sample - Options Profile API: Export

Export the Option Profile for MS SQL and Oracle with database preference key setting and it's corresponding value defined.

API request:

```
curl -u "username:password" -H "Content-type: text/xml" -X -d
"action=export&option_profile_id=1710150"
"https://qualysapi.qualys.com/api/2.0/fo/subscription/option_profile/">ExportOptionProfile.xml
```

XML output:

```
<?xml version="1.0" encoding="UTF-8" ?>
<!DOCTYPE OPTION_PROFILES SYSTEM
"https://qualysapi.qualys.com/api/2.0/fo/subscription/option_profile/option_profile_info.dtd">
<OPTION_PROFILES>
  <OPTION_PROFILE>
    <...
      </POLICY>
      </SCAN_BY_POLICY>
    </SCAN_RESTRICTION>
    <DATABASE_PREFERENCE_KEY>
      <MSSQL>
        <DB_UDC_RESTRICTION>1</DB_UDC_RESTRICTION>
        <DB_UDC_LIMIT>250</DB_UDC_LIMIT>
      </MSSQL>
      <ORACLE>
        <DB_UDC_RESTRICTION>1</DB_UDC_RESTRICTION>
        <DB_UDC_LIMIT>10</DB_UDC_LIMIT>
      </ORACLE>
    </DATABASE_PREFERENCE_KEY>
  </OPTION_PROFILE>
</OPTION_PROFILES>
```



```
        <AUTO_UPDATE_EXPECTED_VALUE>0</AUTO_UPDATE_EXPECTED_VALUE>
    </FILE_INTEGRITY_MONITORING>
    ...
</ADDITIONAL>
</OPTION_PROFILE>
</OPTION_PROFILES>
```

DTD update:

DTD: <platform>/api/2.0/fo/subscription/option_profile/option_profile_info.dtd

```
<!ELEMENT OPTION_PROFILES (OPTION_PROFILE)*>
  <!ELEMENT OPTION_PROFILE (BASIC_INFO, SCAN, MAP?, ADDITIONAL)>
  ...
  <!ELEMENT SCAN (PORTS?, SCAN_DEAD_HOSTS?, CLOSE_VULNERABILITIES?,
    PURGE_OLD_HOST_OS_CHANGED?, PERFORMANCE?, LOAD_BALANCER_DETECTION?,
    PASSWORD_BRUTE_FORCING?, VULNERABILITY_DETECTION?, AUTHENTICATION?,
      ADDL_CERT_DETECTION?, DISSOLVABLE_AGENT?, LITE_OS_SCAN?,
    ETHERNET_IP_PROBING?, CUSTOM_HTTP_HEADER?, HOST_ALIVE_TESTING?,
    SCAN_RESTRICTION?, DATABASE_PREFERENCE_KEY?, SYSTEM_AUTH_RECORD?,
    FILE_INTEGRITY_MONITORING?, CONTROL_TYPES?, DO_NOT_OVERWRITE_OS?,
    TEST_AUTHENTICATION?)>
  ...

  <!ELEMENT DATABASE_PREFERENCE_KEY (MSSQL?, ORACLE?)>
  <!ELEMENT MSSQL (DB_UDC_RESTRICTION, DB_UDC_LIMIT)>
  <!ELEMENT ORACLE (DB_UDC_RESTRICTION, DB_UDC_LIMIT)>
  <!ELEMENT DB_UDC_RESTRICTION (#PCDATA)>
  <!ELEMENT DB_UDC_LIMIT (#PCDATA)>
```

Schema update:

The option_profiles.xsd schema is used to validate a proper format and required elements of the option profile XML file.

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema attributeFormDefault="unqualified"
  elementFormDefault="qualified"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="OPTION_PROFILES" type="OPTION_PROFILESType"/>
  <xs:complexType name="CONTROL_TYPESType">
    <xs:sequence>
    ...
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:enumeration value="0"/>
        <xs:enumeration value="1"/>
      </xs:restriction>
    </xs:simpleType>
```

```

    </xs:element>
    <xs:element type="DISSOLVABLE_AGENTType"
name="DISSOLVABLE_AGENT" minOccurs="0"/>
    <xs:element type="SCAN_RESTRICTIONType"
name="SCAN_RESTRICTION" minOccurs="0"/>
    <xs:element type="DATABASE_PREFERENCE_KEYType"
name="DATABASE_PREFERENCE_KEY" minOccurs="0"/>
    <xs:element type="SYSTEM_AUTH_RECORDType"
name="SYSTEM_AUTH_RECORD" minOccurs="0"/>
    <xs:element type="FILE_INTEGRITY_MONITORINGType"
name="FILE_INTEGRITY_MONITORING" minOccurs="0"/>
    <xs:element type="CONTROL_TypesType" name="CONTROL_TYPES"
minOccurs="0"/>
    <xs:element name="LITE_OS_SCAN" minOccurs="0">
      <xs:simpleType>
        ...
<xs:complexType name="SCAN_RESTRICTIONType">
  <xs:sequence>
    <xs:element type="SCAN_BY_POLICYType" name="SCAN_BY_POLICY"/>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="DATABASE_PREFERENCE_KEYType">
  <xs:sequence>
    <xs:element type="MSSQLType" name="MSSQL" minOccurs="0"/>
    <xs:element type="ORACLEType" name="ORACLE" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="MSSQLType">
  <xs:sequence>
    <xs:element name="DB_UDC_RESTRICTION">
      <xs:simpleType>
        <xs:restriction base="xs:integer">
          <xs:enumeration value="1"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="DB_UDC_LIMIT">
      <xs:simpleType>
        <xs:restriction base="xs:integer">
          <xs:minInclusive value="1"/>
          <xs:maxInclusive value="256"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ORACLEType">
  <xs:sequence>
    <xs:element name="DB_UDC_RESTRICTION">

```

```
        <xs:simpleType>
          <xs:restriction base="xs:integer">
            <xs:enumeration value="1"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
    <xs:element name="DB_UDC_LIMIT">
      <xs:simpleType>
        <xs:restriction base="xs:integer">
          <xs:minInclusive value="1"/>
          <xs:maxInclusive value="5000"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
...
  <xs:complexType name="SYSTEM_AUTH_RECORDType">
    <xs:choice>
    ...
```

Control List Output - DTD Change

APIs affected	/api/2.0/fo/compliance/control/?action=list
New or Updated API	Updated (DTD change only)
DTD or XSD changes	Yes

The Control List Output DTD is used to view the list of compliance controls which are visible in your account.

We've made several changes to this DTD. The updated DTD (control_list_output.dtd) is shown below with new elements in bold.

DTD Update:

```
<!-- QUALYS CONTROL_LIST_OUTPUT DTD -->
<!-- $Revision$ -->
<!ELEMENT CONTROL_LIST_OUTPUT (REQUEST?,RESPONSE)>

<!ELEMENT REQUEST (DATETIME, USER_LOGIN, RESOURCE, PARAM_LIST?,
POST_DATA?)>
<!ELEMENT DATETIME (#PCDATA)>
<!ELEMENT USER_LOGIN (#PCDATA)>
<!ELEMENT RESOURCE (#PCDATA)>
...
<!ELEMENT SCAN_PARAMETERS (REG_HIVE?, REG_KEY?, REG_VALUE_NAME?,
FILE_PATH?, FILE_QUERY?, HASH_TYPE?, WMI_NS?, WMI_QUERY?, SHARE_USER?,
PATH_USER?, GROUP_NAME?, GROUP_NAME_LIMIT?,
BASE_DIR?, SHOULD_DESCEND?, DEPTH_LIMIT?, INTEGRITY_CHECK_DEPTH_LIMIT?,
FOLLOW_SYMLINK?, FILE_NAME_MATCH?, FILE_NAME_SKIP?, DIR_NAME_MATCH?,
DIR_NAME_SKIP?, WIN_FILE_SYS_OBJECT_TYPES?,
MATCH_WELL_KNOWN_USERS_FOR_ANY_DOMAIN?, WIN_PERMISSION_USERS?,
WIN_PERMISSION_MATCH?, WIN_PERMISSIONS?, PERMISSIONS?, PERM_COND?,
TYPE_MATCH?, USER_OWNER?, GROUP_OWNER?,
    TIME_LIMIT?, MATCH_LIMIT?, INTEGRITY_CHECK_TIME_LIMIT?,
INTEGRITY_CHECK_MATCH_LIMIT?, INTEGRITY_CHECK_OBJECT_TYPES?,
DIGEST_HASH?, PERMISSION_MONITOR?, DATA_TYPE, DESCRIPTION)>
...
<!ELEMENT INTEGRITY_CHECK_TIME_LIMIT (#PCDATA)>
<!ELEMENT INTEGRITY_CHECK_MATCH_LIMIT (#PCDATA)>
<!ELEMENT INTEGRITY_CHECK_OBJECT_TYPES (#PCDATA)>
<!ELEMENT DIGEST_HASH (#PCDATA)>
<!ELEMENT PERMISSION_MONITOR (#PCDATA)>
<!ELEMENT DATA_TYPE (#PCDATA)>
...
<!ELEMENT URL (#PCDATA)>
<!-- EOF -->
```

Policy Export Output - DTD Change

APIs affected	/api/2.0/fo/compliance/policy/?action=export
New or Updated API	Updated (DTD change only)
DTD or XSD changes	Yes

The Policy Export Output DTD is used to export compliance policies from your account to an XML file.

We've made several changes to this DTD. The updated DTD (policy_export_output.dtd) is shown below with new elements in bold.

DTD Update:

```
<!-- QUALYS POLICY_EXPORT_OUTPUT DTD -->
<!-- $Revision: 62328 $ -->
<!ELEMENT POLICY_EXPORT_OUTPUT (REQUEST?, RESPONSE)>

<!ELEMENT REQUEST (DATETIME, USER_LOGIN, RESOURCE, PARAM_LIST?,
POST_DATA?)>
<!ELEMENT DATETIME (#PCDATA)>
...
<!ELEMENT ERROR_SET_STATUS (#PCDATA)>

<!ELEMENT SCAN_PARAMETERS (REG_HIVE?, REG_KEY?, REG_VALUE_NAME?,
FILE_PATH?, FILE_QUERY?, HASH_TYPE?, WMI_NS?, WMI_QUERY?, SHARE_USER?,
PATH_USER?, BASE_DIR?, SHOULD_DESCEND?, DEPTH_LIMIT?,
INTEGRITY_CHECK_DEPTH_LIMIT?, FOLLOW_SYMLINK?, FILE_NAME_MATCH?,
FILE_NAME_SKIP?, DIR_NAME_MATCH?,
DIR_NAME_SKIP?, PERMISSIONS?, PERM_COND?, TYPE_MATCH?, USER_OWNER?,
GROUP_OWNER?, TIME_LIMIT?, MATCH_LIMIT?, INTEGRITY_CHECK_TIME_LIMIT?,
INTEGRITY_CHECK_MATCH_LIMIT?, INTEGRITY_CHECK_OBJECT_TYPES?,
WIN_FILE_SYS_OBJECT_TYPES?,
MATCH_WELL_KNOWN_USERS_FOR_ANY_DOMAIN?, WIN_PERMISSION_USERS?,
WIN_PERMISSION_MATCH?, WIN_PERMISSIONS?, GROUP_NAME?,
GROUP_NAME_LIMIT?, DIGEST_HASH?, PERMISSION_MONITOR?, DATA_TYPE,
DESCRIPTION)>
<!ELEMENT REG_HIVE (#PCDATA)>
...
<!ELEMENT BASE_DIR (#PCDATA)>
<!ELEMENT SHOULD_DESCEND (#PCDATA)>
<!ELEMENT DEPTH_LIMIT (#PCDATA)>
<!ELEMENT INTEGRITY_CHECK_DEPTH_LIMIT (#PCDATA)>
<!ELEMENT FOLLOW_SYMLINK (#PCDATA)>
<!ELEMENT FILE_NAME_MATCH (#PCDATA)>
<!ELEMENT FILE_NAME_SKIP (#PCDATA)>
<!ELEMENT DIR_NAME_MATCH (#PCDATA)>
```

```
<!ELEMENT DIR_NAME_SKIP (#PCDATA)>
<!ELEMENT PERM_COND (#PCDATA)>
<!ELEMENT TYPE_MATCH (#PCDATA)>
<!ELEMENT USER_OWNER (#PCDATA)>
<!ELEMENT GROUP_OWNER (#PCDATA)>
<!ELEMENT TIME_LIMIT (#PCDATA)>
<!ELEMENT MATCH_LIMIT (#PCDATA)>
<!ELEMENT INTEGRITY_CHECK_TIME_LIMIT (#PCDATA)>
<!ELEMENT INTEGRITY_CHECK_MATCH_LIMIT (#PCDATA)>
<!ELEMENT INTEGRITY_CHECK_OBJECT_TYPES (#PCDATA)>
<!ELEMENT DIGEST_HASH (#PCDATA)>
<!ELEMENT PERMISSION_MONITOR (#PCDATA)>
<!ELEMENT WIN_PERMISSION_MATCH (#PCDATA)>

...
<!-- EOF -->
```

Subscription API - Import/Export Email Notification Settings for Password Expiry

APIs affected	/api/2.0/fo/auth/subscription/
New or Updated API	Updated
DTD or XSD changes	No

We updated the Export Subscription Configurations API output to include configuration settings for password expiry notification emails in the “USERS” element. New settings indicate whether users in the subscription will be notified by email before their password expires, how often password expiration emails will be sent and when to switch to daily emails.

You can export the email notification configurations to an XML file and then import them to your account.

RECORD > SUBSCRIPTION > FO > USERS

We have added four new Info keys in the “USERS” element to show you the configuration information.

Info Key	Description
notify.password.expiry. email.flag	A value of 1 indicates that users will be notified by email to change their password before it expires.
notify.password.expiry. email.periodic.days	The number of days (1-90) before a user's password is set to expire when the system will send the first password expiration email to the user.
notify.password.expiry. email.periodic.frequency	The frequency in which the password expiration email will be sent to the user in days (1-90). For example, every 2 days, every 5 days, etc.
notify.password.expiry. email.daily.days	The number of days (0-30) before a user's password is set to expire when the system will start sending daily password expiration emails to the user.

Sample - Export Subscription Configurations

API request:

```
curl -u "username:password" -H "Content-type: text/xml" -X "POST"
--data-binary @export_config.xml
"https://qualysapi.qualys.com/api/2.0/fo/subscription/?action=import" > import_config.xml
```

XML output:

```
<?xml version="1.0" encoding="UTF-8" ?>
<!DOCTYPE RECORD SYSTEM
"https://qualysapi.qualys.com/api/2.0/fo/subscription/subscription_info.dtd">
<RECORD>
  <SUBSCRIPTION>
    <FO>
      <SCAN>
        <INFO key="global_storage"><![CDATA[1]]></INFO>
        <SCANNER_TRUSTED_CA>
          <INFO key="id"><![CDATA[36137]]></INFO>
          <INFO key="subscription_id"><![CDATA[244702]]></INFO>
          <INFO key="cert"><![CDATA[]]></INFO>
          ...
        </SCANNER_TRUSTED_CA>
      </SCAN>
      <USERS>
        ...
        <INFO key="notify.password.expiry.flag"><![CDATA[]]></INFO>
        <INFO key="notify.password.expiry.email.flag"><![CDATA[1]]></INFO>
        <INFO
key="notify.password.expiry.email.periodic.days"><![CDATA[15]]></INFO>
        <INFO
key="notify.password.expiry.email.periodic.frequency"><![CDATA[15]]></INFO>
        <INFO
key="notify.password.expiry.email.daily.days"><![CDATA[2]]></INFO>
        ...
      </USERS>
    </FO>
  </SUBSCRIPTION>
</RECORD>
```


Subscription API - Import/Export Session Timeout Settings for User Roles

APIs affected	/api/2.0/fo/auth/subscription/
New or Updated API	Yes
DTD or XSD changes	No

We updated the Export Subscription Configurations API output to include session timeout settings by user role. New settings indicate whether the option to customize session timeout by user role is enabled and the session timeout value for each role. The session timeout setting is configured under Users > Setup > Security in the UI. Note that not all user roles are available in all subscriptions.

You can export the session timeout settings to an XML file and then import them to your account.

RECORD > SUBSCRIPTION > FO > USERS

We added new Info keys in the “USERS” element for session expiration values.

Info Key	Description
session.expiration.custom.flag	A value of 1 indicates that the option to define session timeout by user role is enabled. 0 indicates that this option is not enabled.
session.expiration.manager	The session timeout in minutes (10-240) for Managers.
session.expiration.unit_manager	The session timeout in minutes (10-240) for Unit Managers.
session.expiration.auditor	The session timeout in minutes (10-240) for Auditors.
session.expiration.scanner	The session timeout in minutes (10-240) for Scanners.
session.expiration.reader	The session timeout in minutes (10-240) for Readers.
session.expiration.remediation_user	The session timeout in minutes (10-240) for Remediation Users.
session.expiration.user_administrator	The session timeout in minutes (10-240) for User Administrators.
session.expiration.kb_user	The session timeout in minutes (10-240) for KnowledgeBase Only users.

Sample - Export Subscription Configurations

API request:

```
curl -u "username:password" -H "Content-type: text/xml" -X "POST"
--data-binary @export_config.xml
"https://qualysapi.qualys.com/api/2.0/fo/subscription/?action=import" > import_config.xml
```

XML output:

```
<?xml version="1.0" encoding="UTF-8" ?>
<!DOCTYPE RECORD SYSTEM
"https://qualysapi.qualys.com/api/2.0/fo/subscription/subscription_info.dtd">
<RECORD>
  <SUBSCRIPTION>
    <FO>
      ...
      <USERS>
        ...
        <INFO key="session.expiration.custom_flag"><![CDATA[1]]></INFO>
        <INFO key="session.expiration.auditor"><![CDATA[13]]></INFO>
        <INFO key="session.expiration.kb_user"><![CDATA[18]]></INFO>
        <INFO key="session.expiration.manager"><![CDATA[11]]></INFO>
        <INFO key="session.expiration.reader"><![CDATA[15]]></INFO>
        <INFO key="session.expiration.remediation_user"><![CDATA[16]]></INFO>
        <INFO key="session.expiration.scanner"><![CDATA[14]]></INFO>
        <INFO key="session.expiration.unit_manager"><![CDATA[12]]></INFO>
        <INFO key="session.expiration.user_administrator"><![CDATA[17]]></INFO>
        ...
      </USERS>
    </FO>
  </SUBSCRIPTION>
</RECORD>
```