

UMAPI PGP Production Key Update Required

Dear Valued eNETS Merchant,

As part of our continuous efforts to enhance service resilience, we will be carrying out an update process to the eNETS Production Pretty Good Privacy (PGP) certificates.

Please note that all eNETS UMAPI merchants are required to update the eNETS Production PGP Public Key by 23 December 2020.

Please be informed that eNETS merchants who fail to update the encryption program will experience:

1. Payment disruption with effect from 24 December 2020
2. Discontinuation of payment notification alerts from eNETS with effect from 24 December 2020.

The PGP public key will be available for download on NETS' [developer portal](#). If you are not a registered user, please sign up for a free account to access the portal.

To facilitate this update exercise, we have enclosed some FAQs and additional information (Appendix A) for your reference.

If you have further questions on the technical aspects of this update, please contact enetsts@nets.com.sg.

Thank you for your continuous support.

Warm regards,

eNETS Technology Support

FAQs on UMAPI PGP Production Key Update

1. What is this eNETS Production PGP key update by 23 December 2020?

As part of eNETS' continuous efforts to enhance service resilience, we are updating eNETS Production PGP certs to ensure continuity of payment service availability for our eNETS merchants. eNETS will release the PGP public key for UMAPI merchants to download and replace the existing key .

Please take note that the eNETS PGP certification update exercise is on the eNETS production environment only. The eNETS User Acceptance Testing (UAT) environment will be available for the testing of your certificate renewal from 14 August 2020.

2. Who will this exercise impact?

The UMAPI PGP production certification update exercise affects merchants who are currently still on UMAPI. This includes both eNETS direct debit and eNETS credit, and virtual terminal merchants who have integrated to eNETS via our UMAPI specifications.

This exercise will not affect merchants who are using our SOAPI including eNETS Credit, eNETS direct debit as well as Online QR. No action will be required from these merchants.

3. What are the affected services?

Payment services on UMAPI will be affected when payment requests are submitted. You will need to update the eNETS Production PGP key for eNETS to decrypt the payment request, and allow successful interpretation of eNETS payment notifications.

i. UMAPI Merchants

Integration Method or submission mode	Payment Services	Online Transaction	Settlement file download via HTTPS	Settlement file download via SFTP	Online Transaction Query	Admin portal
Server to Server	Debit, Credit (Visa, MasterCard, Amex)	Impacted	No impact	No impact	No impact	No impact
Browser Submission	Debit, Credit (Visa, MasterCard, Amex)	Impacted	No impact	No impact	No impact	No impact

ii. **SOAPI (eNETS 2.0) Merchants**

Integration Method or submission mode	Payment Services	Online Transaction	Settlement file download via HTTPS	Settlement file download via SFTP	Online Transaction Query	Admin portal
Browser Submission	Debit, Credit (Visa, MasterCard, Amex) Direct Debit QR	No impact	No impact	No impact	No impact	No impact

iii. **NETS QR Online API (NPS QR) Merchants**

Payment Services	Online Transaction	Online Transaction Query	Merchant Connect Portal
QR	No impact	No impact	No Impact

4. What are the required actions?

Merchants who may be impacted should update the eNETS Production PGP Public Key before

23 December 2020. Please refer to the configuration categories below for more details:

No.	Configuration Item	Action Required	Timeline
1	prod/nets-full-pub.pgp.asc	Kindly replace with eNETS Production Public Key <key name>.	By 23 December 2020.
2	NETSConfig.xml	Kindly update to the latest eNETS Production PGP Key name. <netsPubKey>nets-full-pub.pgp.asc</netsPubKey>	
3	The merchant restarts application to take effect		

You can test this in the UAT environment from 14 August 2020.

To download the production certificate:

Simply create an account in our developers' portal at <https://developer.nets.com.sg/signup> to access the production certificate. Registration for a user account is free and takes less than five minutes to complete.

For registered users, you may download the new certificate together with instructions on how to test in the UAT environment from <https://developer.nets.com.sg/docs/resources/>. Additionally, registered users can access our latest SOAPI integration specifications and generate common credentials for testing.

5. What will happen if the merchant's eNETS Production Public Key is not updated after 23 December 2020?

We strongly encourage merchants to update the eNETS Production Public Key by 23 December 2020, and avoid the year-end technical freeze period from 23 December – 31 December 2020.

By 24 December 2020, merchants who have not done the update will not be able to make transactions, but will still be able to login to eNETS Admin Portal and download settlement reports.

These merchants will experience failures when submitting payment requests to eNETS for the services below:

- UMAPI credit card payments
- UMAPI direct debit payments

Appendix A

1 Terminology / Conventions

Term	Description
Merchant	An entity that offer goods or services for sale on the internet
UMAPI	Unified Merchant Application Programming Interface
URL	Uniform Resource Locator. Specifies the "address" of a resource in the internet
Keystore	A special file that stores public and private keys used in Public Key Infrastructure (PKI) . A keystore file can be generated using a Java tool called "keytool"
SSL	Secure Socket Layer
OpenPGP	Non-proprietary protocol for encrypting data using public key cryptography. The OpenPGP protocol defines the standard formats for encrypted messages, signatures and certificates for exchanging public keys

2 PGP Certification – Excerpt from UMAPI Integration Guide v2.8

2.1 Configuration of proxy settings

If the merchant is using server-side submission and the merchant's server is behind a proxy server/firewall, the merchant needs to specify the proxy settings in NETSConfig.xml. Please refer to section [3. Configuration of UMAPI Config Files](#) for the properties to set.

If the proxy server requires authentication, and merchant wants to store the proxy Password in encrypted format, refer to section 3. Configuration of UMAPI Config files or instructions on generating the encrypted password.

3 Configuration of UMAPI Configuration files

Configurations for UMAPI are stored in the file NetsConfig.xml, which contains the following values (merchant will need to update the new netsPubKey in this exercise):

Field	Description
merchPrivKey	Location of merchant private OpenPGP certificate
merchKeyPass	Password for merchant's private OpenPGP certificate
netsPubKey	Location of eNETS public OpenPGP certificate
payURL	eNETS server URL. Only applicable for server submission.

Field	Description
queryURL	eNETS URL to query the transaction status
usePGP	Must be set to true.
useProxy	Applicable for server submission. If the merchant's server is behind a
proxyHost	Proxy server IP
proxyPort	Proxy server Port
proxyUsername	Username for authentication to proxy server (if required)
proxyPassword	Password for authentication to proxy server (if required)
encryption	Flag to indicate whether the merchKeyPass and proxyPassword fields are
configPath	If password encryption is turned on, this field specifies the folder
TimeOut	Connection expiry time.
logLevel	Type of logging level to be set E.g. debug, info, error
logFile	Path of log file (umapi.log) to be written on server.
protocol	Protocol to be used E.g: "https"