



# **Payment Card Industry (PCI) Card Production and Provisioning Security Requirements**

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## **Technical FAQs for use with Version 3**

December 2024

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# Applicable to Both Logical and Physical Security Requirements

These technical FAQs provide answers to questions regarding both the *Payment Card Industry (PCI) Card Production and Provisioning Logical Security Requirements* and the *PCI Card Production and Provisioning Physical Security Requirements*. These FAQs provide additional and timely clarifications to the application of the Security Requirements. The FAQs are an integral part of those requirements and shall be fully considered during the evaluation process.

Updates: New questions or those modified for clarity are in **red**.

## General Questions

**Q 1** October (update) 2024 – How do I contact the Payment Brands with questions regarding the Card Production and Provisioning Security Requirements?

- A** *For information regarding the Security Requirements and any related payment brand program compliance information, contact the payment brand(s) of interest at:*
- *American Express:*  
[PaymentProductsCertification@aexp.com](mailto:PaymentProductsCertification@aexp.com)
  - *Discover:*  
[DN\\_CARD\\_REQUEST@discover.com](mailto:DN_CARD_REQUEST@discover.com)
  - *JCB:*  
[riskmanagement@info.jcb.co.jp](mailto:riskmanagement@info.jcb.co.jp)
  - *Mastercard:*  
[GVCP-Helpdesk@mastercard.com](mailto:GVCP-Helpdesk@mastercard.com)
  - *Visa:*  
Canada/LAC/US: [AVPAmericas@visa.com](mailto:AVPAmericas@visa.com)  
AP: [vendorcompliance@visa.com](mailto:vendorcompliance@visa.com)  
CEMEA: [pcicemea@visa.com](mailto:pcicemea@visa.com)  
VE: [VisaEuropeCardVendor@visa.com](mailto:VisaEuropeCardVendor@visa.com)

**Q 2** November 2021 – Individual payment brands may choose to issue waivers in regard to specific requirements. Should those waivers be taken into consideration for purposes of AOC and ROC reporting?

- A** *No. All non-compliance found during an assessment must be reflected in connection with AOC and ROC report findings on a card vendor. Waivers are part of individual payment brands compliance management programs and do not impact non-compliance reporting.*

**Q 3 November 2021 – Are remote assessments permitted for Card Production and Provisioning assessments?**

**A** While onsite assessments continue to be the preferred method for PCI SSC assessments, the use of remote assessment methods may provide a suitable alternative in legitimate scenarios where an onsite assessment is not feasible. Prior to the engagement of the CPSA, entities must consult with the applicable payment brands' VPA to confirm whether remote assessments are allowed and any requirements they may have around the submission of remote assessment reports.

PCI SSC has developed a set of guidelines and procedures outlining the appropriate use of remote assessment methods when an onsite assessment is not feasible and where remote assessments are permitted by the compliance-accepting entity. The PCI SSC Remote Assessment Guidelines and Procedures can be found in the PCI SSC Document Library [Remote Assessment \(pcisecuritystandards.org\)](#).

If remote assessment methods are used in place of an onsite assessment, the Assessor may be required to complete the Addendum for ROC/ROV: Remote Assessments, provided in Appendix A of the PCI SSC Remote Assessment Guidelines and Procedures document, if requested by the compliance-accepting entity.

**Q 4 April 2024 - Assessors may find requirements that cannot be met due to the requirement conflicting with country, state, or local laws or regulations. In that situation, the country, state, or local law or regulation will supersede any conflicting requirement. Is anything else required in the ROCs?**

**A** Yes. Where the assessor finds a requirement that cannot be met due to a legal exception, the assessor must cite in the ROC the relevant conflicting law or regulation, including stating why it is applicable to the specific situation. The requirement must be marked as non-compliant, either as new or open.

# Logical Security Requirements

These technical FAQs provide answers to questions regarding the application of the *Payment Card Industry (PCI) Logical Security Requirements*. These FAQs provide additional and timely clarifications to the application of the Security Requirements. The FAQs are an integral part of those requirements and shall be fully considered during the evaluation process.

Updates: New questions or those modified for clarity are shown in **red**.

## General Questions

**Q 5   October 2014 – If a Chip Card manufacturer sets up a remote personalization service within an Issuer, is the Issuer facility required to be PCI Card Production compliant?**

**A** *If a third party (vendor) sets up and operates a personalization service inside an issuer's premises, then the issuer facility is required to be approved. If the service is operated by the issuer so that only the issuer has access to card stocks, cardholder data, and keys then it is not required to be approved. For further information regarding details of who is responsible for ensuring the compliance of the facility, contact the payment brand(s) of interest.*

**Q 6   October 2018 – Can a logbook be either manual or electronic?**

**A** *When the required details are met, including capture of signatures, the logs may be either electronic or manual. Electronic logbooks require additional integrity controls such as digital signatures using hashes of the data that are signed.*

**Q 7   June 2022 – Can HSMs that have migrated to the NIST CMVP Historical Validation List continue to be used?**

**A** *Yes. FIPS 140-2 or FIPS 140-3 HSMs that have migrated to the CMVP Historical Validation List can continue to be used if approved at the time of deployment. However, effective January 2023, new deployments—i.e., additional HSMs and not replacements of existing HSMs with like for like—of HSMs on the Historical Validation List are not allowed.*

**Q 8   June 2022 – For PCI approved HSMs that have had their approvals expire, can they continue to be used?**

**A** *For clarification on the usage of PCI approved HSMs for which the approval has expired, contact the payment brand(s) of interest at:  
[https://pcissc.secure.force.com/faq/articles/Frequently\\_Asked\\_Question/How-do-I-contact-the-payment-card-brands](https://pcissc.secure.force.com/faq/articles/Frequently_Asked_Question/How-do-I-contact-the-payment-card-brands).*

## Section 1 – Roles and Responsibilities

No FAQ in this section - Reserved for future use.

## Section 2 – Security Policy and Responsibilities

No FAQ in this section – Reserved for future use.

## Section 3 – Data Security

### 3.1 Classifications

#### **Confidential Data**

*Confidential data is considered any information that might provide the vendor with a competitive advantage or could cause business harm or legal exposure if the information is used or disclosed without restriction. Confidential data is data restricted to authorized individuals. This includes cardholder data and the keys used to encrypt cardholder data.*

*Examples:*

- *PAN, expiry, service code, cardholder name, Track 2, or Track 2 equivalent*
- *TLS keys*
- *Vendor evidence preserving data*
- *Authentication credentials for requesting tokens*
- *Mobile Station International Subscriber Directory Number (number used to identify a mobile phone number)*

**Q 9 December 2013 – Confidential data is defined to include PAN, expiry date, service code, and cardholder name. Does this apply to all these data elements individually or in any combination?**

**A** *The PAN must always be considered confidential, and the other three data elements are considered confidential if stored or otherwise available in conjunction with the PAN.*

### 3.2 Encryption

*All secret and confidential data must be:*

- a) *Encrypted using algorithms and key sizes as stated in Normative Annex A.*
- b) *Encrypted at all times during transmission and storage.*
- c) *Decrypted for the minimum time required for data preparation and personalization.*

*The vendor must only decrypt or translate cardholder data on the data-preparation or personalization or cloud-based provisioning network and not while it is on an Internet or public facing network.*

**Q 10 October 2014 – Does transmission include the file movement between the systems on the data-preparation or personalization or does it apply only to data that is transmitted between organizational entities over a public network?**

**A** *If the data is going from one system or server to another, it is being transmitted and must be encrypted. It does not matter whether the networks are not Internet- or public-facing. The intention is that data is in the clear only in memory for the minimum time required for processing.*

### 3.6 Media Handling

- a) *The vendor must have a documented removable-media policy that includes laptops, mobile devices, and removable storage devices—e.g., USB devices, tapes, and disks.*
- b) *All removable media—e.g., USB devices, tapes, disks—within the HSA must be clearly labeled with a unique identifier and the data classification.*
- c) *All removable media must be securely stored, controlled, and tracked.*
- d) *All removable media within the HSA or the cloud-based provisioning environment must be in the custody of an authorized individual, and that individual must not have the ability to decrypt any sensitive or confidential data contained on that media.*
- e) *A log must be maintained when media is removed from or returned to its storage location or transferred to the custody of another individual. The log must contain:*
  - i. *Unique identifier*
  - ii. *Date and time*
  - iii. *Name and signature of current custodian*
  - iv. *Name and signature of recipient custodian*
  - v. *Reason for transfer*
- f) *Transfers of custody between two individuals must be authorized and logged.*
- g) *Transfer of removable media to and from the HSA must be authorized and logged.*
- h) *Physically destroy any media holding secret or confidential data when it is not possible to delete the data so that it is no longer recoverable.*

**Q 11 November 2015 – Removable media is subject to a number of restrictions as defined in Requirement 3.6. Are hard drives in desktops, servers, and storage area networks (SANs) considered removable media?**

**A** No. Internal hard drives are not considered removable media. Removable electronic media is media that stores digitized data, and which can be easily removed and/or transported from one computer system to another. Examples of removable electronic media include CD-ROM, DVD-ROM, USB flash drives, and external/portable hard drives.

## Section 4 – Network Security

### 4.1.1 Card Production and Provisioning DMZ

- a) *The DMZ must be dedicated to card production/provisioning activities.*
- b) *The card production and provisioning network must be segregated from other parts of an organization's network.*
- c) *All connections to and from the personalization network must be through a system in the DMZ.*
- d) *The DMZ must be located in the server room of the HSA.*
- e) *DMZ infrastructure equipment located within the HSA server room must be in a dedicated rack with access restricted to the minimum number of authorized individuals.*
- f) *All switches and cabling associated with the DMZ equipment must be stored within the same rack with only the minimum required number of cable connections entering/exiting the rack in order to provide connectivity to firewalls.*

**Q 1 December 2024 - The card production and provisioning networks must be segregated from other parts of an organization's network using a DMZ. The DMZ's infrastructure equipment must be located in a dedicated rack in the server room of the HSA. The HSA's DMZ must be protected by an external firewall that is located outside of the HSA. Is the external firewall required to be physically located in the HSA server room as part of the DMZ's infrastructure equipment?**

**A No. The external firewall that protects the card production and provisioning DMZ is not required to be dedicated to card production and provisioning but may be used for other purposes such as the office network. Therefore, the external firewall is not considered part of the card production and provisioning DMZ and must be physically located outside of the HSA.**

## 4.2 General Requirements

The vendor must:

- a) *Maintain a current network topology diagram that includes all system components on the network. The diagram must clearly define the boundaries of all networks.*
- b) *Ensure the network topology diagram is reviewed, updated as appropriate, and verified at least once each year and whenever the network configuration is changed.*
- c) *Ensure that the CISO accepts, by formal signature, the security implications of the current network topology.*
- d) *Document the flow of cardholder and cloud-based provisioning data within the environment from the receipt/generation to end of its lifecycle. The diagram(s) are kept current and updated as needed upon changes to the environment and must undergo an overall review for accuracy at least every 12 months.*
- e) *Ensure that the personalization and data-preparation systems are on dedicated network(s) independent of the back office—e.g., accounting, human resources, etc.—and Internet-connected networks. A virtual LAN (VLAN) is not considered a separate network.*
- f) *Physically and logically segment systems and applications that make up the cloud-based provisioning network from other vendor networks and Internet-connected networks. For example, in a traditional card vendor environment this could be a separate rack in a server room, or in a provisioning-only entity, housed in a separate room or cage in a data center. It cannot be in the same rack as other servers used for different purposes.*
- g) *Put controls in place to restrict, prevent, and detect unauthorized access to the cloud-based and personalization networks. Access from within the high security area to anything other than the personalization or cloud-based networks must be “read-only”.*
- h) *Be able to immediately assess the impact if any of their critical nodes are compromised.*
- i) *Have controls in place to restrict “write” permission to any system external to the personalization network to only pre-approved functions that have been authorized by the VPA, except for systems in the dedicated DMZ. These write functions must not transmit cardholder data if this involves direct write from the system containing the information.*
- j) *Control at all times the physical connection points leading into the personalization network and cloud-based provisioning network.*
- k) *Prevent data from being tampered with or monitored by protecting the network cabling associated with personalization-data movement.*
- l) *Transfer required issuer data and keys into the personalization network or the cloud-based provisioning network via a defined and documented process.*
- m) *Ensure a process is in place for updates and patches and identification of their criticality, as detailed in Section 5.3, “Configuration and Patch Management.”*
- n) *Have the capability to detect, isolate, and correct abnormal operations on cloud-based provisioning network systems and on cloud-based provisioning network endpoints on a real-time basis, 24/7.*

**Q 2 October 2014 – Access from within the high security area to anything other than the personalization network must be read-only. If the data preparation network is also in the high security area, can the personalization network write to the data preparation network?**

**A** Yes. Generally, If they are separate networks the data preparation network will deposit files for production on the personalization network or the personalization network will read them from the data preparation network. It's not a problem as long as they are both in the same HSA. If they are in separate HSAs, the communication path must conform to the DMZ security.

**Q 3 October 2014 – Controls must be in place to restrict write permission to any system external to the personalization network to only pre-approved functions that have been authorized by the VPA, and these write functions must not transmit cardholder data. If the data preparation and personalization networks are separate, can the data preparation network have write permissions to a corporate network?**

**A** No. The data preparation network must meet the same requirements as the personalization network, data preparation is simply the first step in personalization.

**Q 4 October 2014 – Inventory and order systems may reside in the HSA on the data preparation and personalization networks. Corporate users may require access to the inventory and order detail updates performed on those systems. However, logical access from outside the HSA to these networks is not allowed, and access from within the HSA to anything other than the personalization network must be read-only. How can the corporate users obtain access to this information?**

**A** The information needs to be transferred out of the HSA using an approved process via the DMZ, just like cardholder return files, etc. Direct write from the system containing the information is not permitted.

**Q 5 June 2016 – For a card vendor that performs both manufacturing and personalization activities, there will be pre-press activities in the high security area which will contain card design files. Many card vendors will employ email communication to submit these card design files to the issuers/payment brands for approval. As pre-press activities must be within the high security area, the computer with e-mail capability will also reside in the high security area.**

**Can e-mail communication be used for sending the card design files to external parties (issuers/payment brands) from within the pre-press room (high security area)?**

**A** In order for internet access to exist for the pre-press room, it must exist in an HSA separate from the personalization HSA. If the HSA for manufacturing is separate from the HSA for personalization, the logical requirements do not apply to the manufacturing HSA, therefore it is not an issue. If manufacturing and personalization are in the same HSA then the logical security requirements apply to the whole HSA and, in that case, internet access is not allowed.

**Q 6 November 2018 – Can Voice over Internet Protocol (VoIP) be used within the HSA?**

**A** No. VoIP connections allow direct internet access which is prohibited within the HSA. HSA telephony connectivity is restricted to plain old telephone service (POTS), aka public switched telephone network (PSTN).

*VoIP can be used outside the HSA but must be converted to analog (POTS) via a PSTN adapter outside the HSA before connectivity within the HSA.*

## 4.4 Firewalls

The requirements in this section apply to firewalls protecting the data-preparation and personalization networks.

### 4.4.1 General

The vendor must:

- a) Ensure all documents relating to firewall configurations are stored securely.
- b) Deploy an external firewall outside the HSA to protect the HSA's DMZ.
- c) Install a firewall between the data-preparation network and the personalization network unless both are located within the same high security area or network.
- d) Deploy a firewall between the external network and the DMZ and between the DMZ and the cloud-based provisioning network.
- e) Have the capability to detect, isolate, and correct abnormal operations on network systems on a real-time basis, 24/7, on the external (DMZ) facing firewall.
- f) Implement appropriate operating-system controls on firewalls.
- g) Review firewall rule sets and validate supporting business justification either:
  - Monthly, or
  - Quarterly with review after every firewall configuration change.
- h) Restrict physical and logical access to firewalls to only those designated personnel who are authorized to perform firewall or router administration activities.
- i) Ensure the firewall rule set is such that any server only requiring inbound connections (for example, web servers) is prohibited from making outbound connections and vice versa.
- j) Ensure that only authorized individuals can perform firewall administration.
- k) Run firewalls on dedicated hardware. All non-firewall-related software such as compilers, editors, and communication software must be deleted or disabled.
- l) Implement daily, automated analysis reports to monitor firewall activity.
- m) Use unique administrator passwords for firewalls used by the personalization system as well as those passwords used for other network devices in the facility.
- n) Implement both mechanisms to protect firewall and router system logs from tampering, and procedures to check the integrity of the logs monthly.
- o) Explicitly permit inbound and outbound traffic to the cloud-based provisioning and personalization networks. A rule must be in place to deny all other traffic.

**Q 7 February 2016 – Can a card personalization vendor outsource their card production firewall and router administrative support functions to a third-party company?**

**A** Yes. But the third-party administration needs to be included in the card vendor's compliance administration. This includes not just the VPN, but how changes are requested and how the vendor validates that the correct changes, and only those changes, have been made.

*The remote access site is subject to the compliance validation process as designated by the applicable payment brand(s).*

## 4.6 Remote Access

### 4.6.1 Connection Conditions

**4.6.1.a** *Remote access is permitted only for the administration of the network or system components.*

**Q 8 December 2013 – Section 4.6.2 stipulates criteria that VPNs must meet. Under what circumstances do these criteria apply, and is there differentiation between mobile VPNs and site-to-site VPNs?**

**A** The VPN requirements are part of the Remote Access requirements in Section 4.6. Therefore, they apply to the remote administration of networks and system components that comprise the HSA and do not apply to VPNs that are used for other purposes. For example, the VPN requirements apply to administration of the personalization network and do not apply to VPNs used for conveyance of issuer data to the card vendor.

**4.6.1.j.iv** *The vendor must ensure that all remote access locations are included in the facility's compliance assessment and meet these requirements.*

**Q 9 July 2013 – Remote access is permitted only for administration of the network or system components and is not permitted to any system where clear-text cardholder data is being processed. If system administration is handled remotely by the card vendor or outsourced to a third party, are they still subject to the criteria defined within the Remote Access Section?**

**A** Yes. Administration of the network and system components is a critical activity that requires a secure environment that complies with the defined security requirements and is audited for compliance.

## 4.8 Security Testing and Monitoring

### 4.8.1 Vulnerability

**4.8.1.a** *Perform quarterly external network vulnerability scans using an Approved Scanning Vendor (ASV) approved by the Payment Card Industry Security Standards Council (PCI SSC).*

**Q 10 December 2017 – Quarterly external network vulnerability scans must be performed using a PCI SSC Approved Scanning Vendor (ASV). Can internal staff perform the analysis of the results and determine the severity of any vulnerabilities found?**

- A** *No. A PCI SSC ASV has the proper background and experience to perform both the scan and the resulting analyses as specified in the ASV program guide. The remediation actions may be determined by the vendor, but the scoring and ranking, etc. must be done by the ASV.*

### 4.8.2 Penetration

*The vendor must:*

- a) *Perform internal and external penetration tests at least once a year and after any significant infrastructure changes.*
  - i. *The internal penetration test must not be performed remotely.*
  - ii. *Penetration tests must be performed on the network layer and include all personalization network components as well as operating systems.*
  - iii. *Penetration tests must be performed on the application layer and must include at least the following:*
    - *Injection flaws—e.g., SQL injection. Also consider OS Command Injection, LDAP and XPath injection flaws, as well as other injection flaws.*
    - *Buffer overflow*
    - *Insecure cryptographic storage*
    - *Improper error handling*
    - *Insecure communications*
    - *All other discovered “high-risk” network vulnerabilities with criteria for ranking vulnerabilities, including:*
      - *Consideration of the Common Vulnerability Scoring System (CVSS) base score, and/or*
      - *The classification by the vendor, and/or*
      - *Type of systems affected.*

**Q 11 March 2016 – How must the internal penetration test be conducted?**

- A** *The internal penetration test must be performed using the criteria defined in this requirement. Additionally, testing must occur in accordance with DSS Requirement 11 with the exception that the coverage must be all HSA systems and the personalization network. The internal penetration test must not require any rule changes to conduct and must originate from systems within the HSA.*

## Section 5 – System Security

### 5.1 General Requirements

**5.1.g** *The vendor must ensure that virtual systems do not span different network domains.*

**Q 12 December 2013 – For purposes of this requirement, how are network domains defined for what is allowed or not allowed?**

**A** *In a virtualized environment, activities involving data preparation and personalization can use the same equipment. However, you cannot use the same equipment for systems in the DMZ and data-preparation or personalization area. This is because data preparation and personalization must occur within the HSA, whereas other activities must occur outside the HSA.*

## Section 6 – User Management and System Access Controls

### 6.2.2 Characteristics and Usage

**6.2.2.c** *The vendor must ensure “first use” passwords expire if not used within 24 hours of distribution.*

**Q 13 December 2013 – Some systems are not capable of expiring passwords within 24 hours as required by 6.2.2.c. What alternatives are available?**

**A** *If a system cannot expire initial passwords that are not used within 24 hours of distribution, then the passwords must not be issued more than 24 hours before expected use. If 24 hours elapses without use, they must be manually expired within that 24-hour period.*

## Section 7 – Key Management: Secret Data

### 7.4.1 General Requirements

**7.4.1.a** *The vendor must define procedures for the transfer of key-management roles between individuals.*

**Q 14 July 2015 – The vendor must define procedures for the transfer of key-management roles between individuals. Does "roles" mean a custodian A holder versus a custodian B holder?**

**A** *No. This is not intended for transfer of roles between existing custodians if it results in a custodian collectively having access to sufficient key components or shares of a secret or private key to reconstruct a cryptographic key.*

*For example, in an m-of-n scheme (which must use a recognized secret-sharing scheme such as Shamir), where only two of any three components are required to reconstruct the cryptographic key, a custodian must not have current or prior knowledge of more than one component. If a custodian was previously assigned component A, which was then reassigned, the custodian must not then be assigned component B or C, as this would give them knowledge of two components, which gives them ability to recreate the key.*

## 7.6 Key Distribution

- 7.6.d** Key components or shares must only be received by the authorized custodian, who must:
- i. Inspect and ensure that no one has tampered with the shipping package. If there are any signs of tampering, the key must be regarded as compromised and the vendor's key compromise procedures document must be followed.
  - ii. Verify the contents of the package with the attached two-part form.
  - iii. Return one part of the form to the sender of the component or share, acknowledging receipt.
  - iv. Securely store the component or share according to the vendor's key storage policy.

**Q 15 December 2013 – Are there any alternatives to meet this requirement if the authorized custodian is unavailable?**

- A** Yes. If the primary custodian is unavailable, a pre-designated and authorized backup custodian can receive the package. Alternatively, drop boxes can be used for the courier to leave the package in a locked container that is only accessible by the primary and backup custodians.

## 7.8 Key Storage

**7.8.e** Ensure that access logs, at a minimum, include the following:

- i. Date and time (in/out)
- ii. Names of key custodians involved
- iii. Purpose of access
- iv. Serial number of envelope (in/out)

**Q 16 October 2014 – What specifically is the requirement regarding the signature of a custodian being placed on the access logs? Does it require the full name (first and last), or can the signature be the first initial and last name or just the initials of the custodians?**

- A** Signatures must be sufficient to identify each custodian. Full names or initials or any combination are acceptable as long as it can be positively affirmed who provided the signature.

## 7.9 Key Usage

- 7.9.a** *Each key must be used for only one purpose and not shared between payment systems, issuers, or cryptographic zones, for example:*
- 7.9.b** *Key-encipherment keys used to encrypt other keys for conveyance—e.g., KEK, ZCMK—must be unique per established key zone and, optionally, unique per issuer within that zone. These keys must only be shared between the two communicating entities and must not be shared with any third organization.*

**Q 17 July 2014 – Can vendor and issuer keys exist at another site, such as for subcontracted card production activities, or for disaster recovery purposes?**

- A** *Copies of keys at another site (e.g., issuer keys or personalization keys) may exist if there is a contract with that site—e.g., if they are subcontracting the personalization activity to that site. This subcontracting needs the written permission of the issuer(s) impacted.*

*For disaster recovery purposes, the same conditions apply. There must be a contract in place with the disaster recovery site and written permission of the issuer(s) impacted. These conditions apply whether the other site is operated by the vendor or by a third party.*

*Outside of the aforementioned conditions, the only storage that can be outside the HSA or offsite is of encrypted keys.*

*However, copies of the HSM's master file key cannot exist off site in any scenario. Storage of keys is a personalization activity so it must take place in the HSA—i.e., at the approved site. Custodians must be employees of the company, not employees of another vendor.*

**Q 18 July 2013 – Can the same transport keys be used between the card vendor and separate locations of another organization?**

- A** *No. Each location would constitute a separate key zone and therefore different transport keys must be used. The same is true for a card vendor with multiple locations communicating to one or more locations of another organizational entity.*

**7.9.d** *All secret and private keys must have a predefined expiry date by which they must be retired from use. No key must be used for a period longer than the designated life span of that key. Issuer keys must not be used for longer than the issuer-specified expiry date.*

**Q 19 August 2023 - Key usage stipulates: All secret and private keys must have a predefined expiry date by which they must be retired from use. No key must be used for a period longer than the designated life span of that key. Issuer keys must not be used for longer than the issuer-specified expiry date. Are issuers required to provide an expiration date for their keys, such as those used for PIN or Card verification?**

- A** *No. The requirement to have predefined expiry dates for secret and private keys applies to keys owned and used by the card vendor. It does not apply to issuer keys the card vendor possesses in order to personalize payment cards on behalf of an issuer. However, if the issuer does provide expiration dates for its keys, the vendor must follow them.*

**7.9.h** *IC keys must be unique per IC.*

**Q 20 December 2013 – Does 7.9.h apply to all IC keys?**

- A** *No. It does not apply to manufacturer or founder keys. It does apply to other keys such as those used for pre-personalization.*

## 7.14 Key-Management Security Hardware

**7.14.c** HSMs used for key management or otherwise used for the protection of sensitive data must be approved by PCI or certified to FIPS 140-2 or FIPS 140-3 Level 3, or higher.

**Q 21 July 2014 – Does the HSM FIPS/PCI certification include customization of native HSM firmware if the FIPS/PCI mode is not impacted?**

**A** If firmware is modified it impacts the approval. However, HSMs may allow customers or integrators to install additional applications where the vendor can show that by permitting this:

- It cannot adversely affect the security features of the product that are relevant to the PCI HSM certification.
- It cannot modify any of the cryptographic functionality of the HSM or introduce new primitive cryptographic functionality.
- The application is strongly authenticated to the HSM by digital signature.
- The application does not have access to sensitive keys.

*Applications, in this context, are functional entities that execute within the boundary of the HSM and may or may not provide services external to the HSM. Applications are typically processes or tasks that execute under the control of an Operating System (OS) or software executive routine.*

*Applications are considered to be separated by access rights. OS/firmware is considered all code, which is responsible to enforce, manage, or change such access rights.*

## Section 8 – Key Management: Confidential Data

No FAQ in this section – Reserved for future use.

## Section 9 – PIN Distribution via Electronic Methods

No FAQ in this section – Reserved for future use.

# Physical Security Requirements

These technical FAQs provide answers to questions regarding the *Payment Card Industry (PCI) Card Production Physical Security Requirements*. These FAQs provide additional and timely clarifications to the application of the Security Requirements. The FAQs are an integral part of those requirements and shall be fully considered during the evaluation process.

Updates: New questions or those modified for clarity are in **red**.

## General Questions

No FAQ in this section – Reserved for future use.

## Section 1.1 – Card Production Staff

### 1.1.4.1 Employment Application Forms

**1.1.4.1.b** *The vendor must maintain a personnel file for each individual listed in Section 1.1.2 that includes but is not limited to the following information:*

- *Gathered as part of the hiring process:*
  - *Background check results*
  - *Verification of aliases (when applicable)*
  - *List of previous employers and referral follow-up results*
  - *Education history*
  - *Social security number or appropriate national identification number*
  - *Signed document confirming that the employee has read and understands the vendor's security policies and procedures*
  - *Fingerprints and results of search against national and regional criminal records*
- *Gathered as part of the hiring process and periodically thereafter:*
  - *Current photograph, updated at least every three years*
  - *Record of any arrests or convictions, updated annually*
  - *Annual credit checks*

**Q 1 December 2013 – Drug testing is not required in the PCI Card Production Security Requirements. Is this an oversight?**

**A** *No. PCI does not require drug testing due to the wide variances in country laws governing where or when drug testing is allowed. However, that does not preclude card vendors from requiring drug testing wherever and whenever they deem necessary.*

**Q 2 July 2013 – Requirement 1.1.4.1 requires annual credit checks. In some countries, only a small fraction of the employees have ever had a credit transaction, so the local credit bureau does not have any record of them. What should happen in these cases?**

**A** *The intent of the requirement is to determine whether the person is under any financial duress that should be considered for their employment. Even if the credit check is expected to not show anything, it still must be attempted. If the person does not have a credit history, the vendor should apply alternative procedures as the vendor deems appropriate in order to fulfill the intent of this requirement.*

**Q 3 August 2015 – Does the card vendor have to use fingerprints to conduct a search against criminal records as part of the background check process?**

**A** *A criminal background search must be conducted. That search may use fingerprints or any other method or means of identification. If fingerprints are not used—e.g., it is not legally permissible—for this purpose, they do not need to be collected or retained.*

### 1.2.1.2 Restrictions/Limitations

a) *Guards are not permitted to perform any of the functions normally associated with the production of card products or card components.*

b) *Guards must not have access to:*

- HSAs
- Employee records
- Physical master keys that provide access to card production or provisioning areas
- Audit logs
- Any restricted areas where the vendor processes, stores, or delivers card products and card components.

c) *Guards must be prevented from modifying or altering the internal settings on access system controls, intrusion alarm system, closed circuit television (CCTV).*

**Q 4 October 2020 – In the event of an emergency—e.g., medical—personnel who are designated as first responders or guards may not have access to the HSA but may be required to enter the HSA to address the emergency. Can emergency use badges be used to enter the HSA if needed?**

**A** *Personnel who are pre-designated by management as first responders should have their badges pre-enabled to enter the HSA, even though prohibited under these security requirements. However, any such badge usage to enter the HSA constitutes a high security event with mandatory incident reporting that must be escalated. To be allowed, the access must be automatically flagged by the access-control system.*

### 1.3.3 Visitor identification

- a) *Each visitor entering the facility must be issued with and must wear visibly on their person a security pass or ID badge that identifies them as a non-employee.*
- b) *If the security pass or ID badge is disposable, the visitor's name and date of entry to the facility and, if multi-day, the validity period must be clearly indicated on the front of the badge.*
- c) *If the security pass or ID badge is the access-control type that enables a record to be kept of the visitor's movement throughout the facility:*
  - The visitor must be instructed on its proper use.*
  - The vendor must program the visitor access badge or card to enable the tracking of movement of all visitors. It should be activated only for areas that the visitor is authorized to enter.*
  - Visitors must use their access card in the card readers to the room into which they enter.*
  - Badging to track access must be used.*
- d) *Unissued visitor access badges must be securely stored.*
- e) *Any un-badged access must be recorded in a log. Logs may be electronic and/or manual.*
- f) *Employees responsible for escorting visitors while they are inside the facility must ensure that the visitor surrenders their ID badge to the receptionist or guard before leaving the building.*

#### Q 5 October 2020 – Can visitor badges be pre-enabled to enter the HSA?

**A** *No. Badges can be pre-allocated for the portions of the HSA to which the visitor is allowed access, but the badges cannot be activated until assigned, which is when the visitor physically arrives.*

### 1.4.1 External Service Providers – General Guidelines

**1.4.1.b** *The vendor must ensure that the requirements of Section 1.1.2, “Card Production Staff,” of this document have been met by the employer of all suppliers, repair and maintenance staff, and any other external service provider.*

**Q 6 December 2013 – Requirement 1.4.1 states that all third-party service providers (for example, suppliers, repair and maintenance staff, and any other external service providers) must meet the same requirements as employees of the card vendor who have access to card products, components, and the high security area (HSA). This includes pre-employment testing, screening, training, termination checks, etc. Does the card vendor have to directly conduct these reviews?**

**A** *No. The intent of this objective is to ensure that service provider employees with access to the HSA conform to the same employment screening criteria as staff employed by the vendor. As noted in Requirement 1.4.1, the employer of these third-party service providers should conduct the necessary reviews. The card vendor meets this requirement by either directly performing the review or by contractually obligating the third-party external service provider to conduct these reviews.*

### 1.5.1 Vendor Agents – General Guidelines

**1.5.1.a** *Prior to conducting any business with an agent or third party regarding card-related activities, the vendor must register the agent with the VPA and obtain the following information:*

- *Agent's name, address, and telephone numbers*
- *Agent's role or responsibility*

**Q 7 July 2014 – In the context of this requirement, what are card-related activities and what activities are allowed for agents or third parties?**

**A** *Card related activities such as sales and marketing activities are allowed. Agents and third parties must never produce, own, or handle cards.*

## Section 2 – Facilities

### 2.1 External Structure

#### 2.1.1 External Construction

**2.1.1.b** *The vendor must prevent unauthorized access to buildings, building areas, or structures containing technical machinery or equipment such as the heating system generator, auxiliary power supply, and air conditioning.*

**Q 8 October 2014 – If a facility has a fence around the whole property, is a separate fence still required around the technical machinery?**

**A** *Yes. Separate access controls are still required. There will be many people who will have access beyond the fence (everyone entering the facility) but are not authorized to access the machinery, nor do they need access to the technical machinery. In general, technical machinery is not protected by a fence but by proper locked coverings or doors.*

## 2.1.2 Exterior Entrances and Exits

All non-emergency exterior entrances and exits to the facility must be:

- a) Contact-alarm monitored
- b) Locked or electronically controlled at all times
- c) Reinforced, where applicable, to resist intrusion—e.g., steel or equivalent construction that meets local fire and safety codes
- d) Fitted with an access-control device—i.e., card reader or biometric—that automatically activates the locking mechanism
- e) Fitted with a mantrap or interlocking configuration to prevent staff “piggybacking” or tailgating (excluding emergency exits)

**Q 9 May 2017 – For a facility located in a shared building, is it accepted that the entrance to the facility be internal to the building? This means that employees will first enter the main building entrance used by multiple tenants and subsequently enter the facility entrance. The facility entrance has interlocked doors, card access, CCTV, etc.**

**A** Yes. The facility entrance may be internal to the building if the building is shared by multiple tenants. For security compliance, the internal facility entrance may function as the building entrance. The interior facility entrance must then comply with the security requirements defined for exterior entrances and exits.

**Q 10 May 2017 – For a facility located in a shared building, is it required for the main building entrance to comply with the security requirements in section 2.1.2 Exterior Entrances and Exits?**

**A** No. The main building entrance that leads to multiple tenants does not need to comply with the requirements for exterior entrances and exists. Specifically, the entrance to the building segment occupied by the card production vendor is considered the building entrance and must comply with the requirements defined for exterior entrances and exists.

## 2.1.3 External Walls, Doors, and Windows

- a) All exterior walls must be pre-cast or masonry block or material of equivalent strength and penetration resistance. Any openings in the external wall that penetrate the building structure must be secured with security mesh, grating, or metal bars to prevent unauthorized access.
- b) Windows, doors, and other openings must be protected against intrusion by mechanisms such as intruder-resistant—e.g., “burglar-resistant”—glass, bars, glass-break detectors, or motion or magnetic contact detectors.
- c) HSA windows must be non-openable.

**Q 11 December 2015 – If a card vendor is using a hosted or other type of shared facility, there may be a combination of real external concrete walls of the building and walls inside the facility that would be considered ‘external’ to the card vendor, or only interior perimeter walls. For interior walls that form the ‘exterior’ for the card vendor, it may not be feasible to use pre-cast or masonry block material for the construction due to legal, safety, or other considerations. For purposes of this requirement, what would be considered material of equivalent strength and penetration resistance?**

- A** Interior walls may be considered equivalent if they are constructed of metal studded fire rated sheet rock (drywall) with expanded metal (security) mesh. The mesh must be constructed of steel or a stronger material and meet the ASTM F1267-12 or EMMA 557-12 standard. The construction must include vibration detectors to detect any attempts to cut through. The expanded metal (security) mesh shall meet the following minimum requirements:
- 16-gauge metal studs are used with 12inch (305mm) on center
  - 0.75inch #9 steel mesh or 3/4inch #9 or 19mm #9
  - Thickness 0.120 inches (3mm) 0.01-inch tolerance (0.5mm)
  - Expanded metal mesh is anchored to the stud with vendor supplied mesh anchors every 12 inches (305mm) and installed per the manufacturer’s requirements.

The installation must be double lined drywall, with expanded metal mesh on the attack side from true floor to true ceiling.

## 2.3.2.2 Security Control Room / Location and Security Protection

### Definition

This is the room housing the primary CCTV monitoring systems, intrusion, fire and alarm-system control, and access-control systems.

**2.3.2.2.q** The vendor must have mechanisms in place to prevent observation of security equipment—e.g., CCTV monitors—inside the security control room. One example would be covering all security control room windows with a one-way mirror film or other material preventing viewing from outside.

**Q 12 December 2013 – Are any methods of covering security control room windows allowed, other than those described in 2.3.2.2.q?**

- A** Yes. Other mechanisms may be used when they achieve the same result of preventing observation to inside the security control room to view the security equipment—e.g., CCTV images.

**2.3.2.2.u** *The CCTV and access control servers must be in the security control room or a room with equivalent security. The servers must not be in the HSA.*

**Q 13 May 2017 – Under what circumstances, if any, can DVRs be located in the HSA?**

**A** *The DVRs must:*

- *Be protected from access by unauthorized personnel. For example, they are installed in:*
  1. *The HSA server room under normal dual-access control restricted to authorized personnel, and the DVRs are installed in lockable racks only accessible by authorized staff, or*
  2. *A dedicated HSA Security Equipment Room under dual-access control.*
- *Either not have network capability or, if present, policies and procedures must exist to prevent the enablement or usage of the network capability.*

**2.3.3.1 High Security Areas (HSAs) / Definition**

*Areas in production facilities where card products, components, or data are stored or processed are called high security areas. Only card production and provisioning-related activities shall take place within the HSA.*

**Q 14 January 2015 – Only card production related activities shall take place within the HSA. Does this preclude the existence of test and non-production servers and HSMs from existing in the HSA?**

**A** *Equipment that is purely associated with test activities is not allowed in the HSA. Test (non-production) keys and test (non-production) data cannot be used with production equipment. Cards for testing that use production keys and/or data must be produced using production equipment.*

**2.3.3.1.d** *With the exception of mobile provisioning, if multiple HSAs are within the same building, they must be contiguous.*

**Q 15 December 2013 – Areas in production facilities where card products, components, or data are stored or processed are called high security areas. Section 2.3.3 states that these HSAs must be contiguous if they are within the same building. In some building designs these areas are non-contiguous and retrofitting is prohibitively expensive. Are there any other options?**

**A** *Yes. HSAs in the same building that are not contiguous may exist provided they are treated physically and logically as separate facilities—i.e., use of secure physical transport and encryption of sensitive data.*

**2.3.4.1 HSA – Security Protection and Access Procedures / Access Control**

**2.3.4.1.e** *The HSA and all separate rooms within the HSA must be protected by internal motion detectors, even if no production occurs in the room.*

**Q 16 December 2013 – Does this requirement apply to chemical storage areas, cleaner cupboards, and other maintenance/supplies storage?**

**A** *A space within the HSA may be defined as a cupboard or similar area which does not require motion detection if it is not possible for an individual to walk into the space and no longer be visible.*

**2.3.4.1.i** If the access-control server is not located in the security control room it must be located in a room of equivalent security. The access-control server cannot be located in the HSA but must be located in the same facility.

**Q 17 January (update) 2015 – Is the Access-Control Server located in the Security Control Room or in the Server Room?**

**A** The activities in the HSA are restricted to card production activities. Therefore, the access - control server cannot be located in the HSA where the Server Room is required to be because, for networked systems, only servers directly related to data preparation and personalization are allowed within the HSA.

**2.3.4.4 Security Controls**

**g)** All doors and gates to these areas must be contact monitored and fitted with automatic closing or locking devices and audible alarms that sound if the door or gate remains open for more than 30 seconds.

**Q 18 December 2022 - Does this requirement allow for the vendor to use either automatic closing devices or automatic locking devices?**

**A** This requirement is under revision. The intent of the requirement is to automatically secure the door in a closed position, which requires the use of both an automatic closing device and an automatic locking device. The doors must automatically close and automatically lock in order to support the enforcement of anti-pass-back and person-by-person access control.

**2.3.5 HSA Rooms**

**2.3.5.a** Separate rooms within the HSA must meet all of the above requirements with the exception of person-by-person access.

**Q 19 July 2013 – Requirement 2.3.4 specifies controls that must be applied to all rooms within the High Security Area (HSA) and Requirement 2.3.5 specifies the following as rooms that may exist within the HSA:**

- Pre-Press Room
- Work in Progress (WIP) Storage Room
- Card Product and Component Destruction Room(s)
- PIN Mailer Production Room
- Server Room & Key Management Room

**Do the controls specified apply to other rooms within the HSA?**

**A** Yes. They apply to all rooms in the HSA. Non-compliant rooms must be either closed off or reconfigured to no longer be separate rooms.

**Q 20 December 2013 – Local regulations or other safety considerations may require the presence of fire doors in the HSA. Are there any special considerations?**

- A** Yes. If the HSA contains fire doors and these doors are normally closed or can be manually closed, these doors are subject to the same access controls as any other door that provides access to a room.

*If the HSA contains fire doors and these doors are locked open and only closed automatically when a fire alarm is activated, the access controls that normally apply for accessing a room do not apply.*

**Q 21 December 2013 – Separate rooms within the HSA must meet all the requirements in Section 2.3.4, with the exception of person-by-person access. If a room cannot or will not be made to meet these requirements, what options exist?**

- A** The card vendor has three options:

- Close off the room from accessibility to anyone with HSA access.
- Reconfigure smaller rooms into a larger room meeting the requirements.
- Convert non-compliant rooms into spaces within an HSA that are no longer fully enclosed—e.g., by removing doors.

*Note that where person-by-person access is not required, anti-passbook is still required.*

**Q 22 December 2013 – For purposes of 2.3.5, do elevators, stairwells, closets, and glass-enclosed rooms—e.g., conference rooms or other room types—constitute a room?**

- A** If an elevator has a door, access to it must be controlled. Stairwells are not a room if they do not have doors. Closets would not be considered a room if a person could not physically enter. However, a storage room with a door is considered a room. Glass-enclosed rooms are also considered rooms for purposes of this requirement.

**Q 23 October 2014 – If curtains or something similar are used to segment the HSA into subareas, do those subareas constitute rooms for purposes of these requirements?**

- A** If visibility into the segmented area is not impaired from the general HSA area (for example, use of clear curtains), then the sub area does not constitute a room and therefore any requirements pertaining to rooms do not apply for these subareas. When visibility is obstructed (for example, use of opaque curtains) in the "door" area, the opaque curtain acts as a door thus creating a room and all requirements pertaining to rooms apply.

**Q 24 October 2014 – If the walls and/or door(s) of the room are glass such that the view is not restricted, does that constitute a room?**

- A** Yes. It is a room. While glass allows visibility it still restricts access.

**Q 25 October 2014 – Are any of these options acceptable to implement in lieu of implementing the controls for separate rooms under this section:**

- Glass doors without locks and a fully lit room
- Clear plastic flaps hanging from the door
- Swinging or sliding glass doors that do not have any type of closure mechanism?

**A** *Glass doors without locks and swinging or sliding doors are not acceptable. Clear plastic flaps hanging from the door or no door at all are the only viable options.*

**2.3.5.b** *Toilet rooms are prohibited except where required by local law. Where used, the entry/exit way must be camera-monitored.*

**Q 26 October (update) 2016 – What is the rationale for Requirement 2.3.5.b?**

**A** *The intent is to prevent an individual from being unobserved, and to restrict access while in any room within the HSA. This is not a new requirement and was in place under the prior individual payment brand requirements so there should be limited impact on card vendors previously held to payment brand criteria. Toilet rooms that are not fully enclosed and are accessible without opening the door—i.e., sufficient space exists above and/or below the enclosure to access the area—are not subject to this requirement.*

#### **2.3.5.1 Pre-Press Room**

- a) *The pre-press process must be performed in a separate room within the HSA.*
- b) *The pre-press room is where the vendor produces or stores film, plates, or electronic media.*

**Q 27 March 2015 – Can the following processes be performed in the rooms outside the high security areas:**

- Design development (external graphical view) of a plastic card,
- Printing the plastic cards designs/rough copies with your company logo on a printer,
- Preparation of a file containing the plastic card design for output to CTP devices (not an output itself, but only the preparation)?

**A** *Work that is purely design work does not need to occur in the HSA. But where the machinery is present that enables the production of the design—e.g., the plates or the printing of high-resolution images and any pre-production samples—it must be in the HSA.*

#### **2.3.5.3 Card Product and Component Destruction Room(s)**

*Destruction of card product and component waste must take place in a separate room(s) within the HSA that is dedicated for destruction.*

**Q 28 October 2014 – In the Card Production Physical Security Requirements it states that card destruction must occur in a separate room within the HSA. Would the Vault be considered a separate room or does it need to be in a secured room within the Vault?**

**A** *A dedicated room must be used for destruction. This room must be in the HSA and may optionally be a secured room within the vault. This room must meet all room requirements. For example, the destruction room must have its own access controls.*

**Q 29 October 2014 – Sheet and card destruction must take place in a separate room within the HSA that is dedicated for destruction. Does this apply to other materials such as used tipping foil, holographic materials, and signature panels?**

**A** Yes.

#### 2.3.5.4 PIN Mailer Production Room

**2.3.5.4.b** Card production staff involved in personal identification number (PIN) printing and mailing processes must not monitor or be involved in the personalization, encoding, and embossing of the related cards. Individuals may perform other non-personalization activities in addition to PIN printing, except for those that give access to cardholder data such as data administration, packaging, or mailing activities.

**Q 30 July 2014 – If PIN printing and mailing, and personalization, encoding, and embossing take place in an open area, how can this requirement be met?**

**A** PIN printing must occur in a separate room except as delineated in *PIN Printing and Packaging of Non-personalized Prepaid Cards*. Documented procedures must exist that restrict personnel involved in PIN printing and mailing from being involved in the personalization, encoding, and embossing of the related cards.

**Q 31 March (update) 2017 – Employees involved in personal identification number (PIN) printing and mailing processes must not monitor or be involved in the personalization, encoding, and embossing of the related cards. Does this mean that operators who only work in the vault, warehouse, dispatch, or any other role located outside the HSA, can perform PIN printing/mailing services?**

**A** The intent is to prevent staff that personalize those specific cards from also having access to the PINs during generation or printing. Individuals may perform other non-personalization activities in addition to PIN printing, except for those activities that have access to clear text cardholder data such as packaging or mailing activities.

Personnel involved in personalization must never be involved in PIN printing of the associated cards. Defined procedures must demonstrate that these personnel are not involved in the production of the associated cards.

#### 2.3.5.5 Server Room & Key Management Room

**2.3.5.5.a** Server processing and key management must be performed in a separate room within the personalization HSA. Data preparation must occur here. Server processing and key management may occur in the same room or each in a separate room.

**2.3.5.5.b** Systems and applications that make up the cloud-based provisioning network must be physically segregated from other vendor networks and internet-connected networks. This includes separation of servers, firewall, and HSM. For example, in a traditional card vendor environment this could be:

- A separate rack in a server room, or
- In a provisioning-only entity, housed in a separate room or cage in a data center.

**2.3.5.5.c** An internal CCTV camera must be installed to cover the access to this room and provide an overview of the room whenever there is activity within it.

**Q 32 October 2014 – Server processing and key management must be performed in a separate room within the personalization HSA. What is considered “server processing”?**

**A** *This applies to servers used for data preparation and personalization. It does not apply to DMZ based components.*

### 2.3.5.6 Vault

*The vault is the primary security area in the vendor facility.*

**2.3.5.6.b The following must be stored in the vault:**

- *Cards awaiting personalization*
- *Security components*
- *Materials awaiting destruction*
- *Samples and test cards prior to distribution and after return*
- *Any card that is personalized with production data*
- *If the facility is closed, personalized cards that will not be shipped within the same working day*
- *Products awaiting return to the supplier*

**Q 33 February 2020 – How must test cards be protected?**

**A** *There are generally two types of test cards and how they need to be protected depends on the type. The first type is a plain card—e.g., white plastic—or otherwise clearly identified as usable only for testing. These cards do not need to be protected. The other type closely resembles a card to be issued and may have a card design, brand marks, personalization data, or security features. These cards need to be protected during production and distribution to the user the same as any card to be issued. Any card not using test data is regarded as production and must be protected in compliance with the security standard.*

**2.3.5.6.b** Vaults must be constructed of reinforced concrete (minimum 15 centimeters or 6 inches) or at least meet the Underwriters Laboratories Class 1 Burglary Certification Standard—e.g., UL 608 or the European Standard for Secure Storage Units (EN1143-1 class 6)—which provides for at least 30 minutes of penetration resistance to tool and torch for all perimeter surfaces—i.e., vault doors, walls, floors, and ceilings.

**Note:** EN 1143-1 Secure storage units - Requirements, classification, and methods of test for resistance to burglary - Part 1: Safes, ATM safes, strongroom doors and strongrooms: Grade 6 or higher may be used as equivalent to UL 608 Class 1 Burglary Certification.

- An outside wall of the building must not be used as a wall of the vault.
- If the construction of the vault leaves a small (dead) space between the vault and the outside wall, this space must be constantly monitored for intrusion—e.g., via motion sensors.
- No windows are permitted.
- There must be no access to the vault except through the vault doors and gate configurations meeting these requirements. The vault must be protected with a sufficient number of intruder-detection devices that provide an early attack indication—e.g., seismic, vibration/shock, microphonic wire, microphone, etc.—on attempts to enter and also provide full coverage of the walls, ceiling, and floor.
- The vault must be fitted with a main steel-reinforced door with a dual-locking mechanism (mechanical and/or logical—e.g., mechanical combination and biometrics) that requires physical and simultaneous dual-control access. The access mechanism requires that access occurs under dual control and does not allow entry by a single individual—i.e., it is not feasible for a single individual to use credentials belonging to someone else to simulate dual access.

**Q 34 January 2015 – Is it permissible to have more than one entry/exit to the vault from the HSA if each door meets the strength requirement for a vault door and is alarmed and meets all other required controls for a vault door, including anti-passback, etc.?**

**A** Yes.

**Q 35 January 2015 – Is it permissible to have an emergency exit from the vault to the HSA if the emergency door meets the strength requirement for a vault door, is alarmed, and was not openable from outside?**

**A** Yes.

**Q 36 July 2015 – Can security mesh be used for vault construction in lieu of reinforced concrete as equivalent to the Underwriters Laboratories (UL) Class 1 Burglary Certification Standard, which provides for at least 30 minutes of penetration resistance?**

**A** Security mesh is unacceptable unless direct evidence can be provided that it meets the UL 608 Standard for Burglary Resistant Vault Doors and Modular Panels Class 1 criteria. Other UL certifications, such as for fire resistance, are not acceptable as equivalent.

**Q 37 February 2017 – Does the use of alternate materials in lieu of reinforced concrete comply with the vault construction requirement?**

**A** *Alternate materials other than reinforced concrete can be used if they meet the Underwriters Laboratories Class I Burglary Certification Standard for 30 minutes of penetration resistance. For example, expanded metal mesh may meet the criteria. In general, materials such as steel mesh are unlikely to meet this requirement.*

*The vendor must provide evidence that the material has achieved certification to the UL 608 standard for penetration resistance. Fire resistance ratings are not relevant.*

**Q 38 February 2017 – Can new technology such as advanced intrusion detection systems that provide early warnings of potential intrusion satisfy the 30-minute penetration resistance defined in the vault construction requirement? For example, systems that combine laser scan technology and enhanced CCTV?**

**A** *Active monitoring systems provide notification that an intrusion may be in progress but do not restrict or delay access. The penetration resistance provided by concrete or other compliant construction materials provides a physical barrier that delays access to the vault and remains in effect should detection systems be compromised. Therefore, intrusion detection systems cannot be a substitute for the penetration resistance provided by the vault construction requirement.*

**Q 39 February 2017 – PCI Card Production Physical Security Requirements Version 1.1 clarified that materials that provide equivalent strength and durability to reinforced concrete must meet the Underwriters Laboratories Class I Burglary Certification Standard providing for at least 30 minutes of penetration resistance. How does this clarification impact facilities that were erroneously interpreted to use materials of “equivalent strength and durability”?**

**A** *The intent of the clarification was to ensure that all facilities are held to the same objective standard. In that regard the following applies:*

- *Vaults constructed subsequent to the March 2015 publication date of v1.1 must meet the requirement.*
- *Vaults existing prior to the March 2015 publication date that do not meet the requirement must comply with the following:*
  1. *Any major renovation to the facility must include constructing the vault in accordance with the requirement.*
  2. *Become compliant within five years from the publication of this FAQ.*
  3. *Have and actively maintain a management action plan that demonstrates the intent to adhere with the latest version of the PCI Card Production and Provisioning Physical Security Requirements. This plan must be reassessed at least annually.*

**Q 40 August 2020 – Vaults must be constructed of reinforced concrete (minimum 15 centimeters or 6 inches) or at least meet the Underwriters Laboratories Class 1 Burglary Certification Standard (e.g., UL 608), which provides for at least 30 minutes of penetration resistance to tool and torch for all perimeter surfaces—i.e., vault doors, walls, floors and ceilings. Can materials certified to the European Standard EN 1143-1 *Secure storage units - Requirements, classification and methods of test for resistance to burglary - Part 1: Safes, ATM safes, strongroom doors and strongrooms* be used?**

**A** Yes. EN1143-1 grade 6 or higher may be used as equivalent to UL 608 Class 1 Burglary Certification.

### 2.3.6.2 Shipping and Delivery Areas

**2.3.6.2.e** *The inner shipping/delivery area door must have access control installed to restrict access to authorized users and to record usage. The logging at a minimum must include each opening and closing of the door.*

**Q 41 December 2017 – Does this require the presence of a reader for “in” access and a reader for “out” access—i.e., either side of the door?**

**A** *No. This is not intended as an access control mechanism. The requirement is intended to track each opening and closing of the door so that there is full control and traceability of the process.*

**2.3.6.2.f** *The guards may operate the external door of the outer room area only after the driver is identified and the production staff is informed about the ongoing shipment or delivery operation. To prevent unauthorized access to the HSAs through the shipping and delivery rooms, the inner room must be protected by an internal movement detector that prevents the opening of the internal door and the intermediate door of the inner room if movement is detected inside this inner room.*

**Q 42 September 2023 - Can guards operate the doors of the shipping and delivery room?**

**A** *Guards may only operate the external door of the shipping and delivery area after the driver is identified and the production staff is informed about the on-going shipment or delivery operation. The two other shipment and delivery area doors, the intermediate package area door and the inner door, must be operated by the production area staff alone or in combination with the guards’ remote control.*

### 2.4.2.1 Identification badges

- Procedures must be documented and followed for managing identification (ID) badges.*
- The vendor must issue a photo identification (ID) badge to each card production staff member and consultant. A temporary badge valid ONLY for the work shift does not need to contain a picture.*
- ID badges and lanyards must not be imprinted with the company name or logo and are not allowed to be imprinted with any information that may identify the vendor’s name or location.*
- Access credentials (which may be the ID badge) must be programmed only for the access required based on job function.*

**Q 41 March (update) 2017 – If an employee does not have their photo identification (ID) badge with them upon arrival, what are the consequences?**

**A** *A defined process must exist that requires the employee to provide alternate identification equivalent to what a visitor would need to gain access. The identity and employment status of the employee must be verified. Their access must be explicitly authorized by someone who has ability to validate employment status and access qualifications. If access is granted, a temporary badge valid ONLY for the work shift must then be issued and then it must be expired. This event must be logged, including both the authorization and termination of the access.*

## 2.4.3 Access-Control System

*The vendor must ensure that:*

- a) *The vendor must document, follow, and maintain procedures for access-control system administration.*
- b) *Access-control systems that allow entry into restricted areas must have a backup electrical power source capable of maintaining the system for 48 hours.*
- c) *Contingency plans must exist for securing card components in the event of an outage greater than 48 hours.*
- d) *For multiple buildings within the same facility, a single central location for an access-control system can administer all buildings. Either a private or public network may be used. If a public network is used, a VPN as defined in the PCI Card Production and Provisioning – Logical Security Requirements and Test Procedures in conformance with the requirements stipulated therein must be used.*

**Q 42 July 2014 – Can a company have a badge access system that services multiple buildings on a single premises and/or multiple buildings throughout the world as long as the system is on its own segregated/dedicated network and all system changes are made on-site within a PCI compliant/secure room?**

**A** *For multiple buildings within the same facility, a single central location can administer all buildings. However, a central facility cannot administer multiple separate facilities. The badge access system must be located within a given facility and only control access to buildings within that facility.*

**Q 43 May 2017 – Is it permissible to use a central site for remote monitoring of CCTV and access control system logging of multiple facilities?**

**A** *No. Centralized Administration, including monitoring is inappropriate because physical systems require more onsite presence to take timely corrective actions and for the validation of appropriateness of implementations—e.g., the ability to validate during onsite inspections, the correcting of camera dead spots, and local facility knowledge.*

### 2.4.3.2 System Administration

*The vendor must ensure that:*

- a) *Each access-control system administrator uses his or her own user ID and password.*
- b) *Passwords are changed at least every 90 days.*
- c) *User IDs and passwords are assigned to the physical security manager and authorized personnel, who must be employees.*
- d) *The physical security manager and other authorized personnel (who must be employees) are the only individuals able to modify the access-control system controls. All changes to the system must be logged.*
- e) *At the end of each session, the individual who initiated the session must log off the system.*
- f) *All changes to card production, provisioning, and security-relevant systems are recorded and reviewed monthly by a senior manager who is not the individual initially involved in changing the system.*
- g) *Access-control systems are physically and logically isolated on a dedicated network from the main office network.*

**Q 44 December 2024 - Access-control systems must be physically and logically isolated on a dedicated network that is separate from the main office network. Can this be achieved using a dedicated port on a shared firewall?**

**A** *No. The network that hosts access control systems and related endpoints must only be used for that purpose. In order to achieve both physical and logical isolation a separate dedicated firewall for the access control system must be used. Alternatively, it could be fully air gapped from all other networks.*

### 2.4.6.4 Retention of Video Recordings

**2.4.6.4.a** *CCTV images must be kept for at least 90 days and must be backed up daily. Both primary and backup copies must exist for a minimum of 90 days*

**Q 45 July 2014 – Backups must be kept for at least 90 days and must occur daily. Does each daily back up need to occur for at least 90 days and does the 90 days only pertain to backups?**

**A** *Standard back-up policies using full/incremental - daily/weekly/monthly – can be used. Both primary and back-up copies must be kept for a minimum of the most recent 90 days.*

**2.4.6.4.b** *The backup recording or mirror image must be stored in a separate, secure location within the facility and must ensure segregation of duties between the users and administrators of the system. Backups may also be stored in other approved facilities of the card vendor via techniques such as disk mirroring, provided the storage is secure in accordance with these requirements. An approved facility is one evaluated as compliant to these requirements and is participating in the applicable card brand program.*

**Q 46 December 2013 – Does the use of RAID technology meet the criteria for separate backup recordings?**

**A** *No. RAID technology is a storage technique that divides and replicates data among multiple physical drives in order to provide reliability, availability, performance, and capacity. It is not a mechanism for backing up data.*

## Section 3 – Production Procedures and Audit Trails

### 3.5.1.2 Core Sheets / Partially or Fully Printed Sheets

**3.5.1.2.b** *Audit or accountability forms for core sheets must provide the following information for every order processed:*

- *Good sheets*
- *Rejected sheets*
- *Set-up sheets*
- *Quality control sheets*
- *Unused core sheets*

**Q 47 December 2013 – Does this requirement apply to core sheets used at the facility?**

**A** *It applies only to production quality core sheets printed with the payment system brand or issuer design and not to blank sheets.*

**Q 48 September 2016 – Accountability forms must be used to account for information regarding core sheets used for each order. Specifically:**

- *Good sheets*
- *Rejected sheets*
- *Set-up sheets*
- *Quality control sheets*
- *Unused core sheets*

**Does this apply to “make ready” sheets?**

**A** *The audit or accountability forms only apply to make ready sheets if they are of the same quality as production sheets. Make ready sheets are normally lower quality sheets not suitable for production—e.g., make ready sheets are typically uniquely colored and are made from a sub-grade material and are used to get the press running and stabilize the flow of ink within the machine. The material cannot be laminated into a functional card (physically cannot be laminated due to its sub-grade structure). They are freely issued to the press and used and overprinted between 2 and 10 times depending on the density of ink laid per run. Brand logos may be imprinted. These sheets do not require any audit control except for dual control destruction.*

## 3.7 Audit Controls – Manufacturing

### 3.7.1 General

**3.7.1.c** An effective audit trail is comprised of a series of audit logs that must contain but are not limited to the following information:

- Description of the component or card product(s) being transferred
- Name and signature of the individual releasing the component or card product(s)
- Name and signature of the individual receiving the component or card product(s)
- Number of components or card products transferred
- Number of components used
- Number returned to vault or WIP storage
- Number rejected or damaged
- Number to be destroyed
- Date and time of transfer
- Name and signature of supervisor
- Signatures of persons inventorying components

**Q 49 December 2013 – Audit controls for manufacturing include tracking the number returned to the vault or WIP storage. Does this require that finished products that are already packed in containers or cartons prior to shipment be recounted before storage in the vault or WIP storage?**

**A** Finished products that have been previously counted in a controlled manner and sealed in tamper-evident packaging do not require recounting; however, they must still be part of the audit trail log.

**3.7.1.i** During the processing of card products (encoding, embossing, and personalizing), only the minimum number of boxes or sleeves required may be opened at one time. The contents of partially used boxes or sleeves must be verified against the inventory control documents. Before additional boxes or sleeves are opened, any partially used boxes or sleeves must be fully used. The number of cards in partially used boxes and sleeves must be verified, and each box or sleeve must be rewrapped and sealed before being stored in the vault.

**Q 50 February 2016 – Must all partially used boxes be sealed?**

**A** Unsealed boxes are only permitted for stock that requires multiple pulls per day. Unsealed boxes must be in a centralized area within the vault. The counting process must be applied during the pull process and an inventory count under dual control must be performed for each unsealed box at the end of each shift.

### 3.7.3 Personalization Audit Controls

#### 3.7.3.e For PIN mailers, include:

- Number of mailers to be printed
- Number of mailers actually printed
- Wasted mailers that have been printed
- Number of mailers transferred to the mailing area/room
- Operator name and signature
- Name and signature of an individual other than the operator who is responsible for verifying the count.

**Q 51 December 2013 – What happens if a supervisor or auditor is not available to sign off on the various required counts?**

- A** For purposes of this requirement, the terms “operator,” “supervisor,” and “auditor” do not mean a formal job title, but rather define a function. Specifically, supervisor/auditor refers to the function of the individual who verifies the count, while operator refers to the individual who conducts the count.

### 3.8.2 Indent Printing Module

**3.8.2.a** The vendor must use payment system proprietary typefaces within indent-printing modules only for payment system cards.

**Q 52 July (update) 2014 – How is this requirement applied?**

- A** Payment system proprietary typefaces within indent-printing modules cannot be used for purposes other than payment cards. Proprietary indent-printing characters are destroyed at the end of usage.

### 3.8.3 Tipping Foil

**3.8.3.a** The vendor must shred completely used tipping foil reels containing cardholder information as follows:

- In-house,
- Under dual control, and
- The destruction can occur as frequently as the vendor deems necessary but—in all cases—weekly at a minimum. The vendor must maintain proper controls over these materials at all times prior to destruction, and the destruction must occur within the HSA

**Q 53 October (update) 2014 – Many facilities use portable/mobile shredding equipment managed by third-party service providers. How is this accommodated to meet 3.8.3.a?**

- A** The HSA includes the loading bay. The used foil can be destroyed there using portable/mobile equipment provided any access points—e.g., doors—from outside the HSA are closed and properly secured. This can also be applied to other secure materials that require destruction, such as scrap cards, return mail cards, and vault destroy requests.

**Q 54 January 2015 – What materials are required to be destroyed in the destruction room?**

- A** Remnants/residues of holograms from a post splitting process, signature panels, and any materials required to be stored in the vault.

### 3.8.4 Tipping Foil

- a) Prior to use, thermal transfer foil reels/cassettes must be marked with a unique, tamper-evident security identifier.
- b) Records must be maintained pertaining to the reel/cassette for tracking purposes from first use through destruction.

**Q 55 August 2023 - Thermal Transfer Foil has requirements that do not have corresponding requirements where Tipping Foil is used. Specifically, Tipping Foil has neither a pre-use tamper evidence requirement nor a specific life-cycle tracking requirement. What is the rationale for this difference?**

- A** Thermal Transfer Foil uses form factors such as thermal printing reels and cassettes where it may not be possible to remove only the used portion of the ribbon for destruction. Thus, when removing a reel or cassette containing sensitive data which will be re-installed for further use later, it must be tracked as a sensitive asset.

If it is possible to remove, secure, and destroy only the used portion of a thermal printing ribbon, then it must be removed from the machine during non-production hours and requirements 3.8.4.a and 3.8.4.b do not apply. However, the vendor must be prepared to demonstrate the processes involved in removing, securing, and destroying the used material to the assessor during the on-site review.

Note that the Thermal Transfer Foil requirements only apply to thermal reels used in personalization, and do not apply to those used in manufacturing.

## 3.10 Destruction and Audit Procedures

**3.10.b** The following materials must be destroyed on a batch basis by shredding or grinding such that the resulting material cannot be reconstructed:

- Spoiled or waste card products
- Holographic materials
- Signature panels
- Sample and test cards
- Any other sensitive card component material or courier material related to any phase of the card production and personalization process.

**Q 56 July 2014 – 3.10 requires that materials must be destroyed on a batch basis. Does this mean materials must be destroyed at the conclusion of each job?**

- A** No. Multiple jobs can be grouped together to form a batch.

g) Proper destruction requires the following:

- Individuals destroying the materials must ensure that they are rendered unusable and unreadable.
- Two card production staff must simultaneously count and shred the material.
- Before leaving the room, both card production staff must ensure that all material has been destroyed and not displaced in the machinery or equipment.
- Card production staff must prepare, sign, and maintain a destruction document.
- Once the destruction process is initiated, the process must not be interrupted.

**Q 57 April 2024 - If the destruction of materials requires the use of a vacuum extraction system, are there any associated requirements for use of the system?**

**A** If removal of waste material is performed using a vacuum extraction system, the destroyed material may be discharged externally out of the HSA using the following criteria:

- The shredder or granulator meets the DIN66399-P5 standard for shredded material.
- The evacuation system tubing is permanently fixed to the HSA wall.
- The aperture of the security mesh protecting the opening through the HSA wall must prevent the pass-through of material larger than material shredded to DIN66399-P5. The mesh holes must not exceed 3cm on the square, which will not allow larger particles of cards through, but will not disrupt the flow of compliant shredded material, to prevent the blockage of the tube.
- The vendor must review the output at least weekly to verify that the output is completely shredded to at least a P5 level and document that review. This must be validated by the assessor as part of their review.

## **Section 4 – Packaging and Delivery Requirements**

### **4.5.1 Card Mailing**

c) The loading and transfer process must use the shipping and delivery areas as defined in Section 2.3.6, “Other Areas.”

**Q 58 December 2022 - Can the transfer of goods occur between a vendor and the postal service or courier without the use of a traditional Shipping / Delivery area that utilizes a structure as described in requirement 2.3.6.2 for a vehicle.**

**A** No. It is required that all shipping and receiving of cards and components, regardless of the volume of goods, must traverse the “Shipping and Delivery Areas” as outlined in requirement 2.3.6.2. The transfer of goods from the shipping area must be directly to an enclosed vehicle within the secured shipping area. The hand-carrying of goods outside of the shipping area is strictly prohibited.

#### 4.5.3.4 Sea Freight

- e) *The sea shipping container must be locked while in the vendor's shipping area using a tamper-evident, high-security locking mechanism.*
- s) *The locked shipping container must be delivered to an issuer or certified vendor facility prior to opening and further distribution of the card shipment.*

**Q 59 September 2023 - Some facilities do not have loading bays large enough to fully accommodate a sea shipping container. What alternate controls can be implemented?**

**A** *Where facilities cannot accommodate sea containers onsite, standard secure ground transport vehicles can be used to transfer the shipment from the vendor facility to the secure area of the port for loading into waiting shipping containers. Upon receipt at the secure area of the destination port, vendor representatives will meet the container immediately; check the seals, and then transfer the contents to waiting secure ground transportation vehicles for conveyance to the destination facility.*

- m) *The sea shipping container must be fitted with a GPS monitoring system that provides real-time tracking of the container location.*

**Q 60 September 2023 - Requirement 4.5.3.4 states that sea shipping containers for cards must be fitted with a GPS monitoring system that provides real-time tracking of the container location. However, due to the long periods of time at sea, battery power is not sufficient in tracking devices to meet this requirement. What alternative approach exists?**

**A** *This requirement is under revision. However, a solution that monitors the "real-time" tracking and monitoring of a shipping container only while being transported with ground transport from the dispatching site to the port, and the destination port to the receiving site is acceptable, as long as the ship itself is "real-time" tracked (i.e., satellite monitoring) from port to port.*

- n) *The tracking system must provide real-time alerts in the event exception conditions are detected that affect container integrity including door opening, lighting changes, internal motion, and impacts.*

**Q 61 September 2023 - Requirement 4.5.3.4 states that the tracking system must provide real-time alerts in the event exception conditions are detected that affect container integrity, including door opening, lighting changes, internal motion, and impacts. However, while the following events can be monitored: door opening, lighting changes, humidity, temperature and impacts; they cannot monitor specifically "internal motion". Additionally, GSM connectivity will be lost at sea. What alternatives exists?**

**A** *This requirement is under revision. It is acceptable if there is a technology installed that detects internal motion within the shipping container, through a motion sensor and/or changes in lighting level, or any other similar technology that provides the equivalent alert to internal motion. Even though GSM connectivity may be lost at sea, the system must still record any alerts activated during the sea voyage, and when the vessel approaches the destination port and picks up a new GSM connection, it then must "wake up" and upload the alerts recorded during the voyage to the monitoring station.*

#### 4.5.3.5 Rail Freight

- c) *The rail shipping container must be locked while in the vendor's shipping area using a tamper-evident, high-security locking mechanism.*
- q) *The locked shipping container must be delivered to an issuer or certified vendor facility prior to opening and further distribution of the card shipment.*

**Q 62 September 2023 - Some facilities do not have loading bays large enough to fully accommodate a rail shipping container. What alternate controls can be implemented?**

**A** *Where facilities cannot accommodate rail shipping containers onsite, standard secure ground transport vehicles can be used to transfer the shipment from the vendor facility to the secure area of the rail facility for loading into waiting shipping containers. Upon receipt at the secure area of the destination rail facility, vendor representatives will meet the container immediately; check the seals, and then transfer the contents to waiting secure ground transportation vehicles for conveyance to the destination facility.*

### 4.6 Shipping and Receiving

*The vendor must not release card products or components unless the following minimum shipping requirements are met. The vendor must:*

- a) *Have access to the names and signatures of individuals who are authorized to collect and deliver shipments.*
- b) *Verify the identity of personnel arriving to collect or deliver shipments.*
- c) *Confirm the identity with the signature list.*
- d) *Place the cartons on a pallet in such a manner that the sides of the carton showing the batch code are visible.*
- e) *Record the name and signature of individual collecting or delivering the shipment.*

**Q 63 October 2023 - Vendors must not release card products or components unless the vendor has access to the names and signatures of the individuals who are authorized to collect and deliver the shipments, the vendor can identify the personnel who arrive to collect or deliver the shipments and can confirm the identity with the signature list. Does this apply to all shipments?**

**A** *This requirement is under revision. Verification of the identity of personnel arriving to collect or deliver shipments and confirmation of identity with the signature list is required for all modes of transport. Advanced knowledge and access to the names and signatures of individuals who are authorized by the transportation company or Issuer to collect or deliver shipments is required for Secure Transport only.*

## Appendix C: Security Operations Center

### C.5.7 IT Infrastructure Requirements

#### C.5.7.1 PCI CP Certified Vendor Location, external to the SOC

- a) *IT Equipment that manages the SOC must be:*
- *Housed within a facility certified to the PCI Card Production and Provisioning Standard.*
  - *Housed within a location that meets the requirements defined for a Security Control Room within the PCI Card Production and Provisioning Physical Security Requirements.*

#### C.5.7.2 PCI CP Certified Vendor Location, internal to the SOC

- a) *IT Equipment that manages the SOC must be:*
- *Housed within the SOC.*
  - *Housed in a separated room under access control.*
  - *Monitored by CCTV surveillance.*

**Q 64 October 2024 - IT infrastructure types that can be used for the SOC are restricted to a location within a PCI Card Production Certified Location. This may be either external or internal to the SOC. How is that further defined?**

**A** *External is within the physical boundaries of the PCI card production facility where the SOC is located. Internal is within the SOC itself as defined within the C2.2 Structural Requirements.*