



## Using the Visa Private BIN Range Best Practice Guide

### Introduction

This document specifies the best practice to be followed for organisations that want to use the Visa Private BIN Range to create internal identifiers, which have the same format as Visa Primary Account Numbers (PANs), for use within private systems.

### Motivation

Organisations sometimes need to create identifiers to use in place of PANs. Two common requirements are:

1. An identifier is required for test purposes, for example to test the operation of a payment application; and
2. An identifier is required as a token which can be used in place of a PAN within specific internal systems, limiting the exposure of a PAN.

In such cases it is extremely useful for an organisation to be able to create an identifier that has the same format as a PAN but which can be clearly distinguished from a 'real' PAN. This allows an organisation to ensure that such identifiers are never submitted to operational payment systems and helps ensure that payment data is adequately protected. The Visa Private BIN Range facilitates the creation of such identifiers.

### Visa Private BIN Range

Visa Primary Account Numbers have a standard format; they are sixteen digits long; V PAY account numbers are either sixteen or nineteen digits long for. In both cases, the first six digits of an account number are the Bank Identification Number (BIN). For example, the BIN for Visa account number 4000 0098 7654 3217 is 400000, the BIN for V PAY account number 4000019876543210123 is 400001.

BINs are licensed to Visa Members institutions by Visa Europe. This ensures that account numbers are unique and that it is possible to identify the issuing and acquiring institution.

Visa Europe has assigned the following BINs to be freely used by organisations within private systems:

**468738**  
**468739**

An organisation can, therefore, create identifiers with the same format as Primary Account Numbers (PANs) within these ranges, safe in the knowledge that these BINs will not be issued to any entity, and subsequently valid PANs in the Visa Private BIN Range will never exist outside private systems. Two BINs have been provided so that organisations would be able to use them for different purposes – for example as placeholders for both Visa and V PAY account numbers.

An organisation that wants to make use of the Visa Private BIN Range can do so without further reference to Visa Europe.

## **Operational Considerations**

It is important for all organisations that create identifiers within the Visa Private BIN range to take the necessary precautions to ensure that these identifiers are not submitted to operational payment systems as an account number for authorisation or clearing.

Organisations should develop the necessary filters and systems to:

1. Detect the presence of PANs within the Visa Private BIN Range in operational systems.
2. Alert staff that such PANs have been detected.
3. Remove these PANs to prevent these being submitted into operational payment systems.

Organisations that receive payment data from other parties should also put systems in place to detect and remove account numbers within the Visa Private BIN Range within the received data. They should also alert the party that sent the data that such data has been detected.

## **Security Considerations**

Organisations that store, process or transmit cardholder data are required to adhere to the requirements of the Payment Card Industry Data Security Standard (PCI DSS) to secure such data. Tokenisation defines a process through which PANs are replaced with surrogate identifiers known as 'tokens'. The security of an individual token relies on the properties of uniqueness and the infeasibility to determine the original PAN knowing only the surrogate value. One use of the Visa Private BIN Range will be to create and identify tokens.

Where properly implemented, tokenisation allows organisations to limit the storage of cardholder data to within the tokenisation system, potentially decreasing the number of systems and applications reviewed as part of an organisation's assessment against the PCI DSS. As a reference or surrogate value for the original PAN, a token can be used by systems and applications within an organisation's environment without having to consider the security implications associated with the use of cardholder data.

The extent to which a token needs to be protected in accordance with the PCI DSS is dependent on how a tokenisation system is implemented. Organisations are advised to seek the opinion of a PCI DSS Qualified Security Assessor (QSA) and also to consult the Tokenisation Guidelines published by the PCI Security Standards Council.

[https://www.pcisecuritystandards.org/documents/Tokenization\\_Guidelines\\_Info\\_Supplement.pdf](https://www.pcisecuritystandards.org/documents/Tokenization_Guidelines_Info_Supplement.pdf)

## **Conclusion**

The Visa Private BIN Range will allow organisations to create identifiers that can be used in place of PANs.

Such identifiers are easily recognised, ensuring that they can be blocked from entering operational payment systems and allowing organisations to optimise their security programmes.