

Payment Card Industry (PCI) Data Security Standard Self-Assessment Questionnaire D and Attestation of Compliance for Service Providers

SAQ-Eligible Service Providers

For use with PCI DSS Version 3.2.1

Revision 2

September 2022



Document Changes

Date	PCI DSS Version	SAQ Revision	Description
October 2008	1.2		To align content with new PCI DSS v1.2 and to implement minor changes noted since original v1.1.
October 2010	2.0		To align content with new PCI DSS v2.0 requirements and testing procedures.
February 2014	3.0		To align content with PCI DSS v3.0 requirements and testing procedures and incorporate additional response options.
April 2015	3.1		Updated to align with PCI DSS v3.1. For details of PCI DSS changes, see PCI DSS – Summary of Changes from PCI DSS Version 3.0 to 3.1.
July 2015	3.1	1.1	Updated to remove references to "best practices" prior to June 30, 2015, and remove the PCI DSS v2 reporting option for Requirement 11.3.
April 2016	3.2	1.0	Updated to align with PCI DSS v3.2. For details of PCI DSS changes, see PCI DSS – Summary of Changes from PCI DSS Version 3.1 to 3.2.
January 2017	3.2	1.1	Updated version numbering to align with other SAQs
June 2018	3.2.1	1.0	Updated to align with PCI DSS v3.2.1. For details of PCI DSS changes, see PCI DSS – Summary of Changes from PCI DSS Version 3.2 to 3.2.1.
September 2022	3.2.1	2.0	Updated to reflect the inclusion of UnionPay as a Participating Payment Brand. This document aligns with PCI DSS v3.2.1 r1.



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Before You Begin

SAQ D for Service Providers applies to all service providers defined by a payment brand as being SAQeligible.

While many organizations completing SAQ D will need to validate compliance with every PCI DSS requirement, some organizations with very specific business models may find that some requirements do not apply. See the guidance below for information about the exclusion of certain, specific requirements.

PCI DSS Self-Assessment Completion Steps

Confirm that your environment is properly scoped.

Assess your environment for compliance with PCI DSS requirements.

Complete all sections of this document:

Section 1 (Parts 1 & 2 of the AOC) – Assessment Information and Executive Summary

Section 2 – PCI DSS Self-Assessment Questionnaire (SAQ D)

Section 3 (Parts 3 & 4 of the AOC) – Validation and Attestation Details and Action Plan for Non-Compliant Requirements (if applicable)

Submit the SAQ and Attestation of Compliance (AOC), along with any other requested documentation—such as ASV scan reports—to the payment brand, or other requester.

Understanding the Self-Assessment Questionnaire

The questions contained in the "PCI DSS Question" column in this self-assessment questionnaire are based on the requirements in the PCI DSS.

Additional resources that provide guidance on PCI DSS requirements and how to complete the self-assessment questionnaire have been provided to assist with the assessment process. An overview of some of these resources is provided below:

Document	Includes:
PCI DSS	Guidance on Scoping
(PCI Data Security Standard	Guidance on the intent of all PCI DSS Requirements
Requirements and Security Assessment	Details of testing procedures
Procedures)	Guidance on Compensating Controls
SAQ Instructions and Guidelines documents	Information about all SAQs and their eligibility criteria How to determine which SAQ is right for your organization
PCI DSS and PA-DSS Glossary of Terms, Abbreviations, and Acronyms	Descriptions and definitions of terms used in the PCI DSS and self-assessment questionnaires

These and other resources can be found on the PCI SSC website (www.pcisecuritystandards.org). Organizations are encouraged to review the PCI DSS and other supporting documents before beginning an assessment.



Expected Testing

The instructions provided in the "Expected Testing" column are based on the testing procedures in the PCI DSS, and provide a high-level description of the types of testing activities that should be performed in order to verify that a requirement has been met. Full details of testing procedures for each requirement can be found in the PCI DSS.

Completing the Self-Assessment Questionnaire

For each question, there is a choice of responses to indicate your company's status regarding that requirement. *Only one response should be selected for each question.*

A description of the meaning for each response is provided in the table below:

Response	When to use this response:
Yes	The expected testing has been performed, and all elements of the requirement have been met as stated.
Yes with CCW (Compensating	The expected testing has been performed, and the requirement has been met with the assistance of a compensating control.
Control Worksheet)	All responses in this column require completion of a Compensating Control Worksheet (CCW) in Appendix B of the SAQ.
	Information on the use of compensating controls and guidance on how to complete the worksheet is provided in the PCI DSS.
No	Some or all elements of the requirement have not been met, or are in the process of being implemented, or require further testing before it will be known if they are in place.
N/A (Not Applicable)	The requirement does not apply to the organization's environment. (See <i>Guidance for Non-Applicability of Certain, Specific Requirements</i> below for examples.)
	All responses in this column require a supporting explanation in Appendix C of the SAQ.
Not Tested	The requirement was not included for consideration in the assessment, and was not tested in any way. (See <i>Understanding the difference between Not Applicable and Not Tested</i> below for examples of when this option should be used.)
	All responses in this column require a supporting explanation in Appendix D of the SAQ.

Guidance for Non-Applicability of Certain, Specific Requirements

While many organizations completing SAQ D will need to validate compliance with every PCI DSS requirement, some organizations with very specific business models may find that some requirements do not apply. For example, a company that does not use wireless technology in any capacity would not be expected to validate compliance with the sections of the PCI DSS that are specific to managing wireless technology. Similarly, an organization that does not store any cardholder data electronically at any time would not need to validate requirements related to secure storage of cardholder data (for example, Requirement 3.4).



Examples of requirements with specific applicability include:

The questions specific to securing wireless technologies (for example, Requirements 1.2.3, 2.1.1, and 4.1.1) only need to be answered if wireless is present anywhere in your network. Note that Requirement 11.1 (use of processes to identify unauthorized wireless access points) must still be answered even if you don't use wireless technologies in your network, since the process detects any rogue or unauthorized devices that may have been added without your knowledge.

The questions specific to application development and secure coding (Requirements 6.3 and 6.5) only need to be answered if your organization develops its own custom applications.

The questions for Requirements 9.1.1 and 9.3 only need to be answered for facilities with "sensitive areas" as defined here: "Sensitive areas" refers to any data center, server room, or any area that houses systems that store, process, or transmit cardholder data. This excludes the areas where only point-of-sale terminals are present, such as the cashier areas in a retail store, but does include retail store back-office server rooms that store cardholder data, and storage areas for large quantities of cardholder data.

If any requirements are deemed not applicable to your environment, select the "N/A" option for that specific requirement, and complete the "Explanation of Non-Applicability" worksheet in Appendix C for each "N/A" entry.

Understanding the difference between Not Applicable and Not Tested

Requirements that are deemed to be not applicable to an environment must be verified as such. Using the wireless example above, for an organization to select "N/A" for Requirements 1.2.3, 2.1.1, and 4.1.1, the organization would first need to confirm that there are no wireless technologies used in their cardholder data environment (CDE) or that connect to their CDE. Once this has been confirmed, the organization may select "N/A" for those specific requirements,

If a requirement is completely excluded from review without any consideration as to whether it *could* apply, the "Not Tested" option should be selected. Examples of situations where this could occur may include:

An organization may be asked by their acquirer to validate a subset of requirements—for example: using the prioritized approach to validate certain milestones.

An organization may wish to validate a new security control that impacts only a subset of requirements—for example, implementation of a new encryption methodology that requires assessment of PCI DSS Requirements 2, 3 and 4.

A service provider organization might offer a service which covers only a limited number of PCI DSS requirements—for example, a physical storage provider may only wish to validate the physical security controls per PCI DSS Requirement 9 for their storage facility.

In these scenarios, the organization only wishes to validate certain PCI DSS requirements even though other requirements might also apply to their environment.

Legal Exception

If your organization is subject to a legal restriction that prevents the organization from meeting a PCI DSS requirement, check the "No" column for that requirement and complete the relevant attestation in Part 3.



Section 1: Assessment Information

Instructions for Submission

This document must be completed as a declaration of the results of the service provider's self-assessment with the *Payment Card Industry Data Security Standard Requirements and Security Assessment Procedures (PCI DSS).* Complete all sections: The service provider is responsible for ensuring that each section is completed by the relevant parties, as applicable. Contact the requesting payment brand for reporting and submission procedures.

Dont to Samuino Browing	or Organization Infor	motion					
Part 1a. Service Provide	er Organization infor	mation	I	1			
Company Name:	Headhunter System and Graduway Inc.	Headhunter Systems Limited and Graduway Inc.		Gravyty			
Contact Name:	David Whitefield		Title:	CFO			
Telephone:	+1 978 522 4335	+1 978 522 4335					
Business Address:	2815 Elliott Avenue	Suite 201	City:	Seattle			
State/Province:	Washington	Country:	USA Zip: 98			98121	
URL:	https://gravyty.com	https://gravyty.com					
Part 1b. Qualified Secu	rity Assessor Compa	any Inforn	nation (if appli	cable)			
Company Name:	Marcum RAS, LLC						
Lead QSA Contact Name:	Chris Shaffer		Title:	Partner			
Telephone:	813 397 4858		E-mail: christopher.shaffer@marcuml p.com				
Business Address:	201 East Kennedy E Suite 1500	Boulevard	City:	Tampa			
State/Province:	Florida	Country:	USA Zip: 3			33602	
URL:	https://www.marcum	https://www.marcumllp.com					



Part 2. Executive Summary	<u></u>								
Part 2a. Scope Verification									
Services that were INCLUDED in the scope of the PCI DSS Assessment (check all that apply):									
Name of service(s) assessed: Advance cloud based fundraising application.									
Type of service(s) assessed:									
Hosting Provider:	Managed Services (specify):	Payment Processing:							
Applications / software	☐ Systems security services	☐ POS / card present							
☐ Hardware	☐ IT support	☐ Internet / e-commerce							
☐ Infrastructure / Network	☐ Physical security	☐ MOTO / Call Center							
☐ Physical space (co-location)	☐ Terminal Management System	☐ ATM							
☐ Storage	☐ Other services (specify):	Other processing (specify):							
□Web									
☐ Security services									
☐ 3-D Secure Hosting Provider									
☐ Shared Hosting Provider									
Other Hosting (specify):									
Account Management	☐ Fraud and Chargeback	☐ Payment Gateway/Switch							
☐ Back-Office Services	☐ Issuer Processing	☐ Prepaid Services							
☐ Billing Management	☐ Loyalty Programs	☐ Records Management							
☐ Clearing and Settlement	☐ Merchant Services	☐ Tax/Government Payments							
☐ Network Provider									
Others (specify):									
an entity's service description. If you	ed for assistance only, and are not inte u feel these categories don't apply to y a category could apply to your service,	our service, complete							



Part 2. Executive Summary (continued)								
Part 2a. Scope Verification (continued)								
Services that are provided by the service provider but were NOT INCLUDED in the scope of the PCI DSS Assessment (check all that apply):								
Name of service(s) not assessed: Not applicable								
Type of service(s) not assessed:								
Hosting Provider: Applications / software Hardware Infrastructure / Network Physical space (co-location) Storage Web Security services 3-D Secure Hosting Provider Shared Hosting Provider Other Hosting (specify):	Managed Service Systems secur IT support Physical securi Terminal Mana Other services	ity services ity gement System	Payment Processing: POS / card present Internet / e-commerce MOTO / Call Center ATM Other processing (specify):					
Account Management	☐ Fraud and Cha	rgeback	☐ Payment Gateway/Switch					
☐ Back-Office Services	☐ Issuer Process	ing	☐ Prepaid Services					
☐ Billing Management	Loyalty Program	ms	☐ Records Management					
☐ Clearing and Settlement	☐ Merchant Serv	ices	☐ Tax/Government Payments					
☐ Network Provider								
Others (specify):								
Provide a brief explanation why any were not included in the assessmen								
Part 2b. Description of Payme	nt Card Business							
Describe how and in what capacity stores, processes, and/or transmits		application that us integrated into the facilitate payment	provides a cloud based fundraising ses external payment processors ir website using iframe redirection to processing functions for its clients alidated third party providers.					
Describe how and in what capacity otherwise involved in or has the abil security of cardholder data.		The organization hosts a fundraising application that utilizes iFrames for inclusion of payment processing pages from multiple payment processors to facilitate payment functionality for its clients.						

Part 2c. Locations

List types of facilities (for example, retail outlets, corporate offices, data centers, call centers, etc.) and a summary of locations included in the PCI DSS review.

Type of facility	Number of facilities of this type	Location(s) of facility (city, country)		
Example: Retail outlets	3	Boston, MA, USA		
Headquarter Office	1	Seattle, WA		
AWS (data center)	1	USA		

Security Standards Council						
		I				
Part 2. Executive Su	mmary (con	tinued)				
Part 2d. Payment App	olications					
Does the organization use	e one or more l	Payment Application	ons? 🗌 Yes 🛛 No	1		
Provide the following info	mation regard	ing the Payment Ap	oplications your orga	nization use	s:	
Payment Application Name	Version Number	Application Vendor	Is application PA-DSS Listed?		S Listing E (if applicat	
			☐ Yes ☐ No			
			☐ Yes ☐ No			
			☐ Yes ☐ No			
			☐ Yes ☐ No			
			☐ Yes ☐ No			
			☐ Yes ☐ No			
			☐ Yes ☐ No			
			☐ Yes ☐ No			
Part 2e. Description o	f Environmen	t	1			
Provide a <i>high-level</i> desc covered by this assessme	•	environment	Advance is a cloud and the sole applica	ation within s	cope of this	3
For example: Connections into and o environment (CDE).	ut of the cardho	older data	assessment. Payment integration completed via PCI compliant integration with Spreedly, Stripe, BBMS, and Braintree payment processor and payment services via an iframe redirection from			ripe, ind
Critical system compon- POS devices, database other necessary payme	s, web servers	, etc., and any	their fundraising site or within scope of ir application is hoste as service. All proce entirely outsourced	nplementation d using AWS essing of care to PCI DSS	on. The fund infrastruct dholder dat	draisir ure as ta is
Does your business use renvironment?	network segme	ntation to affect the	party service provide scope of your PCI D		☐ Yes	⊠ N
(Refer to "Network Segme segmentation.)	entation" sectio	on of PCI DSS for g	uidance on network			
Part 2f. Third-Party Se						
Does your company have purpose of the services be			egrator Reseller (QIF	R) for the	☐ Yes	⊠ N



If Yes:	
Name of QIR Company:	
QIR Individual Name:	
Description of services provided by QIR:	



Part 2. Executive Summary (continued) Part 2f. Third-Party Service Providers (continued) Does your company have a relationship with one or more third-party service providers (for ⊠ Yes □ No example, Qualified Integrator & Resellers (QIR), gateways, payment processors, payment service providers (PSP), web-hosting companies, airline booking agents, loyalty program agents, etc.) for the purpose of the services being validated? If Yes: Name of service provider: Description of services provided: Spreedly Payment Processor Stripe Payment Processor **BBMS** Payment Processor **Braintree** Payment Processor **AWS** Infrastructure as a Service

Note: Requirement 12.8 applies to all entities in this list.



Part 2. Executive Summary (continued)

Part 2g. Summary of Requirements Tested

For each PCI DSS Requirement, select one of the following:

Full – The requirement and all sub-requirements were assessed for that Requirement, and no sub-requirements were marked as "Not Tested" or "Not Applicable" in the SAQ.

Partial – One or more sub-requirements of that Requirement were marked as "Not Tested" or "Not Applicable" in the SAQ.

None – All sub-requirements of that Requirement were marked as "Not Tested" and/or "Not Applicable" in the SAQ.

For all requirements identified as either "Partial" or "None," provide details in the "Justification for Approach" column, including:

Details of specific sub-requirements that were marked as either "Not Tested" and/or "Not Applicable" in the SAQ

Reason why sub-requirement(s) were not tested or not applicable

Note: One table to be completed for each service covered by this AOC. Additional copies of this section are available on the PCI SSC website.

Name of Service Assessed: Gravyty's cloud based fundraising application. **Details of Requirements Assessed** Justification for Approach **PCI DSS** (Required for all "Partial" and "None" responses. Identify Requirement Full **Partial** None which sub-requirements were not tested and the reason.) Requirement 1: \boxtimes Responsibilities for these requirements are outsourced to a PCI DSS validated service provider. \boxtimes Requirement 2: П 2.2-2.6 - Responsibilities for these requirement are also outsourced to a PCI DSS validated service provider. Requirement 3: \boxtimes П There is no storage of cardholder data within the organization's systems. Responsibilities for these requirements are also outsourced to a PCI DSS validated service provider. Requirement 4: \boxtimes The entity does not transmit cardholder data. Responsibilities for these requirements are outsourced to a PCI DSS validated service provider. Requirement 5: \boxtimes Responsibilities for these requirements are outsourced to a PCI DSS validated service provider.

Appendix A1:

Appendix A2:

Security Standards Council —		
Requirement 6:		6.1;6.3-6.7 - Responsibilities for these requirements are outsourced to a PCI DSS validated service provider.
Requirement 7:		Responsibilities for these requirements are outsourced to a PCI DSS validated service provider.
Requirement 8:		8.3 – 8.7 - Responsibilities for these requirements are outsourced to a PCI DSS validated service provider.
Requirement 9:		Responsibilities for these requirements are outsourced to a PCI DSS validated service provider. 9.5 – 9.8 - Additionally the organization does not have any physical media.
Requirement 10:		Responsibilities for these requirements are outsourced to a PCI DSS validated service provider.
Requirement 11:		Responsibilities for these requirements are outsourced to a PCI DSS validated service provider.
Requirement 12:		12.1 – 12.7; 12.9-12.11 - Responsibilities for these requirements are outsourced to a PCI DSS validated service provider.

 \boxtimes

 \boxtimes

The entity is not a shared hosting provider

The organization does not utilize physical

POS POI devices.



Section 2: Self-Assessment Questionnaire D for Service Providers

Note: The following questions are numbered according to PCI DSS requirements and testing procedures, as defined in the PCI DSS Requirements and Security Assessment Procedures document.

Self-assessment completion date: February 1, 2024

Build and Maintain a Secure Network and Systems

Requirement 1: Install and maintain a firewall configuration to protect data

PCI DSS Question			Response (Check one response for each question)				
		Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
1.1	Are firewall and router configuration standards established and implemented to include the following:						
1.1.1	Is there a formal process for approving and testing all network connections and changes to the firewall and router configurations?	Review documented process. Interview personnel. Examine network configurations.	\boxtimes				
1.1.2	Is there a current network diagram that documents all connections between the cardholder data environment and other networks, including any wireless networks?	Review current network diagram. Examine network configurations.					
	Is there a process to ensure the diagram is kept current?	Interview responsible personnel.					
1.1.3	Is there a current diagram that shows all cardholder data flows across systems and networks?	Review current dataflow diagram. Examine network configurations.	\boxtimes				
	(b) Is there a process to ensure the diagram is kept current?	Interview personnel.					



			(Chec	R k one res _i	espons		uestion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
1.1.4	Is a firewall required and implemented at each Internet connection and between any demilitarized zone (DMZ) and the internal network zone?	Review firewall configuration standards. Observe network configurations to verify that a firewall(s) is in place.					
	Is the current network diagram consistent with the firewall configuration standards?	Compare firewall configuration standards to current network diagram.					
1.1.5	Are groups, roles, and responsibilities for logical management of network components assigned and documented in the firewall and router configuration standards?	Review firewall and router configuration standards. Interview personnel.					
1.1.6	Do firewall and router configuration standards include a documented list of services, protocols, and ports, including business justification and approval for each?	Review firewall and router configuration standards.					
	Are all insecure services, protocols, and ports identified, and are security features documented and implemented for each identified service?	Review firewall and router configuration standards. Examine firewall and router configurations.					
1.1.7	Do firewall and router configuration standards require review of firewall and router rule sets at least every six months?	Review firewall and router configuration standards.					
	(b) Are firewall and router rule sets reviewed at least every six months?	Examine documentation from firewall reviews.					
1.2	Do firewall and router configurations restrict connections between untrusted networks and any system in the cardholder data environment as follows:						
	Note: An "untrusted network" is any network that is external to the networks belonging to the entity under review, and/or which is out of the entity's ability to control or manage.						



			(Chec	R k one res _l	l espons bonse fo		uestion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
1.2.1	Is inbound and outbound traffic restricted to that which is necessary for the cardholder data environment?	Review firewall and router configuration standards. Examine firewall and router configurations.					
	Is all other inbound and outbound traffic specifically denied (for example by using an explicit "deny all" or an implicit deny after allow statement)?	Review firewall and router configuration standards. Examine firewall and router configurations.					
1.2.2	Are router configuration files secured from unauthorized access and synchronized—for example, the running (or active) configuration matches the start-up configuration (used when machines are booted)?	Review firewall and router configuration standards. Examine router configuration files and router configurations.					
1.2.3	Are perimeter firewalls installed between all wireless networks and the cardholder data environment, and are these firewalls configured to deny or, if traffic is necessary for business purposes, permit only authorized traffic between the wireless environment and the cardholder data environment?	Review firewall and router configuration standards. Examine firewall and router configurations.					
1.3	Is direct public access prohibited between the Internet and any system component in the cardholder data environment, as follows:						
1.3.1	Is a DMZ implemented to limit inbound traffic to only system components that provide authorized publicly accessible services, protocols, and ports?	Examine firewall and router configurations.					
1.3.2	Is inbound Internet traffic limited to IP addresses within the DMZ?	Examine firewall and router configurations.					
1.3.3	Are anti-spoofing measures implemented to detect and block forged sourced IP addresses from entering the network? (For example, block traffic originating from the internet with an internal address.)	Examine firewall and router configurations.					



			(Chec	R k one res _l	espons		ıestion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
1.3.4	Is outbound traffic from the cardholder data environment to the Internet explicitly authorized?	Examine firewall and router configurations.					
1.3.5	Are only established connections permitted into the network?	Examine firewall and router configurations.					
1.3.6	Are system components that store cardholder data (such as a database) placed in an internal network zone, segregated from the DMZ and other untrusted networks?	Examine firewall and router configurations.	\boxtimes				
1.3.7	Are methods in place to prevent the disclosure of private IP addresses and routing information to the Internet?	Examine firewall and router configurations.					
	Note: Methods to obscure IP addressing may include, but are not limited to:						
	Network Address Translation (NAT)						
	Placing servers containing cardholder data behind proxy servers/firewalls,						
	Removal or filtering of route advertisements for private networks that employ registered addressing,						
	Internal use of RFC1918 address space instead of registered addresses.						
	Is any disclosure of private IP addresses and routing information to external entities authorized?	Examine firewall and router configurations. Interview personnel.					
1.4	Is personal firewall software (or equivalent functionality) installed and active on any portable computing devices (including company and/or employee-owned) that connect	Review policies and configuration standards.	\boxtimes				
	to the Internet when outside the network (for example, laptops used by employees), and which are also used to access the CDE?	Examine mobile and/or employee- owned devices.					
	(b) Is the personal firewall software (or equivalent functionality) configured to specific configuration	Review policies and configuration standards.	\boxtimes				
	settings, actively running, and not alterable by users of mobile and/or employee-owned devices?	Examine mobile and/or employee- owned devices.					



			(Chec	Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested			
1.5	Are security policies and operational procedures for managing firewalls:	Review security policies and operational procedures.								
	Documented	Interview personnel.								
	In use									
	Known to all affected parties?									



Requirement 2: Do not use vendor-supplied defaults for system passwords and other security parameters

			(Checi	R k one res _i	l espons ponse fo		uestion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
2.1	Are vendor-supplied defaults always changed before installing a system on the network? This applies to ALL default passwords, including but not limited to those used by operating systems, software that provides security services, application and system accounts, point-of-sale (POS) terminals, payment applications, Simple Network Management Protocol (SNMP) community strings, etc.).	Review policies and procedures. Examine vendor documentation. Observe system configurations and account settings. Interview personnel.					
	Are unnecessary default accounts removed or disabled before installing a system on the network?	Review policies and procedures. Review vendor documentation. Examine system configurations and account settings. Interview personnel.					
2.1.1	For wireless environments connected to the cardholder data environment or transmitting cardholder data, are ALL wireless vendor defaults changed at installations, as follows:						
	Are encryption keys changed from default at installation, and changed anytime anyone with knowledge of the keys leaves the company or changes positions?	Review policies and procedures. Review vendor documentation. Interview personnel.					
	Are default SNMP community strings on wireless devices changed at installation?	Review policies and procedures. Review vendor documentation. Interview personnel. Examine system configurations.					
	Are default passwords/passphrases on access points changed at installation?	Review policies and procedures. Interview personnel. Examine system configurations.					



			(Checi	R k one res _l	espons		uestion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
2.1.1 (cont.)	Is firmware on wireless devices updated to support strong encryption for authentication and transmission over wireless networks?	Review policies and procedures. Review vendor documentation. Examine system configurations.					
	Are other security-related wireless vendor defaults changed, if applicable?	Review policies and procedures. Review vendor documentation. Examine system configurations.					
2.2	Are configuration standards developed for all system components and are they consistent with industry-accepted system hardening standards? Sources of industry-accepted system hardening standards may include, but are not limited to, SysAdmin Audit Network Security (SANS) Institute, National Institute of Standards Technology (NIST), International Organization for Standardization (ISO), and Center for Internet Security (CIS).	Review system configuration standards. Review industry-accepted hardening standards. Review policies and procedures. Interview personnel.					
	Are system configuration standards updated as new vulnerability issues are identified, as defined in Requirement 6.1?	Review policies and procedures. Interview personnel.					
	Are system configuration standards applied when new systems are configured?	Review policies and procedures. Interview personnel.	\boxtimes				



			(Checl	R cone resp	espons conse for		uestion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
2.2 (cont.)	Do system configuration standards include all of the following: Changing of all vendor-supplied defaults and elimination of unnecessary default accounts? Implementing only one primary function per server to prevent functions that require different security levels from co-existing on the same server? Enabling only necessary services, protocols, daemons, etc., as required for the function of the system? Implementing additional security features for any required services, protocols or daemons that are considered to be insecure? Configuring system security parameters to prevent misuse? Removing all unnecessary functionality, such as scripts, drivers, features, subsystems, file systems, and unnecessary web servers?	Review system configuration standards.					
2.2.1	Is only one primary function implemented per server, to prevent functions that require different security levels from co-existing on the same server? For example, web servers, database servers, and DNS should be implemented on separate servers.	Examine system configurations.					
	If virtualization technologies are used, is only one primary function implemented per virtual system component or device?	Examine system configurations.	\boxtimes				



			(Checi	R k one res _l	espons		uestion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
2.2.2	Are only necessary services, protocols, daemons, etc. enabled as required for the function of the system (services and protocols not directly needed to perform the device's specified function are disabled)?	Review configuration standards. Examine system configurations.					
	(b) Are all enabled insecure services, daemons, or protocols justified per documented configuration standards?	Review configuration standards Interview personnel. Examine configuration settings. Compare enabled services, etc. to documented justifications.					
2.2.3	Are additional security features documented and implemented for any required services, protocols or daemons that are considered to be insecure?	Review configuration standards. Examine configuration settings.					
2.2.4	Are system administrators and/or personnel that configure system components knowledgeable about common security parameter settings for those system components?	Interview personnel.					
	Are common system security parameters settings included in the system configuration standards?	Review system configuration standards.	\boxtimes				
	Are security parameter settings set appropriately on system components?	Examine system components. Examine security parameter settings. Compare settings to system configuration standards.					
2.2.5	Has all unnecessary functionality—such as scripts, drivers, features, subsystems, file systems, and unnecessary web servers—been removed?	Examine security parameters on system components.	\boxtimes				
	Are enabled functions documented and do they support secure configuration?	Review documentation. Examine security parameters on system components.					
2.2.5 (cont.)	Is only documented functionality present on system components?	Review documentation. Examine security parameters on system components.					



			(Chec	R k one res _l	espons		uestion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
2.3	Is non-console administrative access encrypted as follows:						
	Is all non-console administrative access encrypted with strong cryptography, and is a strong encryption method invoked before the administrator's password is requested?	Examine system components. Examine system configurations. Observe an administrator log on.					
	Are system services and parameter files configured to prevent the use of Telnet and other insecure remote login commands?	Examine system components. Examine services and files.					
	Is administrator access to web-based management interfaces encrypted with strong cryptography?	Examine system components. Observe an administrator log on.					
	For the technology in use, is strong cryptography implemented according to industry best practice and/or vendor recommendations?	Examine system components. Review vendor documentation. Interview personnel.					
2.4	(a) Is an inventory maintained for systems components that are in scope for PCI DSS, including a list of hardware and software components and a description of function/use for each?	Examine system inventory.					
	(b) Is the documented inventory kept current?	Interview personnel.	\boxtimes				
2.5	Are security policies and operational procedures for managing vendor defaults and other security parameters: Documented In use Known to all affected parties?	Review security policies and operational procedures. Interview personnel.					
2.6	If you are a shared hosting provider, are your systems configured to protect each entity's (your customers') hosted environment and cardholder data? See Appendix A1: Additional PCI DSS Requirements for Shared Hosting Providers for specific requirements that must be met.	Complete Appendix A1 testing procedures.					



Protect Cardholder Data

Requirement 3: Protect stored cardholder data

			(Che	F ck one res	Respons ponse for		estion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
3.1	Are data-retention and disposal policies, procedures, and processes implemented as follows:						
	Is data storage amount and retention time limited to that required for legal, regulatory, and/or business requirements?	Review data retention and disposal policies and procedures. Interview personnel.					
	Are there defined processes in place for securely deleting cardholder data when no longer needed for legal, regulatory, and/or business reasons?	Review policies and procedures. Interview personnel. Examine deletion mechanism.					
	Are there specific retention requirements for cardholder data? For example, cardholder data needs to be held for X period for Y business reasons.	Review policies and procedures. Interview personnel. Examine retention requirements.					
	Is there a quarterly process for identifying and securely deleting stored cardholder data that exceeds defined retention requirements?	Review policies and procedures. Interview personnel. Observe deletion processes.					
	Does all stored cardholder data meet the requirements defined in the data-retention policy?	Examine files and system records.					
3.2	For issuers and/or companies that support issuing services and store sensitive authentication data, is there a documented business justification for the storage of sensitive authentication data?	Review policies and procedures. Interview personnel. Review documented business justification.					
3.2 (cont.)	For issuers and/or companies that support issuing services and store sensitive authentication data: Is the data secured?	Examine data stores and system configuration files.	\boxtimes				



			(Ched	F ck one res	Response ponse for		estion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
	For all other entities: Is sensitive authentication data deleted or rendered unrecoverable upon completion of the authorization process?	Review policies and procedures. Examine system configurations. Examine deletion processes.					
	(d) Do all systems adhere to the following requirements regarding non-storage of sensitive authentication data after authorization (even if encrypted):						
3.2.1	The full contents of any track (from the magnetic stripe located on the back of a card, equivalent data contained on a chip, or elsewhere) are not stored after authorization?	Examine data sources including: Incoming transaction data All logs					
	This data is alternatively called full track, track, track 1, track 2, and magnetic-stripe data.	History files Trace files					
	Note: In the normal course of business, the following data elements from the magnetic stripe may need to be retained:	Database schema Database contents					
	The cardholder's name, Primary account number (PAN), Expiration date, and Service code						
	To minimize risk, store only these data elements as needed for business.						
3.2.2	The card verification code or value (three-digit or four-digit number printed on the front or back of a payment card) is not stored after authorization?	Examine data sources including: Incoming transaction data All logs History files Trace files Database schema Database contents					



			Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
3.2.3	The personal identification number (PIN) or the encrypted PIN block is not stored after authorization?	Examine data sources including: Incoming transaction data All logs History files Trace files Database schema Database contents							
3.3	Is the PAN masked when displayed (the first six and last four digits are the maximum number of digits to be displayed) such that only personnel with a legitimate business need can see more than the first six/last four digits of the PAN? Note: This requirement does not supersede stricter requirements in place for displays of cardholder data—for example, legal or payment card brand requirements for point-of-sale (POS) receipts.	Review policies and procedures. Review roles that need access to displays of full PAN. Examine system configurations. Observe displays of PAN.							



			Response (Check one response for each question)							
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested			
3.4	Is PAN rendered unreadable anywhere it is stored (including data repositories, portable digital media, backup media, and in audit logs), by using any of the following approaches? One-way hashes based on strong cryptography (hash must be of the entire PAN) Truncation (hashing cannot be used to replace the truncated segment of PAN) Index tokens and pads (pads must be securely stored) Strong cryptography with associated key management processes and procedures. Note: It is a relatively trivial effort for a malicious individual to reconstruct original PAN data if they have access to both the truncated and hashed version of a PAN. Where hashed and truncated versions of the same PAN are present in an entity's environment, additional controls must be in place to ensure that the hashed and truncated versions cannot be correlated to reconstruct the original PAN.	Examine vendor documentation. Examine data repositories. Examine removable media. Examine audit logs, including payment application logs.								
3.4.1	If disk encryption (rather than file- or column-level database encryption) is used, is access managed as follows: Note: This requirement applies in addition to all other PCI DSS encryption and key management requirements.									
	Is logical access to encrypted file systems managed separately and independently of native operating system authentication and access control mechanisms (for example, by not using local user account databases or general network login credentials)?	Examine system configurations. Observe the authentication process.								
	Are cryptographic keys stored securely (for example, stored on removable media that is adequately protected with strong access controls)?	Observe processes. Interview personnel.								



			Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
3.4.1 (cont.)	Is cardholder data on removable media encrypted wherever stored? Note: If disk encryption is not used to encrypt removable	Examine system configurations. Observe processes.							
	media, the data stored on this media will need to be rendered unreadable through some other method.								
3.5	Are keys used to secure stored cardholder data protected against disclosure and misuse as follows:								
	Note: This requirement applies to keys used to encrypt stored cardholder data, and also applies to key-encrypting keys used to protect data-encrypting keys. Such key-encrypting keys must be at least as strong as the data-encrypting key.								
3.5.1	For service providers only: Is a documented description of the cryptographic architecture maintained that includes:	Interview personnel. Review documentation.	\boxtimes						
	Details of all algorithms, protocols, and keys used for the protection of cardholder data, including key strength and expiry date,	Novew addancements							
	Description of the key usage for each key,								
	 Inventory of any HSMs and other SCDs used for key management? 								
3.5.2	Is access to cryptographic keys restricted to the fewest number of custodians necessary?	Examine user access lists.							



			Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
3.5.3	Are secret and private cryptographic keys used to encrypt/decrypt cardholder data stored in one (or more) of the following forms at all times? Encrypted with a key-encrypting key that is at least as strong as the data-encrypting key, and that is stored separately from the data-encrypting key Within a secure cryptographic device (such as a hardware (host) security module (HSM) or PTS-approved point-of-interaction device) As at least two full-length key components or key shares, in accordance with an industry-accepted method. Note: It is not required that public keys be stored in one of these forms.	Review documented procedures. Examine system configurations and key storage locations, including for key-encrypting keys.							
3.5.4	Are cryptographic keys stored in the fewest possible locations?	Examine key-storage locations. Observe processes.							
3.6	Are all key-management processes and procedures fully documented and implemented for cryptographic keys used for encryption of cardholder data?	Review key-management procedures.							
	For service providers only: If keys are shared with customers for transmission or storage of cardholder data, is documentation provided to customers that includes guidance on how to securely transmit, store and update customer's keys, in accordance with requirements 3.6.1 through 3.6.8 below?	Review documentation provided to customers.							
	Are key-management processes and procedures implemented to require the following:								
3.6.1	Do cryptographic key procedures include the generation of strong cryptographic keys?	Review key-management procedures. Observe key-generation procedures.							



			Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
3.6.2	Do cryptographic key procedures include secure cryptographic key distribution?	Review key management procedures. Observe the key-distribution method.							
3.6.3	Do cryptographic key procedures include secure cryptographic key storage?	Review key-management procedures. Observe the method for secure storage of keys.							
3.6.4	Do cryptographic key procedures include cryptographic key changes for keys that have reached the end of their defined cryptoperiod (for example, after a defined period of time has passed and/or after a certain amount of ciphertext has been produced by a given key), as defined by the associated application vendor or key owner, and based on industry best practices and guidelines (for example, NIST Special Publication 800-57)?	Review key-management procedures. Interview personnel.							
3.6.5	Do cryptographic key procedures include retirement or replacement (for example, archiving, destruction, and/or revocation) of cryptographic keys when the integrity of the key has been weakened (for example, departure of an employee with knowledge of a clear-text key)?	Review key-management procedures. Interview personnel.							
	Do cryptographic key procedures include replacement of known or suspected compromised keys?	Review key-management procedures. Interview personnel.							
	(c) If retired or replaced cryptographic keys are retained, are these keys only used for decryption/verification purposes, and not used for encryption operations?	Review key-management procedures. Interview personnel.							



			Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
3.6.6	If manual clear-text key-management operations are used, do cryptographic key procedures include split knowledge and dual control of cryptographic keys as follows: Do split knowledge procedures require that key components are under the control of at least two people who only have knowledge of their own key components? AND Do dual control procedures require that at least two people are required to perform any key management operations and no one person has access to the authentication materials (for example, passwords or keys) of another? Note: Examples of manual key management operations include, but are not limited to: key generation, transmission, loading, storage and destruction.	Review key-management procedures. Interview personnel and/or. Observe processes.							
3.6.7	Do cryptographic key procedures include the prevention of unauthorized substitution of cryptographic keys?	Review procedures. Interview personnel and/or Observe processes.							
3.6.8	Are cryptographic key custodians required to formally acknowledge (in writing or electronically) that they understand and accept their key-custodian responsibilities?	Review procedures. Review documentation or other evidence.							
3.7	Are security policies and operational procedures for protecting stored cardholder data: Documented In use Known to all affected parties?	Review security policies and operational procedures. Interview personnel.							



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

			Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
4.1	 (a) Are strong cryptography and security protocols used to safeguard sensitive cardholder data during transmission over open, public networks? Note: Examples of open, public networks include but are not limited to the Internet; wireless technologies, including 802.11 and Bluetooth; cellular technologies, for example, Global System for Mobile communications (GSM), Code division multiple access (CDMA); and General Packet Radio Service (GPRS). 	Review documented standards. Review policies and procedures. Review all locations where CHD is transmitted or received. Examine system configurations.							
	(b) Are only trusted keys and/or certificates accepted?	Observe inbound and outbound transmissions. Examine keys and certificates.							
	(c) Are security protocols implemented to use only secure configurations, and to not support insecure versions or configurations?	Examine system configurations.							
	(d) Is the proper encryption strength implemented for the encryption methodology in use (check vendor recommendations/best practices)?	Review vendor documentation. Examine system configurations.							
	(e) For TLS implementations, is TLS enabled whenever cardholder data is transmitted or received? For example, for browser-based implementations: "HTTPS" appears as the browser Universal Record Locator (URL) protocol, and Cardholder data is only requested if "HTTPS" appears as part of the URL.	Examine system configurations.							
4.1.1	Are industry best practices used to implement strong encryption for authentication and transmission for wireless networks transmitting cardholder data or connected to the cardholder data environment?	Review documented standards. Review wireless networks. Examine system configuration settings.							



			Response (Check one response for each question)						
PCI DSS Question		Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
4.2	Are PANs rendered unreadable or secured with strong cryptography whenever they are sent via end-user messaging technologies (for example, e-mail, instant messaging, SMS, chat, etc.)?	Observe processes. Review outbound transmissions.							
	Are policies in place that state that unprotected PANs are not to be sent via end-user messaging technologies?	Review policies and procedures.							
4.3	Are security policies and operational procedures for encrypting transmissions of cardholder data: Documented In use Known to all affected parties?	Review security policies and operational procedures. Interview personnel.							



Maintain a Vulnerability Management Program

Requirement 5: Protect all systems against malware and regularly update anti-virus software or programs

			(Chec	ıestion)			
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
5.1	Is anti-virus software deployed on all systems commonly affected by malicious software?	Examine system configurations.					
5.1.1	Are anti-virus programs capable of detecting, removing, and protecting against all known types of malicious software (for example, viruses, Trojans, worms, spyware, adware, and rootkits)?	Review vendor documentation. Examine system configurations.					
5.1.2	Are periodic evaluations performed to identify and evaluate evolving malware threats in order to confirm whether those systems considered to not be commonly affected by malicious software continue as such?	Interview personnel.					
5.2	Are all anti-virus mechanisms maintained as follows:		<u>'</u>	<u>'</u>			
	Are all anti-virus software and definitions kept current?	Examine policies and procedures. Examine anti-virus configurations, including the master installation. Examine system components.					
	Are automatic updates and periodic scans enabled and being performed?	Examine anti-virus configurations, including the master installation. Examine system components.					
	Are all anti-virus mechanisms generating audit logs, and are logs retained in accordance with PCI DSS Requirement 10.7?	Examine anti-virus configurations. Review log retention processes.					



PCI DSS Question			Response (Check one response for each question,						
		Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
5.3	Are all anti-virus mechanisms: Actively running? Unable to be disabled or altered by users? Note: Anti-virus solutions may be temporarily disabled only if there is legitimate technical need, as authorized by management on a case-by-case basis. If anti-virus protection needs to be disabled for a specific purpose, it must be formally authorized. Additional security measures may also need to be implemented for the period of time during which anti-virus protection is not active.	Examine anti-virus configurations. Examine system components. Observe processes. Interview personnel.							
5.4	Are security policies and operational procedures for protecting systems against malware: Documented In use Known to all affected parties?	Review security policies and operational procedures. Interview personnel.							



Requirement 6: Develop and maintain secure systems and applications

			(Ched	F ck one res	Respons ponse for		estion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
6.1	Is there a process to identify security vulnerabilities, including the following: Using reputable outside sources for vulnerability information? Assigning a risk ranking to vulnerabilities that includes identification of all "high" risk and "critical" vulnerabilities? Note: Risk rankings should be based on industry best practices as well as consideration of potential impact. For example, criteria for ranking vulnerabilities may include consideration of the CVSS base score and/or the classification by the vendor, and/or type of systems affected. Methods for evaluating vulnerabilities and assigning risk ratings will vary based on an organization's environment and risk assessment strategy. Risk rankings should, at a minimum, identify all vulnerabilities considered to be a "high risk" to the environment. In addition to the risk ranking, vulnerabilities may be considered "critical" if they pose an imminent threat to the environment, impact critical systems, and/or would result in a potential compromise if not addressed. Examples of critical systems may include security systems, public-facing devices and systems, databases, and other systems that store, process or transmit cardholder data.	Review policies and procedures. Interview personnel. Observe processes.					
6.2	Are all system components and software protected from known vulnerabilities by installing applicable vendor-supplied security patches?	Review policies and procedures.					



			(Chec	F ck one res	Respons ponse for		estion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
6.2 (cont.)	Are critical security patches installed within one month of release? Note: Critical security patches should be identified according to the risk ranking process defined in Requirement 6.1.	Review policies and procedures. Examine system components. Compare list of security patches installed to recent vendor patch lists.					
6.3	Are software- development processes based on industry standards and/or best practices?	Review software development processes. Observe processes. Interview personnel.					
	Is information security included throughout the software-development life cycle?	Review software development processes. Observe processes. Interview personnel.					
	Are software applications developed in accordance with PCI DSS (for example, secure authentication and logging)?	Review software development processes. Observe processes. Interview personnel.					
	Do software development processes ensure the following at 6.3.1 - 6.3.2:						
6.3.1	Are development, test, and/or custom application accounts, user IDs, and passwords removed before applications become active or are released to customers?	Review software development processes. Interview personnel.					



			(Ched	F ck one res	Response ponse for		estion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
6.3.2	Is all custom code reviewed prior to release to production or customers to identify any potential coding vulnerability (using either manual or automated processes as follows: Are code changes reviewed by individuals other than the originating code author, and by individuals who are knowledgeable about code review techniques and secure coding practices? Do code reviews ensure code is developed according to secure coding guidelines? Are appropriate corrections are implemented prior to release? Are code review results are reviewed and approved by management prior to release? Note: This requirement for code reviews applies to all custom code (both internal and public-facing), as part of the system development life cycle. Code reviews can be conducted by knowledgeable internal personnel or third parties. Public-facing web applications are also subject to additional controls, to address ongoing threats and vulnerabilities after implementation, as defined at PCI DSS Requirement 6.6.	Review policies and procedures. Interview personnel. Examine recent changes and change records.					
6.4	Are change control processes and procedures followed for all changes to system components to include the following:						
6.4.1	Are development/test environments separate from the production environment?	Review change control processes and procedures. Examine network documentation and network device configurations.					
	Is access control in place to enforce the separation between the development/test environments and the production environment?	Review change control processes and procedures. Examine access control settings.	\boxtimes				



			(Ched		Respons ponse for		estion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
6.4.2	Is there separation of duties between personnel assigned to the development/test environments and those assigned to the production environment?	Review change control processes and procedures. Observe processes. Interview personnel.					
6.4.3	Are production data (live PANs) <i>not</i> used for testing or development?	Review change control processes and procedures. Observe processes. Interview personnel. Examine test data.					
6.4.4	Are test data and accounts removed from system components before the system becomes active / goes into production?	Review change control processes and procedures. Observe processes. Interview personnel. Examine production systems.					
6.4.5	Are change-control procedures documented and require the following? Documentation of impact Documented change control approval by authorized parties Functionality testing to verify that the change does not adversely impact the security of the system Back-out procedures	Review change control processes and procedures.					
	Are the following performed and documented for all changes:						
6.4.5.1	Documentation of impact?	Trace changes to change control documentation. Examine change control documentation.	\boxtimes				



			(Ched	F ck one res	Respons ponse for		estion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
6.4.5.2	Documented approval by authorized parties?	Trace changes to change control documentation. Examine change control documentation.					
6.4.5.3	(a) Functionality testing to verify that the change does not adversely impact the security of the system?	Trace changes to change control documentation. Examine change control documentation.					
	(b) For custom code changes, testing of updates for compliance with PCI DSS Requirement 6.5 before being deployed into production?	Trace changes to change control documentation. Examine change control documentation.					
6.4.5.4	Back-out procedures?	Trace changes to change control documentation. Examine change control documentation.					
6.4.6	Upon completion of a significant change, are all relevant PCI DSS requirements implemented on all new or changed systems and networks, and documentation updated as applicable?	Trace changes to change control documentation. Examine change control documentation. Interview personnel. Observe affected systems or networks.					



			(Ched	F ck one res	Response ponse for		estion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
6.5	Do software-development processes address common coding vulnerabilities?	Review software-development policies and procedures.					
	Are developers trained at least annually in up-to-date secure coding techniques, including how to avoid common coding vulnerabilities?	Examine software-development policies and procedures. Examine training records.					
	Are applications developed based on secure coding guidelines to protect applications from, at a minimum, the following vulnerabilities:						
	Note: The vulnerabilities listed at 6.5.1 through 6.5.10 were current with industry best practices when this version of PCI DSS was published. However, as industry best practices for vulnerability management are update d (for example, the Open Web Application Security Project (OWASP) Guide, SANS CWE Top 25, CERT Secure Coding, etc.), the current best practices must be used for these requirements.						
6.5.1	Do coding techniques address injection flaws, particularly SQL injection? Note: Also consider OS Command Injection, LDAP and XPath injection flaws as well as other injection flaws.	Examine software-development policies and procedures. Interview responsible personnel.					
6.5.2	Do coding techniques address buffer overflow vulnerabilities?	Examine software-development policies and procedures. Interview responsible personnel.					
6.5.3	Do coding techniques address insecure cryptographic storage?	Examine software-development policies and procedures. Interview responsible personnel.					
6.5.4	Do coding techniques address insecure communications?	Examine software-development policies and procedures. Interview responsible personnel.					



			(Ched	F ck one res	Response ponse for		estion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
6.5.5	Do coding techniques address improper error handling?	Examine software-development policies and procedures. Interview responsible personnel.					
6.5.6	Do coding techniques address all "high risk" vulnerabilities identified in the vulnerability identification process (as defined in PCI DSS Requirement 6.1)?	Examine software-development policies and procedures. Interview responsible personnel.					
	applications and application interfaces (internal or externors from the following additional vulnerabilities:	nal), are applications developed base	d on sec	ure codii	ng guide	lines to p	orotect
6.5.7	Do coding techniques address cross-site scripting (XSS) vulnerabilities?	Examine software-development policies and procedures. Interview responsible personnel.					
6.5.8	Do coding techniques address improper access control such as insecure direct object references, failure to restrict URL access, directory traversal, and failure to restrict user access to functions?	Examine software-development policies and procedures. Interview responsible personnel.					
6.5.9	Do coding techniques address cross-site request forgery (CSRF)?	Examine software-development policies and procedures. Interview responsible personnel.					
6.5.10	Do coding techniques address broken authentication and session management?	Examine software-development policies and procedures. Interview responsible personnel.					



			(Ched	F ck one res	Respons ponse for		estion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
6.6	For public-facing web applications, are new threats and vulnerabilities addressed on an ongoing basis, and are these applications protected against known attacks by applying either of the following methods? Reviewing public-facing web applications via manual or automated application vulnerability security assessment tools or methods, as follows: At least annually After any changes By an organization that specializes in application security That, at a minimum, all vulnerabilities in Requirement 6.5 are included in the assessment That all vulnerabilities are corrected That the application is re-evaluated after the corrections Note: This assessment is not the same as the vulnerability scans performed for Requirement 11.2. OR — Installing an automated technical solution that detects and prevents web-based attacks (for example, a web-application firewall) as follows: Is situated in front of public-facing web applications to detect and prevent web-based attacks. Is actively running and up to date as applicable. Is generating audit logs. Is configured to either block web-based attacks, or generate an alert that is immediately investigated.	Review documented processes. Interview personnel. Examine records of application security assessments. Examine system configuration settings.					
6.7	Are security policies and operational procedures for developing and maintaining secure systems and applications: Documented	Review security policies and operational procedures. Interview personnel.					
	In use Known to all affected parties?						



Implement Strong Access Control Measures

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

			(Che	F ck one res	Respons ponse fo		uestion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
7.1	Is access to system components and cardholder data limited to only those individuals whose jobs require such access, as follows:						
	Is there a written policy for access control that incorporates the following?	Examine written access control policy.					
	Defining access needs and privilege assignments for each role Restriction of access to privileged user IDs to least privileges necessary to perform job responsibilities, Assignment of access based on individual personnel's job classification and function Documented approval (electronically or in writing) by authorized parties for all access, including listing of specific privileges approved						
7.1.1	Are access needs for each role defined, including: System components and data resources that each role needs to access for their job function? Level of privilege required (for example, user, administrator, etc.) for accessing resources?	Examine roles and access need.					
7.1.2	Is access to privileged user IDs restricted as follows: To least privileges necessary to perform job responsibilities? Assigned only to roles that specifically require that privileged access?	Interview personnel. Interview management. Review privileged user IDs.					
7.1.3	Is access assigned based on individual personnel's job classification and function?	Interview management. Review user IDs.					



			Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
7.1.4	Is documented approval by authorized parties required, specifying required privileges?	Review user IDs. Compare with documented approvals. Compare assigned privileges with documented approvals.							
7.2	Is an access control system(s) in place for system components to restrict access based on a user's need to know, and is it set to "deny all" unless specifically allowed, as follows:								
7.2.1	Is the access control system(s) in place on all system components?	Review vendor documentation. Examine configuration settings.							
7.2.2	Is the access control system(s) configured to enforce privileges assigned to individuals based on job classification and function?	Review vendor documentation. Examine configuration settings.	\boxtimes						
7.2.3	Does the access control system(s) have a default "deny-all" setting?	Review vendor documentation. Examine configuration settings.							
7.3	Are security policies and operational procedures for restricting access to cardholder data: Documented In use Known to all affected parties?	Examine security policies and operational procedures. Interview personnel.							



Requirement 8: Identify and authenticate access to system components

			(Check	R one resp	esponse onse for		estion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
8.1	Are policies and procedures for user identification management controls defined and in place for non-consumer users and administrators on all system components, as follows:						
8.1.1	Are all users assigned a unique ID before allowing them to access system components or cardholder data?	Review password procedures. Interview personnel.					
8.1.2	Are additions, deletions, and modifications of user IDs, credentials, and other identifier objects controlled such that user IDs are implemented only as authorized (including with specified privileges)?	Review password procedures. Examine privileged and general user IDs and associated authorizations. Observe system settings.					
8.1.3	Is access for any terminated users immediately deactivated or removed?	Review password procedures. Examine terminated users accounts. Review current access lists. Observe returned physical authentication devices.					
8.1.4	Are inactive user accounts either removed or disabled within 90 days?	Review password procedures. Observe user accounts.					
8.1.5	Are accounts used by third parties to access, support, or maintain system components via remote access enabled only during the time period needed and disabled when not in use?	Review password procedures. Interview personnel. Observe processes.					
	Are third-party remote access accounts monitored when in use?	Interview personnel. Observe processes.					



			Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
8.1.6	Are repeated access attempts limited by locking out the user ID after no more than six attempts?	Review password procedures. Examine system configuration settings.							
	For service providers only: Are non-consumer customer passwords temporarily locked-out after not more than six invalid access attempts?	Review policies and procedures. Review documentation. Observe processes.							
8.1.7	Once a user account is locked out, is the lockout duration set to a minimum of 30 minutes or until an administrator enables the user ID?	Review password procedures. Examine system configuration settings.							
8.1.8	If a session has been idle for more than 15 minutes, are users required to re-authenticate (for example, re-enter the password) to re-activate the terminal or session?	Review password procedures. Examine system configuration settings.							
8.2	In addition to assigning a unique ID, is one or more of the following methods employed to authenticate all users? Something you know, such as a password or passphrase Something you have, such as a token device or smart card Something you are, such as a biometric	Review password procedures. Observe authentication processes.							
8.2.1	Is strong cryptography used to render all authentication credentials (such as passwords/passphrases) unreadable during transmission and storage on all system components?	Review password procedures. Review vendor documentation. Examine system configuration settings. Observe password files. Observe data transmissions.							
8.2.1 (cont.)	For service providers only: Is strong cryptography used to render all non-consumer customers' authentication credentials (such as passwords/passphrases) unreadable during transmission and storage on all system components?	Observe password files. Observe data transmissions.	\boxtimes						



			(Check	Ro one resp	esponse onse for		estion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
8.2.2	Is user identity verified before modifying any authentication credential (for example, performing password resets, provisioning new tokens, or generating new keys)?	Review authentication procedures. Observe personnel.					
8.2.3	Are user password parameters configured to require passwords/passphrases meet the following? - A minimum password length of at least seven characters - Contain both numeric and alphabetic characters Alternatively, the passwords/passphrases must have complexity and strength at least equivalent to the parameters specified above.	Examine system configuration settings to verify password parameters.					
	For service providers only: Are non-consumer customer passwords required to meet the following minimum length and complexity requirements? A minimum password length of at least seven characters Contain both numeric and alphabetic characters	Review customer/user documentation. Observe internal processes.					
8.2.4	Are user passwords/passphrases changed at least once every 90 days?	Review password procedures. Examine system configuration settings.					
	For service providers only: Are non-consumer customer passwords required to be changed periodically, and are non-consumer customers given guidance as to when, and under what circumstances, passwords must change.	Review customer/user documentation. Observe internal processes.	\boxtimes				
8.2.5	Must an individual submit a new password/passphrase that is different from any of the last four passwords/passphrases he or she has used?	Review password procedures. Sample system components. Examine system configuration settings.					
	For service providers only: Are new, non-consumer customer passwords required to be different from any of the last four passwords used?	Review customer/user documentation. Observe internal processes.					



			(Check	Ro one resp	esponse onse for		estion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
8.2.6	Are passwords/passphrases set to a unique value for each user for first-time use and upon reset, and must each user change their password immediately after the first use?	Review password procedures. Examine system configuration settings. Observe security personnel.					
8.3	Is all individual non-console administrative access and all remote access to the CDE secured using multi-factor authentication, as follows:						
	Note: Multi-factor authentication requires that a minimum of two of the three authentication methods (see PCI DSS Requirement 8.2 for descriptions of authentication methods) be used for authentication. Using one factor twice (for example, using two separate passwords) is not considered multi-factor authentication.						
8.3.1	Is multi-factor authentication incorporated for all non- console access into the CDE for personnel with administrative access?	Examine system configurations. Observe administrator logging into CDE.					
8.3.2	Is multi-factor authentication incorporated for all remote network access (both user and administrator, and including third-party access for support or maintenance) originating from outside the entity's network?	Examine system configurations. Observe personnel connecting remotely.	\boxtimes				
8.4	Are authentication policies and procedures documented and communicated to all users?	Review policies and procedures. Review distribution method. Interview personnel. Interview users.					



			Response (Check one response for each question				estion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
	Do authentication policies and procedures include the following? Guidance on selecting strong authentication credentials Guidance for how users should protect their authentication credentials Instructions not to reuse previously used passwords Instructions that users should change passwords if there is any suspicion the password could be compromised	Review policies and procedures. Review documentation provided to users.					
8.5	Are group, shared, or generic accounts, passwords, or other authentication methods prohibited as follows: Generic user IDs and accounts are disabled or removed; Shared user IDs for system administration activities and other critical functions do not exist; and Shared and generic user IDs are not used to administer any system components?	Review policies and procedures. Examine user ID lists. Interview personnel.					
8.5.1	For service providers only: Do service providers with remote access to customer premises (for example, for support of POS systems or servers) use a unique authentication credential (such as a password/passphrase) for each customer? Note: This requirement is not intended to apply to shared hosting providers accessing their own hosting environment, where multiple customer environments are hosted.	Review policies and procedures. Interview personnel.					



			(Check	R one resp	esponse onse for		estion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
8.6	Where other authentication mechanisms are used (for example, physical or logical security tokens, smart cards, and certificates, etc.), is the use of these mechanisms assigned as follows? Authentication mechanisms must be assigned to an individual account and not shared among multiple accounts Physical and/or logical controls must be in place to ensure only the intended account can use that mechanism to gain access	Review policies and procedures. Interview personnel. Examine system configuration settings and/or physical controls.					
8.7	Is all access to any database containing cardholder data (including access by applications, administrators, and all other users) restricted as follows:			'			
	Is all user access to, user queries of, and user actions on (for example, move, copy, delete), the database through programmatic methods only (for example, through stored procedures)?	Review database authentication policies and procedures. Examine database and application configuration settings.					
	Is user direct access to or queries to of databases restricted to database administrators?	Review database authentication policies and procedures. Examine database access control settings. Examine database application configuration settings.					
	(c) Are application IDs only able to be used by the applications (and not by individual users or other processes)?	Review database authentication policies and procedures. Examine database access control settings. Examine database application configuration settings.					



			Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No N/A		Not Tested		
8.8	Are security policies and operational procedures for identification and authentication: Documented In use Known to all affected parties?	Examine security policies and operational procedures. Interview personnel.							



Requirement 9: Restrict physical access to cardholder data

			Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
9.1	Are appropriate facility entry controls in place to limit and monitor physical access to systems in the cardholder data environment?	Observe physical access controls. Observe personnel.							
9.1.1	Are either video cameras or access control mechanisms (or both) in place to monitor individual physical access to sensitive areas? Note: "Sensitive areas" refers to any data center, server room, or any area that houses systems that store, process, or transmit cardholder data. This excludes public-facing areas where only point-of-sale terminals are present such as the cashier areas in a retail store.	Review policies and procedures. Observe physical monitoring mechanisms. Observe security features.							
	Are either video cameras or access control mechanisms (or both) protected from tampering or disabling?	Observe processes. Interview personnel.	\boxtimes						
	(c) Is data collected from video cameras and/or access control mechanisms reviewed and correlated with other entries?	Review policies and procedures. Interview security personnel.							
	(d) Is data collected from video cameras and/or access control mechanisms stored for at least three months unless otherwise restricted by law?	Review data retention processes. Observe data storage. Interview security personnel.							
9.1.2	Are physical and/or logical controls in place to restrict access to publicly accessible network jacks? For example, network jacks located in public areas and areas accessible to visitors could be disabled and only enabled when network access is explicitly authorized. Alternatively, processes could be implemented to ensure that visitors are escorted at all times in areas with active	Review policies and procedures. Interview personnel. Observe locations.							
	network jacks.								



			(Che		Respons	s e or each qu	uestion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
9.1.3	Is physical access to wireless access points, gateways, handheld devices, networking/communications hardware, and telecommunication lines restricted?	Review policies and procedures. Interview personnel. Observe devices.					
9.2	Are procedures developed to easily distinguish between onsite personnel and visitors, which include: Identifying onsite personnel and visitors (for example, assigning badges), Changing access requirements, and Revoking terminated onsite personnel and expired visitor identification (such as ID badges) For the purposes of Requirement 9, "onsite personnel" refers to full-time and part-time employees, temporary employees, contractors and consultants who are physically present on the entity's premises. A "visitor" refers to a vendor, guest of any onsite personnel, service workers, or anyone who needs to enter the facility for a short duration, usually not more than one day.	Review policies and procedures. Interview personnel. Observe identification methods (e.g. badges). Observe visitor processes.					
	Do identification methods (such as ID badges) clearly identify visitors and easily distinguish between onsite personnel and visitors?	Observe identification methods.	\boxtimes				
	(c) Is access to the badge system limited to authorized personnel?	Observe physical controls and access controls for the badge system.	\boxtimes				
9.3	Is physical access to sensitive areas controlled for onsite personnel, as follows: Is access authorized and based on individual job function? Is access revoked immediately upon termination Upon termination, are all physical access mechanisms, such as keys, access cards, etc., returned or disabled?	Interview personnel. Examine access control lists. Observe onsite personnel. Compare lists of terminated employees to access control lists.					



			(Che		Respons	se or each qu	uestion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
9.4	Is visitor identification and access handled as follows:						
9.4.1	Are visitors authorized before entering, and escorted at all times within, areas where cardholder data is processed or maintained?	Review policies and procedures. Observe visitor processes including how access is controlled. Interview personnel. Observe visitors and badge use.					
9.4.2	Are visitors identified and given a badge or other identification that visibly distinguishes the visitors from onsite personnel?	Observe badge use of personnel and visitors. Examine identification.					
	Do visitor badges or other identification expire?	Observe process. Examine identification.	\boxtimes				
9.4.3	Are visitors asked to surrender the badge or other identification before leaving the facility or at the date of expiration?	Observe processes. Observe visitors leaving facility.					
9.4.4	Is a visitor log in use to record physical access to the facility as well as for computer rooms and data centers where cardholder data is stored or transmitted?	Review policies and procedures. Examine the visitor log. Observe visitor processes. Examine log retention.					
	Does the visitor log contain the visitor's name, the firm represented, and the onsite personnel authorizing physical access?	Review policies and procedures. Examine the visitor log.					
	(c) Is the visitor log retained for at least three months?	Review policies and procedures. Examine visitor log retention.	\boxtimes				
9.5	Are all media physically secured (including but not limited to computers, removable electronic media, paper receipts, paper reports, and faxes)? For purposes of Requirement 9, "media" refers to all paper and electronic media containing cardholder data.	Review policies and procedures for physically securing media. Interview personnel.					



			Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
9.5.1	Is the location where media back-ups are stored reviewed at least annually to confirm storage is secure?	Review policies and procedures for reviewing offsite media locations. Interview security personnel.							
9.6	Is strict control maintained over the internal or external distribution of any kind of media?	Review policies and procedures for distribution of media.							
	Do controls include the following:								
9.6.1	Is media classified so the sensitivity of the data can be determined?	Review policies and procedures for media classification. Interview security personnel.							
9.6.2	Is media sent by secured courier or other delivery method that can be accurately tracked?	Interview personnel. Examine media distribution tracking logs and documentation.							
9.6.3	Is management approval obtained prior to moving the media (especially when media is distributed to individuals)?	Interview personnel. Examine media distribution tracking logs and documentation.							
9.7	Is strict control maintained over the storage and accessibility of media?	Review policies and procedures.							
9.7.1	Are inventory logs of all media properly maintained?	Examine inventory logs.							
	Are periodic media inventories conducted at least annually?	Examine inventory logs. Interview personnel.							



			Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
9.8	Is all media destroyed when it is no longer needed for business or legal reasons?	Review periodic media destruction policies and procedures.							
	Is there a periodic media destruction policy that defines requirements for the following?	Review periodic media destruction policies and procedures.				\boxtimes			
	Hard-copy materials must be crosscut shredded, incinerated, or pulped such that there is reasonable assurance the hard-copy materials cannot be reconstructed.								
	Storage containers used for materials that are to be destroyed must be secured.								
	Cardholder data on electronic media must be rendered unrecoverable (e.g., via a secure wipe program in accordance with industry-accepted standards for secure deletion, or by physically destroying the media).								
	(c) Is media destruction performed as follows:								
9.8.1	Are hardcopy materials cross-cut shredded, incinerated, or pulped so that cardholder data cannot be reconstructed?	Interview personnel. Examine procedures. Observe processes.							
	Are storage containers used for materials that contain information to be destroyed secured to prevent access to the contents?	Examine security of storage containers.				\boxtimes			
9.8.2	Is cardholder data on electronic media rendered unrecoverable (e.g. via a secure wipe program in accordance with industry-accepted standards for secure deletion, or otherwise by physically destroying the media), so that cardholder data cannot be reconstructed?	Observe processes. Interview personnel.							



			(Che		Respons	se or each qu	uestion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
9.9	Are devices that capture payment card data via direct physical interaction with the card protected against tampering and substitution as follows? Note: This requirement applies to card-reading devices used in card-present transactions (that is, card swipe or dip) at the point of sale. This requirement is not intended						
	to apply to manual key-entry components such as computer keyboards and POS keypads.						
	Do policies and procedures require that a list of such devices be maintained?	Review policies and procedures.					
	Do policies and procedures require that devices are periodically inspected to look for tampering or substitution?	Review policies and procedures.					
	Do policies and procedures require that personnel are trained to be aware of suspicious behavior and to report tampering or substitution of devices?	Review policies and procedures.					
9.9.1	Does the list of devices include the following? Make, model of device Location of device (for example, the address of the site or facility where the device is located) Device serial number or other method of unique identification	Examine the list of devices.					
	Is the list accurate and up to date?	Observe devices and device locations and compare to list.	\boxtimes				
	Is the list of devices updated when devices are added, relocated, decommissioned, etc.?	Interview personnel.					



			Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
9.9.2	Are device surfaces periodically inspected to detect tampering (for example, addition of card skimmers to devices), or substitution (for example, by checking the serial number or other device characteristics to verify it has not been swapped with a fraudulent device) as follows? Note: Examples of signs that a device might have been	Interview personnel. Observe inspection processes and compare to defined processes.							
	tampered with or substituted include unexpected attachments or cables plugged into the device, missing or changed security labels, broken or differently colored casing, or changes to the serial number or other external markings.								
	Are personnel aware of procedures for inspecting devices?	Interview personnel.	\boxtimes						
9.9.3	Are personnel trained to be aware of attempted tampering or replacement of devices, to include the following?								
	 (a) Do training materials for personnel at point-of-sale locations include the following? Verify the identity of any third-party persons claiming to be repair or maintenance personnel, prior to granting them access to modify or troubleshoot devices. Do not install, replace, or return devices without verification. Be aware of suspicious behavior around devices (for example, attempts by unknown persons to unplug or open devices). Report suspicious behavior and indications of device tampering or substitution to appropriate personnel (for example, to a manager or security officer). 	Review training materials.							



PCI DSS Question		Expected Testing	Response (Check one response for each question)						
			Yes	Yes with CCW	No	N/A	Not Tested		
9.9.3 (cont.)	(b) Have personnel at point-of-sale locations received training, and are they aware of procedures to detect and report attempted tampering or replacement of devices?	Interview personnel at POS locations.							
9.10	Are security policies and operational procedures for restricting physical access to cardholder data: Documented In use Known to all affected parties?	Examine security policies and operational procedures. Interview personnel.							



Regularly Monitor and Test Networks

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

			(Check	Re one resp	sponse		estion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
10.1	Are audit trails enabled and active for system components?	Observe processes. Interview system administrator.					
	Is access to system components linked to individual users?	Observe processes. Interview system administrator.					
10.2	Are automated audit trails implemented for all system components to reconstruct the following events:						
10.2.1	All individual user accesses to cardholder data?	Interview personnel. Observe audit logs. Examine audit log settings.					
10.2.2	All actions taken by any individual with root or administrative privileges?	Interview personnel. Observe audit logs. Examine audit log settings.					
10.2.3	Access to all audit trails?	Interview personnel. Observe audit logs. Examine audit log settings.					
10.2.4	Invalid logical access attempts?	Interview personnel. Observe audit logs. Examine audit log settings.					
10.2.5	Use of and changes to identification and authentication mechanisms—including but not limited to creation of new accounts and elevation of privileges—and all changes, additions, or deletions to accounts with root or administrative privileges?	Interview personnel. Observe audit logs. Examine audit log settings.					



			(Check	Re one resp	sponse		estion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
10.2.6	Initialization, stopping, or pausing of the audit logs?	Interview personnel. Observe audit logs. Examine audit log settings.					
10.2.7	Creation and deletion of system-level objects?	Interview personnel. Observe audit logs. Examine audit log settings.					
10.3	Are the following audit trail entries recorded for all system components for each event:						
10.3.1	User identification?	Interview personnel. Observe audit logs. Examine audit log settings.					
10.3.2	Type of event?	Interview personnel. Observe audit logs. Examine audit log settings.					
10.3.3	Date and time?	Interview personnel. Observe audit logs. Examine audit log settings.					
10.3.4	Success or failure indication?	Interview personnel. Observe audit logs. Examine audit log settings.					
10.3.5	Origination of event?	Interview personnel. Observe audit logs. Examine audit log settings.					
10.3.6	Identity or name of affected data, system component, or resource?	Interview personnel. Observe audit logs. Examine audit log settings.					



			(Check	Re one resp	esponse onse for		estion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
10.4	Are all critical system clocks and times synchronized through use of time synchronization technology, and is the technology kept current?	Review time configuration standards and processes.					
	Note: One example of time synchronization technology is Network Time Protocol (NTP).						
10.4.1	Are the following processes implemented for critical systems to have the correct and consistent time:						
	Do only designated central time server(s) receive time signals from external sources, and are time signals from external sources based on International Atomic Time or UTC?	Review time configuration standards and processes. Examine time-related system parameters.					
	Where there is more than one designated time server, do the time servers peer with each other to keep accurate time?	Review time configuration standards and processes. Examine time-related system parameters.					
	(c) Do systems receive time only from designated central time server(s)?	Review time configuration standards and processes. Examine time-related system parameters.					
10.4.2	Is time data is protected as follows: Is access to time data restricted to only personnel with a business need to access time data?	Examine system configurations and time-synchronization settings.					
	Are changes to time settings on critical systems logged, monitored, and reviewed?	Examine system configurations and time-synchronization settings and logs.					



			Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
10.4.3	Are time settings received from specific, industry-accepted time sources? (This is to prevent a malicious individual from changing the clock). Optionally, those updates can be encrypted with a symmetric key, and access control lists can be created that specify the IP addresses of client machines that will be provided with the time updates (to prevent unauthorized use of internal time servers).	Examine system configurations.							
10.5	Are audit trails secured so they cannot be altered, as follows:								
10.5.1	Is viewing of audit trails limited to those with a job-related need?	Interview system administrators. Examine system configurations and permissions.							
10.5.2	Are audit trail files protected from unauthorized modifications via access control mechanisms, physical segregation, and/or network segregation?	Interview system administrators. Examine system configurations and permissions.							
10.5.3	Are audit trail files promptly backed up to a centralized log server or media that is difficult to alter?	Interview system administrators. Examine system configurations and permissions.							
10.5.4	Are logs for external-facing technologies (for example, wireless, firewalls, DNS, mail) written onto a secure, centralized, internal log server or media?	Interview system administrators. Examine system configurations and permissions.							
10.5.5	Is file-integrity monitoring or change-detection software used on logs to ensure that existing log data cannot be changed without generating alerts (although new data being added should not cause an alert)?	Examine settings, monitored files, and results from monitoring activities.							



			(Check	Re one resp	sponse		estion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
10.6	Are logs and security events for all system components reviewed to identify anomalies or suspicious activity as follows? Note: Log harvesting, parsing, and alerting tools may be used to achieve compliance with Requirement 10.6.						
10.6.1	Are written policies and procedures defined for reviewing the following at least daily, either manually or via log tools? All security events Logs of all system components that store, process, or transmit CHD and/or SAD Logs of all critical system components Logs of all servers and system components that perform security functions (for example, firewalls, intrusion-detection systems/intrusion-prevention systems (IDS/IPS), authentication servers, e-commerce redirection servers, etc.)	Review security policies and procedures.					
	Are the above logs and security events reviewed at least daily?	Observe processes. Interview personnel.					
10.6.2	Are written policies and procedures defined for reviewing logs of all other system components periodically—either manually or via log tools—based on the organization's policies and risk management strategy?	Review security policies and procedures.					
	Are reviews of all other system components performed in accordance with organization's policies and risk management strategy?	Review risk assessment documentation. Interview personnel.					
10.6.3	Are written policies and procedures defined for following up on exceptions and anomalies identified during the review process?	Review security policies and procedures.					
_	Is follow up to exceptions and anomalies performed?	Observe processes. Interview personnel.					



			Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
10.7	Are audit log retention policies and procedures in place and do they require that logs are retained for at least one year, with a minimum of three months immediately available for analysis (for example, online, archived, or restorable from backup)?	Review security policies and procedures.							
	Are audit logs retained for at least one year?	Interview personnel. Examine audit logs.							
	Are at least the last three months' logs immediately available for analysis?	Interview personnel. Observe processes.							
10.8	For service providers only: Is a process implemented for the timely detection and reporting of failures of critical security control systems as follows:								
	(a) Are processes implemented for the timely detection and reporting of failures of critical security control systems, including but not limited to failure of: Firewalls IDS/IPS FIM Anti-virus Physical access controls Logical access controls Audit logging mechanisms Segmentation controls (if used)	Review policies and procedures.							
	(b) Does the failure of a critical security control result in the generation of an alert?	Observe processes. Interview personnel.							
10.8.1	For service providers only: Are failures of any critical security controls responded to in a timely manner, as follows:								



			Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
	Are processes for responding to critical security control failures defined and implemented, and include: - Restoring security functions - Identifying and documenting the duration (date and time start to end) of the security failure - Identifying and documenting cause(s) of failure, including root cause, and documenting remediation required to address root cause - Identifying and addressing any security issues that arose during the failure - Implementing controls to prevent cause of failure from reoccurring - Resuming monitoring of security controls?	Review policies and procedures. Interview personnel.							
	Are failures in critical security controls documented, including: Identification of cause(s) of the failure, including root cause Duration (date and time start and end) of the security failure Details of the remediation required to address the root cause?	Examine records of security control failures.							
10.9	Are security policies and operational procedures for monitoring all access to network resources and cardholder data: Documented In use Known to all affected parties?	Review security policies and operational procedures. Interview personnel.							



Requirement 11: Regularly test security systems and processes

			Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
11.1	Are processes implemented for detection and identification of both authorized and unauthorized wireless access points on a quarterly basis?	Review policies and procedures.							
	Note: 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.								
	Whichever methods are used, they must be sufficient to detect and identify any unauthorized devices.								
	Does the methodology detect and identify any unauthorized wireless access points, including at least the following?	Evaluate the methodology.							
	WLAN cards inserted into system components; Portable or mobile devices attached to system components to create a wireless access point (for example, by USB, etc.); and Wireless devices attached to a network port or network device.								
	(c) If wireless scanning is utilized to identify authorized and unauthorized wireless access points, is the scan performed at least quarterly for all system components and facilities?	Examine output from recent wireless scans.							
	If automated monitoring is utilized (for example, wireless IDS/IPS, NAC, etc.), is monitoring configured to generate alerts to notify personnel?	Examine configuration settings.							
11.1.1	Is an inventory of authorized wireless access points maintained and a business justification documented for all authorized wireless access points?	Examine inventory records.							



			(Chec		esponse onse for		
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	nse for each que	Not Tested
11.1.2	Does the incident response plan define and require a response in the event that an unauthorized wireless access point is detected?	Examine incident response plan (see Requirement 12.10).					
	Is action taken when unauthorized wireless access points are found?	Interview responsible personnel. Inspect recent wireless scans and related responses.					
11.2	Are internal and external network vulnerability scans run 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), as follows:						
	Note: 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 1) the most recent scan result was a passing scan, 2) the entity has documented policies and procedures requiring quarterly scanning, and 3) vulnerabilities noted in the scan results have been corrected as shown in a rescan(s). For subsequent years after the initial PCI DSS review, four quarters of passing scans must have occurred.						
11.2.1	Are quarterly internal vulnerability scans performed?	Review scan reports.					
	Does the quarterly internal scan process address all "high risk" vulnerabilities and include rescans to verify all "highrisk" vulnerabilities (as defined in PCI DSS Requirement 6.1) are resolved?	Review scan reports.					



			(Chec	R k one resp	esponse oonse for		estion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
11.2.1 (cont.)	Are quarterly internal scans performed by a qualified internal resource(s) or qualified external third party, and if applicable, does organizational independence of the tester exist (not required to be a QSA or ASV)?	Interview personnel.					
11.2.2	Are quarterly external vulnerability scans performed?	Review results from the four most	\boxtimes				
	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).	recent quarters of external vulnerability scans.					
	efer to the ASV Program Guide published on the PCI SSC ebsite for scan customer responsibilities, scan preparation,						
	Do external quarterly scan and rescan results satisfy the ASV Program Guide requirements for a passing scan (for example, no vulnerabilities rated 4.0 or higher by the CVSS, and no automatic failures)?	Review results of each external quarterly scan and rescan.					
	Are quarterly external vulnerability scans performed by a PCI SSC Approved Scanning Vendor (ASV?	Review results of each external quarterly scan and rescan.					
11.2.3	Are internal and external scans, and rescans as needed, performed after any significant change?	Examine and correlate change control documentation and scan					
	Note: Scans must be performed by qualified personnel.	reports.					
	Does the scan process include rescans until: For external scans, no vulnerabilities exist that are scored 4.0 or higher by the CVSS, For internal scans, a passing result is obtained or all "high- risk" vulnerabilities as defined in PCI DSS Requirement 6.1 are resolved?	Review scan reports.					
	Are scans performed by a qualified internal resource(s) or qualified external third party, and if applicable, does organizational independence of the tester exist (not required to be a QSA or ASV)?	Interview personnel.					



			(Chec	R k one resp	esponse oonse for		estion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
11.3	Does the penetration-testing methodology include the following? 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 scopereduction controls Defines application-layer penetration tests to include, at a minimum, the vulnerabilities listed in Requirement 6.5 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	Examine penetration-testing methodology. Interview responsible personnel.					
11.3.1	Is external penetration testing performed per the defined methodology, at least annually, and after any significant infrastructure or application changes to the environment (such as an operating system upgrade, a sub-network added to the environment, or an added web server)?	Examine scope of work. Examine results from the most recent external penetration test.					
	Are tests performed by a qualified internal resource or qualified external third party, and if applicable, does organizational independence of the tester exist (not required to be a QSA or ASV)?	Interview responsible personnel.					



			Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
11.3.2	Is internal penetration testing performed per the defined methodology, at least annually, and after any significant infrastructure or application changes to the environment (such as an operating system upgrade, a sub-network added to the environment, or an added web server)?	Examine scope of work. Examine results from the most recent internal penetration test.							
	Are tests performed by a qualified internal resource or qualified external third party, and if applicable, does organizational independence of the tester exist (not required to be a QSA or ASV)?	Interview responsible personnel.							
11.3.3	Are exploitable vulnerabilities found during penetration testing corrected, followed by repeated testing to verify the corrections?	Examine penetration testing results.							
11.3.4	If segmentation is used to isolate the CDE from other networks:								
	Are penetration-testing procedures defined to test all segmentation methods, to confirm they are operational and effective, and isolate all out-of-scope systems from systems in the CDE?	Examine segmentation controls. Review penetration-testing methodology.							
	Does penetration testing to verify segmentation controls meet the following? Performed at least annually and after any changes to segmentation controls/methods. Covers all segmentation controls/methods in use. Verifies that segmentation methods are operational and effective, and isolate all out-of-scope systems from systems in the CDE.	Examine results from the most recent penetration test.							
	Are tests performed by a qualified internal resource or qualified external third party, and if applicable, does organizational independence of the tester exist (not required to be a QSA or ASV)?	Interview responsible personnel.							



			(Chec	R k one resp	esponse oonse for		estion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
11.3.4.1	For service providers only: If segmentation is used:						
	Is PCI DSS scope confirmed by performing penetration tests on segmentation controls at least every six months and after any changes to segmentation controls/methods?	Examine results of penetration tests on segmentation controls.					
	Does penetration testing cover all segmentation controls/methods in use?	Examine results of penetration tests on segmentation controls.					
	Does penetration testing verify that segmentation controls/methods are operational and effective, and isolate all out-of-scope systems from systems in the CDE	Examine results of penetration tests on segmentation controls.	\boxtimes				
	Are tests performed by a qualified internal resource or qualified external third party, and if applicable, does organizational independence of the tester exist (not required to be a QSA or ASV)?	Interview responsible personnel.					
11.4	Are intrusion-detection and/or intrusion-prevention techniques that detect and/or prevent intrusions into the network in place to monitor all traffic: At the perimeter of the cardholder data environment, and	Examine system configurations. Examine network diagrams.	\boxtimes				
	At critical points in the cardholder data environment. Are intrusion-detection and/or intrusion-prevention techniques configured to alert personnel of suspected compromises?	Examine system configurations. Interview responsible personnel.					
	Are all intrusion-detection and prevention engines, baselines, and signatures kept up-to-date?	Examine IDS/IPS configurations. Examine vendor documentation.	\boxtimes				



			Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
11.5	Is a change-detection mechanism (for example, file-integrity monitoring tools) deployed to detect unauthorized modification (including changes, additions, and deletions) of critical system files, configuration files, or content files? Examples of files that should be monitored include: System executables Application executables Configuration and parameter files Centrally stored, historical or archived, log, and audit files Additional critical files determined by entity (for example, through risk assessment or other means)	Observe system settings and monitored files. Examine system configuration settings.							
	Is the change-detection mechanism configured to alert personnel to unauthorized modification (including changes, additions, and deletions) of critical system files, configuration files or content files, and do the tools perform critical file comparisons at least weekly?	Observe system settings and monitored files. Review results from monitoring activities.							
	Note: For change detection purposes, critical files are usually those that do not regularly change, but the modification of which could indicate a system compromise or risk of compromise. Change detection mechanisms such as file-integrity monitoring products usually come pre-configured with critical files for the related operating system. Other critical files, such as those for custom applications, must be evaluated and defined by the entity (that is the merchant or service provider).								
11.5.1	Is a process in place to respond to any alerts generated by the change-detection solution?	Examine system configuration settings.							
11.6	Are security policies and operational procedures for security monitoring and testing: Documented In use Known to all affected parties?	Examine security policies and operational procedures. Interview personnel.							





Maintain an Information Security Policy

Requirement 12: Maintain a policy that addresses information security for all personnel

Note: For the purposes of Requirement 12, "personnel" refers to full-time part-time employees, temporary employees and personnel, and contractors and consultants who are "resident" on the entity's site or otherwise have access to the company's site cardholder data environment.

			(Ched	F ck one res	lespons ponse foi		estion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
12.1	Is a security policy established, published, maintained, and disseminated to all relevant personnel?	Review the information security policy.					
12.1.1	Is the security policy reviewed at least annually and updated when the environment changes?	Review the information security policy. Interview responsible personnel.					
12.2	 (a) Is an annual risk assessment process implemented that: Identifies critical assets, threats, and vulnerabilities, and Results in a formal, documented analysis of risk? Examples of risk assessment methodologies include but are not limited to OCTAVE, ISO 27005 and NIST SP 800-30. 	Review annual risk assessment process. Interview personnel.					
	(b) Is the risk assessment process performed at least annually and upon significant changes to the environment (for example, acquisition, merger, relocation, etc.)?	Review risk assessment documentation. Interview responsible personnel.					
12.3	Are usage policies for critical technologies developed to define proper use of these technologies and require the following:						
	Note: Examples of critical technologies include, but are not limited to, remote access and wireless technologies, laptops, tablets, removable electronic media, e-mail usage and Internet usage.						
12.3.1	Explicit approval by authorized parties to use the technologies?	Review usage policies. Interview responsible personnel.					



			Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
12.3.2	Authentication for use of the technology?	Review usage policies. Interview responsible personnel.							
12.3.3	A list of all such devices and personnel with access?	Review usage policies. Interview responsible personnel.							
12.3.4	A method to accurately and readily determine owner, contact information, and purpose (for example, labeling, coding, and/or inventorying of devices)?	Review usage policies. Interview responsible personnel.							
12.3.5	Acceptable uses of the technologies?	Review usage policies. Interview responsible personnel.							
12.3.6	Acceptable network locations for the technologies?	Review usage policies. Interview responsible personnel.							
12.3.7	List of company-approved products?	Review usage policies. Interview responsible personnel.							
12.3.8	Automatic disconnect of sessions for remote-access technologies after a specific period of inactivity?	Review usage policies. Interview responsible personnel.							
12.3.9	Activation of remote-access technologies for vendors and business partners only when needed by vendors and business partners, with immediate deactivation after use?	Review usage policies. Interview responsible personnel.							
12.3.10	For personnel accessing cardholder data via remote- access technologies, does the policy specify the prohibition of copying, moving, and storage of cardholder data onto local hard drives and removable electronic media, unless explicitly authorized for a defined business need?	Review usage policies. Interview responsible personnel.							
	Where there is an authorized business need, the usage policies must require the data be protected in accordance with all applicable PCI DSS Requirements.								
	For personnel with proper authorization, does the policy require the protection of cardholder data in accordance with PCI DSS Requirements?	Review usage policies. Interview responsible personnel.							



			Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
12.4	Do security policy and procedures clearly define information security responsibilities for all personnel?	Review information security policy and procedures. Interview a sample of responsible personnel.							
12.4.1	For service providers only: Have executive management established responsibility for the protection of cardholder data and a PCI DSS compliance program, as follows:								
	Has executive management assigned overall accountability for maintaining the entity's PCI DSS compliance?	Examine documentation.							
	(b) Has executive management defined a charter for the PCI DSS compliance program and communication to executive management?	Examine PCI DSS charter.							
12.5	Is responsibility for information security formally assigned to a Chief Security Officer or other security-knowledgeable member of management?	Review information security policy and procedures.							
	Are the following information security management responsibilities formally assigned to an individual or team:								
12.5.1	Establishing, documenting, and distributing security policies and procedures?	Review information security policy and procedures.							
12.5.2	Monitoring and analyzing security alerts and information, and distributing to appropriate personnel?	Review information security policy and procedures.							
12.5.3	Establishing, documenting, and distributing security incident response and escalation procedures to ensure timely and effective handling of all situations?	Review information security policy and procedures.							
12.5.4	Administering user accounts, including additions, deletions, and modifications?	Review information security policy and procedures.							
12.5.5	Monitoring and controlling all access to data?	Review information security policy and procedures.							



			Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
12.6	Is a formal security awareness program in place to make all personnel aware of the cardholder data security policy and procedures?	Review security awareness program.							
	Do security awareness program procedures include the following:		·						
12.6.1	Does the security awareness program provide multiple methods of communicating awareness and educating personnel (for example, posters, letters, memos, web based training, meetings, and promotions)?	Review security awareness program. Review security awareness program procedures.							
	Note: Methods can vary depending on the role of the personnel and their level of access to the cardholder data.	Review security awareness program attendance records.							
	Are personnel educated upon hire and at least annually?	Examine security awareness program procedures and documentation.							
	Have employees completed awareness training and are they aware of the importance of cardholder data security?	Interview personnel.	\boxtimes						
12.6.2	Are personnel required to acknowledge at least annually that they have read and understood the security policy and procedures?	Examine security awareness program procedures and documentation.							
12.7	Are potential personnel (see definition of "personnel" above) screened prior to hire to minimize the risk of attacks from internal sources?	Interview Human Resource department management.							
	Examples of background checks include previous employment history, criminal record, credit history and reference checks.								
	Note: For those potential personnel to be hired for certain positions, such as store cashiers who only have access to one card number at a time when facilitating a transaction, this requirement is a recommendation only.								



			Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
12.8	Are policies and procedures maintained and implemented to manage service providers with whom cardholder data is shared, or that could affect the security of cardholder data, as follows:								
12.8.1	Is a list of service providers maintained, including a description of the service(s) provided?	Review policies and procedures. Observe processes. Review list of service providers.							
12.8.2	Is a written agreement maintained that includes an acknowledgement that the service providers are responsible for the security of cardholder data the service providers possess or otherwise store, process, or transmit on behalf of the customer, or to the extent that they could impact the security of the customer's cardholder data environment?	Observe written agreements. Review policies and procedures.							
	Note: The exact wording of an acknowledgement will depend on the agreement between the two parties, the details of the service being provided, and the responsibilities assigned to each party. The acknowledgement does not have to include the exact wording provided in this requirement.								
12.8.3	Is there an established process for engaging service providers, including proper due diligence prior to engagement?	Observe processes. Review policies and procedures and supporting documentation.							
12.8.4	Is a program maintained to monitor service providers' PCI DSS compliance status at least annually?	Observe processes. Review policies and procedures and supporting documentation.							
12.8.5	Is information maintained about which PCI DSS requirements are managed by each service provider, and which are managed by the entity?	Observe processes. Review policies and procedures and supporting documentation.							



			(Ched	R ck one res	Respons ponse foi		estion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
12.9	For service providers only: Do service providers acknowledge in writing to customers that they are responsible for the security of cardholder data the service provider possesses or otherwise stores, processes, or transmits on behalf of the customer, or to the extent that they could impact the security of the customer's cardholder data environment?	Review service provider's policies and procedures. Observe templates used for written agreements.					
	Note: The exact wording of an acknowledgement will depend on the agreement between the two parties, the details of the service being provided, and the responsibilities assigned to each party. The acknowledgement does not have to include the exact wording provided in this requirement.						
12.10	Has an incident response plan been implemented in preparation to respond immediately to a system breach, as follows:						
12.10.1	Has an incident response plan been created to be implemented in the event of system breach?	Review the incident response plan. Review incident response plan procedures.	\boxtimes				
	Does the plan address the following, at a minimum:						
	Roles, responsibilities, and communication and contact strategies in the event of a compromise including notification of the payment brands, at a minimum?	Review incident response plan procedures.					
	Specific incident response procedures?	Review incident response plan procedures.					
	Business recovery and continuity procedures?	Review incident response plan procedures.					



			Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
12.10.1(b) (cont.)	Data backup processes?	Review incident response plan procedures.							
	Analysis of legal requirements for reporting compromises?	Review incident response plan procedures.							
	Coverage and responses of all critical system components?	Review incident response plan procedures.							
	Reference or inclusion of incident response procedures from the payment brands?	Review incident response plan procedures.							
12.10.2	Is the plan reviewed and tested at least annually, including all elements listed in Requirement 12.10.1?	Review incident response plan procedures. Interview responsible personnel.							
12.10.3	Are specific personnel designated to be available on a 24/7 basis to respond to alerts?	Observe processes. Review policies. Interview responsible personnel.							
12.10.4	Is appropriate training provided to staff with security breach response responsibilities?	Observe processes. Review incident response plan procedures. Interview responsible personnel.							
12.10.5	Are alerts from security monitoring systems included in the incident response plan?	Observe processes. Review incident response plan procedures.							
12.10.6	Is a process developed and in place to modify and evolve the incident response plan according to lessons learned and to incorporate industry developments?	Observe processes. Review incident response plan procedures. Interview responsible personnel.							
12.11	For service providers only: Are reviews performed at least quarterly to confirm personnel are following security policies and operational procedures, as follows:						•		



			Response (Check one response for each question)						
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested		
	(a) Do reviews cover the following processes: Daily log reviews Firewall rule-set reviews Applying configuration standards to new systems Responding to security alerts Change management processes	Examine policies and procedures for performing quarterly reviews. Interview personnel.							
	(b) Are reviews performed at least quarterly?	Interview personnel. Examine records of reviews.							
12.11.1	For service providers only: Is documentation of the quarterly review process maintained to include: Documenting results of the reviews Review and sign off of results by personnel assigned responsibility for the PCI DSS compliance program	Examine documentation from the quarterly reviews.							



Appendix A: Additional PCI DSS Requirements

Appendix A1: Additional PCI DSS Requirements for Shared Hosting Providers

			(Che	R ck one resp	esponse conse for		estion)
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
A1	Is each entity's (that is, a merchant, service provider, or other entity) hosted environment and data protected, per A1.1 through A1.4 as follows:						
	A hosting provider must fulfill these requirements as well as all other relevant sections of the PCI DSS.						
	Note: Even though a hosting provider may meet these requirements, the compliance of the entity that uses the hosting provider is not guaranteed. Each entity must comply with the PCI DSS and validate compliance as applicable.						
A1.1	Does each entity run processes that have access to only that entity's cardholder data environment, and are these application processes run using the unique ID of the entity?	Examine system configurations and related unique IDs for hosted entities.				\boxtimes	
	For example:						
	No entity on the system can use a shared web server user ID.						
	All CGI scripts used by an entity must be created and run as the entity's unique user ID						
A1.2	Are each entity's access and privileges restricted to its own cardholder data environment as follows:						
	Are the user IDs for application processes not privileged users (root/admin)?	Examine system configurations for application user IDs.					
	Does each entity have read, write, or execute permissions only for files and directories it owns or for necessary system files (restricted via file system permissions, access control lists, chroot, jailshell, etc.)?	Examine system configurations and file permissions for hosted entities.					
	Important: An entity's files may not be shared by group.						



			(Che	R ck one res _l	esponse conse for		estion)
PCI DSS Question		Expected Testing	Yes	Yes with CCW	No	N/A	Not Tested
A1.2 (cont.)	Do all entities' users not have write access to shared system binaries?	Examine system configurations and file permissions for shared system binaries.					
	Is viewing of log entries restricted to the owning entity?	Examine system configurations and file permissions for viewing log entries.				\boxtimes	
	(e) Are restrictions in place for the use of these system resources? Disk space, Bandwidth, Memory, CPU This ensures that each entity cannot monopolize server resources to exploit vulnerabilities (for example, error, race,	Examine system configurations and file permissions for use of: Disk space Bandwidth Memory CPU					
	and restart conditions, resulting in, for example, buffer overflows).						
A1.3	Are logging and audit trails enabled and unique to each entity's cardholder data environment and consistent with PCI DSS Requirement 10?	Examine log settings.					
	Is logging enabled as follows, for each merchant and service provider environment as follows:						
	Logs are enabled for common third-party applications?	Examine log settings.					
	Logs are active by default?	Examine log settings.					
	Logs are available for review by the owning entity?	Examine log settings.					
	Log locations are clearly communicated to the owning entity?	Examine log settings.					
A1.4	Are written policies and processes enabled to provide for timely forensic investigation in the event of a compromise to any hosted merchant or service provider?	Review written policies and procedures.					



Appendix A2: Additional PCI DSS Requirements for Entities using SSL/Early TLS for Card-Present POS POI Terminal Connections

			Response (Check one response for each questi			Not Tested I	
	PCI DSS Question	Expected Testing	Yes	Yes with CCW	No	N/A	
A2.1	For POS POI terminals (at the merchant or payment-acceptance location) using SSL and/or early TLS: Are the devices confirmed to not be susceptible to any known exploits for SSL/early TLS Note: This requirement is intended to apply to the entity with the POS POI terminal, such as a merchant. This requirement is not intended for service providers who serve as the termination or connection point to those POS POI terminals. Requirements A2.2 and A2.3 apply to POS POI service providers.	Review documentation (for example, vendor documentation, system/network configuration details, etc.) that verifies POS POI devices are not susceptible to any known exploits for SSL/early TLS.					
A2.2	For service providers only: Is there a formal Risk Mitigation and Migration Plan in place for all service provider connection points to POS POI terminals that use SSL and/or early TLS (as referred to in A2.1), that includes: Description of usage, including; what data is being transmitted, types and number of systems that use and/or support SSL/early TLS, type of environment; Risk assessment results and risk reduction controls in place; Description of processes to monitor for new vulnerabilities associated with SSL/early TLS; Description of change control processes that are implemented to ensure SSL/early TLS is not implemented into new environments; Overview of migration project plan to replace SSL/early TLS at a future date?	Review the documented Risk Mitigation and Migration Plan.					
A2.3	For service providers only: Is there a secure service offering in place?	Examine system configurations and supporting documentation.				\boxtimes	



Appendix A3: Designated Entities Supplemental Validation (DESV)

This Appendix applies only to entities designated by a payment brand(s) or acquirer as requiring additional validation of existing PCI DSS requirements. Entities required to validate to this Appendix should use the DESV Supplemental Reporting Template and Supplemental Attestation of Compliance for reporting, and consult with the applicable payment brand and/or acquirer for submission procedures.



Appendix B: Compensating Controls Worksheet

Use this worksheet to define compensating controls for any requirement where "YES with CCW" was checked.

Note: Only companies that have undertaken a risk analysis and have legitimate technological or documented business constraints can consider the use of compensating controls to achieve compliance.

Refer to Appendices B, C, and D of PCI DSS for information about compensating controls and guidance on how to complete this worksheet.

Requirement Number and Definition:

	Information Required	Explanation
Constraints	List constraints precluding compliance with the original requirement.	
Objective	Define the objective of the original control; identify the objective met by the compensating control.	
Identified Risk	Identify any additional risk posed by the lack of the original control.	
Definition of Compensating Controls	Define the compensating controls and explain how they address the objectives of the original control and the increased risk, if any.	
Validation of Compensating Controls	Define how the compensating controls were validated and tested.	
Maintenance	Define process and controls in place to maintain compensating controls.	



Appendix C: Explanation of Non-Applicability

If the "N/A" (Not Applicable) column was checked in the questionnaire, use this worksheet to explain why the related requirement is not applicable to your organization.

Requirement	Reason Requirement is Not Applicable			
Example:	Example:			
3.4 Cardholder data is never stored electronically				
9.5 - 9.8	The organization does not store CHD on hard copy or physical media.			
A1	The entity is not a shared hosting provider.			
A2	The organization does not utilize physical POS/POI devices.			



Appendix D: Explanation of Requirements Not Tested

If the "Not Tested" column was checked in the questionnaire, use this worksheet to explain why the related requirement was not reviewed as part of the assessment.

Requirement	Describe which part(s) of the requirement was not tested	Describe why requirements were not tested
Examples:		
Requirement 12	Requirement 12.2 was the only requirement tested. All other requirements from Requirement 12 were excluded.	This assessment only covers requirements in Milestone 1 of the Prioritized Approach.
Requirements 1-8, 10-12	Only Requirement 9 was reviewed for this assessment. All other requirements were excluded.	Company is a physical hosting provider (CO-LO), and only physical security controls were considered for this assessment.



Section 3: Validation and Attestation Details

Part 3. PCI DSS Validation

This AOC is based on results noted in SAQ D (Section 2), dated February 1, 2024.

Based on the results documented in the SAQ D noted above, the signatories identified in Parts 3b-3d, as applicable, assert(s) the following compliance status for the entity identified in Part 2 of this document: (check one):

Compliant: All sections of the PCI DSS SAQ are complete, all questions answered affirmatively, resulting in an overall COMPLIANT rating; thereby <i>Gravyty</i> has demonstrated full compliance with the PCI DSS.						
affirmatively, resulting in an ove	ns of the PCI DSS SAQ are complete, or not all questions are answered rall NON-COMPLIANT rating, thereby (Service Provider Company all compliance with the PCI DSS.					
Target Date for Compliance:						
An entity submitting this form with a status of Non-Compliant may be required to complete the Action Plan in Part 4 of this document. Check with the payment brand(s) before completing Part 4.						
_	eption: One or more requirements are marked "No" due to a legal uirement from being met. This option requires additional review from ing:					
Affected Requirement Details of how legal constraint prevents requirement being met						

Part 3a. Acknowledgement of Status Signatory(s) confirms: (Check all that apply) PCI DSS Self-Assessment Questionnaire D, Version 3.2.1, was completed according to the instructions therein. \boxtimes All information within the above-referenced SAQ and in this attestation fairly represents the results of my assessment in all material respects. I have confirmed with my payment application vendor that my payment system does not store sensitive authentication data after authorization. \boxtimes I have read the PCI DSS and I recognize that I must maintain PCI DSS compliance, as applicable to my environment, at all times. \boxtimes If my environment changes, I recognize I must reassess my environment and implement any additional PCI DSS requirements that apply.



Part 3. PCI DSS Validation (continued)

Part 3a. Acknowledgement of Status (continued)

No evidence of full track data¹, CAV2, CVC2, CVN2, CVV2, or CID data², or PIN data³ storage after transaction authorization was found on ANY system reviewed during this assessment.

П ASV scans are being completed by the PCI SSC Approved Scanning Vendor (Not Required).

Part 3b. Service Provider Attestation

David Whitefield

Date: 2/19/2024 Signature of Service Provider Executive Officer 1

Service Provider Executive Officer Name: David Whitefield Title: CFO

Part 3c. Qualified Security Assessor (QSA) Acknowledgement (if applicable)

If a QSA was involved or assisted with this assessment, describe the role performed:

The QSA reviewed the completed assessment for accuracy and conducted interviews, reviews of policies and procedures, and performed technical testing for a sample of applicable controls.

Christopher Shaffer

Date: 2/19/2024 Signature of Duly Authorized Officer of QSA Company 1

QSA Company: Marcum RAS, LLC Duly Authorized Officer Name: Chris Shaffer

Part 3d. Internal Security Assessor (ISA) Involvement (if applicable)

If an ISA(s) was involved or assisted with this assessment, identify the ISA personnel and describe the role performed:

¹ Data encoded in the magnetic stripe or equivalent data on a chip used for authorization during a card-present transaction. Entities may not retain full track data after transaction authorization. The only elements of track data that may be retained are primary account number (PAN), expiration date, and cardholder name.

² The three- or four-digit value printed by the signature panel or on the face of a payment card used to verify card-not-present

Personal identification number entered by cardholder during a card-present transaction, and/or encrypted PIN block present within the transaction message.



Part 4. Action Plan for Non-Compliant Requirements

Select the appropriate response for "Compliant to PCI DSS Requirements" for each requirement. If you answer "No" to any of the requirements, you may be required to provide the date your Company expects to be compliant with the requirement and a brief description of the actions being taken to meet the requirement.

Check with the applicable payment brand(s) before completing Part 4.

PCI DSS Requirement	Description of Requirement	Compliant to PCI DSS Requirements (Select One)		Remediation Date and Actions (If "NO" selected for any
		YES	NO	Requirement)
1	Install and maintain a firewall configuration to protect cardholder data.			
2	Do not use vendor-supplied defaults for system passwords and other security parameters.			
3	Protect stored cardholder data.			
4	Encrypt transmission of cardholder data across open, public networks.			
5	Protect all systems against malware and regularly update anti-virus software or programs.			
6	Develop and maintain secure systems and applications.			
7	Restrict access to cardholder data by business need to know.			
8	Identify and authenticate access to system components.			
9	Restrict physical access to cardholder data.			
10	Track and monitor all access to network resources and cardholder data.			
11	Regularly test security systems and processes.			
12	Maintain a policy that addresses information security for all personnel.			
Appendix A1	Additional PCI DSS Requirements for Shared Hosting Providers.			
Appendix A2	Additional PCI DSS Requirements for Entities using SSL/Early TLS for Card-Present POS POI Terminal Connections.			











