

The Prioritized Approach to Pursue PCI DSS Compliance

The Payment Card Industry Data Security Standard (PCI DSS) provides a detailed, 12 requirements structure for securing cardholder data that is stored, processed and/or transmitted by merchants and other organizations. By its comprehensive nature, the standard provides a large amount of information about security – so much that some people who are responsible for cardholder data security may wonder where to start the continuous journey of compliance. Toward this end, the PCI Security Standards Council provides the following Prioritized Approach to help stakeholders understand where they can act to reduce risk earlier in the compliance process. No single milestone in the Prioritized Approach will provide comprehensive security or PCI DSS compliance, but following its guidelines will help stakeholders to expedite the process of securing cardholder data.



HIGHLIGHTS

Can help merchants identify highest risk targets

Creates a common language around PCI DSS implementation and assessment efforts

Milestones enable merchants to demonstrate progress on compliance process

What Is the Prioritized Approach?

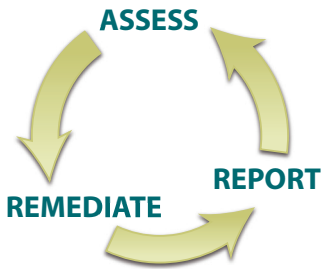
The Prioritized Approach provides six security milestones that will help merchants and other organizations incrementally protect against the highest risk factors and escalating threats while on the road to PCI DSS compliance. The Prioritized Approach and its milestones (described on page 2) are intended to provide the following benefits:

- Roadmap that an organization can use to address its risks in priority order
- Pragmatic approach that allows for “quick wins”
- Supports financial and operational planning
- Promotes objective and measurable progress indicators
- Helps promote consistency among Qualified Security Assessors

Objectives of the Prioritized Approach

The Prioritized Approach provides a roadmap of compliance activities based on risk associated with storing, processing, and/or transmitting cardholder data. The roadmap helps to prioritize efforts to achieve compliance, establish milestones, lower the risk of cardholder data breaches sooner in the compliance process, and help acquirers objectively measure compliance activities and risk reduction by merchants, service providers, and others. The Prioritized Approach was devised after factoring data from actual breaches, and feedback from Qualified Security Assessors, forensic investigators, and the PCI Security Standards Council Board of Advisors. It is not intended as a substitute, short cut or stop-gap approach to PCI DSS compliance, nor is it a mandatory one-size-fits-all framework applicable to every organization. The Prioritized Approach is suitable for merchants who choose an on-site assessment or use SAQ D.

PCI COMPLIANCE IS A CONTINUOUS PROCESS



PCI SSC FOUNDERS



PARTICIPATING ORGANIZATIONS

Merchants, banks, processors, developers and point of sale vendors

Disclaimer

To achieve PCI DSS compliance, an organization must meet all PCI DSS requirements, regardless of the order in which they are satisfied or whether the organization seeking compliance follows the PCI DSS Prioritized Approach. This document does not modify or abridge the PCI DSS or any of its requirements, and may be changed without notice. PCI SSC is not responsible for errors or damages of any kind resulting from the use of the information contained herein. PCI SSC makes no warranty, guarantee, or representation as to the accuracy or sufficiency of the information provided herein, and assumes no responsibility or liability regarding the use or misuse of such information.

Milestones for Prioritizing PCI DSS Compliance Efforts

The Prioritized Approach includes six milestones. The matrix below summarizes the high-level goals and intentions of each milestone. The rest of this document maps the milestones to each of all twelve PCI DSS requirements and their sub-requirements.

Milestone	Goals
1	Remove sensitive authentication data and limit data retention. This milestone targets a key area of risk for entities that have been compromised. Remember – if sensitive authentication data and other cardholder data are not stored, the effects of a compromise will be greatly reduced. If you don't need it, don't store it.
2	Protect the perimeter, internal, and wireless networks. This milestone targets controls for points of access to most compromises – the network or a wireless access point.
3	Secure payment card applications. This milestone targets controls for applications, application processes, and application servers. Weaknesses in these areas offer easy prey for compromising systems and obtaining access to cardholder data.
4	Monitor and control access to your systems. Controls for this milestone allow you to detect the who, what, when, and how concerning who is accessing your network and cardholder data environment.
5	Protect stored cardholder data. For those organizations that have analyzed their business processes and determined that they must store Primary Account Numbers, Milestone Five targets key protections mechanisms for that stored data.
6	Finalize remaining compliance efforts, and ensure all controls are in place. The intent of Milestone Six is to complete PCI DSS requirements and finalize all remaining related policies, procedures, and processes needed to protect the cardholder data environment.

PCI DSS Requirements	Milestone					
	1	2	3	4	5	6
Requirement 1: Install and maintain a firewall configuration to protect cardholder data						
1.1 Establish firewall and router configuration standards that include the following:						6
1.1.1 A formal process for approving and testing all network connections and changes to the firewall and router configurations						
1.1.2 Current network diagram with all connections to cardholder data, including any wireless networks	1					
1.1.3 Requirements for a firewall at each Internet connection and between any demilitarized zone (DMZ) and the internal network zone		2				
1.1.4 Description of groups, roles, and responsibilities for logical management of network components						6
1.1.5 Documentation and business justification for use of all services, protocols, and ports allowed, including documentation of security features implemented for those protocols considered to be insecure		2				
1.1.6 Requirement to review firewall and router rule sets at least every six months						6
1.2 Build a firewall configuration that restricts connections between untrusted networks and any system components in the cardholder data environment.		2				
1.2.1 Restrict inbound and outbound traffic to that which is necessary for the cardholder data environment.		2				
1.2.2 Secure and synchronize router configuration files.		2				
1.2.3 Install perimeter firewalls between any wireless networks and the cardholder data environment, and configure these firewalls to deny or control (if such traffic is necessary for business purposes) any traffic from the wireless environment into the cardholder data environment.		2				
1.3 Prohibit direct public access between the Internet and any system component in the cardholder data environment.		2				
1.3.1 Implement a DMZ to limit inbound and outbound traffic to only protocols that are necessary for the cardholder data environment.		2				
1.3.2 Limit inbound Internet traffic to IP addresses within the DMZ.		2				
1.3.3 Do not allow any direct routes inbound or outbound for traffic between the Internet and the cardholder data environment.		2				
1.3.4 Do not allow internal addresses to pass from the Internet into the DMZ.		2				
1.3.5 Restrict outbound traffic from the cardholder data environment to the Internet such that outbound traffic can only access IP addresses within the DMZ.		2				
1.3.6 Implement stateful inspection, also known as dynamic packet filtering. (That is, only "established" connections are allowed into the network.)		2				

PCI DSS Requirements	Milestone					
	1	2	3	4	5	6
1.3.7 Place the database in an internal network zone, segregated from the DMZ.		2				
1.3.8 Implement IP masquerading to prevent internal addresses from being translated and revealed on the Internet, using RFC 1918 address space. Use network address translation (NAT) technologies—for example, port address translation (PAT).		2				
1.4 Install personal firewall software on any mobile and/or employee-owned computers with direct connectivity to the Internet (for example, laptops used by employees), which are used to access the organization's network.		2				
Requirement 2: Do not use vendor-supplied defaults for system passwords and other security parameters						
2.1 Always change vendor-supplied defaults before installing a system on the network—for example, include passwords, simple network management protocol (SNMP) community strings, and elimination of unnecessary accounts.		2				
2.1.1 For wireless environments connected to the cardholder data environment or transmitting cardholder data, change wireless vendor defaults, including but not limited to default wireless encryption keys, passwords, and SNMP community strings. Ensure wireless device security settings are enabled for strong encryption technology for authentication and transmission.		2				
2.2 Develop configuration standards for all system components. Assure that these standards address all known security vulnerabilities and are consistent with industry-accepted system hardening standards.			3			
2.2.1 Implement only one primary function per server			3			
2.2.2 Disable all unnecessary and insecure services and protocols (services and protocols not directly needed to perform the device's specified function).			3			
2.2.3 Configure system security parameters to prevent misuse			3			
2.2.4 Remove all unnecessary functionality, such as scripts, drivers, features, subsystems, file systems, and unnecessary Web servers.			3			
2.3 Encrypt all non-console administrative access. Use technologies such as SSH, VPN, or SSL/TLS for Web-based management and other non-console administrative access.		2				
2.4 Shared hosting providers must protect each entity's hosted environment and cardholder data. These providers must meet specific requirements as detailed in <i>Appendix A: Additional PCI DSS Requirements for Shared Hosting Providers</i> .			3			

PCI DSS Requirements	Milestone					
	1	2	3	4	5	6
Requirement 3: Protect stored cardholder data						
3.1 Keep cardholder data storage to a minimum. Develop a data retention and disposal policy. Limit storage amount and retention time to that which is required for business, legal, and/or regulatory purposes, as documented in the data retention policy.	1					
3.2 Do not store sensitive authentication data after authorization (even if encrypted). Sensitive authentication data includes the data as cited in the following Requirements 3.2.1 through 3.2.3:	1					
3.2.1 Do not store the full contents of any track from the magnetic stripe (located on the back of a card, contained in a chip, or elsewhere). This data is alternatively called full track, track, track 1, track 2, and magnetic-stripe data.	1					
3.2.2 Do not store the card-verification code or value (three-digit or four-digit number printed on the front or back of a payment card) used to verify card-not-present transactions	1					
3.2.3 Do not store the personal identification number (PIN) or the encrypted PIN block.	1					
3.3 Mask PAN when displayed (the first six and last four digits are the maximum number of digits to be displayed).					5	
3.4 Render PAN, at minimum, unreadable anywhere it is stored (including on portable digital media, backup media, in logs) by using any of the following approaches: <ul style="list-style-type: none"> • One-way hashes based on strong cryptography • Truncation • Index tokens and pads (pads must be securely stored) • Strong cryptography with associated key management processes and procedures 					5	
3.4.1 If disk encryption is used (rather than file- or column-level database encryption), logical access must be managed independently of native operating system access control mechanisms (for example, by not using local user account databases). Decryption keys must not be tied to user accounts.					5	
3.5 Protect cryptographic keys used for encryption of cardholder data against both disclosure and misuse:					5	
3.5.1 Restrict access to cryptographic keys to the fewest number of custodians necessary					5	
3.5.2 Store cryptographic keys securely in the fewest possible locations and forms					5	
3.6 Fully document and implement all key management processes and procedures for cryptographic keys used for encryption of cardholder data, including the following:					5	
3.6.1 Generation of strong cryptographic keys					5	

PCI DSS Requirements	Milestone					
	1	2	3	4	5	6
3.6.2 Secure cryptographic key distribution					5	
3.6.3 Secure cryptographic key storage					5	
3.6.4 Periodic cryptographic key changes <ul style="list-style-type: none"> • As deemed necessary and recommended by the associated application (for example, re-keying); preferably automatically • At least annually 					5	
3.6.5 Retirement or replacement of old or suspected compromised cryptographic keys					5	
3.6.6 Split knowledge and establishment of dual control of cryptographic keys					5	
3.6.7 Prevention of unauthorized substitution of cryptographic keys					5	
3.6.8 Requirement for cryptographic key custodians to sign a form stating that they understand and accept their key-custodian responsibilities					5	

Requirement 4: Encrypt transmission of cardholder data across open, public networks

4.1 Use strong cryptography and security protocols such as SSL/TLS or IPSEC to safeguard sensitive cardholder data during transmission over open, public networks.	2
4.1.1 Ensure wireless networks transmitting cardholder data or connected to the cardholder data environment, use industry best practices (e.g., IEEE 802.11i) to implement strong encryption for authentication and transmission. <ul style="list-style-type: none"> • For new wireless implementations, it is prohibited to implement WEP after March 31, 2009. • For current wireless implementations, it is prohibited to use WEP after June 30, 2010. 	2
4.2 Never send unencrypted PANs by end-user messaging technologies (for example, e-mail, instant messaging, chat).	2

Requirement 5: Use and regularly update anti-virus software or programs

5.1 Deploy anti-virus software on all systems commonly affected by malicious software (particularly personal computers and servers).	2
5.1.1 Ensure that all anti-virus programs are capable of detecting, removing, and protecting against all known types of malicious software.	2
5.2 Ensure that all anti-virus mechanisms are current, actively running, and capable of generating audit logs.	2

Requirement 6: Develop and maintain secure systems and applications

6.1 Ensure that all system components and software have the latest vendor-supplied security patches installed. Install critical security patches within one month of release.	3
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PCI DSS Requirements	Milestone					
	1	2	3	4	5	6
6.2 Establish a process to identify newly discovered security vulnerabilities (for example, subscribe to alert services freely available on the Internet). Update configuration standards as required by PCI DSS Requirement 2.2 to address new vulnerability issues.			3			
6.3 Develop software applications in accordance with PCI DSS (for example, secure authentication and logging) and based on industry best practices and incorporate information security throughout the software development life cycle. These processes must include the following:			3			
6.3.1 Testing of all security patches, and system and software configuration changes before deployment, including but not limited to the following:			3			
6.3.1.1 Validation of all input (to prevent cross-site scripting, injection flaws, malicious file execution, etc.)			3			
6.3.1.2 Validation of proper error handling			3			
6.3.1.3 Validation of secure cryptographic storage			3			
6.3.1.4 Validation of secure communications			3			
6.3.1.5 Validation of proper role-based access control (RBAC)			3			
6.3.2 Separate development/test, and production environments			3			
6.3.3 Separation of duties between development/test, and production environments			3			
6.3.4 Production data (live PANs) are not used for testing or development			3			
6.3.5 Removal of test data and accounts before production systems become active			3			
6.3.6 Removal of custom application accounts, usernames, and passwords before applications become active or are released to customers			3			
6.3.7 Review of custom code prior to release to production or customers in order to identify any potential coding vulnerability.			3			
6.4 Follow change control procedures for all changes to system components. The procedures must include the following:						6
6.4.1 Documentation of impact						6
6.4.2 Management sign-off by appropriate parties						6
6.4.3 Testing of operational functionality						6
6.4.4 Back-out procedures						6
6.5 Develop all Web applications (internal and external, and including Web administrative access to application) based on secure coding guidelines such as the <i>Open Web Application Security Project Guide</i> . Cover prevention of common coding vulnerabilities in software development processes, to include the following:			3			
6.5.1 Cross-site scripting (XSS)						
6.5.2 Injection flaws, particularly SQL injection. Also consider LDAP and Xpath injection flaws as well as other injection flaws.			3			

PCI DSS Requirements		Milestone					
		1	2	3	4	5	6
6.5.3	Malicious file execution			3			
6.5.4	Insecure direct object references			3			
6.5.5	Cross-site request forgery (CSRF)			3			
6.5.6	Information leakage and improper error handling			3			
6.5.7	Broken authentication and session management			3			
6.5.8	Insecure cryptographic storage			3			
6.5.9	Insecure communications			3			
6.5.10	Failure to restrict URL access			3			
6.6	For public-facing Web applications, address new threats and vulnerabilities on an ongoing basis and ensure these applications are protected against known attacks by <i>either</i> of the following methods: <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 a Web-application firewall in front of public-facing Web applications 			3			

Requirement 7: Restrict access to cardholder data by business need-to-know

7.1	Limit access to system components and cardholder data to only those individuals whose job requires such access. Access limitations must include the following:					4	
7.1.1	Restriction of access rights to privileged user IDs to least privileges necessary to perform job responsibilities						
7.1.2	Assignment of privileges is based on individual personnel's job classification and function					4	
7.1.3	Requirement for an authorization form signed by management that specifies required privileges					4	
7.1.4	Implementation of an automated access control system					4	
7.2	Establish an access control system for systems components with multiple users that restricts access based on a user's need- to- know, and is set to "deny all" unless specifically allowed. This access control system must include the following:					4	
7.2.1	Coverage of all system components						
7.2.2	Assignment of privileges to individuals based on job classification and function					4	
7.2.3	Default "deny-all" setting					4	

Requirement 8: Assign a unique ID to each person with computer access

8.1	Assign all users a unique username before allowing them to access system components or cardholder data.					4	
8.2	In addition to assigning a unique ID, employ at least one of the following methods to authenticate all users: <ul style="list-style-type: none"> • Password or passphrase • Two-factor authentication (e.g., token devices, smart cards, biometrics, or public keys) 					4	

PCI DSS Requirements	Milestone					
	1	2	3	4	5	6
8.3 Incorporate two-factor authentication for remote access (network-level access originating from outside the network) to the network by employees, administrators, and third parties. Use technologies such as remote authentication and dial-in service (RADIUS); terminal access controller access control system (TACACS) with tokens; or VPN (based on SSL/TLS or IPSEC) with individual certificates.				4		
8.4 Render all passwords unreadable during transmission and storage on all system components using strong cryptography based on approved standards (defined in <i>PCI DSS Glossary, Abbreviations, and Acronyms</i>).				4		
8.5 Ensure proper user authentication and password management for non-consumer users and administrators on all system components as follows:				4		
8.5.1 Control addition, deletion, and modification of user IDs, credentials, and other identifier objects				4		
8.5.2 Verify user identity before performing password resets.				4		
8.5.3 Set first-time passwords to a unique value for each user and change immediately after the first use.				4		
8.5.4 Immediately revoke access for any terminated users.				4		
8.5.5 Remove/disable inactive user accounts at least every 90 days.				4		
8.5.6 Enable accounts used by vendors for remote maintenance only during the time period needed.				4		
8.5.7 Communicate password procedures and policies to all users who have access to cardholder data.				4		
8.5.8 Do not use group, shared, or generic accounts and passwords.				4		
8.5.9 Change user passwords at least every 90 days.				4		
8.5.10 Require a minimum password length of at least seven characters.				4		
8.5.11 Use passwords containing both numeric and alphabetic characters.				4		
8.5.12 Do not allow an individual to submit a new password that is the same as any of the last four passwords he or she has used.				4		
8.5.13 Limit repeated access attempts by locking out the user ID after not more than six attempts.				4		
8.5.14 Set the lockout duration to a minimum of 30 minutes or until administrator enables the user ID.				4		
8.5.15 If a session has been idle for more than 15 minutes, require the user to re-enter the password to re-activate the terminal				4		
8.5.16 Authenticate all access to any database containing cardholder data. This includes access by applications, administrators, and all other users.				4		

PCI DSS Requirements	Milestone					
	1	2	3	4	5	6
Requirement 9: Restrict physical access to cardholder data						
9.1 Use appropriate facility entry controls to limit and monitor physical access to systems in the cardholder data environment.					5	
9.1.1 Use video cameras or other access control mechanisms to monitor individual physical access to sensitive areas. Review collected data and correlate with other entries. Store for at least three months, unless otherwise restricted by law.					5	
9.1.2 Restrict physical access to publicly accessible network jacks.					5	
9.1.3 Restrict physical access to wireless access points, gateways, and handheld devices.					5	
9.2 Develop procedures to help all personnel easily distinguish between employees and visitors, especially in areas where cardholder data is accessible.					5	
9.3 Make sure all visitors are handled as follows:					5	
9.3.1 Authorized before entering areas where cardholder data is processed or maintained					5	
9.3.2 Given a physical token (for example, a badge or access device) that expires and that identifies the visitors as non-employees					5	
9.3.3 Asked to surrender the physical token before leaving the facility or at the date of expiration					5	
9.4 Use a visitor log to maintain a physical audit trail of visitor activity. Document the visitor's name, the firm represented, and the employee authorizing physical access on the log. Retain this log for a minimum of three months, unless otherwise restricted by law.					5	
9.5 Store media back-ups in a secure location, preferably an off-site facility, such as an alternate or backup site, or a commercial storage facility. Review the location's security at least annually.					5	
9.6 Physically secure all paper and electronic media that contain cardholder data.					5	
9.7 Maintain strict control over the internal or external distribution of any kind of media that contains cardholder data, including the following:					5	
9.7.1 Classify the media so it can be identified as confidential.					5	
9.7.2 Send the media by secured courier or other delivery method that can be accurately tracked.					5	
9.8 Ensure management approves any and all media containing cardholder data that is moved from a secured area (especially when media is distributed to individuals).					5	
9.9 Maintain strict control over the storage and accessibility of media that contains cardholder data.					5	

PCI DSS Requirements	Milestone					
	1	2	3	4	5	6
9.9.1 Properly maintain inventory logs of all media and conduct media inventories at least annually.					5	
9.10 Destroy media containing cardholder data when it is no longer needed for business or legal reasons as follows:	1					
9.10.1 Shred, incinerate, or pulp hardcopy materials so that cardholder data cannot be reconstructed.						
9.10.2 Render cardholder data on electronic media unrecoverable so that cardholder data cannot be reconstructed.	1					

Requirement 10: Track and monitor all access to network resources and cardholder data

10.1 Establish a process for linking all access to system components (especially access done with administrative privileges such as root) to each individual user.				4		
10.2 Implement automated audit trails for all system components to reconstruct the following events:				4		
10.2.1 All individual accesses to cardholder data						
10.2.2 All actions taken by any individual with root or administrative privileges				4		
10.2.3 Access to all audit trails				4		
10.2.4 Invalid logical access attempts				4		
10.2.5 Use of identification and authentication mechanisms				4		
10.2.6 Initialization of the audit logs				4		
10.2.7 Creation and deletion of system-level objects				4		
10.3 Record at least the following audit trail entries for all system components for each event:				4		
10.3.1 User identification						
10.3.2 Type of event				4		
10.3.3 Date and time				4		
10.3.4 Success or failure indication				4		
10.3.5 Origination of event				4		
10.3.6 Identity or name of affected data, system component, or resource				4		
10.4 Synchronize all critical system clocks and times.				4		
10.5 Secure audit trails so they cannot be altered						6
10.5.1 Limit viewing of audit trails to those with a job-related need.						6
10.5.2 Protect audit trail files from unauthorized modifications.						6
10.5.3 Promptly back up audit trail files to a centralized log server or media that is difficult to alter.						6
10.5.4 Write logs for external-facing technologies onto a log server on the internal LAN.						6

PCI DSS Requirements	Milestone					
	1	2	3	4	5	6
10.5.5 Use file integrity monitoring or change detection software on logs to ensure that existing log data cannot be changed without generating alerts (although new data being added should not cause an alert).						6
10.6 Review logs for all system components at least daily. Log reviews must include those servers that perform security functions like intrusion detection system (IDS) and authentication, authorization, and accounting protocol (AAA) servers (for example, RADIUS).				4		
10.7 Retain audit trail history for at least one year, with a minimum of three months immediately available for analysis (for example, online, archived, or restorable from backup).				4		

Requirement 11: Regularly test security systems and processes

11.1 Test for the presence of wireless access points by using a wireless analyzer at least quarterly or deploying a wireless IDS/IPS to identify all wireless devices in use						6
11.2 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).		2				
11.3 Perform external and internal penetration testing at least once a year 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). These penetration tests must include the following:						6
11.3.1 Network-layer penetration tests						
11.3.2 Application-layer penetration tests						6
11.4 Use intrusion detection systems, and/or intrusion prevention systems to monitor all traffic in the cardholder data environment and alert personnel to suspected compromises. Keep all intrusion detection and prevention engines up to date.		2				
11.5 Deploy file integrity monitoring software to alert personnel to unauthorized modification of critical system files, configuration files or content files; and configure the software to perform critical file comparisons at least weekly.				4		

Requirement 12: Maintain a policy that addresses information security for employees and contractors

12.1 Establish, publish, maintain, and disseminate a security policy that accomplishes the following:						6
12.1.1 Addresses all PCI DSS requirements						
12.1.2 Includes an annual process that identifies threats, and vulnerabilities, and results in a formal risk assessment						6
12.1.3 Includes a review at least once a year and updates when the environment changes						6

PCI DSS Requirements	Milestone					
	1	2	3	4	5	6
12.2 Develop daily operational security procedures that are consistent with requirements in this specification (for example, user account maintenance procedures, and log review procedures).						6
12.3 Develop usage policies for critical employee-facing technologies (for example, remote access technologies, wireless technologies, removable electronic media, laptops, personal data/digital assistants (PDAs), email usage and internet usage) to define proper use of these technologies for all employees and contractors. Ensure these usage policies require the following:						6
12.3.1 Explicit management approval						6
12.3.2 Authentication for use of the technology						6
12.3.3 A list of all such devices and personnel with access						6
12.3.4 Labeling of devices with owner, contact information, and purpose						6
12.3.5 Acceptable uses of the technology						6
12.3.6 Acceptable network locations for the technologies						6
12.3.7 List of company-approved products						6
12.3.8 Automatic disconnect of sessions for remote access technologies after a specific period of inactivity						6
12.3.9 Activation of remote access technologies for vendors only when needed by vendors, with immediate deactivation after use						6
12.3.10 When accessing cardholder data via remote access technologies, prohibit copy, move, and storage of cardholder data onto local hard drives and removable electronic media.						6
12.4 Ensure that the security policy and procedures clearly define information security responsibilities for all employees and contractors.						6
12.5 Assign to an individual or team the following information security management responsibilities:						6
12.5.1 Establish, document, and distribute security policies and procedures.						6
12.5.2 Monitor and analyze security alerts and information, and distribute to appropriate personnel.						6
12.5.3 Establish, document, and distribute security incident response and escalation procedures to ensure timely and effective handling of all situations.						6
12.5.4 Administer user accounts, including additions, deletions, and modifications						6
12.5.5 Monitor and control all access to data.						6
12.6 Implement a formal security awareness program to make all employees aware of the importance of cardholder data security.						6
12.6.1 Educate employees upon hire and at least annually.						6
12.6.2 Require employees to acknowledge at least annually that they have read and understood the company's security policy and procedures.						6

PCI DSS Requirements	Milestone					
	1	2	3	4	5	6
12.7 Screen potential employees (see definition of employees above) prior to hire to minimize the risk of attacks from internal sources.						6
12.8 If cardholder data is shared with service providers, maintain and implement policies and procedures to manage service providers, to include the following:		2				
12.8.1 Maintain a list of service providers.						
12.8.2 Maintain a written agreement that includes an acknowledgement that the service providers are responsible for the security of cardholder data the service providers possess.		2				
12.8.3 Ensure there is an established process for engaging service providers including proper due diligence prior to engagement.		2				
12.8.4 Maintain a program to monitor service providers' PCI DSS compliance status.		2				
12.9 Implement an incident response plan. Be prepared to respond immediately to a system breach.						6
12.9.1 Create the incident response plan to be implemented in the event of system breach. Ensure the plan addresses the following, at a minimum: <ul style="list-style-type: none"> • Roles, responsibilities and communication and contact strategies in the event of a compromise including notification of the payment brands, at a minimum • Specific incident response procedures • Business recovery and continuity procedures • Data backup processes • Analysis of legal requirements for reporting compromises • Coverage and responses of all critical system components • Reference or inclusion of incident response procedures from the payment brands 						6
12.9.2 Test the plan at least annually.						6
12.9.3 Designate specific personnel to be available on a 24/7 basis to respond to alerts.						6
12.9.4 Provide appropriate training to staff with security breach response responsibilities.						6
12.9.5 Include alerts from intrusion detection, intrusion prevention, and file integrity monitoring systems.						6
12.9.6 Develop process to modify and evolve the incident response plan according to lessons learned and to incorporate industry developments.						6

PCI DSS Requirements	Milestone					
	1	2	3	4	5	6
Requirement A.1: Shared hosting providers must protect the cardholder data environment						
A.1 Protect each entity's (that is merchant, service provider, or other entity) hosted environment and data, per A.1.1 through A.1.4:			3			
A.1.1 Ensure that each entity only runs processes that have access to that entity's cardholder data environment.						
A.1.2 Restrict each entity's access and privileges to own cardholder data environment only.			3			
A.1.3 Ensure logging and audit trails are enabled and unique to each entity's cardholder data environment and consistent with PCI DSS Requirement 10.			3			
A.1.4 Enable processes to provide for timely forensic investigation in the event of a compromise to any hosted merchant or service provider.			3			