

First Data Merchant Services / SecurityMetrics

PCI Compliance

PCI Self-Assessment Questionnaire D 2.0

First Data Merchant Services has partnered with SecurityMetrics (SM) to evaluate the handling of your customer's credit card information within your business. SM is to assist you with any necessary remediation efforts and to certify your business as being PCI compliant.

You can reach SM by calling (800) 557-4684 or by going to their website (securitymetrics.com). Be sure to identify yourself as a merchant of First Data Merchant Services.

In order to help you address questions found in the "Self-Assessment Questionnaire D2.0" which may pertain to PaymentMate, Tempus has provided this document. Below is a copy of each of the questions with a PaymentMate response to those which may apply.

Please call the number found above regarding any questions you may have about the "Self-Assessment Questionnaire D2.0".

For those questions which do not apply to PaymentMate only, we suggest that you explore the questions with Security Metrics, your IT department or an IT consultant.

PCI Self-Assessment Questionnaire D 2.0

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

None of the questions in this section applies to PaymentMate

1.1 Are firewall and router configuration standards established to include the following:

1.1.1 Is there a formal process for approving and testing all external network connections and changes to the firewall and router configurations?

1.1.2.a Is there a current network diagram (for example, one that shows cardholder data flows over the network) that documents all connections to cardholder data, including any wireless networks?

1.1.2.b Is the diagram kept current?

1.1.3.a Do configuration standards include requirements for a firewall at each Internet connection and between any demilitarized zone (DMZ) and the internal network zone?

1.1.3.b Is the current network diagram consistent with the firewall configuration standards?

1.1.4 Do firewall and router configuration standards include a description of groups, roles, and responsibilities for logical management of network components?

1.1.5.a Do firewall and router configuration standards include a documented list of services, protocols and ports necessary for business (for example, hypertext transfer protocol (HTTP), Secure Sockets Layer (SSL), Secure Shell (SSH), and Virtual Private Network (VPN) protocols).

1.1.5.b Are all allowed insecure services, protocols, and ports necessary, and are security features documented and implemented for each?

Note: Examples of insecure services, protocols, or ports include but are not limited to FTP, Telnet, POP3, IMAP, and SNMP.

1.1.6.a Do firewall and router configuration standards require review of firewall and router rule sets at least every six months?

1.1.6.b Are firewall and router rule sets reviewed at least every six months?

1.2 Do firewall and router configurations restrict connections between untrusted networks and any system in the cardholder data environment as follows:

1.2.1.a Is inbound and outbound traffic restricted to that which is necessary for the cardholder data environment, and are the restrictions documented?

1.2.1.b Is all other inbound and outbound traffic specifically denied (for example by using an explicit "deny all" or an implicit deny after allow statement)?

1.2.2 Are router configuration files secure and synchronized?

1.2.3 Are perimeter firewalls installed between any wireless networks and the cardholder data environment, and are these firewalls configured to deny or control (if such traffic is necessary for business purposes) any traffic from the wireless environment into the cardholder data environment?

1.3 Does the firewall configuration prohibit direct public access 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?

1.3.2 Is inbound Internet traffic limited to IP addresses within the DMZ?

1.3.3 Are direct connections prohibited for inbound or outbound traffic between the Internet and the cardholder data environment?

1.3.4 Are internal addresses prohibited from passing from the Internet into the DMZ?

1.3.5 Is outbound traffic from the cardholder data environment to the Internet explicitly authorized?

1.3.6 Is stateful inspection, also known as dynamic packet filtering, implemented (that is, only established connections are allowed into the network)?

1.3.7 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?

1.3.8.a Are methods in place to prevent the disclosure of private IP addresses and routing information to the Internet?

1.3.8.b Is any disclosure of private IP addresses and routing information to external entities authorized?

1.4.a Is personal firewall software installed and active on any mobile and/or employee-owned computers with direct connectivity to the Internet (for example, laptops used by employees), which are used to access the organization's network?

1.4.b Is the personal firewall software configured to specific standards, and not alterable by mobile and/or employee owned computer users?

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

None of the questions in this section applies to PaymentMate, unless additional comments are added.

2.1 Are vendor-supplied defaults always changed before installing a system on the network?

PaymentMate offers User/Function level security. It is up to the customer to implement their own security policy, which would include changing default user names and passwords.

2.1.1 For wireless environments connected to the cardholder data environment or transmitting cardholder data, are defaults changed as follows:

2.1.1.a Are encryption keys changed from default at installation, and changed anytime anyone with knowledge of the keys leaves the company or changes positions?

2.1.1.b Are default SNMP community strings on wireless devices changed?

- 2.1.1.c Are default passwords/passphrases on access points changed?
- 2.1.1.d Is firmware on wireless devices updated to support strong encryption for authentication and transmission over wireless networks?
- 2.1.1.e Are other security-related wireless vendor defaults changed, if applicable?
- 2.2.a Are configuration standards developed for all system components and are they consistent with industry-accepted system hardening standards?
- 2.2.b Are system configuration standards updated as new vulnerability issues are identified, as defined in requirement 6.2?
- 2.2.c Are system configuration standards applied when new systems are configured?
- 2.2.d Do system configuration standards include the following:
 - 2.2.1.a only one primary function implemented per server, to prevent functions that require different security levels from coexisting on the same server?
 - 2.2.2.a 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)?
 - 2.2.2.b Are all enabled insecure services, daemons, or protocols justified, and are security features documented and implemented?
(For example, secured technologies such as SSH, S-FTP, SSL, or IPSec VPN are used to protect insecure services such as NetBIOS, file-sharing, Telnet, FTP, etc.)
 - 2.2.3.a Are system administrators and/or personnel that configure system components knowledgeable about common security parameter settings for those system components?
 - 2.2.3.b Are common system security parameters settings included in the system configuration standards?
 - 2.2.3.c Are security parameter settings set appropriately on system components?
 - 2.2.4.a Has all unnecessary functionality—such as scripts, drivers, features, subsystems, file systems, and unnecessary web servers—been removed?
 - 2.2.4.b Are enabled functions documented and do they support secure configuration?
 - 2.2.4.c Is only documented functionality present on system components?

2.3 Is non-console administrative access encrypted as follows: Use, technologies such as SSH, VPN, or SSL/TLS for webbased management and other non-console administrative access.

2.3.a Is all non-console administrative access encrypted with strong cryptography, and is a strong encryption method invoked before the administrator's password is requested?

2.3.b Are system services and parameter files configured to prevent the use of Telnet and other insecure remote login commands?

2.3.c Is administrator access to web-based management interfaces encrypted with strong cryptography?

2.4 If you are a shared hosting provider, are your systems configured to protect each entity's hosted environment and cardholder data?

Section 3: Protect stored cardholder data

None of the questions in this section applies to PaymentMate, unless additional comments are added.

3.1 Are data retention and disposal policies and procedures implemented as follows:

3.1.a Are data retention and disposal policies and procedures implemented and do they include specific requirements for retention of cardholder data as required for business, legal, and/or regulatory purposes?

Specifically for PaymentMate, the answer is “yes”. You will need to evaluate all other aspects of your business to decide if you meet this requirement.

3.1.b Do policies and procedures include provisions for the secure disposal of data when no longer needed for legal, regulatory, or business reasons, including disposal of cardholder data?

Specifically for PaymentMate, the answer is “yes”. You will need to evaluate all other aspects of your business to decide if you meet this requirement.

3.1.c Do policies and procedures include coverage for all storage of cardholder data?

3.1.d Do processes and procedures include at least one of the following?

* A programmatic process (automatic or manual) to remove, at least quarterly, stored cardholder data that exceeds requirements defined in the data retention policy

Specifically for PaymentMate, the answer is “yes”. You will need to evaluate all other aspects of your business to decide if you meet this requirement.

* Requirements for a review, conducted at least quarterly, to verify that stored cardholder data does not exceed requirements defined in the data retention policy.

3.1.e Does all stored cardholder data meet the requirements defined in the data retention policy?

Specifically for PaymentMate, the answer is “yes”. You will need to evaluate all other aspects of your business to decide if you meet this requirement.

3.2.a For issuers and/or companies that support issuing services and store sensitive authentication data, is there is a business justification for the storage of sensitive authentication data, and is that the data is secured?

3.2.b For all other entities, if sensitive authentication data is received and deleted, are processes in place to securely delete the data to verify that the data is unrecoverable?

3.2.c Do all systems adhere to the following requirements regarding non-storage of sensitive authentication data after authorization (even if encrypted):

Specifically for PaymentMate, the answer is “yes”. You will need to evaluate all other aspects of your business to decide if you meet this requirement.

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 under any circumstance?

Specifically for PaymentMate, the answer is “yes”. You will need to evaluate all other aspects of your business to decide if you meet this requirement.

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 under any circumstance?

Specifically for PaymentMate, the answer is “yes”. You will need to evaluate all other aspects of your business to decide if you meet this requirement.

3.2.3 The personal identification number (PIN) or the encrypted PIN block are not stored under any circumstance?

Specifically for PaymentMate, the answer is “yes”. You will need to evaluate all other aspects of your business to decide if you meet this requirement.

3.3 Is the PAN masked when displayed (the first six and last four digits are the maximum number of digits to be displayed)?

Specifically for PaymentMate, the answer is “yes”. You will need to evaluate all other aspects of your business to decide if you meet this requirement.

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?

Specifically for PaymentMate, the answer is “yes”. You will need to evaluate all other aspects of your business to decide if you meet this requirement.

3.4.1 If disk encryption (rather than file- or column-level database encryption) is used, is access managed as follows:

3.4.1.a Is logical access to encrypted file systems managed independently of native operating system access control mechanisms (for example, by not using local user account databases)?

Specifically for PaymentMate, the answer is “yes”. You will need to evaluate all other aspects of your business to decide if you meet this requirement.

3.4.1.b Are cryptographic keys stored securely (for example, stored on removable media that is adequately protected with strong access controls)?

Specifically for PaymentMate, the answer is “yes”. You will need to evaluate all other aspects of your business to decide if you meet this requirement.

3.4.1.c Is cardholder data on removable media encrypted wherever stored?

Note: If disk encryption is not used to encrypt removable media, the data stored on this media will need to be rendered unreadable through some other method.

Specifically for PaymentMate, the answer is “yes”. You will need to evaluate all other aspects of your business to decide if you meet this requirement.

3.5 Are any keys used to secure cardholder data protected against disclosure and misuse as follows:

3.5.1 Is access to cryptographic keys restricted to the fewest number of custodians necessary?

Specifically for PaymentMate, the answer is “yes”. End Users do not have access to cryptographic keys. You will need to evaluate all other aspects of your business to decide if you meet this requirement.

3.5.2.a Are keys stored in encrypted format and are key-encrypting keys stored separately from data-encrypting keys?

Specifically for PaymentMate, the answer is “yes”. You will need to evaluate all other aspects of your business to decide if you meet this requirement.

3.5.2.b Are cryptographic keys stored in the fewest possible locations and forms?

Specifically for PaymentMate, the answer is “yes”. You will need to evaluate all other aspects of your business to decide if you meet this requirement.

3.6.a Are all key-management processes and procedures fully documented and implemented for cryptographic keys used for encryption of cardholder data?

3.6.b 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?

PaymentMate never shares keys with customers. You will need to evaluate all other aspects of your business to decide if you meet this requirement.

3.6.c 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?

3.6.2 Do cryptographic key procedures include secure cryptographic key distribution?

3.6.3 Do cryptographic key procedures include secure cryptographic key storage?

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 cipher-text 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)?

3.6.5.a 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)?

3.6.5.b Do cryptographic key procedures include replacement of known or suspected compromised keys?

3.6.5.c If retired or replaced cryptographic keys are retained, are these keys only used for decryption/verification purposes (not used for encryption operations)?

3.6.6 Do cryptographic key procedures include split knowledge and dual control of cryptographic keys (for example, requiring two or three people, each knowing only their own key component, to reconstruct the whole key), for manual cleartext key-management operations?

3.6.7 Do cryptographic key procedures include the prevention of unauthorized substitution of cryptographic keys?

3.6.8 Are cryptographic key custodians required to formally acknowledge (in writing or electronically) that they understand and accept their key-custodian responsibilities?

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

Specifically for PaymentMate, the answer is “yes” to all the questions in this section.

You will need to evaluate all other aspects of your business to decide if you meet the below requirements.

4.1.a Are strong cryptography and security protocols, such as SSL/TLS, SSH or IPSEC, used to safeguard sensitive cardholder data during transmission over open, public networks?

4.1.b Are only trusted keys and/or certificates accepted?

4.1.c Are security protocols implemented to use only secure configurations, and not support insecure versions or configurations?

4.1.d Is the proper encryption strength implemented for the encryption methodology in use (check vendor recommendations/best practices)?

4.1.e For SSL/TLS implementations:

* Does HTTPS appear as part of the browser Universal Record Locator (URL)?

* Is cardholder data required only when HTTPS appears in the URL?

4.1.1 Are industry best practices (for example, IEEE 802.11i) used to implement strong encryption for authentication and transmission for wireless networks transmitting cardholder data or connected to the cardholder data environment?

4.2.a Are PANs rendered unreadable or secured with strong cryptography whenever they are sent via end-user messaging technologies (for example, e-mail, instant messaging, or chat)?

4.2.b Are policies in place that state that unprotected PANs are not to be sent via end-user messaging technologies?

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

None of the questions in this section applies to PaymentMate.

5.1 Is anti-virus software deployed on all systems commonly affected by malicious software?

5.1.1 Are all 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)?

5.2 Is all anti-virus software current, actively running, and generating audit logs as follows:

5.2.a Does the anti-virus policy require updating of anti-virus software and definitions?

5.2.b Is the master installation of the software enabled for automatic updates and scans?

5.2.c Are automatic updates and periodic scans enabled?

5.2.d Are all anti-virus mechanisms generating audit logs, and are logs retained in accordance with PCI DSS Requirement 10.7?

Section 6: Develop and maintain secure systems and applications

None of the questions in this section applies to the end user PaymentMate application.

6.1.a Are all system components and software protected from known vulnerabilities by having the latest vendor-supplied security patches installed?

6.1.b Are critical security patches installed within one month of release?

Note: An organization may consider applying a risk-based approach to prioritize their patch installations. For example, by prioritizing critical infrastructure (for example, public facing devices and systems, databases) higher than less critical internal devices, to ensure high-priority systems and devices are addressed within one month, and addressing less critical devices and systems within three months.

6.2.a Is there a process to identify newly discovered security vulnerabilities, including a risk ranking that is assigned to such vulnerabilities? (At minimum, the most critical, highest risk vulnerabilities should be ranked as "High".)

6.2.b Do processes to identify new security vulnerabilities include using outside sources for security vulnerability information?

6.3.a Are software development processes based on industry standards and/or best practices?

6.3.b Is information security included throughout the software development life cycle?

6.3.c Are software applications developed in accordance with PCI DSS (for example, secure authentication and logging)?

6.3.d Do software development processes ensure the following?

6.3.1 Are custom application accounts, user IDs, and/or passwords removed before applications become active or are released to customers?

6.3.2 Are all custom application code changes reviewed (either using manual or automated processes) prior to release to production or customers in order to identify any potential coding vulnerability as follows:

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, and is access control in place to enforce the separation?

6.4.2 Is there separation of duties between personnel assigned to the development/test environments and those assigned to the production environment?

6.4.3 Are production data (live PANs) not used for testing or development?

6.4.4 Are test data and accounts removed before production systems become active?

6.4.5.a Are change control procedures for implementing security patches and software modifications documented and require items 6.4.5.1 - 6.4.5.4 below?

6.4.5.b Is the following performed for all changes:

6.4.5.1 Documentation of impact?

6.4.5.2 Documented approval by authorized parties?

6.4.5.3.a Functionality testing to verify that the change does not adversely impact the security of the system?

6.4.5.3.b For custom code changes, are updates tested for compliance with PCI DSS Requirement 6.5 before being deployed into production?

6.4.5.4 Are back-out procedures prepared for each change?

6.5.a Are applications developed based on secure coding guidelines?

6.5.b Are developers knowledgeable in secure coding techniques?

6.5.c Is prevention of common coding vulnerabilities covered in software development processes to ensure that applications are not vulnerable to, at a minimum the following:

Note: The vulnerabilities listed at 6.5.1 through 6.5.9 were current with industry best practices when this version of PCI DSS was published. However, as industry best practices for vulnerability management are updated, the current best practices must be used for these requirements.

6.5.1 Injection flaws, particularly SQL injection? (Validate input to verify user data cannot modify meaning of commands and queries, utilize parameterized queries, etc.)

6.5.2 Buffer overflow? (Validate buffer boundaries and truncate input strings.)

6.5.3 Insecure cryptographic storage? (Prevent cryptographic flaws.)

6.5.4 Insecure communications? (Properly encrypt all authenticated and sensitive communications.)

6.5.5 Improper error handling? .do not leak information via error messages.)

6.5.6 All "High" vulnerabilities identified in the vulnerability identification process (as defined in PCI DSS Requirement 6.2)?

For web applications and application interfaces (internal or external), are the following additional vulnerabilities also addressed:

6.5.7 Cross-site scripting (XSS)? (Validate all parameters before inclusion, utilize context-sensitive escaping, etc.)

6.5.8 Improper Access Control such as insecure direct object references, failure to restrict URL access, and directory traversal? (Properly authenticate users and sanitize input. Do not expose internal object references to users.)

6.5.9 Cross-site request forgery (.cSRF)? .do not reply on authorization credentials and tokens automatically submitted by browsers.)

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?

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

For all the questions below, PaymentMate offers User/Function level security. It is up to the customer to implement their own security policy.

7.1 Is access to system components and cardholder data limited to only those individuals whose jobs require such access, as follows:

7.1.1 Are access rights for privileged user IDs restricted to least privileges necessary to perform job responsibilities?

7.1.2 Are privileges assigned to individuals based on job classification and function (also called "role-based access control" or RBAC)?

7.1.3 Is documented approval by authorized parties required (in writing or electronically) that specifies required privileges?

7.1.4 Are access controls implemented via an automated access control system?

7.2 Is an access control system in place for systems with multiple users 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 Are access control systems in place on all system components?

7.2.2 Are access control systems configured to enforce privileges assigned to individuals based on job classification and function?

7.2.3 Do access control systems have a default "deny-all" setting?

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

For all the questions below, PaymentMate offers User/Function level security. This is at the application level. It is up to the customer to implement their own security policy regarding computer access.

8.1 Are all users assigned a unique ID before allowing them to access system components or cardholder data?

8.2 In addition to assigning a unique ID, is one or more of the following methods employed to authenticate all users?

8.3 Is two-factor authentication incorporated for remote access (network-level access originating from outside the network) to the network by employees, administrators, and third parties?

8.4.a Are all passwords rendered unreadable during transmission and storage on all system components using strong cryptography?

8.4.b For Service Providers only: Are customer passwords encrypted?

8.5 Are proper user identification and authentication management controls in place for non-consumer users and administrators on all system components, as follows:

8.5.1 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)?

8.5.2 Is user identity verified before performing password resets for user requests made via a non-face-to-face method (for example, phone, e-mail, or web)?

8.5.3 Are first-time and reset passwords set to a unique value for each user, and must each user change their password Immediately after the first use?

8.5.4 Is access for any terminated users immediately deactivated or removed?

8.5.5 Are inactive user accounts over 90 days old either removed or disabled?

8.5.6.a Are accounts used by vendors for remote access, maintenance or support enabled only during the time period needed?

8.5.6.b Are vendor remote access accounts monitored when in use?

8.5.7 Are authentication procedures and policies communicated to all users who have access to cardholder data?

8.5.8 Are group, shared, or generic accounts and passwords, or other authentication methods, prohibited as follows:

8.5.9.a Are user passwords changed at least every 90 days?

8.5.9.b For service providers only: Are non-consumer user passwords required to be changed periodically and are non-consumer users given guidance as to when, and under what circumstances, passwords must change?

8.5.10.a Is a minimum password length of at least seven characters required?

8.5.10.b For service providers only: Are non-consumer user passwords required to meet minimum length requirements?

8.5.11.a Must passwords contain both numeric and alphabetic characters?

8.5.11.b For service providers only: Are non-consumer user passwords required to contain both numeric and alphabetic characters?

8.5.12.a Must an individual submit a new password that is different from any of the last four passwords he or she has used?

8.5.12.b For service providers only: Are new, non-consumer user passwords required to be different from any of the last four passwords used?

8.5.13.a Are repeated access attempts limited by locking out the user ID after no more than six attempts?

8.5.13.b For service providers only: Are non-consumer user passwords temporarily locked-out after not more than six invalid access attempts?

8.5.14 Once a user account is locked out, is the lockout duration set to a minimum of 30 minutes or until administrator enables the user ID?

8.5.15 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?

8.5.16.a Is all access to any database containing cardholder data authenticated? (This includes access by applications, administrators, and all other users.)

8.5.16.b 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)?

8.5.16.c Is user direct access or queries to databases restricted to database administrators?

8.5.16.d Are application IDs with database access only able to be used by the applications (and not by individual users or other processes)?

Section 9: Restrict physical access to cardholder data

For all the questions below, PaymentMate offers User/Function level security. This is at the application level. It is up to the customer to implement their own security policy regarding restriction of physical access.

9.1 Are appropriate facility entry controls in place to limit and monitor physical access to systems in the cardholder data environment?

9.1.1.a Are video cameras and/or access-control mechanisms in place to monitor individual physical access to sensitive areas?

9.1.1.b Are video cameras and/or access-control mechanisms protected from tampering or disabling?

9.1.1.c Is data collected from video cameras and/or access control mechanisms reviewed and correlated with other entries, and is data stored for at least three months, unless otherwise restricted by law?

9.1.2 Is physical access to publicly accessible network jacks restricted (For example, areas accessible to visitors do not have network ports enabled unless network access is explicitly authorized)?

9.1.3 Is physical access to wireless access points, gateways, handheld devices, networking/communications hardware, and telecommunication lines restricted?

9.2 Are procedures developed to easily distinguish between onsite personnel and visitors, as follows: 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.

9.2.a Do processes and procedures for assigning badges to onsite personnel and visitors include the following:

9.2.b Is access to the badge system limited to authorized personnel?

9.2.c Do badges clearly identify visitors and easily distinguish between onsite personnel and visitors?

9.3 Are all visitors handled as follows:

9.3.1 Are visitors authorized before entering areas where cardholder data is processed or maintained?

9.3.2.a Are visitors given a physical token (for example, a badge or access device) that identifies the visitors as not onsite personnel?

9.3.2.b Do visitor badges expire?

9.3.3 Are visitors asked to surrender the physical token before leaving the facility or upon expiration.

9.4.a 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?

9.4.b Does the visitor log contain the visitor's name, the firm represented, and the onsite personnel authorizing physical access, and is the visitor log retained for at least three months?

9.5.a Are media back-ups stored in a secure location, preferably in an off-site facility, such as an alternate or backup site, or a commercial storage facility?

9.5.b Is this location's security reviewed at least annually?

9.6 Are all media physically secured (including but not limited to computers, removable electronic media, paper receipts, paper reports, and faxes)?

9.7.a Is strict control maintained over the internal or external distribution of any kind of media?

9.7.b Do controls include the following:

9.7.1 Is media classified so the sensitivity of the data can be determined?

9.7.2 Is media sent by secured courier or other delivery method that can be accurately tracked?

9.8 Are logs maintained to track all media that is moved from a secured area, and is management approval obtained prior to moving the media .especially when media is distributed to individuals)?

9.9 Is strict control maintained over the storage and accessibility of media?

9.9.1 Are inventory logs of all media properly maintained and are periodic media inventories conducted at least annually?

9.10 Is all media destroyed when it is no longer needed for business or legal reasons?

9.10.1.a Are hardcopy materials cross-cut shredded, incinerated, or pulped so that cardholder data cannot be reconstructed?

9.10.1.b Are containers that store information to be destroyed secured to prevent access to the contents? (For example, a "to-beshredded" container has a lock preventing access to its contents.)

9.10.2 Is cardholder data on electronic media rendered unrecoverable via a secure wipe program in accordance with industry-accepted standards for secure deletion, or otherwise by physically destroying the media (for example, degaussing), so that cardholder data cannot be reconstructed?

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

For all the questions below, PaymentMate offers User/Function level security. This is at the application level. This includes a security audit log. It is up to the customer to implement their own security policy regarding tracking and monitoring all access.

10.1 Is a process in place to link all access to system components (especially access done with administrative privileges such as root) to each individual user?

10.2 Are automated audit trails implemented for all system components to reconstruct the following events:

10.2 Are automated audit trails implemented for all system components to reconstruct the following events:

10.2.2 All actions taken by any individual with root or administrative privileges?

10.2.3 Access to all audit trails?

10.2.4 Invalid logical access attempts?

10.2.5 Use of identification and authentication mechanisms?

10.2.6 Initialization of the audit logs?

10.2.7 Creation and deletion of system-level object?

10.3 Are the following audit trail entries recorded for all system components for each event:

10.3.1 User identification?

10.3.2 Type of event?

10.3.3 Date and time?

10.3.4 Success or failure indication?

10.3.5 Origination of event?

10.3.6 Identity or name of affected data, system component, or resource?

10.4.a Are all critical system clocks and times synchronized through use of time synchronization technology, and is the technology kept current?

10.4.b Are the following controls implemented for acquiring, distributing, and storing time:

10.4.1.a Do only designated central time servers receive time signals from external sources, and do all critical systems have the correct and consistent time, based on International Atomic Time or UTC?

10.4.1.b Do designated central time servers peer with each other to keep accurate time, and do other internal servers only receive time from the central time servers?

10.4.2 Is time data is protected as follows:

10.4.2.a Access to time data is restricted to only personnel with a business need to access time data?

10.4.2.b Changes to time settings on critical systems are logged, monitored, and reviewed?

10.4.3 Are time settings received from specific, industry-accepted time sources?

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?

10.5.2 Are audit trail files protected from unauthorized modifications via access control mechanisms, physical segregation, and/or network segregation?

10.5.3 Are audit trail files promptly backed up to a centralized log server or media that is difficult to alter?

10.5.4 Are logs for external-facing technologies (for example, wireless, firewalls, DNS, mail) offloaded or copied onto a secure, centralized log server or media on the internal LAN?

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)?

10.6 Are logs for all system components reviewed at least daily, and are follow-ups to exceptions required?

10.7.a Are audit log retention policies and procedures in place and do they require that audit trail history is retained for at least one year?

10.7.b Are audit logs available for at least one year and are processes in place to immediately restore at least the last three months' logs for analysis?

Section 11: Regularly test security systems and processes

None of the questions in this section applies to PaymentMate.

11.1.a Is a documented process implemented to detect and identify wireless access points on a quarterly basis?

11.1.b Does the methodology detect and identify any unauthorized wireless access points, including at least the following: * WLAN cards inserted into system components; * Portable wireless devices connected to system components (for example, by USB, etc.); * Wireless devices attached to a network port or network device?

11.1.c Is the process to identify unauthorized wireless access points performed at least quarterly for all system components and facilities?

11.1.d If automated monitoring is utilized (for example, wireless IDS/IPS, NAC, etc.), is monitoring configured to generate alerts to personnel?

11.1.e Does the Incident Response Plan (Requirement 12.9) include a response in the event unauthorized wireless devices are detected?

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?

11.2.1.a Are quarterly internal vulnerability scans performed?

11.2.1.b Does the quarterly internal scan process include rescans until passing results are obtained, or until all "High" vulnerabilities as defined in PCI DSS Requirement 6.2 are resolved?

11.2.1.c Are internal quarterly 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)?

11.2.2.a Are quarterly external vulnerability scans performed?

11.2.2.b Do external quarterly scan results satisfy the ASV Program Guide requirements (for example, no vulnerabilities rated higher than a 4.0 by the CVSS and no automatic failures)?

11.2.2.c Are quarterly external vulnerability scans performed by an Approved Scanning Vendor (ASV), approved by the Payment Card Industry Security Standards Council (PCI SSC)?

11.2.3.a Are internal and external scans performed after any significant change (such as new system component installations, changes in network topology, firewall rule modifications, product upgrades)?

11.2.3.b Does the scan process include rescans until: * For external scans, no vulnerabilities exist that are scored greater than a 4.0 by the CVSS, * For internal scans, a passing result is obtained or all "High" vulnerabilities as defined in PCI DSS Requirement 6.2 are resolved?

11.2.3.c 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)?

11.3.a Is external and internal penetration testing performed at least once a year and after any significant infrastructure or application changes (such as an operating system upgrade, a sub-network added to the environment, or a web server added to the environment)?

11.3.b Are noted exploitable vulnerabilities corrected and testing repeated?

11.3.c 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).

Do these penetration tests include the following?

11.3.1 Network-layer penetration tests?

11.3.2 Application-layer penetration tests?

11.4.a Are intrusion-detection systems and/or intrusion-prevention systems used to monitor all traffic at the perimeter of the cardholder data environment as well as at critical points inside of the cardholder data environment?

11.4.b Are IDS and/or IPS configured to alert personnel of suspected compromises?

11.4.c Are all intrusion-detection and prevention engines, baselines, and signatures kept up-to-date?

11.5.a Are file-integrity monitoring tools deployed within the cardholder data environment?

11.5.b Are the tools configured to alert personnel to unauthorized modification of critical system files, configuration files or content files, and do the tools perform critical file comparisons at least weekly?

Note: For file-integrity monitoring 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. 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).

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

None of the questions in this section applies to PaymentMate.

12.1 Is a security policy established, published, maintained, and disseminated to all relevant personnel?

12.1.1 Does the policy address all PCI DSS requirements?

12.1.2.a Is an annual risk assessment process documented that identifies threats and vulnerabilities, and results in a formal risk assessment?

12.1.2.b Is the risk assessment process performed at least annually?

12.1.3 Is the information security policy reviewed at least once a year and updated as needed to reflect changes to business objectives or the risk environment?

12.2 Are daily operational security procedures developed that are consistent with requirements in this specification (for example, user account maintenance procedures, and log review procedures), and do they include administrative and technical procedures for each of the requirements?

12.3 Are usage policies for critical technologies (for example, remote-access technologies, wireless technologies, removable electronic media, laptops, tablets personal data/digital assistants [PDAs], e-mail, and Internet usage) developed to define proper use of these technologies for all personnel, and require the following:

12.3.1 Explicit approval by authorized parties to use the technologies?

12.3.2 Authentication for use of the technology?

- 12.3.3 A list of all such devices and personnel with access?
- 12.3.4 Labeling of devices to determine owner, contact information, and purpose?
- 12.3.5 Acceptable uses of the technologies?
- 12.3.6 Acceptable network locations for the technologies?
- 12.3.7 List of company-approved products?
- 12.3.8 Automatic disconnect of sessions for remote-access technologies after a specific period of inactivity?
- 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?
- 12.3.10.a For personnel accessing cardholder data via remote-access technologies, does the policy specify the prohibition of copy, move, and storage of cardholder data onto local hard drives and removable electronic media, unless explicitly authorized for a defined business need?
- 12.3.10.b For personnel with proper authorization, does the policy require the protection of cardholder data in accordance with PCI DSS Requirements?
- 12.4 Do the security policy and procedures clearly define information security responsibilities for all personnel?
- 12.5 Is responsibility for information security formally assigned to a Chief Security Officer or other security-knowledgeable member of management?
 - 12.5.1 Establishing, documenting, and distributing security policies and procedures?
 - 12.5.2 Monitoring and analyzing security alerts and information, and distributing to appropriate personnel?
 - 12.5.3 Establishing, documenting, and distributing security incident response and escalation procedures to ensure timely and effective handling of all situations?
 - 12.5.4 Administering user accounts, including additions, deletions, and modifications?
 - 12.5.5 Monitoring and controlling all access to data?
- 12.6.a Is a formal security awareness program in place to make all personnel aware of the importance of cardholder data security?

12.6.b Do security awareness program procedures include the following:

12.6.1.a 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)?

12.6.1.b Are personnel educated upon hire and at least annually?

12.6.2 Are personnel required to acknowledge at least annually that they have read and understood the security policy and procedures?

12.7 Are potential personnel (see definition of "personnel" at Requirement 12.1, above) screened prior to hire to minimize the risk of attacks from internal sources? .examples of background checks include previous employment history, criminal record, credit history and reference checks.)

12.8 If cardholder data is shared with service providers, are policies and procedures maintained and implemented to manage service providers, as follows:

12.8.1 Is a list of service providers maintained?

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?

12.8.3 Is there an established process for engaging service providers, including proper due diligence prior to engagement?

12.8.4 Is a program maintained to monitor service providers' PCI DSS compliance status at least annually?

12.9 Has an incident response plan been implemented in preparation to respond immediately to a system breach, as follows:

12.9.1.a Has an incident response plan been created to be implemented in the event of system breach?

12.9.1.b Does the plan address, 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?

Specific incident response procedures?

Business recovery and continuity procedures?

Data back-up processes?

Analysis of legal requirements for reporting compromises?

Coverage and responses of all critical system components?

Reference or inclusion of incident response procedures from the payment brands?

12.9.2 Is the plan tested at least annually?

12.9.3 Are specific personnel designated to be available on a 24/7 basis to respond to alerts?

12.9.4 Is appropriate training provided to staff with security breach response responsibilities?

12.9.5 Are alerts from intrusion-detection, intrusion-prevention, and file-integrity monitoring systems included in the incident response plan?

12.9.6 Is a process developed and in place to modify and evolve the incident response plan according to lessons learned and to incorporate industry developments?