

Cashless, Cards and PCI DSS

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Overview

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- Cashless Campus
- What is PCI DSS
- Skimming
- Key loggers
- Buying card data
- Conclusion

About WPM

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Who Are WPM?



WPM are the **process specialists** and **payment experts** within the higher and further education sector.

We help transform your capacity to take **secure online payments**, resulting in **significant savings in time and money**, on every transaction.

WPM has a history of **15 years** providing a reliable, trusted means of payment processing with **24/7 industry leading service levels** and support.

Vital statistics

- Over **170 HE/FE clients**
- Client base covering around **2 million students** in the UK
- Process **4 million transactions** annually
- With a value of **over £2 billion**



The WPM Payment Platform

WPM Payment Platform

Payment Gateway

Online Store

Tuition Fees, Accommodation Fees,
Print Credits, Cashless Catering, Sports,
Commercial Invoices, Donations,
Library Fines

Graduation DVD's, Bedding Packs,
Books, Study Trips, Subject Access Fee,
Replacement ID Cards, Flip Flops,
Parking, Staff Socials, Course Materials,
Staff Salary Repayments, Cycle Locks,
Lab Coats, Studio Fees, Bike Hire

Cashless Campus

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Cashless Campus – the principles of

- Accountability
- Exposure
- Administration
- Reconciliation
- Management Responsibilities

Cashless Campus - Costs

- Bank charges
- Security & insurance
- Staff costs
 - Collecting cash
 - Counting
 - Transporting
- Risk
- Other

Cashless Campus – the source

- This information was provided by SUMS consulting
- They have worked with institutions to find out the costs
- The costs for handling cash vary

Speak to SUMS Consulting if you want to know more:

<http://www.sums.org.uk>

What is PCI DSS

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What is PCI DSS

PCI DSS is the standard that always applies to anywhere that **stores**, **processes** or **transmits** card holder data (CHD)

It is a list of 12 requirements that must be met in order to ensure the security of the CHD.

The requirements apply to people, places and systems

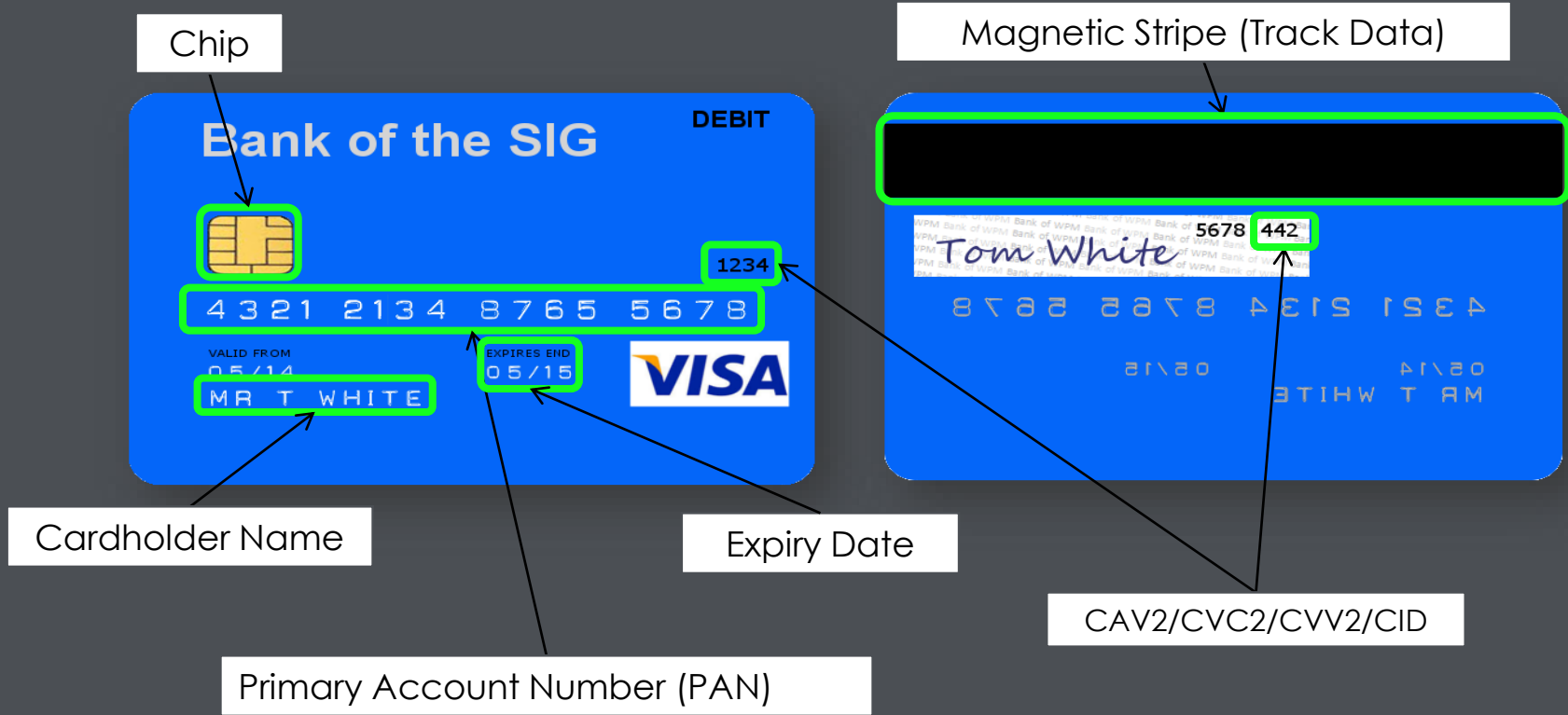
PCI DSS – Why does it apply?



Because the people that make the cards (Brands) tell the people that process the payments (Acquirers) to make the people who accept the cards (Merchants) that they have to be compliant.

It applies to anyone that **stores**, **processes** or **transmits** Card Holder Data

PCI DSS – What is Card Holder Data



Activity – Quiz!

- Who do merchants report their compliance to?
- Can you store the three security digits on the back of a card?*
- Name a Payment Brand that is also an Issuer
- When can you store the PAN?
- How do you know if your PSP is PCI DSS compliant?

Card data/data theft

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Skimming

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Skimming – what is it?

- It is the unauthorized capture and transfer of payment data to another source for fraudulent purposes
- It is a highly profitable criminal activity, difficult to prevent and detect
- It allows criminals to capture massive amounts of account details in a short amount of time, with low risk of detection

Skimming – How is it done?

- Acquisition of payment data directly from the consumer's payment card
- The capture of payment data from compromised PDQ
- The capture of payment data using malicious software
- The interception of payment data across a wireless network
- Interception of data from NFC device
- Data capture from overlays

Skimming – Who does it?

- Both ends of the criminal spectrum
- Complex and effective attacks on merchant terminal infrastructures
- Least sophisticated of criminal elements, using readily available, simple technology

Skimming – What is a target?

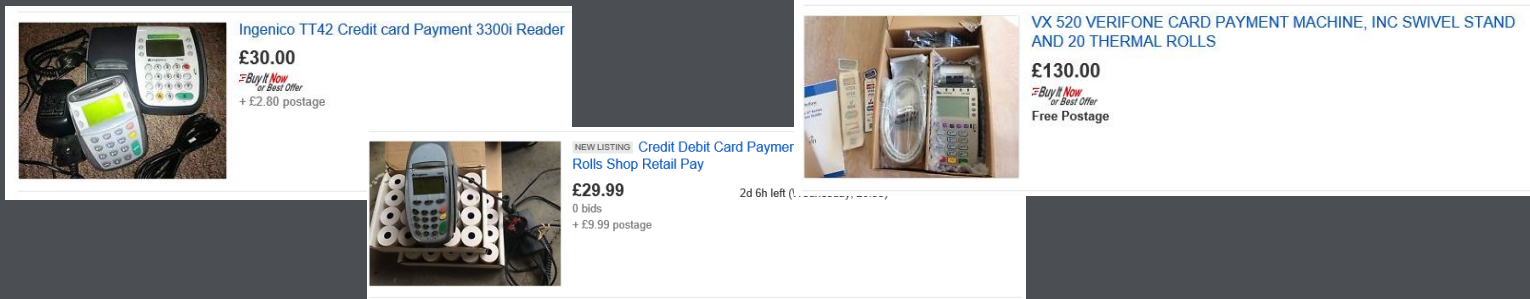
- PIN data
 - Shoulder-surfing
 - Fake PDQ machines, ATMs, or readers and CCTV cameras
 - Malware and memory scrapers in PIN entry devices

- Unattended, or temporarily unattended PDQ machines

- Terminals with high volume usage
 - ATM's
 - High volume sales periods

Skimming – Theoretical execution.....

- On site visit to case the existing PDQ machines
- Phone call for an appointment to service PDQ machines
- Arrive on site with compromised terminal in bag (purchased from Ebay)



The image shows a collage of eBay listings for PDQ machines. On the left, there is a listing for an 'Ingenico TT42 Credit card Payment 3300i Reader' priced at £30.00 with £2.80 postage. In the center, a listing for a 'Credit Debit Card Paymer' is shown at £29.99 with £9.99 postage. On the right, a listing for a 'VX 520 VERIFONE CARD PAYMENT MACHINE, INC SWIVEL STAND AND 20 THERMAL ROLLS' is priced at £130.00 with free postage. Each listing includes a small photograph of the device and its packaging.

Ingenico TT42 Credit card Payment 3300i Reader
£30.00
Buy It Now or Best Offer
+ £2.80 postage

Credit Debit Card Paymer
£29.99
0 bids
+ £9.99 postage

VX 520 VERIFONE CARD PAYMENT MACHINE, INC SWIVEL STAND AND 20 THERMAL ROLLS
£130.00
Buy It Now or Best Offer
Free Postage

Skimming – Theoretical execution.....

- Swap out the 'real' machines
- Collect card data and send it out over the internet
- Book another appointment
- Replace compromised terminals
- Sell card data!

Skimming – Prevention

- Check PDQ machines daily against an inventory
- Do not leave them unattended
- Do not leave them accessible
- Train staff to check PDQ machines for tampering
- Have processes in place for checking credentials
- Security awareness training

Key loggers

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Key loggers – What are they?

- Hardware key loggers are used for keystroke logging, a method of capturing and recording a computer users keystrokes

KeyGrabber USB 8MB Black
by SpyShop
More Choices from £5:
★★★★☆ 12

USB KeyLogger Nano Wi-Fi 16
by DataLogger WiFi
£128.99 new (1 offer)

Advanced KeyGrabber WiFi Premium PS/2
by SpyShop
Be the first to review this item

Note: This item is only available from third-party sellers (see all)

Available from these sellers.

1 new from £100.00

- PC monitoring
- Logs every key stroke
- Takes screenshots
- Invisible to antivirus programs
- Sends data directly to mailbox!

Key loggers – A Review.....

1 of 1 people found the following review helpful

★★★★★ **My life is much more less stressful than before knowing that the person who claim to love you is just saying to wood wink you**

By [Comido](#) on 10 Nov. 2014

Verified Purchase

This thing has done and continue doing what i bought it for,to trace my cheating spouse.My life is much more less stressful than before knowing that the person who claim to love you is just saying to wood wink you.I have managed to log on in her multiple email and facebook accounts.

The only thing which i didn't manage doing was to set the date but it doesn't matter much coz i always clear what i have typed in,then reset it and save her data for scrutiny when she pops out.It needs time though to figure out some words because it records every key stroke.

I recommend this product to anyone in a similar dilemma,will upload a sample later.

[1 Comment](#)

Was this review helpful to you?

[Report abuse](#)

Key Loggers – Where to target?

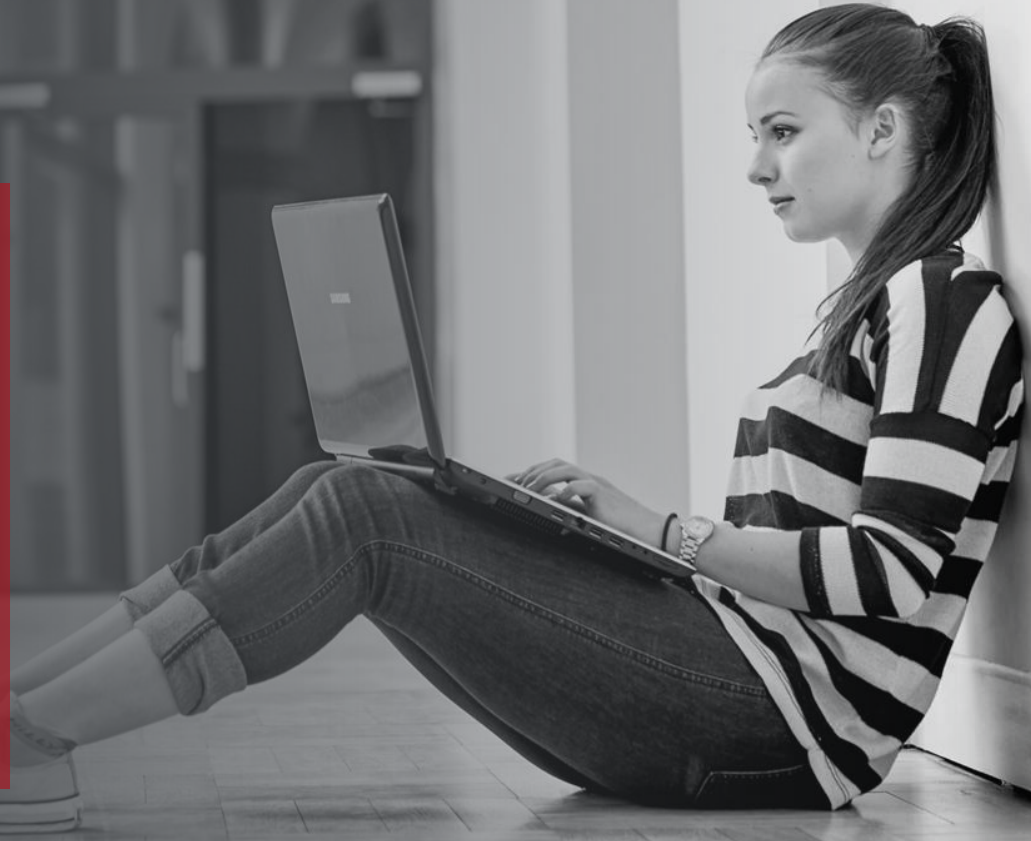
- IT departments
- Finance departments
- Virtual terminals
- Lecturers PC's
- Shared machines (library etc.)

Key loggers – Prevention

- Check vulnerable machines
- Plug keyboards into the front of the PC's
- Do not leave PC's accessible
- Train staff to check machines for key loggers
- Security awareness training

Activity – talk to your
neighbour

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Activity

- What do you think would be the consequences of card data (or any sort of data) being stolen from your college?

Buying card data

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Card data – How much is it worth?

SWIPE . BZ

Online dumps shop, where you can buy fresh and cheap dumps online with both track 1 and track 2. Only fresh, 90-99% valid bases.

Username

Password

Captcha p5v6sn

[Login](#) [Create account](#)

Jabber: swipe-store@100500.cc
lq: 301030

LONG AWAITED WORLD BASE IS ADDED!
ONLY WORLD! BIG BASE!

Latest news

hello! i've added a new fresh big base today: -LONG AWAITED WORLD! VERY HOT STUFF! WELCOME!	18 Jan 2016
hello mates! there are usually prices in our shop! go swipe for your rights!	17 Jan 2016
hello mates! i just want to say that we've wait this shit a long time! very serious big base of world stuff! namelly for you! load your funds right now to be at first who will get it in MONDAY!	16 Jan 2016

Card data – How much is it worth?

Bin	Carr.	Type	CD	Qty	Price	
379493 track 1	201	AMERICAN EXPRESS CENTURION	CREDIT	1	\$40.00	0 <input type="button" value="▲"/> <input type="button" value="▼"/> To cart
379612 track 1	201	AMERICAN EXPRESS CENTURION	CREDIT	4	\$40.00	0 <input type="button" value="▲"/> <input type="button" value="▼"/> To cart
379618 track 1	201	AMERICAN EXPRESS CENTURION	CREDIT	1	\$40.00	0 <input type="button" value="▲"/> <input type="button" value="▼"/> To cart
379621 track 1	201	AMERICAN EXPRESS CENTURION	CREDIT	3	\$40.00	0 <input type="button" value="▲"/> <input type="button" value="▼"/> To cart
379628 track 1	201	AMERICAN EXPRESS CENTURION	CREDIT	2	\$40.00	0 <input type="button" value="▲"/> <input type="button" value="▼"/> To cart
379634 track 1	201	AMERICAN EXPRESS CENTURION	CREDIT	10	\$40.00	0 <input type="button" value="▲"/> <input type="button" value="▼"/> To cart
379635 track 1	201	AMERICAN EXPRESS CENTURION	CREDIT	8	\$40.00	0 <input type="button" value="▲"/> <input type="button" value="▼"/> To cart
371532 track 1	201	AMERICAN EXPRESS CENTURION	CREDIT	1	\$13.00	0 <input type="button" value="▲"/> <input type="button" value="▼"/> To cart
371541 track 1	201	AMERICAN EXPRESS CENTURION	CREDIT	1	\$13.00	0 <input type="button" value="▲"/> <input type="button" value="▼"/> To cart
371553 track 1	201	AMERICAN EXPRESS CENTURION	CREDIT	1	\$13.00	0 <input type="button" value="▲"/> <input type="button" value="▼"/> To cart

Card data – How do you pay for it?

LONG AWAITED WORLD BASE IS ADDED!
ONLY WORLD! BIG BASE!

Swipe.bz rules

1. Deposits

We accept Bitcoins, LessPay, Western Union, Money Gram and Perfect Money. The minimum amount for deposits depends on your personal limits except Western Union and Money Gram with minimum amount of \$550.00 and 10% fee. Bitcoin payment method is fully automatic. Your bitcoins will be loaded to your account within 1-24 hours (we wait till 6 confirmations). This is how Bitcoin network works. The rest payment methods are manual until we make them automatic.

2. Refunds

We make refunds within 24 hours only for pick-up/lost/stolen/no account codes. We do not make refunds or replaces for region locks and we do not guarantee dumps work in your region. We do not make refunds from fresh bases. We do not make refunds for not U.S.A. dumps. We do not make refunds or replaces for any bins of Citi Bank.

Discounted bases not refundable.

For fast refund make a ticket with number of the order and short number of the dump.

Now there is only a manual refund option, so contact administrator. The automatic refund will be available within several weeks.

3. Stuff

If you can't find the bins you need, you can contact administrator through chat support and we will try to find your bins.

Conclusion

- Put payments online for self service (student experience) and security
- Remove cash where possible
- Ensure that security awareness training is in place
- PCI DSS compliance is a must and is not going away
- You can get help for PCI DSS from the PCI DSS SIG
- If PDQ machines aren't needed, don't use them
- Card data thieves are out there and are also not going away

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Thank you

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