



Live Webinar

# Webinar is starting soon

# **Understanding PCI DSS**

Avoid risk and financial consequences

**Speakers:** 

#### **Christian Möller**

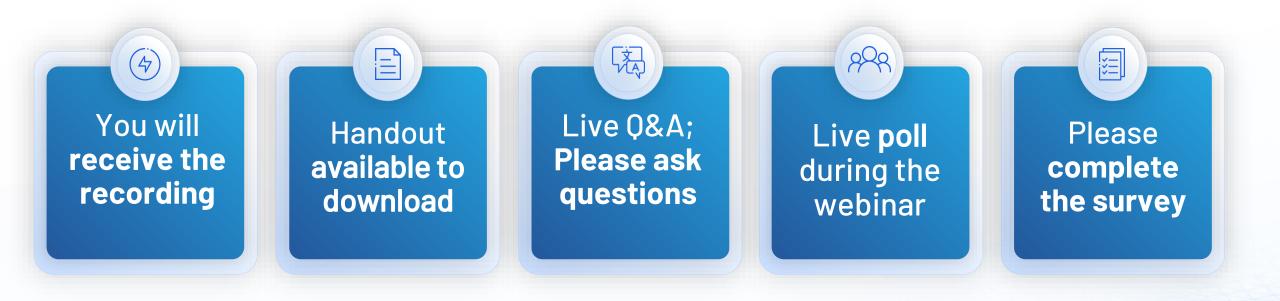
Director Transport and Distribution ECTAA

#### Natasja Bolton

Client Engagement Manager

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# **Understanding PCI DSS**

## Avoid risk and financial consequences

**Speakers:** 



## CHRISTIAN MÖLLER

Director Transport and Distribution ECTAA



#### NATASJA BOLTON

Client Engagement Manager

# Our Agenda

# What We Are Discussing Today

Background to the PCI DSS

Why the PCI DSS

Data Breaches & the Consequences

Aim of PCI DSS

How to comply with the PCI DSS

**Exploring PCI Manager** 

Conclusion





# Payment Card Industry Security Standards Council (PCI SSC)

Background to the PCI DSS

# **PCI SSC**

- Independent body founded in 2006 by the card payment brands
- Develops and maintains PCI standards:



Ecosystem of payment devices, applications, infrastructure and users

(after: PCI DSS Quick Reference Guide v3.2)

# The card payment brands:

- Define PCI Compliance Programmes
- Those programmes require merchant compliance with the PCI Data Security Standard (DSS)



# What is the PCI Data Security Standard (DSS)?

#### Background to the PCI DSS



**Global data security standard** adopted by the payment card brands.

#### Applies to:

- All entities involved in payment card processing (incl. merchants, processors, acquirers, issuers, and service providers)
- All other entities that store, process or transmit (or could impact the security of) account data

#### PCI DSS is not new:

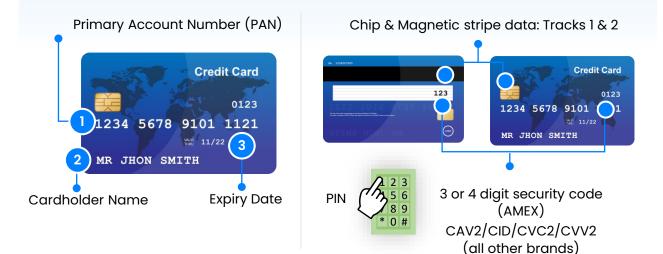
PCI DSS v1.1 launched in 2006

PCI DSS v2.0 in **2010** 

#### Current PCI DSS v3.2.1, since 2018

#### **PCI DSS**

Baseline security best practices for protecting Account Data (Cardholder Data and Sensitive Authentication Data)



# **Applicability of PCI DSS**

Background to the PCI DSS

PCI DSS applies to environments where account data is **stored**, **processed** and/or **transmitted**:

#### Account data:

- ✓ Is personal data (PII) and a target for criminals
- Attackers exploit weaknesses in the CDE to gain unauthorised access to account data:
   a data breach

#### **PCI DSS security controls:**

- Protect the CDE
- Help businesses prevent, detect and respond to data breaches
- Include requirements for policies, procedures and technical security measures



# What is the PCI DSS

## A high-level overview

PCI DSS Goals	Requirements Summary
Build and maintain a secure network	<ul> <li>Use of firewalls to protect your network, secure wireless networks</li> <li>Securely configure and administer all systems</li> </ul>
Protect cardholder data	<ul> <li>Sensitive data retention and disposal policies</li> <li>Secure storage of card data and mask Primary Account Numbers on display</li> <li>Encrypt transmission of cardholder data across open, public networks</li> </ul>
Maintain a vulnerability management program	<ul> <li>Use anti-virus software, vulnerability and patch management for all systems</li> <li>Software/application development practices and secure coding</li> </ul>
Use strong access control measures	<ul> <li>Restrict access to cardholder data by business need to know</li> <li>User identification and authentication requirements, incl. secure remote access</li> <li>Physical access controls and tamper inspection of card reading devices</li> </ul>
Regularly monitor and test networks	<ul> <li>Log and monitor access to systems and cardholder data</li> <li>Vulnerability scan / test the security of systems and networks</li> </ul>
Maintain an information security policy	<ul> <li>Organisational information security policy, roles and responsibilities, usage policies, security awareness</li> <li>Management of service providers</li> <li>Incident response plan</li> </ul>



# Why PCI DSS

"

Protecting customer payment card information from unauthorised use, exposure and potential fraud is *key in delivering the trust* your customers and partners expect.

#### To achieve this:



IATA Accredited Travel Agents must achieve and maintain PCI DSS compliance.

Implications of non-compliance or inaccurate compliance assessment:

- IATA Risk Event registered
- Potential for non-compliance charges levied by your acquirer(s) / merchant services provider
- Failure to have appropriate technical and organisational measures to ensure the protection of personal data – a breach of GDPR
- Greater risk of card data (account data) breach



# **Data Breaches**

and their Consequences

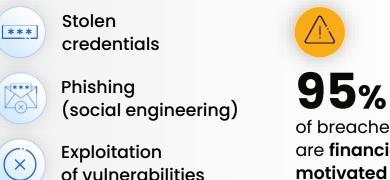
# What is a card data breach?

Data breaches and their consequences



Any event that could lead to the unauthorised exposure, compromise and misuse of payment card details and hence to card fraud.

#### Three primary ways attackers gain unauthorised access:



# 95% of breaches are **financially**

#### **Travel Industry Breaches**

- **2019:** Nearly 70% of travel buyers said, their travelers were affected by a payment-related data breach from an outside vendor, such as a hotel, airline or retailer, in the previous year
- May 2023: Cyberattack on French travel agency
  - Computer intrusion (LockBit ransomware infection)
  - 8000+ customers' passport details, phone numbers and addresses published on the darkweb
  - Data leak followed travel agency's refusal to pay the ransom demanded

# Data Breaches

90%

#### The reality

of customers who suffered a data
 breach last year had a turnover of
 below Im transactions per year
 (UK-based acquirer statistic)

#### Merchant e-commerce websites:

the predominant payment channel being attacked in UK and Europe.

#### Most breached merchants do not publicise the fact

so there is a lack of awareness within the merchant community. It can be months until a breach is identified, during which time **all cards being accepted** are likely to be **at risk**.

#### 2023 mean time to **identify a breach:**

**204 days** (6+ months)

2023 mean time to contain a breach:



(IBM Cost of a Data Breach 2023)

# **Card Fraud**

#### Data breaches and their consequences

Remote purchase (Card Not Present) fraud

 $\checkmark$ 

- Criminals use stolen card details to buy something online, over the phone or through mail order
- Use card details obtained by scams (such as phishing) or from data breaches (such as web skimming)

 $\checkmark$ Face to face (Card Present) fraud In retail stores and ATMs Involves the use of: - Counterfeit cards (criminal creates a fake card using information obtained from the magnetic stripe) - Legitimate cards, and often the PIN, stolen by fraudsters Every fraudulent transaction costs businesses times the lost transaction

As a merchant accepting and processing payments directly from cardholders you are on the front line of the battle to:

()

 $\checkmark$ 

- Keep payment data safe from theft and exploitation
- Prevent card fraud

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3.01

**E-commerce** 

merchants

# \$165 USD

Average cost per record involved in a data breach

(IBM Cost of a Data Breach 2023)

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(LexisNexis Fraud Multiplier)

value, on average

3.13

Retailers

# **Card Fraud in Europe**

Data breaches and their consequences

#### **Credit Card Fraud Rates by European Countries** Credit card fraud €1.53 billion varies widely United Kingdom 123 France Total Value of Card Fraud 2022 across Europe: Ireland Denmark (2021 Uswitch Online fraud report) Luxembourg (left-hand scale: total value of fraud (EUR millions); right-hand Malta scale; value of fraud as a share of the value of transactions) Swede POS 📕 ATM Spair CNP Fraud share Finland 21 2,500 0.050% Belgium No. of people affected Netherlands 15 0.041% Germany 13 per 1,000 inhabitants 0.037% 0.036% 0.036% 2,000 0.040% 0.035% 1,500 0.030% Total Value Lost per 1,000 Inhabitants 1,000 80% 0.020% 73% 79% 500 0.010% 12% n. 0.000% 2016 2017 2018 2019 2020 2021 Amount of money lost (€) per 1,000 inhabitants (2023 European Central Bank card fraud report)

# Aim of PCI DSS

To reduce financial fraud through **heightened data security capabilities** of whoever processes payment card information.

# Businesses adhere to best practice security requirements (PCI DSS):

To help them **prevent**, **detect and respond to data breaches**.

Help **avoid the costs** associated with data breaches, including:

- Investigation and remediation costs
- Legal costs

(0)

 $\checkmark$ 

 $\left[ \checkmark \right]$ 

- Loss of revenue
- Lost opportunity costs



# How to comply with the PCI DSS

# PCI DSS compliance reporting

## How to comply with the PCI DSS

- Specified by the payment brand PCI Compliance Programmes
- For merchants at lower levels (of transaction processing):
  - Self-Assessment Questionnaire (SAQ)
  - Supported by an external network vulnerability scan (If applicable to your environment)
- Eight SAQ types:
  - Address common payment processing methods
  - Contain an appropriate set of PCI DSS security measures

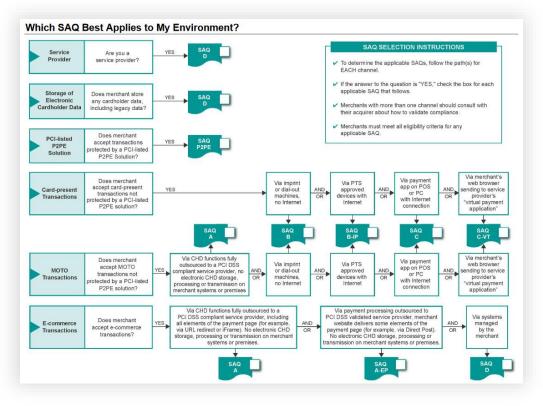


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# Selecting your SAQ type

How to comply with the PCI DSS

#### Follow the PCI SSC flowchart:



(from: PCI DSS Self-Assessment Questionnaire Instructions and Guidelines, v3.2.1 r1)

#### Sign up for the SecureTrust PCI Manager:

# SecureTrust is now VikingCloud

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#### PCI DSS Certification Program

SecureTrust PCI DSS Compliance Program for IATA Passenger Agents

#### Welcome to the PCI DSS Compliance Program!

Understanding that compliance with the PCI Data Security Standards (PCI DSS) may be a challenging task for your Travel Agent and under the guiding principle of "collaborative approach towards compliance", IATA has partnered with SecureTrust, a Qualified Security Assessor (QSA) by the PCI Security Standards Council, who offer a comprehensive Compliance Program through an intuitive web based tool, intended to assist in validating compliance with PCI DSS.

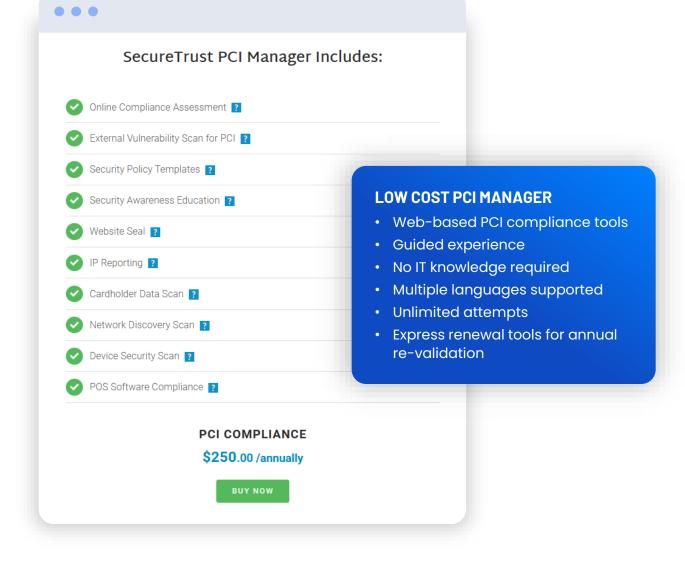


OR

# SecureTrust PCI Manager

## How to comply with the PCI DSS

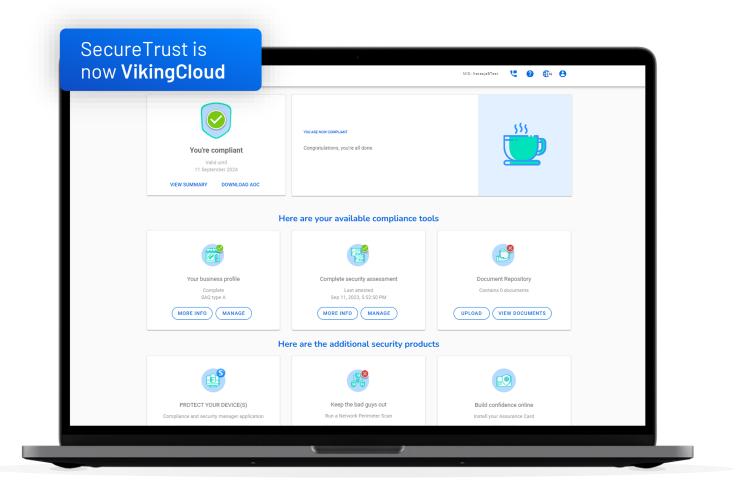
- Simplifies compliance assessment and reporting
- Wizard Tool 'Guide Me'
  - Makes sure you complete the right PCI DSS
     Self-Assessment Questionnaire (SAQ)
  - Hides requirements that **do not apply** to your business
  - Helps you set up **vulnerability scanning** (if applicable)
- Downloadable PCI Attestation of Compliance (AoC)
  - For submission to IATA



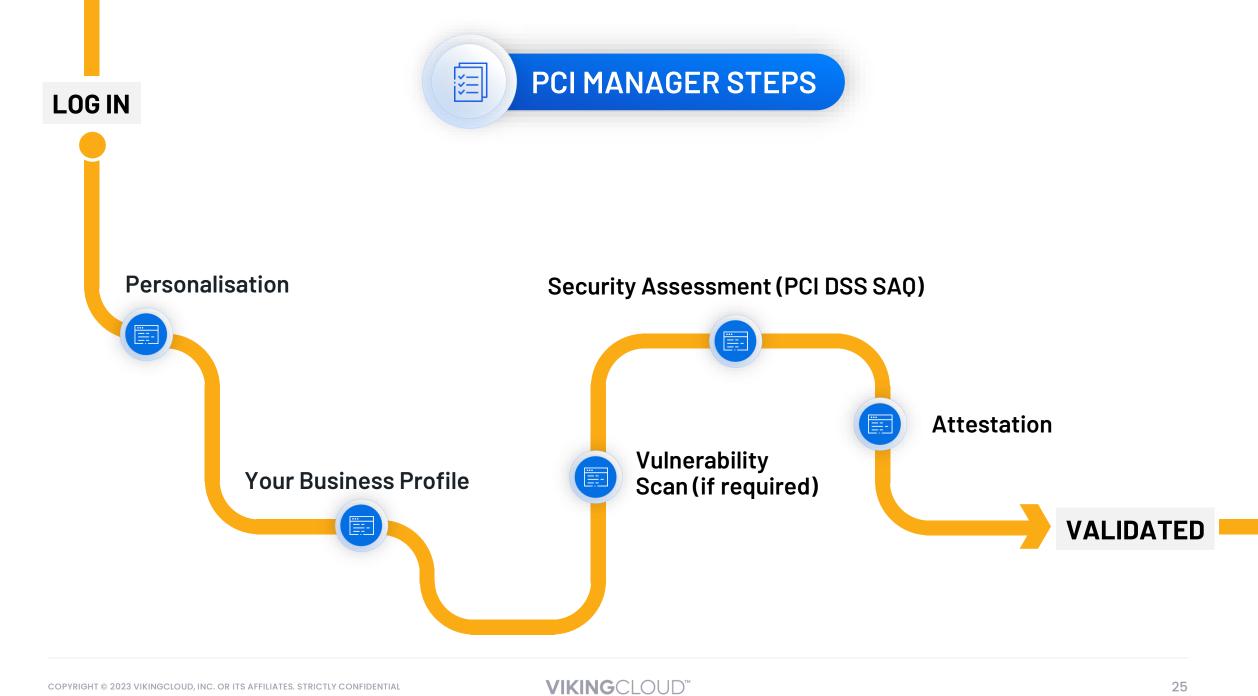
# PCI Manager: what's included

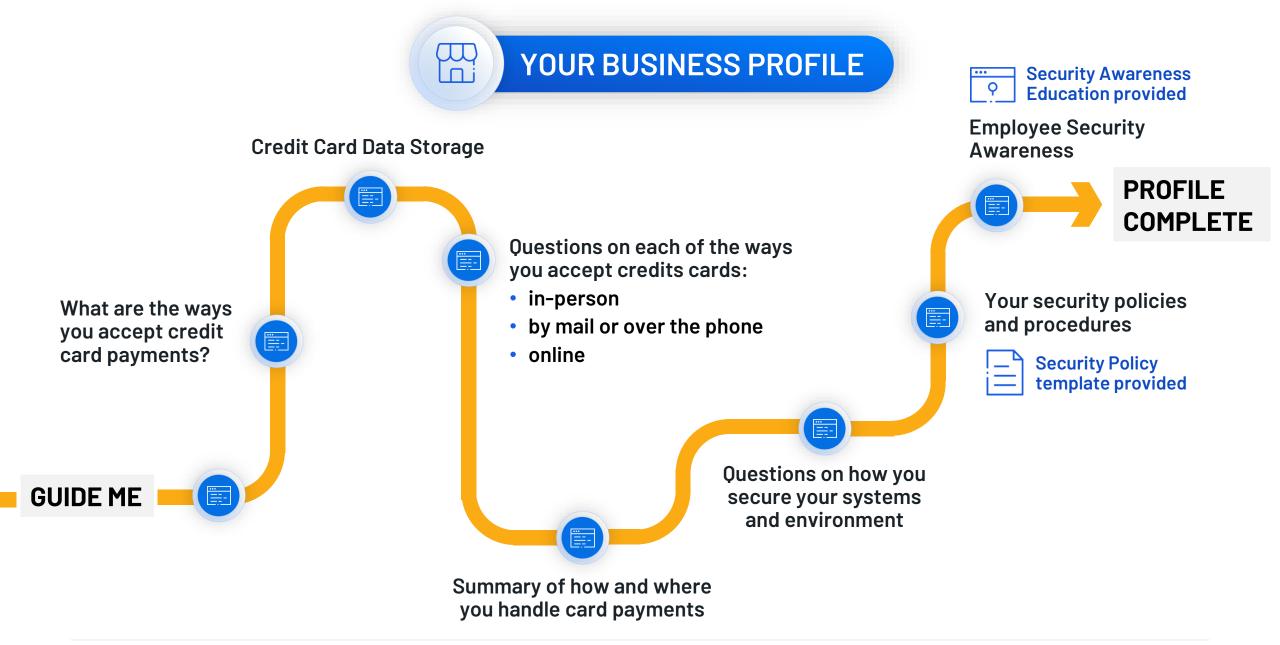
## How to comply with the PCI DSS

- Report your PCI DSS compliance
  - Streamlined and simplified journey
- Maintain your compliance throughout the year
  - Login to complete regular scanning and maintenance tasks
- Receive email alerts and reminders so you always stay up to date
- Rich online, chat and phone support available if you get stuck
  - Multi-language support (German, Spanish, French-Canadian, English)
- Included Security Tools
  - Take additional steps to defend against hackers and malware









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# What are the ways you accept credit card payments?

?

Your Business Profile

## How do you accept credit cards? Select all that apply.

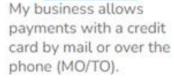


My business has a physical location where payments with a credit card are made in-person.



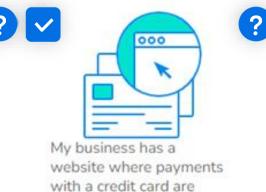
In-store card payments







Over the telephone or by mail order







Online e-commerce card payments



## **Credit Card Data Storage**

Does your business store any sensitive credit card data electronically?

Sensitive credit card data includes the credit card number, the 3- or 4-digit card validation code, PIN data, or full magnetic stripe data (track data) from a credit card.

Hover over any to see help text



#### Card data storage example:

- Holidays deposits taken as one-off payments; customer card details retained electronically for future balance payments
- Card data held as a 'token' (alias) is **not considered** electronic storage of card data
- A token (alias) is returned by your Payment Service Provider, on completion of the initial payment, that you:
  - Can use to trigger subsequent or recurring payments
  - Cannot exchange for the full card details



# Questions on each of the ways you accept credits cards

# Please select all of the methods that you use to accept card payments in your business.





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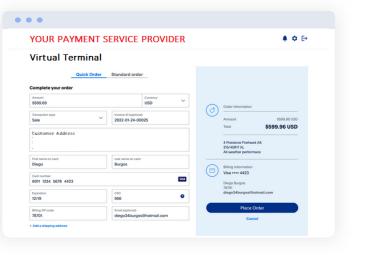








**Payment Application** 



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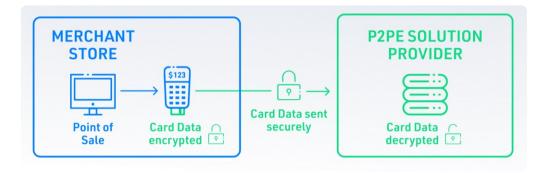
# Questions on each of the ways you accept credits cards

# Please select all of the methods that you use to accept card payments in your business.



Certified Point to Point Encryption (P2PE)

A PCI SSC-listed Point to Point Encryption (P2PE) solution:



 $https://listings.pcisecuritystandards.org/assessors\_and\_solutions/point\_to\_point\_encryption\_solutions$ 



No equipment; I use only paper or a telephone.

- You use an imprint device with carbon-copy paper to capture the credit card number
- Services where you call a number and key in the purchase information.



## Questions on each of the ways you accept credits cards:

By mail or over the phone

# For your mail and/or telephone orders who collects the credit card numbers from your customers?

 $(\mathbf{X})$ 

## My business:

 call handlers in your business take the card details over the phone A third-party service provider:

 you may never receive the credit card numbers



Questions on each of the ways you accept credits cards: online online

# Does your business have administrative control over any part of your web site?

# Ves, if you can: Control the website look-and-feel Access the servers that run the website Administer the web server Install plug-ins, patches or updates

# A summary of how and where you handle card payments Your Business Profile

## Forms part of your PCI DSS Attestation of Compliance (AOC)

List your business premises type(s) and a summary of locations that are relevant to your PCI DSS assessment (eg, retail outlets, corporate offices, data centres, call centres etc..)

Retail travel agent stores in XXXX and YYYY locations. Head office in ZZZZ location.

Generally, how does your business store, process and/or transmit cardholder data?

We have two stores processing face to face and telephone payments from customers for holiday deposits and balance payments, processed via standalone mobile chip & PIN terminals. The finance team in head office process customer refunds, calling the customer to confirm the last four digits of the card.

Briefly describe the environment and/or systems covered by this assessment

Each mobile chip & PIN terminal has its own SIM card, and is not connected to the store network or WiFi. Terminals are located on agent desks in the store and one terminal in the Finance office for processing refunds.



#### List the locations in scope for this assessment



Describe how card data is **handled** and card payments are **accepted** by your business.



Describe the **systems / cardholder data environment(s) in scope** of your assessment. The system / environment(s) that **facilitate how** your business handles and accepts card payments



## Questions on how you secure your systems and environment

Your Business Profile

#### Your answers:

- May trigger further profile questions
- Will pre-populate security assessment questions
  - e.g. as 'Yes' or 'Not Applicable'

#### **Topics include:**

- ✓ How you secure your business network and systems
- How you protect and securely destroy paper documents with credit card data
- ✓ How you keep track of and protect your POS devices
- Third-party service provider relationships
- ✓ Your use of wireless networks
- Controlling physical access to areas where account data is present



## Your security policies and procedures

Your Business Profile

# Do you have written security policies and procedures that address the protection of paper with credit card numbers such as receipts and the physical security of your card processing devices?

- Template information security policy available for download
- Make sure all employees and contractors:
  - Are familiar with your security policies
  - Have access to your policy document(s) and all related procedures for reference
  - Understand their responsibilities regarding protecting credit card data
- Policy template covers PCI DSS security topics, including:
  - Protecting your Internet connection
  - Securing your POS devices
  - Physical protection of account data, etc.

Information Security Policy	
	Contents
	Information Security Policy
(Company Name)	1. Network Security
	2. Acceptable Use Policy
	Protect Stored Data     Information Classification
	5. Access to the Sensitive Cardholder Data
	6. Physical Security
	7. Protect Data in Transit
(Date)	8. Disposal of Stored Data     9. Security Awareness and Procedures
	Security Awareness and Procedures     Credit Card (PCI) Security Incident Response Plan
	11. Transfer of Sensitive Information Policy
	12. User Access Management
	13. Access Control Policy
	Appendix A – Agreement to Comply Form – Agreement to Comply With Information Security Policies
	Appendix B – List of Devices



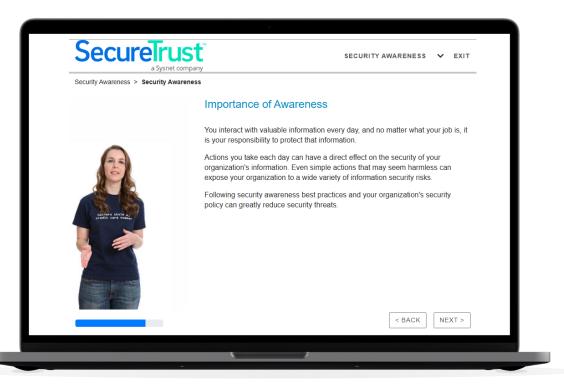
## **Security Awareness Education**

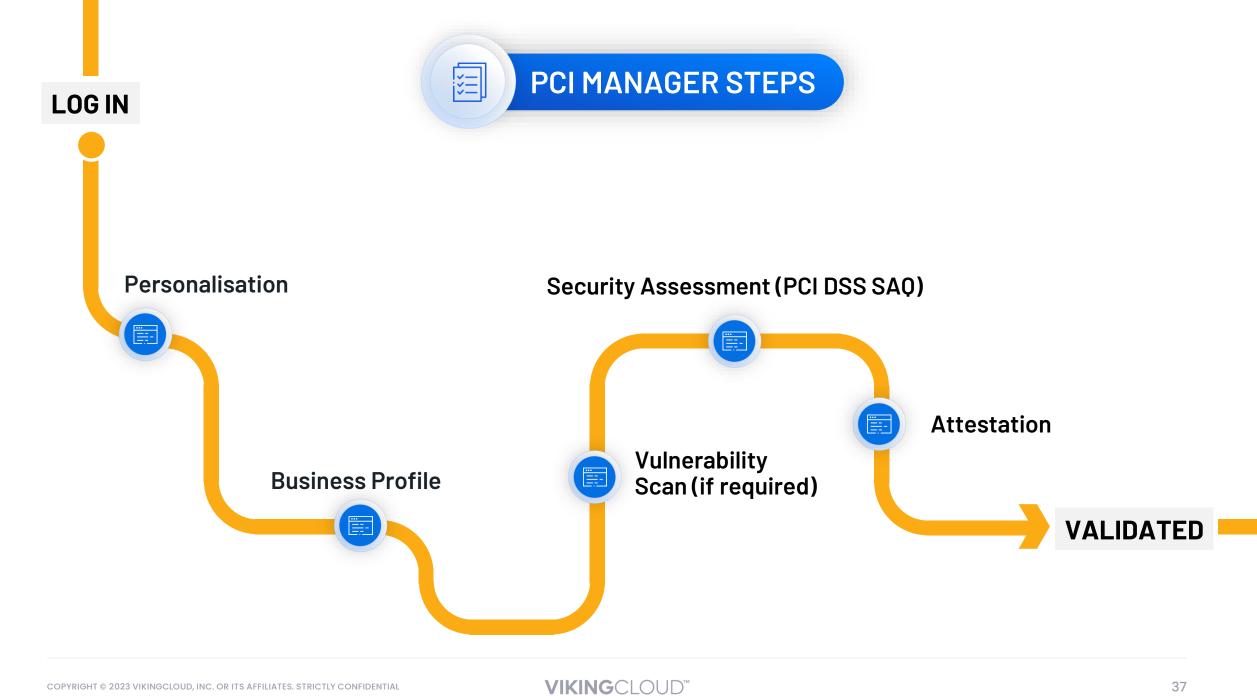
Your Business Profile

Do you have a formal training program for all relevant employees that teaches them about security as it relates to credit cards, paper with credit card numbers on them and the devices that process credit card transactions?

# Online Security Awareness Education is provided, including:

- Payment Card Industry Overview
- ✓ Information Security
- Security Awareness Overview
- Sensitive Information
- Secure Practices for Associates

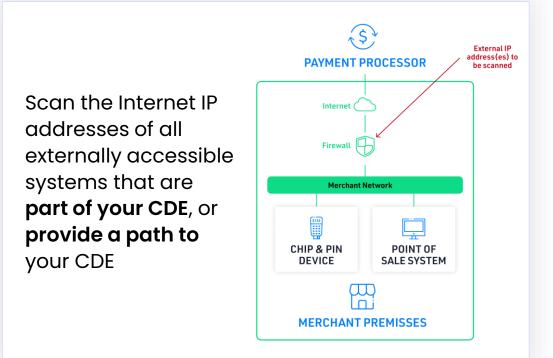




# **Vulnerability Scans**

#### PCI Manager

- May be required based on Your Business Profile:
- Scans detect vulnerabilities (security weaknesses) affecting your Internet-facing systems



	÷	Be scan compliant Manage your PCI DSS External Vulnerability Scan
Be scan compliant Run PCI DSS External Vulnerability Scan		Schedule scan As part of your PCI DSS compliance tasks, you will need to schedule a scan on all of your externally facing IP addresses
MORE INFO MANAGE	۵	Review your PCI DSS External Vulnerability scans View the status and history of all of your PCI DSS External Vulnerability Scans
	:=	Manage multiple Subs / IP addresses Create a list of your domain names or your IP addresses that require scanning
	<b>1</b>	Upload results Upload your validated scan results from a 3rd party Approved Scanning Vendor (ASV)

 PCI Manager User Guide and Scan widget guides set-up, review and attestation of scans:

can Dash	board				sysnet
u can view & edi	t your current scan s	status and scan history			
SCAN STATUS:	SCAN RESULT:	SCAN DATE:	SCAN ATTESTED DATE:	ASV:	ACTIONS:
	Pass	Aug 16, 2023 23:10	Aug 22, 2023 20:16	Sysnet Global Solutions	OPTIONS

• Reminder emails sent when your next scan is due

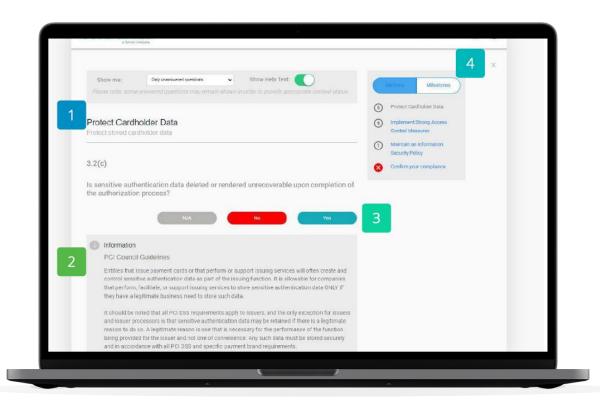


- Assess your measures to protect and secure your business against the applicable PCI DSS Requirements.
- Your 'Guide Me' business profile:

2.

4.

- Determines the number and complexity of the assessment questions
- Pre-populates questions that do not apply or that you have already answered
  - You are guided through the questions.
  - More information is available in the box underneath each question.
- 3. Work your way through the questions, answering 'Yes', 'No' or 'N/A'
  - Box on the right shows your progress and the number of unanswered questions remaining.

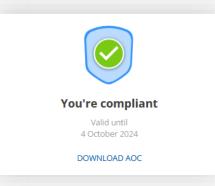


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# Attest to your compliance

#### PCI Manager

- Attest to your compliance:
  - Confirm the information you provided is correct.
- Select 'Confirm your Attestation'
  - Your SAQ is valid for one year.
- Your renewal date is shown on your dashboard:



- Reminder emails are sent when it's time to:
  - Complete your next scan (if required for your business)

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- Revalidate your PCI DSS compliance.

Confirm your compli Please review the form below and ensu	ance		
	ure all sections are correct and complete	Sections	
✓ Your organization information of		Protect Cardholder Data     Implement Strong Access	
Cobury rank merchant000	Contactment/unit000	Control Measures  Maintain an Information  Security Policy	
Title	Telephone numbers	Confirm your compliance	
testDijisysnet.le	0 Main Street		
0 Main Street 2	0 Main Street 3		
0 Main Street 4	O Main Street 5		
Country		THEN DOWNLOAD Y PCI DSS ATTESTATI	
✓ Type of business ✓ Description of environment		OF COMPLIANCE (AC	
✓ Eligibility to complete SAQ 8		For submission to I	AT.
✓ Acknowledgement of status an	d attestation		
		-	
✓ Merchant Executive Officer			
✓ Merchant Executive Officer			
✓ Attestation ✓ Attestation for SU Based on the match sealed Based on the match sealed Based 23, assert(s) the fail bio decomption of all of all of Comptont; All sections of)	In the SAQ B steam like 54, 2022, the algorithmen atems raving compliance status for the writer liket/likes in Far 3, 2022. In PCI DISS SAQ are complete, all questions answered reveals COMPLANT rating, thereby marcheniblo has		



# **Understanding the PCI DSS**

Conclusion

# PCI DSS Compliance.

Avoid risk and financial consequences

- Don't think "a breach won't happen to me and my business"; there are risks to your business
- You and your business are not alone with PCI DSS
  - SecureTrust PCI Manager is just one of the solutions available to address your risks
  - The available tools simplify and guide you in your implementation of PCI DSS
- PCI DSS compliance does not have to be a significant expense:
  - It is risk-based data security based on your business' exposure to and handling of card data
  - National associations and ECTAA can connect you with experts
  - QSA Companies are available to help you
- Compliance with the PCI DSS not only helps you meet IATA obligations;
  - Its good data security practices help you with your obligations to other industry bodies and regulators

# Further guidance and resource links

#### Understanding PCI DSS

Today's presentation deck:

Click on Handouts pane or icon in the GoTo Webinar toolbar. Or download from: https://www.ectaa.org/en/media/webinars

IATA PCI DSS & Travel Agent Compliance Requirements https://www.iata.org/en/services/finance/pci-dss/

SecureTrust PCI DSS Compliance Program for IATA Passenger Agents

https://www.securetrust.com/iata/

#### PCI Security Standards website:

https://www.pcisecuritystandards.org/

#### PCI DSS Self-Assessment Questionnaires (SAQs) downloadable from:

https://www.pcisecuritystandards.org/document\_library/?category=saqs#results

#### PCI Information Supplements and Guidance from:

https://www.pcisecuritystandards.org/document\_library e.g. Guidance for PCI DSS Scoping and Segmentation, Protecting Telephone-based Payment Card Data

#### **PCI Merchant Resources:**

https://www.pcisecuritystandards.org/merchants

#### VikingCloud Resources:

- Blog: https://www.vikingcloud.com/blog
- PCI DSS v4.0 eBooks: https://www.vikingcloud.com/ebooks/
- PCI DSS and v4.0 merchant information website: https://pciportal.info/





# Thank you. **Questions?**

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SecureTrust PCI DSS Compliance Program for IATA https://www.securetrust.com/iata/ PCI Manager: https://managepci.com/ Call: +1 312 267 3212; Email: support@securetrust.com

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BRINGING SECURITY AND COMPLIANCE TOGETHER



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