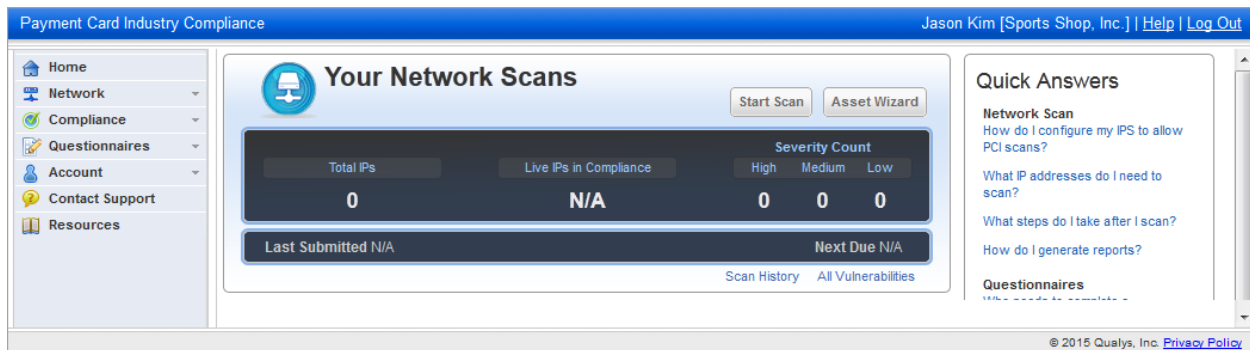


PCI Compliance

Getting Started Guide

Qualys PCI provides businesses, merchants and online service providers with the easiest, most cost effective and highly automated way to achieve compliance with the Payment Card Industry Data Security Standard (PCI DSS). This standard provides organizations with the guidance needed to ensure that credit cardholder information is kept secure from possible security breaches.

Qualys PCI is the most accurate and easiest to use tool for PCI compliance testing and reporting for certification. Qualys is an Approved Scanning Vendor (ASV).



Network Scanning

Per PCI DSS v3.0 requirement 11.2.2, merchants are required to perform quarterly external vulnerability scans via an Approved Scanning Vendor (ASV). Every part of cardholder data system components needs to be scanned. Using the PCI module you can meet the external network scans requirement.

You are responsible for adding IP assets to your PCI account for all in-scope infrastructure for the PCI DSS external network scan requirement. To see the IP assets in your account go to Account > IP Assets. You can add IP addresses up to the total IPs purchased.

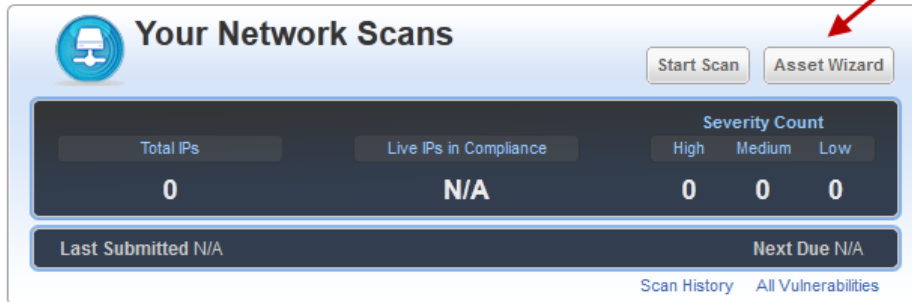
Check Scanner IP Addresses Before Scanning

Only IPs that are accessible from the Internet are scanned by the Qualys PCI service. The service automatically provides multiple scanners for external (perimeter) scanning, located at the Security Operations Center (SOC) that is hosting the PCI compliance service. Depending on your network, it may be necessary to add the scanner IPs to your list of trusted IPs, so the service can send probes to your in-scope system components.

The scanner IPs are: 64.39.96.0/20 (64.39.96.1-64.39.111.254), 139.87.112.0/23 (139.87.112.1-139.87.113.254)

Define Your In-Scope Infrastructure

Click the Asset Wizard button on your Home page (or go to Account > IP Assets and select the wizard). The wizard helps you define the in-scope infrastructure for the external network scan. You must add to your account all Internet-facing IP addresses and/or ranges. If you have domains that host in-scope PCI infrastructure you need to add these domains to your account.



The screenshot shows the 'Your Network Scans' dashboard. At the top right, there are two buttons: 'Start Scan' and 'Asset Wizard'. A red arrow points to the 'Asset Wizard' button. Below the buttons is a summary table with the following data:

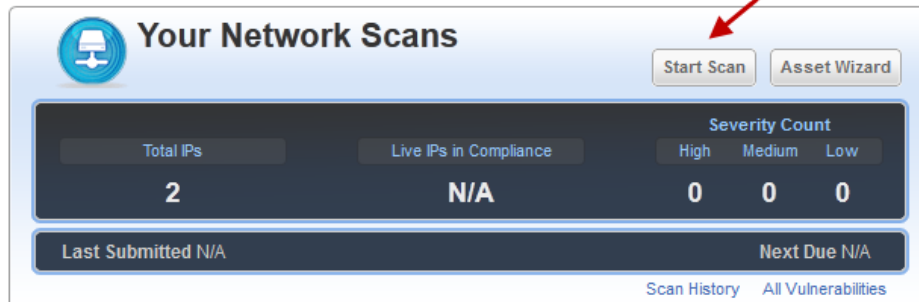
Total IPs	Live IPs in Compliance	Severity Count		
		High	Medium	Low
0	N/A	0	0	0

Below the table, it shows 'Last Submitted N/A' and 'Next Due N/A'. At the bottom right, there are links for 'Scan History' and 'All Vulnerabilities'.

Important! The wizard prompts you to confirm scans can be performed without interference. The service provides multiple scanners for external (perimeter) scanning and lists the scanner IP addresses. Depending on your network, it may be necessary to add the scanner IPs to your list of trusted IPs.

Start an External Network Scan

Click the Start Scan button on your Home page (or go to Network > New Scan).



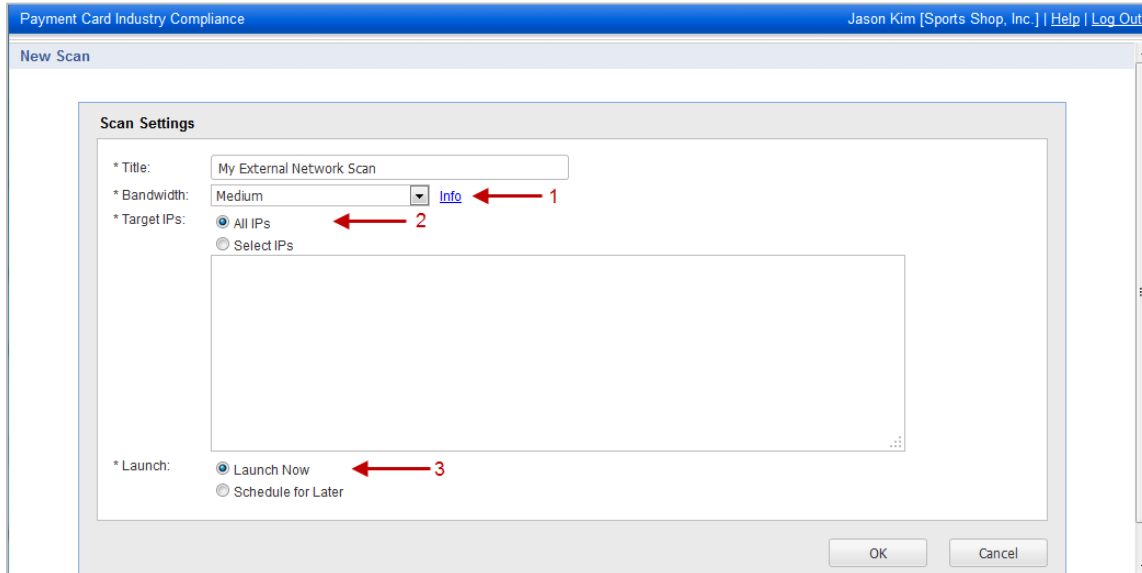
The screenshot shows the 'Your Network Scans' dashboard. At the top right, there are two buttons: 'Start Scan' and 'Asset Wizard'. A red arrow points to the 'Start Scan' button. Below the buttons is a summary table with the following data:

Total IPs	Live IPs in Compliance	Severity Count		
		High	Medium	Low
2	N/A	0	0	0

Below the table, it shows 'Last Submitted N/A' and 'Next Due N/A'. At the bottom right, there are links for 'Scan History' and 'All Vulnerabilities'.

Tip – You may have already run an external PCI network scan using Qualys VM and then shared this scan with the PCI module. In this case you're ready to run reports and complete certification steps. Jump ahead to the section "Create Network Reports for Certification" later in this document.

Next you'll see the New Scan page. Select your scan settings and click OK.



1) The bandwidth represents a set of scan performance settings. We recommend Medium to get started. Click the Info link to understand the settings.

2) Choose to scan All IPs in your account or just certain IPs. Tip – To meet PCI compliance all the IPs in your account must be scanned and there can be no detected PCI vulnerabilities on any IPs. If you have a large number of IPs that must be compliant, you may want to scan a few IPs at a time to help you with the remediation process.

When enabled by admin, you can choose to scan by All DNS hosts or just certain DNS hosts. Scan by DNS supports scanning DNS hosts that resolve to unique IP addresses. If you want to scan DNS hosts that resolve to same IP address, use Split Targets option. You can add a maximum of 500 DNS hosts if you want to scan DNS hosts using Split Targets option. Note that your scan time will increase if you select this option.

Scan Settings

Title: *

Bandwidth: * [Info](#)

Asset Type: * IP DNS

Split Targets: *

Select this option ONLY if you want us to scan DNS hosts that resolve to same IP addresses. Note that this option will increase your scan time.

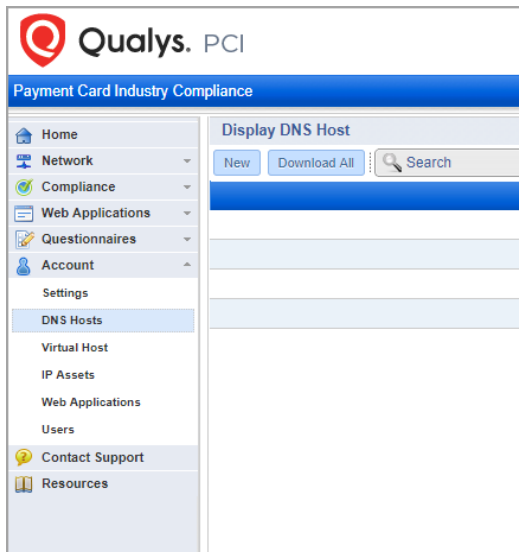
DNS Asset

All DNS Select DNS

[Select DNS](#)
[Download DNS](#)

* Launch: Launch Now Schedule for Later

To add DNS hosts to your account, go to Account > DNS Hosts and click New. See [Configuring Virtual Hosts](#) if you wish to scan the domains associated with an IP address, possibly increasing the number of vulnerabilities detected.



3) You can schedule the scan to run later or on a regular basis – daily, weekly or monthly. We recommend you set up a schedule so you’ll receive vulnerability scan results on an ongoing basis.

Once the scan is launched you can monitor the scan progress by going to Scan Results.

Scan Launched

Your scan has been successfully launched. You can monitor the status of the scan on the Scan Results section. To generate a PCI compliance report to submit to your bank, you need to go to the Compliance Status section.

Scan Results



[Go to Scan Results](#)

Return to the Scan Results section to see the status of the scan and to download the results once it is finished.

PCI Status Report



[Go to Compliance Status](#)

Once the scan is finished you can go to the Compliance Status section to generate a PCI compliance report to submit to your bank.

PASS FAIL



Scan Title	Scan Status	Scan Date	Compliance	Cancel
My External Network Scan	Finished	08/28/2012	FAIL	

Title:	My External Network Scan
Started On:	08/28/2012 at 18:03:52
Launched By:	Jason Kim
Duration:	00:09:22
Active Hosts:	2
Type:	On Demand
Bandwidth:	Medium
Scan Status:	Finished
Target IPs:	10.10.25.100, 10.10.25.112

What does the scan status Importing mean? Importing means a user requested to share an external PCI network scan using the VM module and the service is importing this scan. Once complete, the status will change to Finished and any of the scanned IPs not already in your PCI account will be added.

Configuring Virtual Hosts

Your account may be configured to allow you to add/remove virtual hosts to scan. A virtual host configuration consists of the IP address of the virtual host, the port number to be associated with the hosted domain, and the domain name (FQDN) to be hosted by the IP address. To add virtual host, go to Account > Virtual Host. Click New to add new virtual hosts. When adding multiple virtual hosts, separate each one with a line break.

Formats:

FQDN:Port:IP


FQDN:Port:IP/Path

For example:

www.merchantA.com:2020:194.55.109.1

www.merchantB.com:2020:194.55.109.1/path2

www.merchantC.com:8080:194.55.109.1



Payment Card Industry Compliance [Amazon] | [Help](#) | [Log Out](#)

Add Virtual Host

Virtual Hosts

Enter Virtual Host in the field below:

www.merchantA.com:2020:194.55.109.1

Example: [www.example.com:port:ipaddress](#) or [www.example.com:port:ipaddress/path](#) and multiple virtual hosts should be separated by line break.

Add Cancel

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View Current Vulnerabilities and Fix



Payment Card Industry Compliance Jason Kim [Sports Shop, Inc.] | [Help](#) | [Log Out](#)

Current Vulnerabilities Compliance Status ▶

SEARCH BY IP ADDRESS

Enter one or more IP addresses and/or IP ranges. Separate by using commas.

Search for IP Address

Clear Find IP Address

FILTER RESULTS

Display only PCI Fail Vulnerabilities

FALSE POSITIVES

REQ REJ EXP

POTENTIAL SEVERITY LEVEL

High Med Low

CONFIRMED SEVERITY LEVEL

High Med Low

ACCOUNT SUMMARY

HIGH	<div style="background-color: #f00; height: 10px; width: 100%;"></div>	12	13
MED	<div style="background-color: #f00; height: 10px; width: 0%;"></div>	0	
LOW	<div style="background-color: #f00; height: 10px; width: 20%;"></div>	2	2

Hide Filters

PASS FAIL



Payment Card Industry Compliance Jason Kim [Sports Shop, Inc.] | Help | Log Out

Home Current Vulnerabilities Compliance Status

Show Filters

Review 1 False Positive Download All Showing 1 - 11 of 11 (filtered)

Vulnerability Title	Severity	IP Address
NetBIOS Shared Folder List Available QID: 70001 FAIL	HIGH	10.10.25.100 2k3sp1-25-100.pa
Microsoft Windows Remote Desktop Protocol Server Pri QID: 90250 FAIL	HIGH	10.10.25.112 2k8sp0-25-112.2
Microsoft Windows Server Service Could Allow Remote QID: 90464 FAIL	HIGH	10.10.25.100 2k3sp1-25-100.pa
Microsoft SMB Remote Code Execution Vulnerability (M QID: 90477 FAIL	HIGH	10.10.25.100 2k3sp1-25-100.pa
Microsoft Server Message Block (SMBv2) Remote Code QID: 90527 FAIL	HIGH	10.10.25.112 2k8sp0-25-112.2
Microsoft Windows Remote Desktop Protocol Remote C QID: 90783 FAIL	HIGH	10.10.25.112 2k8sp0-25-112.2
EOL/Obsolete Operating System : Microsoft Windows S QID: 105340 FAIL	HIGH	10.10.25.100 2k3sp1-25-100.pa
EOL/Obsolete Operating System : Microsoft Windows S QID: 105449 FAIL	HIGH	10.10.25.112 2k8sp0-25-112.2

Vulnerability Details

Microsoft Windows Remote Desktop Protocol Remote Code Execution Vulnerability (MS12-020)
10.10.25.112
2k8sp0-25-112.2k8sp0_patch.ad.vuln.qa.qualys.com

QID: 90783
Severity: 5
CVSS Base: 9.3 AV:N/AC:M/Au:N/C/I:C/A:C
CVSS Temporal: 7.7 E:F/RL:O/RC:C
PCI Compliance Status: FAIL FAIL
CVSS basescore of 4.0 or greater results in an automatic failure.

Category: Windows
Port/Service: - / Windows
False Positive: N/A

Bugtraq ID: -
CVE ID: CVE-2012-0002 , CVE-2012-0152
Vendor Reference: MS12-020
Last Update: 03/29/2012 at 17:35:31

Rescan to Verify Vulnerabilities are Fixed



Payment Card Industry Compliance Jason Kim [Sports Shop, Inc.] | Help | Log Out

Home Network

- Discovery
- New Scan
- Scheduled Scans
- Scan Results
- Vulnerabilities
- False Positive History
- Open Services Report
- Compliance

Scans

New Scan Search

Details	Rescan	Download	Vulnerabilities	Scan Title	Scan Status	Scan Date	Compliance	Cancel
(i)	(+)	(d)	(v)	My External Network Scan	Finished	08/28/2012	FAIL	(x)

False Positive Requests

It's possible after fixing all vulnerabilities, as defined by the PCI DSS compliance standards, that you have an issue that doesn't seem to apply to the host. In this case, you may request an exception that will be considered by us as a false positive. Before making this request, complete all remediation steps to fix vulnerabilities by following these guidelines:

- 1) Work with your system administrator to fix all vulnerabilities in your scan results using the recommended solutions. A custom solution is provided for each detected vulnerability.
- 2) Before you submit a false positive, be sure to fix all vulnerabilities except the false positive issues. Your last rescan should show only the false positive issues.

If you believe that the PCI compliance service has identified a false positive in your scan, submit your false positive request by going to Network > Vulnerabilities. Select the check box next to vulnerabilities you want to submit and then click "Review False Positives". A Technical Support representative will work with you to confirm the issue is indeed a false positive. Once approved, the false positive is approved for 90 days and this will not appear in your vulnerabilities list or your reports.

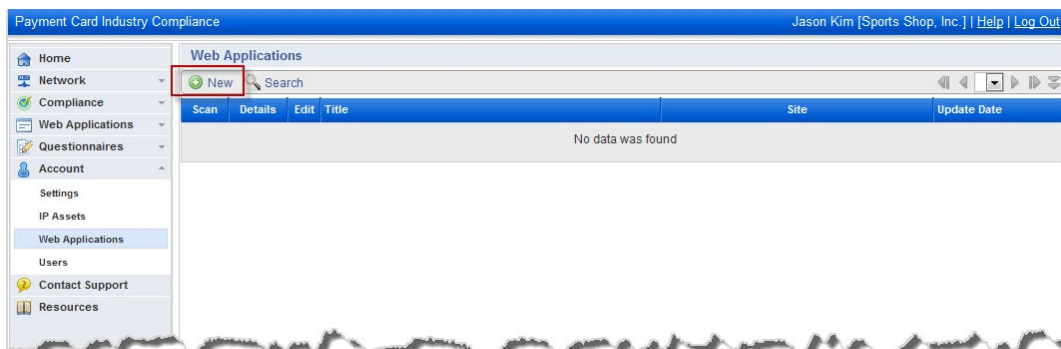
Secure Web Applications

Per PCI DSS v3.0 requirement 6.6, merchants are required to perform scans of public-facing web applications and review detected vulnerabilities. Using the PCI module you can meet the web application scans requirement. Note that web application scanning is available when this option is turned on for your subscription. Please contact your Account Manager or our Support Team if you would like to use this option.

You are responsible for adding web applications to your PCI account for all in-scope applications for the PCI DSS requirement. To see the IP assets in your account go to Account > Web Applications. You can add web applications up to the total applications purchased.

Add Your Web Application

To add a web application to your account, go to Account > Web Applications and click the New link.



Enter the web application settings and click Save. Tip – Click Help on the top menu bar for guidance.

New Web Application

Web Application Details

* Title: Demo Web Application

* Site: 10.10.26.238
Enter full domain name (FQDN) e.g. www.mysite.com or IP address e.g. 192.168.1.1

* Port: 80

* Starting URI: /

[Blacklist](#)
Use the blacklist to avoid potential disruptions to your application. Check online help for more details.

Authentication Records

You must save the new web application before you can add authentication records. Edit the web application to add records.

Save Cancel

What are authentication records? Authentication to HTML forms is optional but may be required to scan your web application. These authentication techniques are supported: HTTP Basic server-based authentication and simple form authentication. If authentication to the web application is required add one or more authentication records by editing the web application.

Start a Web Application Scan

On the web applications list, click the Scan link next to your web application. (Or you can go to Web Applications > Scans and click New Scan.)

Scan	Details	Edit	Title	Site	Update Date
Scan			Demo Web Application	10.10.26.238	09/06/2012

Choose your scan settings. Want to use authentication? Select an authentication record already defined for your web application. Then click OK to start the scan.

Payment Card Industry Compliance Jason Kim [Sports Shop, Inc.] | [Help](#) | [Log Out](#)

New Web Application Scan

Scan Settings

* Title: My Web Application Scan

* Application: Demo Web Application [New](#)

Authentication Record: Demo App - Form Authentication

* Form Submission: Disallow Forms

Maximum links to crawl: 300

Limit crawling to starting URI

Bandwidth: Medium [Info](#)

Crawl Only (do not conduct web vulnerability tests)

[Advanced Options](#)

Scan Date

Launch Now Schedule for Later

OK Cancel

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Your scan will appear under Web Applications > Scan Results where you can track its progress and download the results.

Submit Compliance Status

PASS

The screenshot shows the 'Payment Card Industry Compliance' dashboard for Jason Kim [Sports Shop, Inc.]. The dashboard is divided into several sections:

- Navigation Menu:** Home, Network, Compliance, Web Applications, Questionnaires, Account, Contact Support, Resources.
- Your Network Scans:** Status: **PASS Compliant**. Total IPs: 2, Live IPs in Compliance: 100%. Severity Count: High (0), Medium (0), Low (0). Last Submitted: 09/25/2012, Next Due: 12/24/2012.
- Self-Assessment Questionnaire:** Status: **PASS Completed**. Questionnaire Type: B, Completion Status: 100%. Answer Count: Yes (29), No (0), N/A (0), CC (0). Last Submitted: 09/25/2012, Next Due: 09/25/2013.
- Quick Answers:** Network Scan, Questionnaires, General.

Create Reports for Certification

You are ready to create network reports when the Compliance Status shows that the number of hosts in your account matches the number of hosts that are compliant. In the example below there are 2 hosts in the account and 2 hosts that are compliant.

The screenshot shows the 'Compliance Status' section of the dashboard. It features a table with the following data:

Overall Status	Hosts	Vulnerabilities	Potential Vulnerabilities	Actions
	In Account: 2 Not Live: 0 Compliant: 2 Not Compliant: 0 Not Current: Link 0	HIGH 0 MED 0 LOW 0	HIGH 0 MED 0 LOW 0	 Generate

A red arrow points to the 'Generate' button in the Actions column.

To create your reports, click Generate (under Actions) and simply follow the steps in the report generation wizard. Your reports will appear on the submitted reports list.

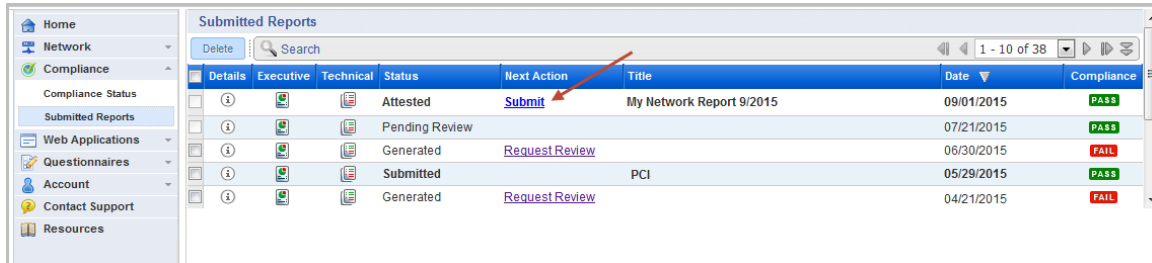
Next steps:

- 1) Preview the reports online in PDF format for completeness and accuracy.
- 2) Request a review from your Approved Scanning Vendor (ASV) using the report wizard or from the submitted reports list. You will receive an email with the review status (approved or rejected).
- 3) Once approved by the ASV, the report is considered certified and can be submitted to your acquiring banks for PCI certification.

Auto-Submit to Acquiring Banks

The Qualys PCI auto-submission feature allows you to submit compliance status directly to your acquiring banks. Entering your bank and merchant IDs in your “Account Settings” activates the auto-submission feature. You can also download PCI compliance reports in PDF to submit to your acquiring bank(s) or use to assist in remediation efforts.

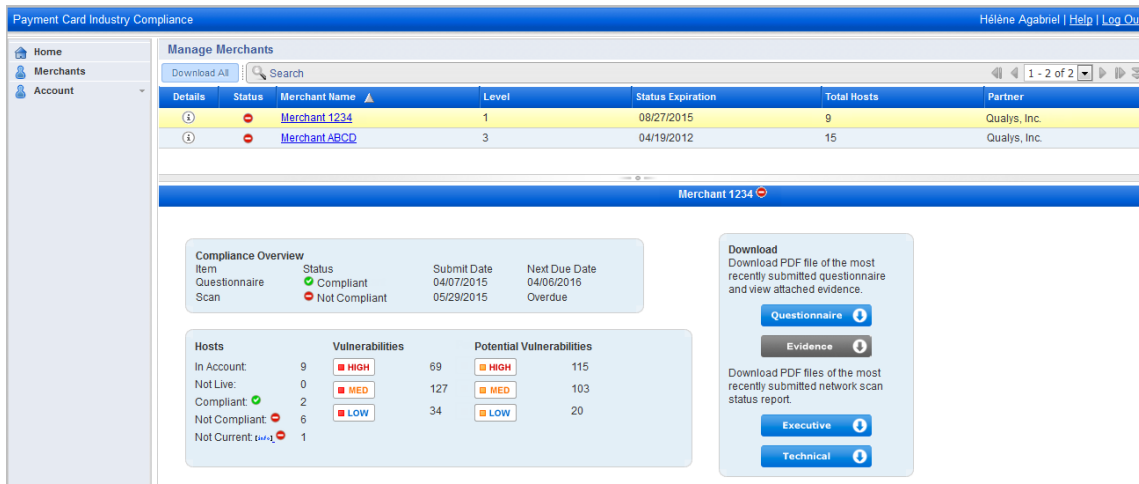
Go to Compliance > Submitted Reports and click the Submit link.



Details	Executive	Technical	Status	Next Action	Title	Date	Compliance
			Attested	Submit	My Network Report 9/2015	09/01/2015	PASS
			Pending Review			07/21/2015	PASS
			Generated	Request Review		06/30/2015	FAIL
			Submitted		PCI	05/29/2015	PASS
			Generated	Request Review		04/21/2015	FAIL

PCI Bank Service

We offer our PCI Bank service to acquiring banks. When your bank has signed up you can submit your compliance status to them directly, without having to send it manually via email or other means. A bank representative gets a PCI Bank account and logs in to our PCI Bank application where they get a view of your compliance status and direct access to your submitted reports.



Details	Status	Merchant Name	Level	Status Expiration	Total Hosts	Partner
		Merchant 1234	1	08/27/2015	9	Qualys, Inc.
		Merchant ABCD	3	04/19/2012	15	Qualys, Inc.

Item	Status	Submit Date	Next Due Date
Questionnaire		04/07/2015	04/06/2016
Scan		05/29/2015	Overdue

Hosts	Vulnerabilities	Potential Vulnerabilities
In Account: 9	69	115
Not Live: 0	127	103
Compliant: 2	34	20
Not Compliant: 6		
Not Current: 1		

Can a bank user log in to a merchant account? No, bank users do not have access to merchant accounts.

Looking for More Information?

Check out these references to help you meet PCI Compliance requirements.

Qualys Community: How to Satisfy the New PCI Internal Scanning Requirements
<https://community.qualys.com/docs/DOC-3923>

PCI Security Standard Council
<https://www.pcisecuritystandards.org/>

PCI Data Security Standards
https://www.pcisecuritystandards.org/security_standards/index.php

PCI DSS: Self-Assessment Questionnaire
https://www.pcisecuritystandards.org/merchants/self_assessment_form.php

PCI Security Standards Documents
https://www.pcisecuritystandards.org/security_standards/documents.php