

The New Requirements in PCI DSS 4.0



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64 New Requirements

53

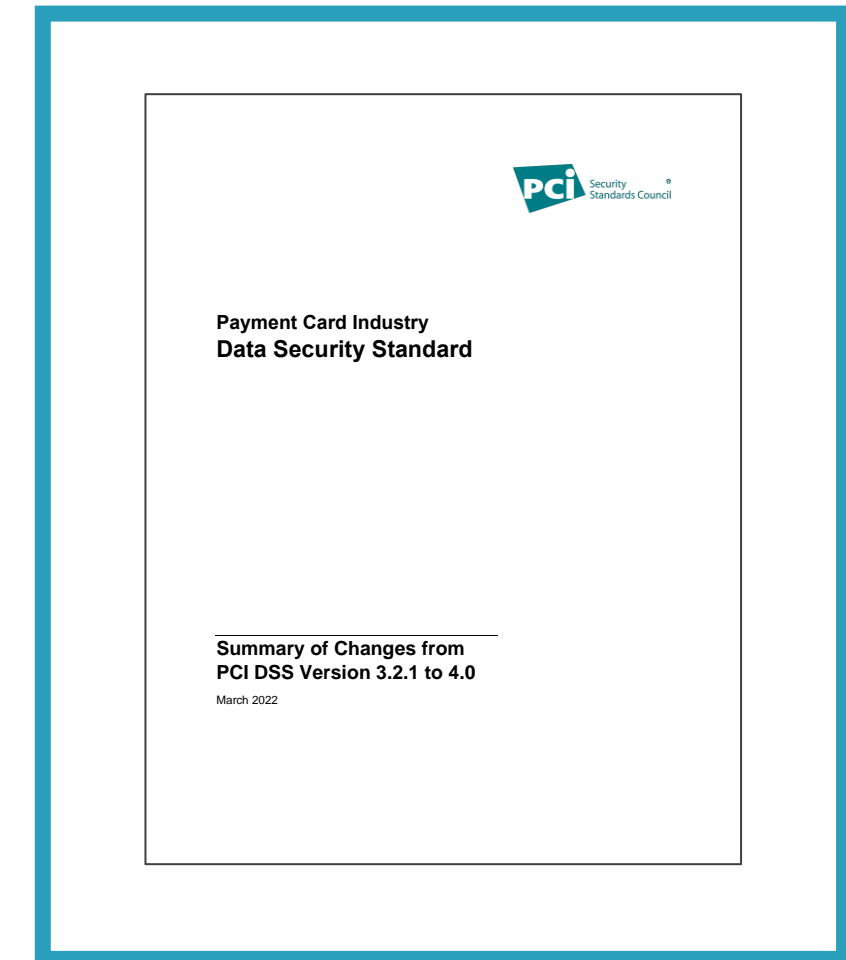
new requirements

**Apply to all
organizations**

11

new requirements

**Just for
service providers**



Summary of Changes

https://www.pcisecuritystandards.org/documents/PCI-DSS-Summary-of-Changes-v3_2_1-to-v4_0.pdf



New “Policy” Requirements



All these apply with
the new standard.

Must be in place for
assessments on or after
01 April 2024.





Requirement x.1.2

“Roles and responsibilities for performing activities in Requirement x are documented, assigned, and understood.”

For each requirement:

- Responsibility assigned
- To someone who knows that it is their responsibility!

Good practice is a RACI matrix

Confirm PCI DSS Scope



Organization to confirm and document scope annually 12.5.2

- Separate from the assessor

Document / update

- Cardholder data flows
- Everything in the CDE
- Segmentation
- Anything that could “affect the security of the CDE”.

Service providers: Every six months 12.5.2.1

- But this is future-dated



Future-dated Changes



All these are future-dated.

Must be in place for
assessments on or after
01 April 2025.



Targeted Risk Analysis (TRA)



A very limited ability for organizations to determine their own risk.

Primarily around periodicity 12.3.1

Also required for customized approach 12.3.2

Changes



Cryptography

E-commerce

Identity and access control

Logging and vulnerability scanning

Phishing and control management

Service providers



Cryptography



If hashing PANs, hash needs to be keyed 3.5.1.1

SAD stored pre-auth needs to be encrypted 3.2.2

- Hard to encrypt 3 or 4 digits!

Disk encryption no longer sufficient except on removable media 3.5.1.2

Cryptographic inventory 12.3.3 incl. certs 4.2.1.1

Crypto in use needs to be risk assessed annually (Crypto-agility) 12.3.3

All certs need to be checked to be valid and managed 4.2.1



Cryptography – but Not DSS v4



Three key triple DES (TDES/TDEA) no longer strong cryptography after 31 December 2023:

- Forbidden for storage
- Maybe OK for transmission of PAN if using something like DUKPT

New Requirements Protecting E-commerce



Protecting E-commerce



Clear definition of a payment page glossary



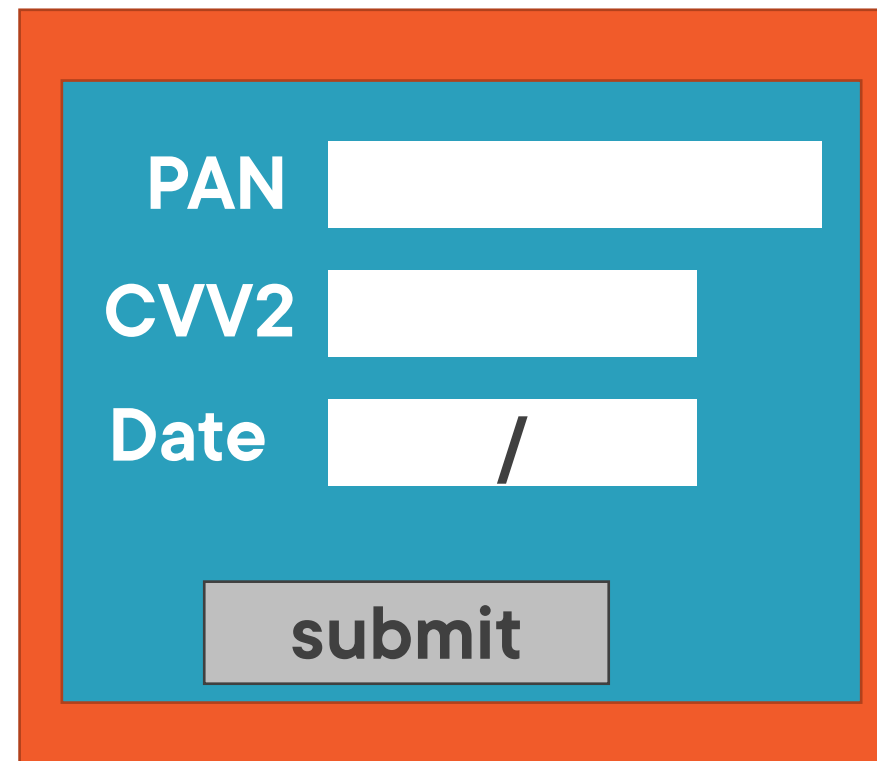
Payment Page

“A web-based user interface containing one or more form elements intended to capture account data.”



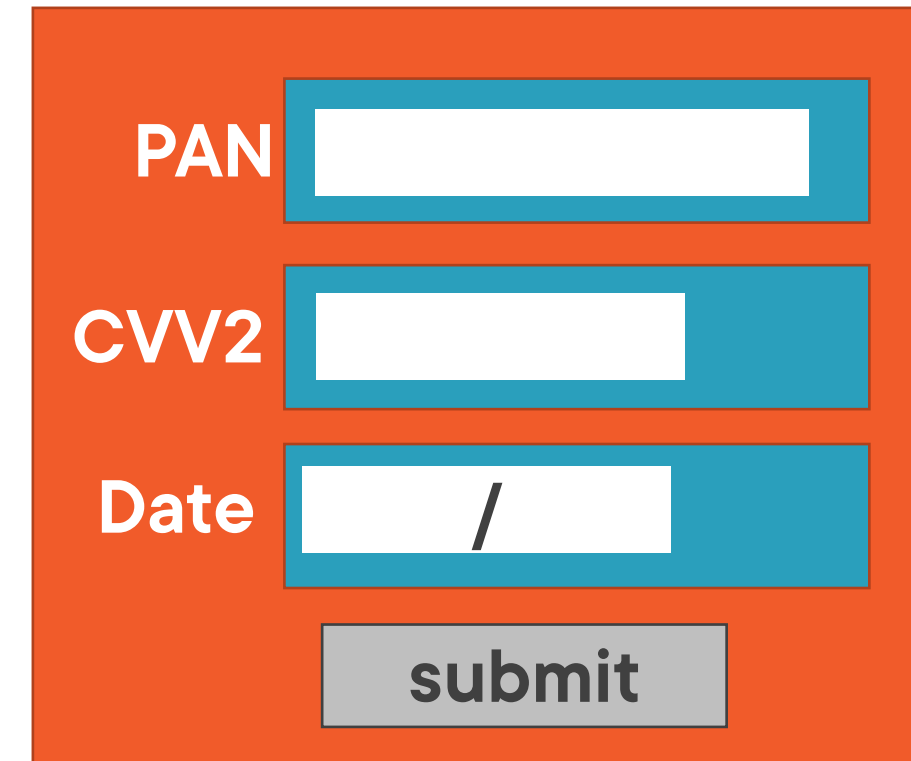
A diagram showing a single document or instance of a payment page. It features a blue background with three form fields: PAN, CVV2, and Date, each with a white input box. A gray submit button is located at the bottom.

A single document
or instance



A diagram showing a document or component displayed in an inline frame within a non-payment page. The payment page form is shown as a blue rectangle with a white border, centered within a larger orange rectangle representing the parent page.

A document or component
displayed in an inline frame
within a non-payment page



A diagram showing multiple documents or components each containing one or more form elements contained in multiple inline frames within a non-payment page. The payment page form is shown as a blue rectangle with a white border, centered within a larger orange rectangle representing the parent page.

Multiple documents or
components each containing one
or more form elements contained
in multiple inline frames within a
non-payment page



Payment page



Not a payment page
(Parent page)



Protecting E-commerce



Clear definition of a payment page glossary

Prevent skimming 6.4.3

- Only necessary scripts
- Authorized by management
- Integrity validated e.g. CSP and SRI

Detect tampering / skimming 11.6.1

- CSP violation reporting
- External monitor / checker

Must use a Web Application Firewall (WAF) 6.4.1

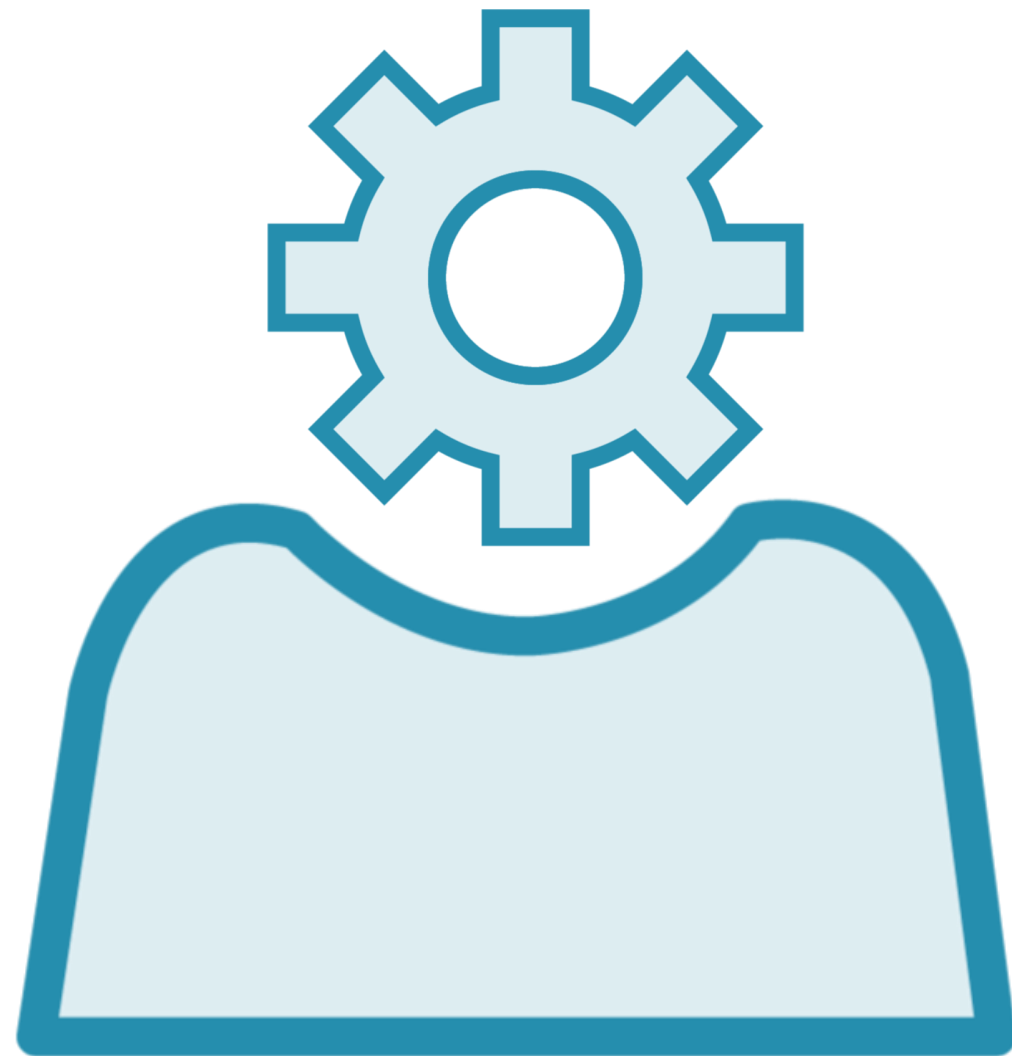
- Removes the option for a second code review



Identity and Access Control



System and Application Accounts



Document least privilege 7.2.5

Review schedule based on TRA 7.2.5.1

Managed if they can be used for interactive login (i.e. PAM solution) 8.6.1

Passwords not stored in config files or hard-coded if the account can be used for interactive login 8.6.2

Password complexity and frequency of forced changed based on a TRA 8.6.3



Human User Accounts



Require access rights to be validated every six months 7.2.4

Passwords \geq 12 characters 8.3.6

- Unless technically not supported, then 8 is the minimum
- Still required to be changed quarterly if the password is used as a single authentication factor

MFA for All



Everyone 8.4.2

- Not just admin
- Not just remote access

Double MFA required if remote access is via corporate network 8.4.3

MFA must be well configured 8.5.1

- But the standard does allow most commercial implementations

Not required for people who just access one card number at a time

Logging and Vulnerability Management



Logging



Acknowledgement that logging is dual purpose:

Real-time detection

Post-incident forensics

Automated log reviews 10.4.1.1



Vulnerability Scanning



Authenticated internal vulnerability scans 11.3.1.2

This will have a massive impact



Phishing and Management



Protecting Against Phishing



Technical controls 5.4.1

- Inbound email filter
- Clicked link checking

Awareness 12.6.3.1

- Train users – the standard emphasizes training users to report phishing

Management



Management of critical security controls 10.7.3

- Detected
- Alerted
- Addressed

Post event

- Risk exposure
- Contributory factor analysis
- Remediation to prevent future failures

Inventories and End-of-life



Bespoke and Custom Software Inventory 6.3.2

- Vulnerability and patch management
- An SBOM by any other name?

Hardware and Software Inventory 12.5.1

- Not a new requirement

BUT: Review annually 12.3.4

- Still supported by the vendor?
- Plan to remediate end-of-life components

Cryptographic Inventory 12.3.3

Changes Applicable to Service Providers



If You Are a Service Provider



Separation of keys in the cryptographic architecture 3.6.1.1

Covert channels monitored by IPS/IDS 11.5.1.1

Allow penetration tests or provide evidence 11.4.7

Help meet customer's 12.8 requirements 12.9.2

- Compliance of a function or service (to meet 12.8.4)
- Which requirements are the TPSP's responsibility and which are shared (to meet 12.8.5)

Summary of Changes Document

**Available in the PCI SSC
document library**



**Payment Card Industry
Data Security Standard**

**Summary of Changes from
PCI DSS Version 3.2.1 to 4.0**

March 2022



New Options in the Assessment



Assessment Documents

**Payment Card Industry
Data Security Standard**

PCI DSS v4.0 Report on Compliance Template
March 2022

Report on Compliance



**Payment Card Industry
Data Security Standard**

**Attestation of Compliance for Report
on Compliance - Merchants**
Version 4.0
Publication Date: March 2022

Attestation of Compliance



**Payment Card Industry
Data Security Standard**

**PCI DSS v4.x Report on Compliance Template -
Frequently Asked Questions**
March 2022

Report on Compliance FAQs



Two Changes



Partial Assessments



In-place With Remediation



Partial Assessment

1.7 Overall Assessment Result

Indicate below whether a full or partial assessment was completed. Select only one.

| | |
|--------------------------|---|
| <input type="checkbox"/> | Full Assessment: All requirements have been assessed and therefore no requirements were marked as Not Tested. |
| <input type="checkbox"/> | Partial Assessment: One or more requirements have not been assessed and were therefore marked as Not Tested. Any requirement not assessed is noted as Not Tested in section 1.8.1 below. |

Partial Assessment:
One or more requirements have not been assessed and were therefore marked as Not Tested.



Why a Partial Assessment?



Only a sub-set of requirements tested

- Everything else marked “Not Tested”

Organization just wanted to validate some requirements

- Prioritized approach
- Implementation of a new technology

Organization only takes responsibility for a sub-set of PCI DSS requirements

- Typically service providers

In Place With Remediation

| Assessment Findings (select one) | | | | |
|-------------------------------------|---------------------------|--------------------------|--------------------------|--------------------------|
| In Place | In Place with Remediation | Not Applicable | Not Tested | Not in Place |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

In Place

In Place with Remediation

Not Applicable

Not Tested

Not in Place



In Place With Remediation



Requirement was not in place when initially assessed

Rectified during the course of an assessment

Assessor satisfied that organization:

- Understands cause of failure
- Now properly implemented
- Processes to prevent reoccurrence of failure

Improved transparency

- Internal management
- External customers



In Place With Remediation: Examples



Security patch not applied in 30 days

Some users missed training

Three new systems not configured with anti-malware solution

Unintentional storage of unencrypted PAN

Quarterly ASV scan missed

Up Next: The Customized Approach

