

# The New Requirements in PCI DSS 4.0

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# 64 New Requirements

53

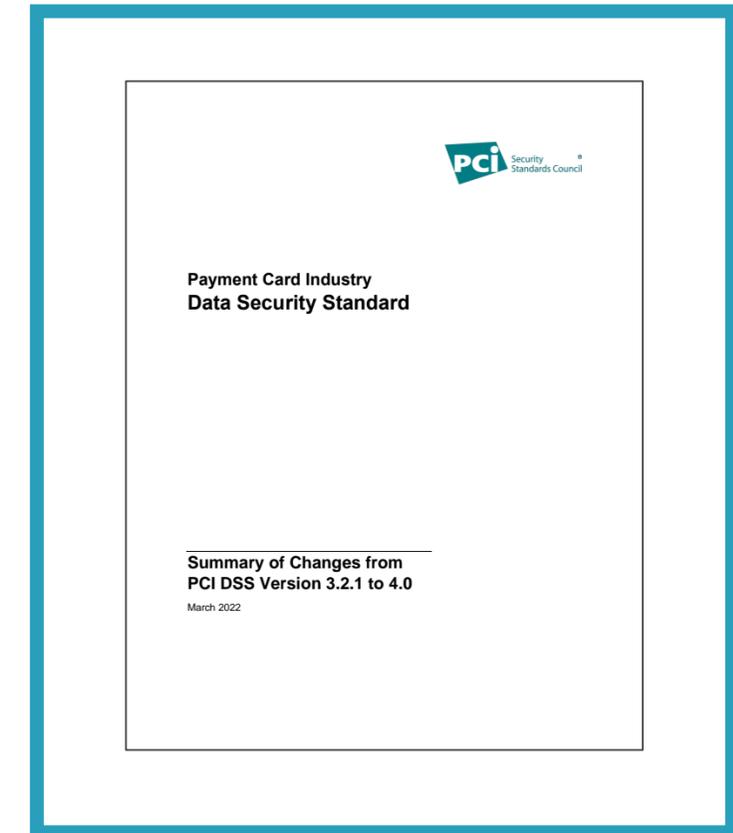
new requirements

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



# New “Policy” Requirements

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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

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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

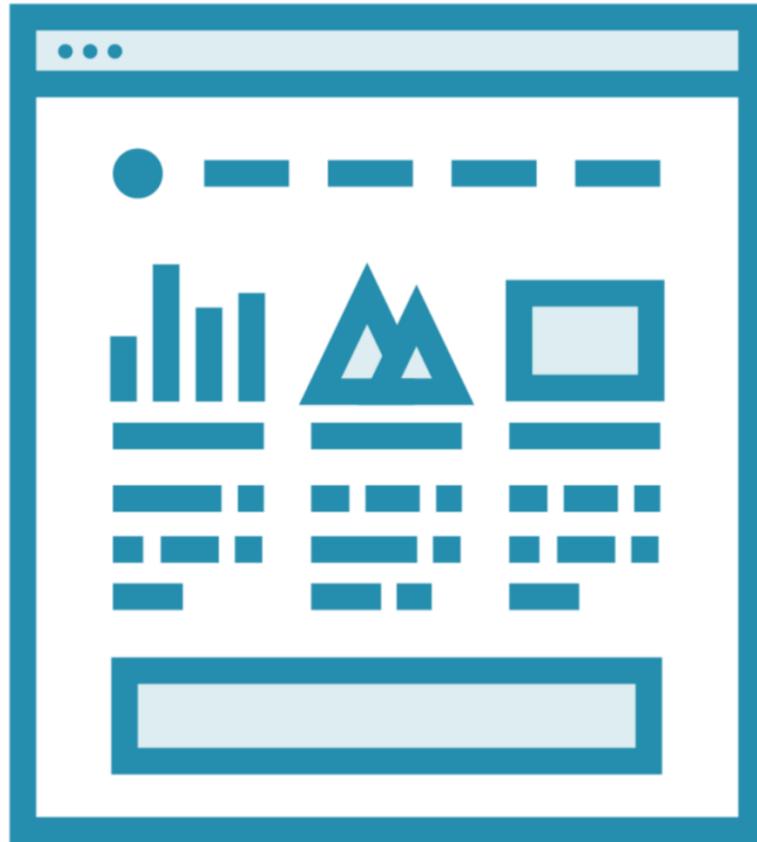


# New Requirements Protecting E-commerce

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# Protecting E-commerce



**Clear definition of a payment page** glossary



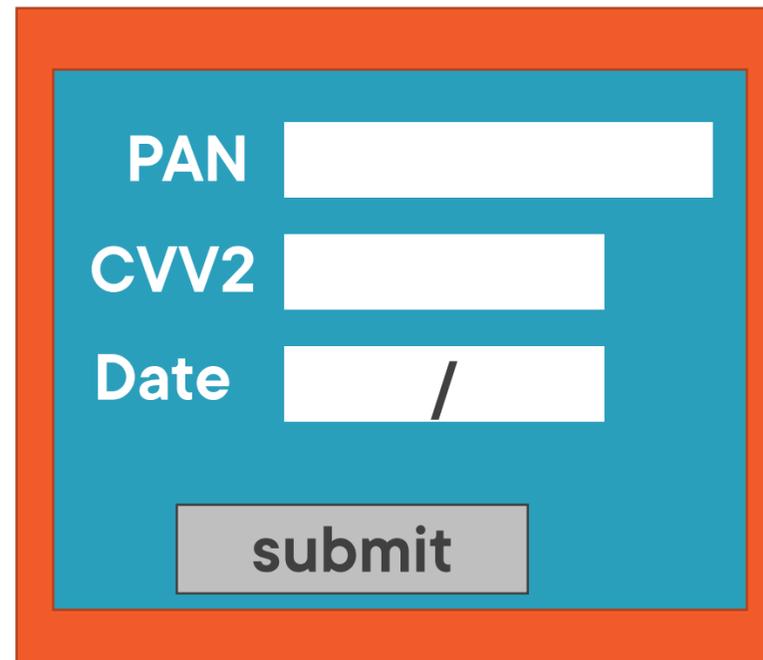
# Payment Page

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



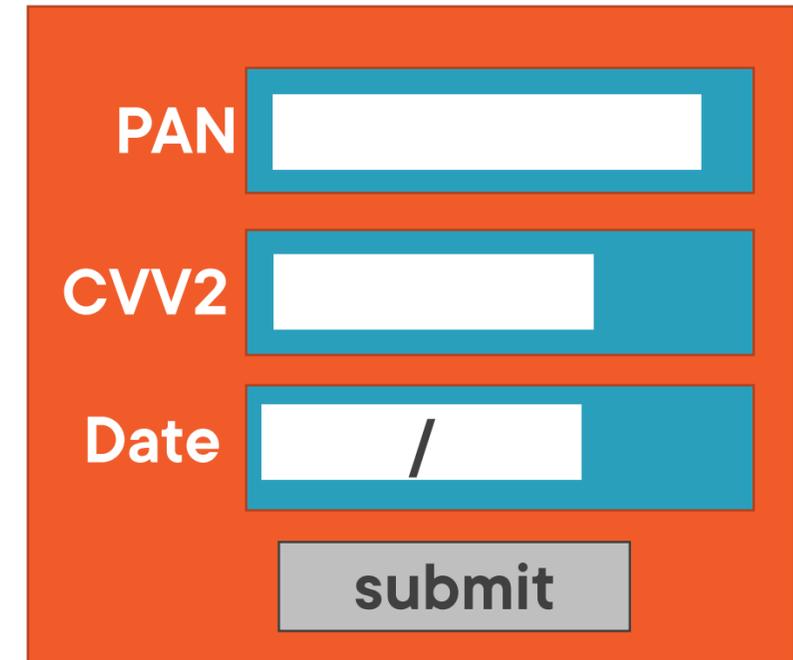
A diagram showing a payment page form on a blue background. The form includes three input fields: 'PAN', 'CVV2', and 'Date' (with a slash separator). Below the fields is a 'submit' button.

A single document or instance



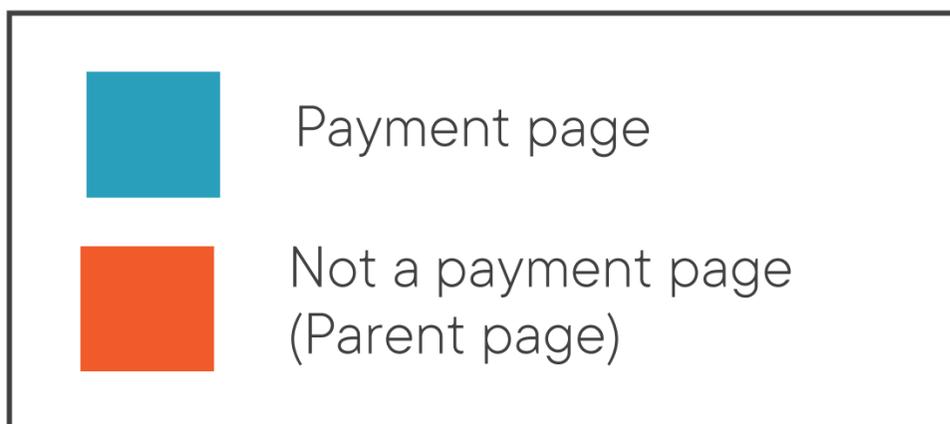
A diagram showing a payment page form (blue background) enclosed within an orange border, representing an inline frame within a non-payment page. The form includes 'PAN', 'CVV2', 'Date' fields and a 'submit' button.

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

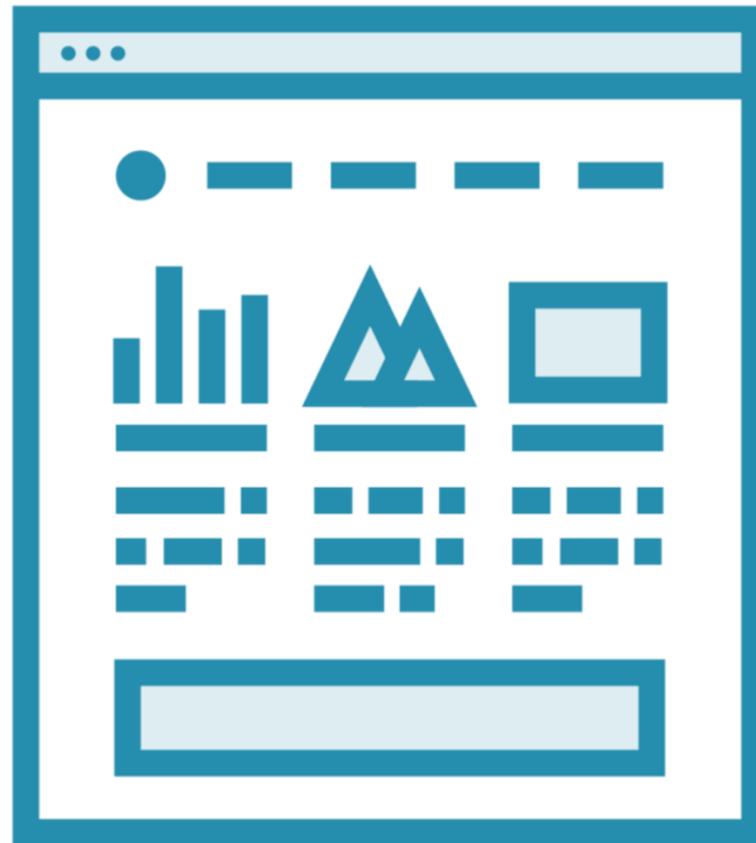


A diagram showing three separate payment page forms (blue background) stacked vertically, each enclosed within its own orange border, representing multiple inline frames within a non-payment page. Each form includes 'PAN', 'CVV2', 'Date' fields and a 'submit' button.

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

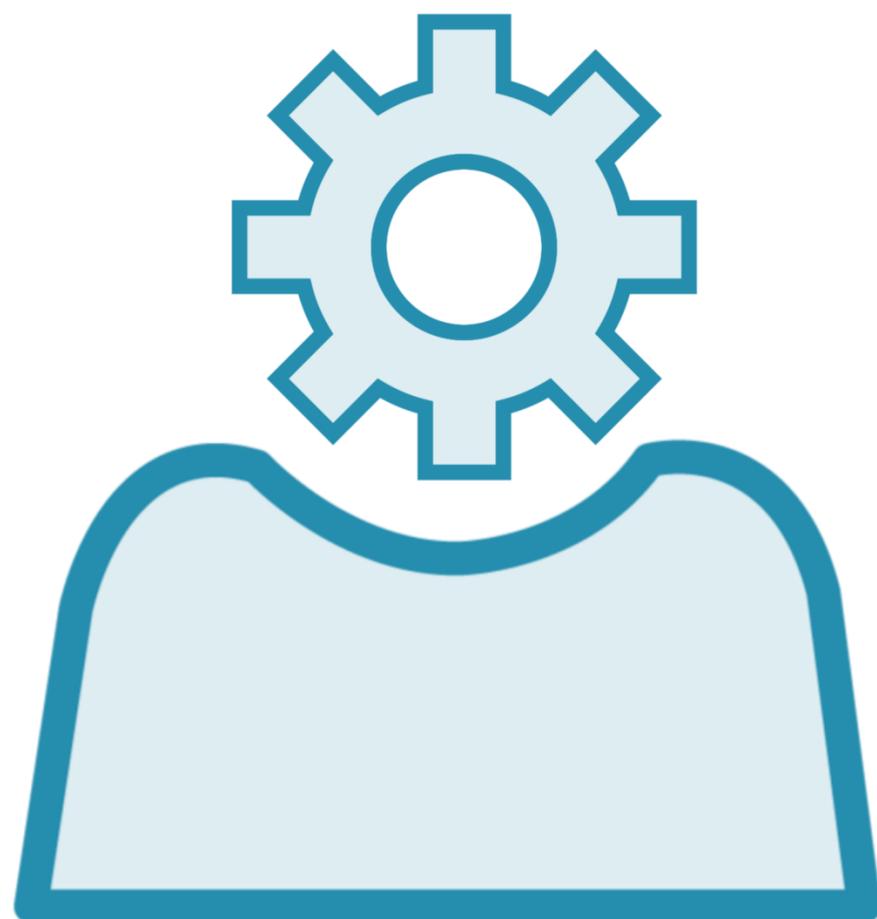


# Identity and Access Control

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# 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

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# 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

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# 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



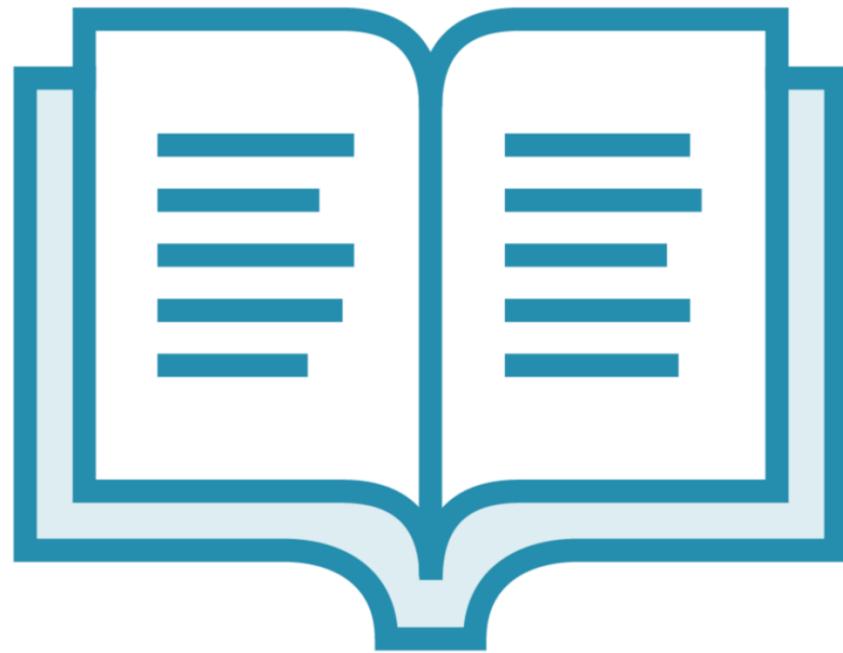
## Management of critical security controls 10.7.3

- 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

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# 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**

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

March 2022



# New Options in the Assessment

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# 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"/>	<b>Full Assessment:</b> All requirements have been assessed and therefore no requirements were marked as Not Tested.
<input type="checkbox"/>	<b>Partial Assessment:</b> 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

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