

PCI DSS v3.0 Vulnerability & Penetration Testing

PCI DSS Requirement	Description	Frequency	Scope
6.6	<p>For public-facing web applications, address new threats and vulnerabilities on an ongoing basis and ensure these applications are protected against known attacks by either of the following methods:</p> <ul style="list-style-type: none"> • Reviewing public-facing web applications via manual or automated application vulnerability security assessment tools or methods, at least annually and after any changes • Installing an automated technical solution that detects and prevents web-based attacks (for example, a web-application firewall) in front of public-facing web applications, to continually check all traffic. 	Presuming no Web Application Firewall in place - annually, and after any changes	External or Internal
11.1	<p>Implement processes to test for the presence of wireless access points (802.11), and detect and identify all authorized and unauthorized wireless access points on a quarterly basis.</p> <p>Note: <i>Methods that may be used in the process include but are not limited to wireless network scans, physical/logical inspections of system components and infrastructure, network access control (NAC), or wireless IDS/IPS.</i></p> <p><i>Whichever methods are used, they must be sufficient to detect and identify any unauthorized devices.</i></p>	At least quarterly, <i>even if policy prohibits the use of wireless devices</i>	Internal and/or External as appropriate

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11.2	<p>Run internal and external network vulnerability scans at least quarterly and after any significant change in the network (such as new system component installations, changes in network topology, firewall rule modifications, product upgrades).</p> <p>Note: <i>Multiple scan reports can be combined for the quarterly scan process to show that all systems were scanned and all applicable vulnerabilities have been addressed. Additional documentation may be required to verify non-remediated vulnerabilities are in the process of being addressed. For initial PCI DSS compliance, it is not required that four quarters of passing scans be completed if the assessor verifies:</i></p> <ol style="list-style-type: none"> 1) <i>the most recent scan result was a passing scan,</i> 2) <i>the entity has documented policies and procedures requiring quarterly scanning, and</i> 3) <i>vulnerabilities noted in the scan results have been corrected as shown in a re-scan(s).</i> <p><i>For subsequent years after the initial PCI DSS review, four quarters of passing scans must have occurred.</i></p>	At least quarterly, or after significant change. See 11.2.1, 11.2.2 and 11.2.3 below	Internal & External
11.2.1	Perform quarterly internal vulnerability scans and rescans as needed, until all “high-risk” vulnerabilities (as identified in Requirement 6.1) are resolved. Scans must be performed by qualified personnel.	Quarterly	Internal

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11.2.2	<p>Perform quarterly external vulnerability scans, via an Approved Scanning Vendor (ASV) approved by the Payment Card Industry Security Standards Council (PCI SSC). Perform rescans as needed, until passing scans are achieved.</p> <p><i>Note: Quarterly external vulnerability scans must be performed by an Approved Scanning Vendor (ASV), approved by the Payment Card Industry Security Standards Council (PCI SSC).</i></p> <p><i>Refer to the ASV Program Guide published on the PCI SSC website for scan customer responsibilities, scan preparation, etc.</i></p>	Quarterly	External
11.2.3	<p>Perform internal and external scans, and rescans as needed, after any significant change.</p> <p>Scans must be performed by qualified personnel.</p>	After significant change	Internal and External
11.3	<p>Implement a methodology for penetration testing that includes the following:</p> <ul style="list-style-type: none"> • Is based on industry-accepted penetration testing approaches (for example, NIST SP800-115) • Includes coverage for the entire CDE perimeter and critical systems • Includes testing from both inside and outside the network • Includes testing to validate any segmentation and scope-reduction controls • Defines application-layer penetration tests to include, at a minimum, the vulnerabilities listed in Requirement 6.5 	As per 11.3.1 and 11.3.2	As per 11.3.1 and 11.3.2

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	<ul style="list-style-type: none"> • Defines network-layer penetration tests to include components that support network functions as well as operating systems • Includes review and consideration of threats and vulnerabilities experienced in the last 12 months • Specifies retention of penetration testing results and remediation activities results. <p><i>Note: This update to Requirement 11.3 is a best practice until June 30, 2015, after which it becomes a requirement. PCI DSS v2.0 requirements for penetration testing must be followed until v3.0 is in place.</i></p>		
11.3.1	Perform <i>external</i> penetration testing at least annually and after any significant infrastructure or application upgrade or modification (such as an operating system upgrade, a sub-network added to the environment, or a web server added to the environment).	Annually and after any significant change	External
11.3.2	Perform <i>internal</i> penetration testing at least annually and after any significant infrastructure or application upgrade or modification (such as an operating system upgrade, a sub-network added to the environment, or a web server added to the environment).	Annually and after any significant change	Internal

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11.3.3	Exploitable vulnerabilities found during penetration testing are corrected and testing is repeated to verify the corrections.		
11.3.4	If segmentation is used to isolate the CDE from other networks, perform penetration tests at least annually and after any changes to segmentation controls/methods to verify that the segmentation methods are operational and effective, and isolate all out-of-scope systems from in-scope systems.	Annually, and after significant change to segmentation controls	Internal and/or external according to penetration test methodology