



QualysGuard[®] API

Answers to Frequently Asked Questions

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It seems like using the QualysGuard API is just a matter of submitting form elements and receiving an XML document. Is that correct?

Yes. The QualysGuard API has an extensible XML interface that is very easy to use.

Do you have any examples of how to use the QualysGuard API?

Yes, we have examples of how to access the API and perform functions. You can download the sample code (.zip format) from our website from the URL shown below:

http://www.qualys.com/products/qgent/resources/#technical_documents

Also, the latest QualysGuard API user guides are published at this same URL.

If you have a QualysGuard user account, you can download the sample code and user guide from within the QualysGuard web application. Simply log into your account and go to Help > Resources > API.

Can I use the QualysGuard API with any off-the-shelf products?

Any product that supports XML can be used.

Where are the most recent DTDs for QualysGuard reports?

Qualys publishes DTDs for all QualysGuard reports on its website. It is recommended that you access the website for the most recent DTDs to decode your reports. The locations of the DTDs for all reports are documented with function descriptions in the QualysGuard API user guides.

What values should I expect for the attributes of the various elements defined in the DTDs for QualysGuard reports?

Look in the Appendices of the QualysGuard API user guides for complete specifications for all reports. For each report, XPath specifications are provided.

Do I need to use an XML parser or can I just do simple searches on the text?

You need to use an XML parser. Occasionally Qualys updates the XML output in such a way that would break a simple text search, but would not break a parser.

Scans and maps take a while to complete. Do I have to wait for the scan or map to complete, or can I just close my connection once I make the request?

If you include the `save_report=yes` attribute as one of the attributes to the `scan.php` function or the `map.php` function, then you can disconnect after the scan or map starts. The `save_report=yes` attribute causes the service to save the scan or map on the QualysGuard server so the results can be downloaded later. For example, you can request information about the last saved scan using this URL:

https://qualysapi.qualys.com/msp/scan_report_list.php?last=yes

Or you can request a list of saved scan reports and then request a specific report. To do this, first retrieve a list of saved scan reports using this URL:

`https://qualysapi.qualys.com/msp/scan_report_list.php`

Then retrieve one of the reports returned from the `scan_report_list.php` function, using a URL like this:

`https://qualysapi.qualys.com/msp/scan_report.php?ref={referenceCode}`

where *{referenceCode}* is a valid scan reference code.

Saved maps can be retrieved in a similar way as saved scans. The `map_report_list.php` and `map_report.php` functions allow you to list and retrieve saved maps.

I want to make a script that looks for a single vulnerability or potential vulnerability. How can I do that?

Just search the scan report output and locate the Qualys ID or CVE ID number. The Qualys ID number is located here in the scan report:

<code>/SCAN/VULNS/VULN[number]</code>	For a vulnerability
<code>/SCAN/VULNS/PRACTICE[number]</code>	For a potential vulnerability

The CVE ID number is located here in the scan report:

<code>/SCAN/VULNS/VULN[cveid]</code>	For a vulnerability
<code>/SCAN/VULNS/PRACTICE[cveid]</code>	For a potential vulnerability

A complete list of all vulnerability checks is available to you in the QualysGuard KnowledgeBase. You can view the vulnerability checks in the KnowledgeBase by logging into your account. Under VM, select KnowledgeBase on the top menu.

Are QualysGuard accounts required to use the QualysGuard API?

Yes. An application user who will run scans and maps must have a QualysGuard user account. An administrator who will create new user accounts for subscribers must have a QualysGuard administrator account. If you need assistance with obtaining a QualysGuard account, please contact your Qualys account representative.

How do I provide a username and password to the QualysGuard API?

The application must authenticate using QualysGuard account credentials (username and password) as part of the HTTP request. The credentials are transmitted using the “Basic Authentication Scheme” for HTTP. For more information, see the “Basic Authentication Scheme” section of RFC #2617. Also, see the QualysGuard API sample code for details on how to do this.

Can I use the QualysGuard API to schedule scans and maps?

Yes. The `scheduled_scans.php` function allows you to define daily, weekly, and monthly vulnerability scans and maps. Once defined, the service starts scheduled tasks automatically. The scheduled scan reports can be retrieved using the `scan_reports_list.php` and `scan_report.php` functions. Using the `scheduled_scans.php` function, you can also list scheduled scans and maps and delete tasks as needed.

Can my application receive a list of running maps?

Yes. The `scan_running_list.php` function allows you to retrieve a list of running scans and maps. The `scan_cancel.php` function gives you the ability to cancel a running scan or map.

Is there support for saved maps?

Yes. The `map.php` function allows you to save map reports on the QualysGuard server for later use. Once saved, you can do the following:

- List saved map reports using the `map_report_list.php` function
- Retrieve a saved map report using the `map_report.php` function
- Delete a saved map report using the `scan_report_delete.php` function

Is it possible to apply a custom option profile to scans and maps?

Yes, you can apply a custom option profile to scans and maps – on-demand or scheduled. One profile is applied to each scan and map. Qualys supplies a default option profile and other pre-defined profiles. The QualysGuard API applies the default profile to scan and map requests issued by `scan.php`, `map.php`, `scheduled_scans.php` unless another profile is specified. You may select another option profile using the `option` attribute as described in the *QualysGuard API V1 User Guide*. Note that editing option profiles (adding, modifying, and deleting) is supported only in the QualysGuard web application (not in the QualysGuard API) at this time.

What is the QualysGuard API V2 and what are its capabilities?

The QualysGuard API V2 is based on the latest API architecture from Qualys. The API V2 architecture is optimized for performance and security. Several functions are supported. The Vulnerability Scan API provides improved functions for managing vulnerability scans. Report Share API allows users to launch reports and download reports using Report Share. The Assets API provides functions for viewing hosts and host detection records. The Scan Authentication API allows users to manage authentication records. The WAS Scan Results API allows users to download WAS 1.0 scan results. See the *QualysGuard API V2 User Guide* for further details and samples. To download the latest version, log into your account and go to Help > Resources > API.

After a new user account is created, I would like my application to receive the username and password information directly. Is this possible?

Yes. The `user.php` function allows the API user to request that user credentials for the new account are returned via an XML report or via a registration email sent to the new user. For more information, see the “User Management” chapter in the *QualysGuard API VI User Guide*. To download the latest version, log into your account and go to Help > Resources > API.

My QualysGuard subscription has multiple users. Can all users access the API?

Yes, users who can access the QualysGuard web application can also access the QualysGuard API. These users can run maps and scans, schedule tasks, view reports, and view preferences according to the permissions granted by their user role – Manager, Auditor, Unit Manager, Scanner, or Reader. These permissions are documented along with each function in the QualysGuard API user guides. Note that a Contact user does not have permission to use the API.