Verifone®

PCI PA DSS Implementation Guide

MultiPOINT 03.20.072.xxxxx & 04.20.073.xxxxx

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1. Introduction

1.1 Purpose

The Payment Card Industry Data Security Standard (PCI-DSS) defines a set of requirements for the configuration, operation, and security of payment card transactions in your business. If you use Verifone MultiPOINT payment application in your business to store, process, or transmit payment card information, this standard and this guide apply to you.

The requirements are designed for use by assessors conducting onsite reviews and for merchants who must validate compliance with the PCI DSS.

Failure to comply with these standards can result in significant fines if a security breach should occur. For more details about PCI DSS, please see the following link:

http://www.pcisecuritystandards.org

This guide is updated whenever there are changes in MultiPOINT software that affect PCI DSS and is also reviewed annually and updated as needed to reflect changes in the MultiPOINT as well as the PCI standards. Guidelines how to download the latest version of this document could be found on the following web site

http://www.verifone.lv/

The Payment Card Industry has also set the requirements for software applications that store, process or transmit cardholder data. These requirements are defined by the Payment Card Industry Payment Application Data Security Standard (PCI PA-DSS). In order to facilitate for you to get a PCI DSS assessment the Verifone software application has been approved by PCI to comply with the PCI PA-DSS requirements.

Note: This guide refers to MultilPOINT software versions on the PCI web site "List of Validated Payment Applications" that have been validated in accordance with PCI PA-DSS. If you cannot find the version of your MultiPOINT application on that list please contact our helpdesk at Verifone Baltic in order to upgrade your terminal.

http://www.pcisecuritystandards.org/

1.2 Document Use

This PA-DSS Implementation Guide contains information for proper use of the Verifone MultiPOINT payment application. Verifone Baltic SIA does not possess the authority to state that a merchant may be deemed "PCI Compliant" if information contained within this document is followed. Each merchant is responsible for creating a PCI-compliant environment. The purpose of this guide is to provide the information needed during installation and operation of the MultiPOINT payment application in a manner that will support a merchant's PCI DSS compliance efforts.

Note 1: Both the System Installer and the controlling merchant must read this document. Hence, the Implementation Guide should be distributed to all relevant payment application users (customers, resellers and integrators)

Note 2: This document must also be used when training ECR integrators/resellers at initial workshops.



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1.3 References

- (1) Payment Card Industry Payment Application Data Security Standard v3.2
- (2) Payment Card Industry Data Security Standard v3.2(3) Terminal Audit Log v1.7
- (4) Verifone Baltic Terminal Software Version Numbering Specification v1.4.1

Update History

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1.00	Sergejs Melnikovs	2010-04-08	Original version
1.01	Janis Grikis	2010-04-09	Reviewed
1.3	Sergejs Melnikovs	2010-06-09	Corrected according to GAP Analysis Report on April 27, 2010
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1.5	Sergejs Melnikovs	2011-01-20	Correction according PA-DSS v1.2 requirement 4.2
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2.1	Sergejs Melnikovs	2015-07-09	Added description of connection initiation for integrated mode.
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3.1	Sergejs Melnikovs	2017-04-07	Added clarification related to PA DSS requirements 2.3.a, 3.1.a & 7.2.3



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1.5 Terminology and abbreviations

3DES	Triple DES common name for the Triple Data Encryption Algorithm	
AES	Advances encryption standard	
Cardholder Data	PAN, Expiration Date, Cardholder Name and Service Code.	
CVV2	Card Verification Value, also called CVC2, is a three or four digit value	
	printed on the back of the card but not encoded on the magnetic stripe or the	
	chip. Supplying this code in a transaction is intended to verify that the card is	
	present at the point of sale when PAN is entered manually or when a voice	
	referral is performed.	
ECR	Electronic Cash Register	
HSM	Hardware security module	
Magnetic Stripe Data	Track data read from the magnetic stripe, magnetic-stripe image on the chip, or elsewhere.	
MultiPOINT Application	Terminal Payment Application for use in Baltic States (Estonia, Latvia, Lithuania)	
MultiPOINT Terminal	Terminal with installed MultiPOINT Application	
PA DSS	Payment Application Data Security Standard is a standard for validation of	
	payment applications that store, process or transmit payment card data.	
	Applications that comply with PA-DSS have built in protection of card data	
	and hereby facilitates for retailers to comply with PCI-DSS.	
PAN	Primary Account Number. PAN, also called card number, is part of the	
	magnetic stripe data and is also printed or embossed on the card. PAN can	
PCI DSS	also be stored in the chip of the card.	
PCIDSS	Payment Card Industry Data Security Standard. Retailers that use applications to store, process or transmit payment card data are subject to	
	the PCI-DSS standard.	
PCI PTS	Payment Card Industry PIN Transaction Security	
PED	PIN Entry Device	
POS	Point of sale	
Sensitive	Magnetic Stripe Data, CAV2/CVC2/CVV2/CID, PINs/PIN-block.	
Authentication Data	3	
Service Code	A three digit code from the magnetic stripe data defining (1) Interchange and	
	technology, (2) Authorization processing and (3) Range of services and PIN	
	requirements.	
SNMP	Simple Network Management Protocol is a network protocol. It is used	
	mostly in network management systems to monitor network-attached devices	
	for conditions that warrant administrative attention.	
SSH	Secure Shell (SSH) is a network protocol that allows data to be exchanged	
SSL	using a secure channel between two networked devices.	
JOL	Secure Sockets Layer is a commonly used method to protect transmission across public networks.	
SYSLOG	Syslog is a standard for computer data logging.	
TCP	Transmission Control Protocol is one of the core protocols of the Internet	
	protocol suite.	
TLS	Acronym for "Transport Layer Security." Designed with goal of providing data	
	secrecy and data integrity between two communicating applications. TLS is	
	successor of SSL.	
TMS	Terminal management system	
TRSM	Tamper resistant security module	
UDP	User Datagram Protocol is one of the core protocols of the Internet protocol	
	suite.	
WEP	Wired Equivalent Privacy, a wireless network security standard. Sometimes	
MDA and MDAC	erroneously called "Wireless Encryption Protocol"	
WPA and WPA2	Wi-Fi Protected Access is a certification program created by the Wi-Fi	
	Alliance to indicate compliance with the security protocol created by the Wi-	
	Fi Alliance to secure wireless computer networks.	



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2. SUMMARY OF PCI DSS REQUIREMENTS

This summary provides basic overview of the PCI PA-DSS requirements that have a related to Implementation Guide topic. It also explains how the requirement is handled on the MultiPOINT application side and required actions for your (as a customer).

The complete PCI-DSS and PA-DSS documentation can be found at:

http://www.pcisecuritystandards.org

Note: If a Terminal Management Systems is used as part of an authenticated remote software distribution framework for the PED, it should be evaluated by a QSA as part of any PCI DSS assessment.

2.1 PA-DSS Req. 1.1.4: Historical data deletion

Securely delete any magnetic stripe data, card validation values or codes, and PINs or PIN block data	
stored by previous versions	s of the payment application
	No specific setup for MultiPOINT application is required. New version of
How MultiPOINT	MultiPOINT application does not use any cardholder's sensitive historical
application meets this	data collected by previous version of the application. On installation,
requirement	MultiPOINT application performs secure wipe for all terminal's memory,
	which is available for custom application files.
	You must make sure that historical data (magnetic stripe data, cardholder
merchant/reseller	data and CVV2s) are removed from all other storage devices used in your
actions required	systems, ECRs, PCs, servers etc. For further details please refer to your
actions required	vendor. Removal of sensitive authentication data is absolutely necessary for
	PCI DSS compliance.

Aligns with PCI DSS Requirement 3.2

2.2 PA-DSS Req. 1.1.5: Securely delete any sensitive data used for debugging or troubleshooting

Delete any sensitive authoral payment application.	Delete any sensitive authentication data (pre-authorization) gathered as a result of troubleshooting the payment application.		
How MultiPOINT application meets this requirement	application meets this application meets the properties of th		
merchant/reseller actions required	The merchant/reseller is not required to take any action in relation to this requirement.		

Aligns with PCI DSS Requirement 3.2

2.3 PA-DSS Req. 2.1: Purging cardholder data

Securely delete cardholder	Securely delete cardholder data after customer-defined retention period.		
How MultiPOINT	ultiPOINT All cardholder data is automatically erased during the nightly batch sending		
application meets this	or if manual batch sending is done. See the list of files in the Annex A1		
requirement	Terminal files		
merchant/reseller actions required	All cardholder data is automatically erased according to batch sending configuration on MultiPOINT terminal. If you want you can send batch manually. If the terminal prints full PAN on merchant ticket please securely protect the merchant receipts/data and securely delete them after retention period in accordance with PCI DSS Requirements. Such protection is absolutely necessary for PCI DSS compliance.		

Aligns with PCI DSS Requirement 3.1



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2.4 PA-DSS Req. 2.2: Mask PAN when displayed

F	
Mask PAN when displayed (the first six and last four digits are the maximum number of digits to be	
displayed) so only personn	el with a business need can see the full PAN.
How MultiPOINT	Details of all instances where PAN is displayed, including but not limited to
application meets this	POS devices, screens, logs, and receipts are available in Annex A3
requirement	Instances where PAN is displayed.
	If the terminal prints full PAN on merchant ticket please securely protect the
merchant/reseller	receipts in accordance with PCI DSS Requirement 3.3 and ensure that the
actions required	data available only to personnel with a legitimate business need can see the
	full PAN.

Aligns with PCI DSS Requirement 3.3

2.5 PA-DSS Req. 2.3: Render PAN unreadable anywhere it is stored

Render PAN unreadable anywhere it is stored (including data on portable digital media, backup media,		
and in logs). The PAN mu	and in logs). The PAN must be rendered unreadable anywhere it is stored, even outside the payment	
application (for example, lo	g files output by the application for storage in the customer environment)	
	Details of all instances where PAN is displayed, including but not limited to	
How MultiPOINT	POS devices, screens, logs, and receipts are available in Annex A3	
application meets this	Instances where PAN is displayed	
requirement	The application does not allow plaintext PAN output even for debugging/	
	troubleshooting purposes.	
merchant/reseller	The customer is responsible for rendering PAN unreadable in all instances	
actions required	where a PAN could be stored in outside of MultiPOINT application.	

Aligns with PCI DSS Requirement 3.4

2.6 PA-DSS Req. 2.4: Protect keys

Protect keys used to secure cardholder data against disclosure and misuse. Access to keys used for cardholder data encryption must be restricted to the fewest possible number of key custodians. Keys should be stored securely.	
How MultiPOINT application meets this requirement	Cryptographic keys used to encrypt cardholder data stored inside tamper- protected memory area of terminals, so disclosure and misuse of keys is not possible. Tamper protected memory area protection implemented according to PCI PTS requirements.
merchant/reseller	The merchant/reseller is not required to take any action in relation to this
actions required	requirement.

Aligns with PCI DSS Requirement 3.5

2.7 PA-DSS Req. 2.5: Implement key management processes and procedures

Implement key-management processes and procedures for cryptographic keys used for encryption of cardholder data.	
How MultiPOINT application meets this requirement	There is no any possibility to manage the keys directly on the terminal. All key generation and delivery implemented according to PCI requirements MultiPOINT application is designed to use TLS 1.2 or TLS 1.1 (secure configuration in accordance with NIST SP 800-52 rev 1) communication channel encryption. Cardholder data stored in terminal memory is encrypted by key that is automatically generated and periodically updated by the application without any user intervention. Key management is briefly described in chapter <i>MultiPOINT application key management</i> of this document.
merchant/reseller	The merchant/reseller is not required to take any action in relation to this
actions required	requirement.

Aligns with PCI DSS Requirement 3.6



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2.8 PA-DSS Req. 2.6: Provide a mechanism to render irretrievable any cryptographic key material

Provide a mechanism to render irretrievable cryptographic key material or cryptograms stored by the payment application.		
How MultiPOINT application meets this requirement	MultiPOINT application is designed to use TLS 1.2 or TLS 1.1 (secure configuration in accordance with NIST SP 800-52 rev 1) communication channel encryption. Cardholder or sensitive data that are sent to host during authorization are encrypted by key residing only within authorization systems HSM and secure memory of a terminal. Cardholder data stored in terminal memory is encrypted by key that is automatically generated and periodically updated by the application without any user intervention. All cryptographic material must be removed before new version of payment application deployed into the terminal. The removal of this material is automatically handled by the MultiPOINT application so you do not need to take any action. New version of MultiPOINT application does not use any encrypted historical data collected by previous version of the application Key management is briefly described in chapter <i>MultiPOINT application key management</i> of this document.	
merchant/reseller actions required	Please be sure that you use valid TLS certificate of the acquirer. When the certificate close to be expired replace it by new one according to acquirer requirements.	

Aligns with PCI DSS Requirement 3.6

2.9 PA-DSS Req. 3.1: Unique user IDs and secure authentication

Use unique user IDs and s	ecure authentication for administrative access and access to cardholder data.	
How MultiPOINT	This requirement cannot be applied to the payment MultiPOINT application	
application meets this	because there is no user login for the payment application itself. It runs on a	
requirement	Hardware terminal without requiring an operator or admin login.	
	All other systems in the cardholder data should be protected by PCI-	
	compliant authentication methods. That means:	
	 Each user account must be assigned a unique ID. 	
	- The authentication must be performed at least either by a password,	
	a token, or some biometric.	
	 No group accounts or generic accounts may be used. 	
	 User passwords must be changed every 90 days. 	
	 A password must be at least seven characters long. 	
merchant/reseller	 The password must consist of numeric and alphabetic characters. 	
actions required	- The password history must be saved and a password must be	
	different from the last four passwords used.	
	- The account must be locked after no more than six invalid login	
	attempts.	
	- A lock must last at least 30 seconds.	
	- After 15 minutes of inactivity, the user must authenticate again.	
	- Assigning secure authentication to all default accounts in use	
	 Any default accounts which are not required must be disabled or removed. 	

Aligns with PCI DSS Requirement 8.1 and 8.2

2.10 PA-DSS Req. 3.2: Unique user IDs and secure authentication for access to servers etc.

Use unique user IDs and secure authentication for access to PCs, servers, and databases with payment applications.	
How MultiPOINT application meets this	MultiPOINT application does not provide functionality and does not maintain user accounts for administrative access or individual access to cardholder
requirement	data.
merchant/reseller	The merchant/reseller is not required to take any action in relation to this
actions required	requirement.



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Aligns with PCI DSS Requirement 8.1 and 8.2

2.11 PA-DSS Req. 4.1: Implement automated audit trails

Implement automated audit trails.	
How MultiPOINT application meets this requirement	MultiPOINT application has an Audit Trail logging functionality. This log may contains truncated PANs. No cardholder data is accessible from the MultiPOINT terminal. The application also keeps an Audit Trail to track changes to system level objects.
merchant/reseller actions required	The application uses syslog protocol for audit trails. If you need to receive this data on your syslog server too please refer to (3)Terminal Audit Log v1.7.

Aligns with PCI DSS Requirement 10.1

2.12 PA-DSS Req. 4.4: Facilitate centralized logging

Facilitate centralized loggin	ıg.
How MultiPOINT	The MultiPOINT application provides ability to collect/analyze logging
application meets this	information by sending log files to remote host. The log file has syslog format
requirement	and described in separate document (3)Terminal Audit Log v1.7.
merchant/reseller actions required	The application uses syslog protocol for audit trails. If you need to receive this data on your syslog server too please refer to (3)Terminal Audit Log v1.7.

Aligns with PCI DSS Requirement 10.5.3

2.13 PA-DSS Req. 5.4.4: Application versioning methodology

Implement and communicate application versioning methodology.	
How MultiPOINT	Detailed description of version numbering methodology available in Annex
application meets this	A2 Application Version Numbering policy of the implementation guide.
requirement	
merchant/reseller	The merchant/reseller needs to understand which version of the payment
actions required	application they are using, and ensure validated versions are in use.

2.14 PA-DSS Req. 6.1: Securely implement wireless technology

Securely implement wireless technology. For payment applications using wireless technology, the wireless technology must be implemented securely.		
How MultiPOINT	MultiPOINT application is designed to operate in a network behind a firewall.	
application meets this	If wireless is used the MultiPOINT application supports strong encryption	
requirement	(WPA).	
merchant/reseller actions required	If you are using wireless network within your business, you must make sure, that firewalls are installed, what deny or control (if such traffic is necessary for business purposes) any traffic from the wireless environment into the MultiPOINT application environment. Please refer to your firewall manual.	

Aligns with PCI DSS Requirements 1.2.3 & 2.1.1



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2.15 PA-DSS Req. 6.2: Secure transmission of cardholder data over wireless networks

Secure transmissions of cardholder data over wireless networks. For payment applications using wireless technology, payment application must facilitate use of industry best practices (for example, IEEE 802.11i) to implement strong encryption for authentication and transmission.

to implement strong encryption for admentication and transmission.	
How MultiPOINT application meets this requirement	If wireless is used the MultiPOINT application supports strong encryption (WPA). The wireless encryption is applied on top of the TLS protected communication. The type of wireless encryption could be set up only through TMS and there is not possibility to assign PCI DSS not compatible wireless connection type.
merchant/reseller actions required	For wireless networks transmitting cardholder data or connected to the cardholder data environment, verify that industry best practices (for example, IEEE 802.11i) are used to implement strong encryption for authentication and transmission. For other actions please refer to action required part of chapter 2.16 PA-DSS Req. 6.3: Provide instructions for secure use of wireless technology.

Aligns with PCI DSS Requirement 4.1.1

2.16 PA-DSS Req. 6.3: Provide instructions for secure use of wireless technology

Provide instructions for secure use of wireless technology.	
How MultiPOINT	MultiPOINT application is designed to operate in a network behind a firewall.
application meets this	If wireless is used the MultiPOINT application supports strong encryption
requirement	(WPA).
merchant/reseller actions required	If you are using wireless network within your business, you must make sure, that firewalls are installed, what deny or control (if such traffic is necessary for business purposes) any traffic from the wireless environment into the MultiPOINT application environment. Please refer to your firewall manual. In case you are using a wireless network you must also make sure, that: • Encryption keys were changed from vendor defaults at installation • Encryption keys are changed anytime someone with knowledge of the keys leaves the company or changes position • Default SNMP community strings on wireless devices are changed • Firmware on wireless devices is updated to support strong encryption, WPAWPA2. Please note that WEP must not be used for new installations and is not allowed after June 30, 2010 • Other security related vendor defaults are changed

Aligns with PCI DSS Requirements 1.2.3, 2.1.1, & 4.1.1



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2.17 PA-DSS Req. 7.2.3: Instructions for customers about secure installation and updates

5		
Provide instructions for customers about secure installation of patches and updates.		
How MultiPOINT application meets this requirement	MultiPOINT application facilitates secure update functionality by downloading updates directly from a management server, verifying integrity and authenticity of the update through digital signatures and applying updates to the terminal when it's not in use. Once a security patch or update of MultiPOINT application released by Verifone our Product Manager notifies by email (or via phone call) responsible person of the integrator/reseller and provides encrypted package by corresponding integrator/reseller's public PGP key, signs it with his own private PGP key and provides it to the integrator/reseller's contact person via email or other communication channel which is agree in advance with the integrator/reseller.	
merchant/reseller actions required	The merchant is not required to take any action in relation to this requirement because MultiPOINT once per 24h connects to management server and could download a new version of the application if that command received from the server. There is also possibility to initiate application update from the terminal menu: Service > Parameters > Download > Programs > Phone > Full The integrator/reseller which provides management server service to the customer should configure the management server to deliver patches and updates to MultiPOINT terminal once it's received from Verifone according to PCI DSS required timeframe.	

2.18 PA-DSS Req. 8.2: Must only use secure services, protocols and other components

Use only necessary and secure services, protocols, components, and dependent software and hardware, including those provided by third parties.	
How MultiPOINT application meets this requirement	MultiPOINT application does not employ unnecessary or insecure services or functionality. Full list of application components and dependent components / protocols described in Annex
	A4 Application components and used protocols
merchant/reseller	The merchant/reseller is not required to take any action in relation to this
actions required	requirement.

Aligns with PCI DSS Requirement 2.2.3

2.19 PA-DSS Req. 9.1: Store cardholder data only on servers not connected to the Internet

Store cardholder data only	on servers not connected to the Internet.
How MultiPOINT	MultiPOINT application does not store any cardholder data in a server
application meets this	connected to the internet.
requirement	
merchant/reseller	The merchant/reseller is not required to take any action in relation to this
actions required	requirement.

Aligns with PCI DSS Requirement 1.3.7



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2.20 PA-DSS Req. 10.1: Implement two-factor authentication for remote access to payment application

Implement two-factor auth	entication for all remote access to payment application that originates from
outside the customer environment	onment.
How MultiPOINT	MultiPOINT application does not provide the functionality and does not
application meets this	maintain user accounts for any remote access to the application.
requirement	
merchant/reseller	The merchant/reseller is not required to take any action in relation to this
actions required	requirement.

Aligns with PCI DSS Requirement 8.3

2.21 PA-DSS Req. 10.2.1: Securely deliver remote payment application updates

Securely deliver remote payment application updates. If payment application updates are delivered via remote access into customers' systems, software vendors must tell customers to turn on remote-access technologies only when needed for downloads from vendor, and to turn off immediately after download completes. Alternatively, if delivered via VPN or other high-speed connection, software vendors must advise customers to properly configure a firewall or a personal firewall product to secure "always-on" connections

MultiPOINT application facilitates secure update functionality by downloading

	MultiPOINT application facilitates secure update functionality by downloading	
How MultiPOINT	updates directly from the management server, verifying integrity and	
application meets this	authenticity of the update through digital signatures and applying updates to	
requirement	the terminal when it's not in use. Connection to the management server	
	initiated by the MultiPOINT terminal according to configuration.	
merchant/reseller	The merchant/reseller is not required to take any action in relation to this	
actions required	requirement.	

Aligns with PCI DSS Requirements 1 and 12.3.9

2.22 PA-DSS Req. 10.2.3: Securely implement remote access software

Securely implement remote	e-access software.
How MultiPOINT	MultiPOINT application does not provide remote access functionality and
application meets this	does not maintain user accounts for any remote access to the application.
requirement	
merchant/reseller	The merchant/reseller is not required to take any action in relation to this
actions required	requirement.

Aligns with PCI DSS Requirements 2, 8 and 10

2.23 PA-DSS Req. 11.1: Secure transmissions of cardholder data over public networks

Secure transmissions of cardholder data over public networks.		
How MultiPOINT All Cardholders Data and Sensitive Authentication Data sent to and from the		
application meets this	MultiPOINT application over public networks always protected using TLS	
requirement	encryption protocol.	
merchant/reseller	The merchant/reseller is not required to take any action in relation to this	
actions required	requirement.	

Aligns with PCI DSS Requirement 4.1



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2.24 PA-DSS Req. 11.2: Encrypt cardholder data sent over end-user messaging technologies

Encrypt cardholder data sent over end-user messaging technologies. If the payment application facilitates sending of PANs by end-user messaging technologies (for example, e-mail, instant messaging, chat), the payment application must provide a solution that renders the PAN unreadable or implements strong cryptography, or specify use of strong cryptography to encrypt the PANs.

How MultiPOINT
application meets this requirement
merchant/reseller

The merchant/reseller is not required to take any action in relation to this

Aligns with PCI DSS Requirement 4.2

requirement.

actions required

2.25 PA-DSS Req. 12.1, 12.1.1 and 12.2: Secure all non-console administrative access

Encrypt non-console administrative access. Use multi-factor authentication for all personnel with non-			
console administrative access.			
How MultiPOINT	MultiPOINT application does not provide non-console access functionality		
application meets this	and does not maintain user accounts for any administrative access to the		
requirement	application.		
merchant/reseller	The merchant/reseller is not required to take any action in relation to this		
actions required	requirement.		

Aligns with PCI DSS Requirement 2.3



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3. MultiPOINT application key management

The main idea is that the Key Management process is automatic and controlled only by the MultiPOINT application. It doesn't require any key injections from outside. A 3DES or AES key is used for encryption. The key is generated and stored in the POS TRSM and never goes outside.

- The key is generated by the terminal's operating system.
- The encryption key is stored in tamper resistant secure module's memory of the terminal.
- MultiPOINT 03.20.072.xxxxx uses double length 3DES(112 bit) key.
- Starting from MultiPOINT 04.20.073.xxxxx AES-128 is used for CHD encryption data on the terminal.
- Key transmission is not required.
- New key is generated when terminal starts for the 1st time, after terminal software update, after every batch sending (at least once per 24 hours) and after manual transaction deletion operation. If the key generation process was not successful then the application doesn't allow making any payment transactions, only service functions are allowed. Before a new key generation the old key is destroyed and cryptographic material is removed.
- If for some reason the application/terminal is not able to send the batch for a time longer than 30 days, then the application doesn't allow to make a new payment transactions without sending the batch.



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4. Annexes

A1 Terminal files

In a table below represented list of files on the terminal what can contains any cardholder data or logs of important events from the terminal.

File Name	Description	Cardholders data	Protection
FILEREVERSALLIST.LST	Payment list queue for cancellation	PAN & Expiry date	Encrypted
FILETRANSSETUP.CFG	Last payment data and batch counters	PAN & Expiry date	Encrypted
FILETRANSSETUP.CPY	Last payment data and batch counters, backup copy	PAN & Expiry date	Encrypted
FILETRANSLIST.LST	24h Payment list	PAN & Expiry date	Encrypted
FILETRANSLIST.CPY	24h Payment list, backup copy	PAN & Expiry date	Encrypted
FILEPREAUTHLIST.LST	Pre-authorization list	PAN & Expiry date	Encrypted
FILEGOODSLIST.LST	Payment details for goods payments	PAN	Encrypted
FILELASTTRANS.DAT	Last transaction record	PAN & Expiry date	Encrypted
FILETMPTRANS.DAT	Information about unfinished transactions (for ECR requests processing)	PAN & Expiry date	Encrypted
TRANSTXT	Payment statistics	Masked PAN & Expiry date	
DEBUG.LOG	Application debug information	Masked PAN & Expiry date	
VK_LOG.LOG	Payment flow "step by step" log for Valsts Kase configuration	Masked PAN	
TRACE.LOG	Transaction errors and speed measurement log	Masked PAN & Expiry date	
STATS.LOG	Communication statistics log		
ERROR.LOG	Application Error event log		
SYS.LOG	Audit log		
*.TRACE	Transaction errors and speed measurement logs, compressed	Masked PAN & Expiry date	
*.SRZ	Archive for sending to terminal management system, contains compressed log files	Masked PAN & Expiry date	
PRINTCOPYDEALOYAL.LST	"Dealoyal" receipt copy (loyalty bonus points)	Masked PAN	
BATCH_MON_x.TXT	List of unsent transactions, where "x" is acquirer index (0-6)	Masked PAN	



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A2 Application Version Numbering policy

Below represented MultiPOINT application version numbering methodology what is based on common Verifone Baltic version numbering policy (reference (4) Verifone Baltic – Terminal Software Version Numbering Specification v1.4.1)

Application version numbering format:

<NNNNNNNNNN> <XX>.<YY>.<ZZZ> .<BBBBB>, where :

Format	Subject	Description
NNNNNNNNN	Software Name;	Name of the application
XX	Major application version number	This version number indicates the major version of the payment application. It is increased every time, when major changes are done, according to PA-DSS rules. Number is never restarted within the application life cycle
YY	Payment application identifier	Number is attached to a combination of particular payment application and "major" (from PA DSS prospective) payment functionality. For current application it has fixed value: 20 - MultiPOINT payment application, main configuration;
ZZZ	Minor application version number	This number is increased every time some changes to the functionality of the application are done, which are not considered "major" by PA DSS rules for payment application. Number can be (but not mandatory should be) restarted, when "Payment application major version number" or "Payment application identifier" is changed. In cases, when changes contains only bug fixes of existing functionality, but functionality itself isn't changed, minor application number should not be increased
BBBBB	build number	Increased every time, when new software package is created, even on minor bug fixes, when no changes to neither version numbers are made. Number is never restarted during the application life cycle. Should mandatory present, but should not be mandatory presented to external parties, when indicating application version. If a new package contains changes what could be classified as Low-impact or High-impact from PA DSS prospective than together with build number other relevant part of version number MUST be changed

Example: let's look on MultiPOINT 03.20.072.00390:

MultiPOINT	Software Name;
03	Major application version number
20	Payment application identifier
072	Minor application version number
00390	build number



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A3 Instances where PAN is displayed

Below represented instances where MultiPOINT application can show cardholders data:

Instance	Description	Protection
DISPLAY	Manual PAN entry dialog	none
DISPLAT	Voice authorization dialog	none
CARDHOLDERS RECEIPT (terminal printer and/or ECR protocol)		Masked
MERCHANT RECEIPT	Regular transaction	Masked
(terminal printer and/or	Offline transaction	none
ECR protocol)	Preauthorization	none
Preauthorization's list receipt (terminal printer and/or ECR protocol)		Masked
Last EMV transaction params receipt (terminal printer and/or ECR protocol)		Masked
FCD must a sale tura manatica.	Regular transaction	Masked
ECR protocol: transaction result message	Offline transaction	none
result illessage	Preauthorization	none



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A4 Application components and used protocols

Hardware platform and OS supported:

MultiPOINT 03.20.072.xxxxx

Model Name	PCI PTS Approval #	OS Required
Vx805	<u>4-10106</u>	QT850240, QTyy0400.xxxxxxxxx, QTyy0500.xxxxxxxxx
Vx675	<u>4-10116</u>	QT650240, QTyy0400.xxxxxxxxx, QTyy0500.xxxxxxxxx
Vx680	<u>4-20146,</u> <u>4-30053</u>	QT680240, QT6G0240, QT6B0240, QTyy0400.xxxxxxxx, QTyy0500.xxxxxxxxx
Vx820	<u>4-40053,</u> <u>4-40054</u>	QT820240, QTyy0400.xxxxxxxxx, QTyy0500.xxxxxxxxx
Vx520	<u>4-30050</u> , <u>4-30052</u>	QT520240, QT5G0240, QTyy0400.xxxxxxxx, QTyy0500.xxxxxxxxx
Ux300 + Ux100 + Ux400	4-20259	30070600
Vx700 + SCR710	4-20095; 4-20077; 4-20096	QH0011A1
Vx510	4-30014	QA0012A2
Vx570	4-10004	QC0011A2
Vx610	<u>4-30015</u>	QB0111A2
Vx670	4-40005	QD0012A5
Vx810	4-30019	QG0012A2

MultiPOINT 04.20.073.xxxxx

Model Name	PCI PTS Approval #	OS Required
P400/P400 Plus	<u>4-10191</u>	VAULT: 5.x.x, AppM: 10.x.x, VFSRED: 5.x.x, VFOP: 1.x.x

Terminal to Host protocol in use:

List of supported protocols available in application release notes.

Terminal to TMS protocol in use:

List of supported protocols available in application release notes.

Terminal to ECR protocol in use:

List of supported protocols available in application release notes.