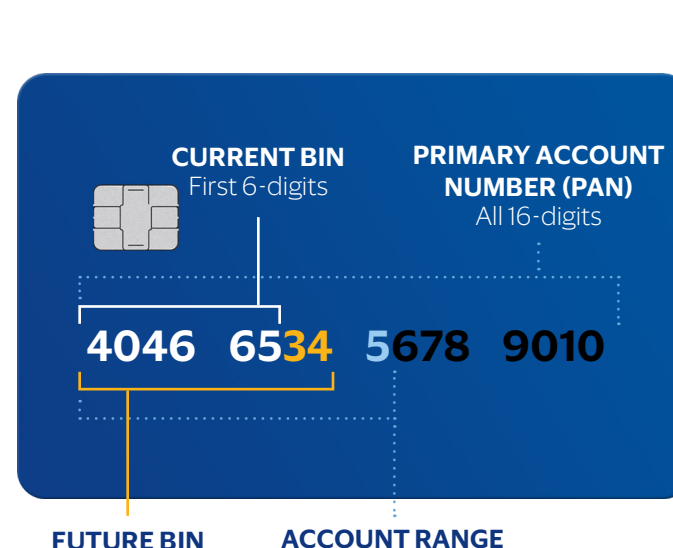
VISA

IS YOUR ORGANIZATION 8-DIGIT BIN READY?



In 2016, to address the industry supply shortage, the International Organization for Standardization (ISO) **expanded the length of Issuer Identification Numbers (IIN) referred to as Bank Identification Numbers (BIN) in the Visa system from 6 to 8 digits**. Visa is supporting this change to fuel innovation of the payment ecosystem. Although the BIN length is changing from the first 6 to the first 8 digits of Visa Primary Account Numbers (PAN), PAN lengths and 9-digit account range lengths will not be modified.

Read the **ISO Announcement** here

Also effective **April 2022**, Acquiring BINs have been reclassified as Acquiring IDs, although the values did not change.

Visa endorsed the standard in 2017 and announced April 22, 2022 as its final effective date.

Visa is supporting this change to ensure an adequate BIN supply to help fuel future innovation.

Learn more at **Visa's Numerics Initiative page on visa.com**

Did you know?

Although ISO is only assigning 8-digit BINs for new requests, for the foreseeable future, 6-digit BINs will continue to exist. Therefore, **it is imperative that acquirers are able to handle both 6- and 8-digit BINs** in back-end systems and transaction processing.

Why does it matter?

Visa now only assigns 8-digit BINs; **6-digit issuing BINs will no longer be assigned**. Acquirer numerics will remain 6 digits and will be reclassified as Acquiring IDs. These reclassified IDs will not change, and acquirers can request new Acquiring IDs from Visa through the standard numeric request process.

All current Acquiring BIN numbers will remain as-is, and will be reclassified as Acquiring IDs.

Making the systems and process updates necessary to support 8-digit BINs can be a large effort for acquirer processors, and the repercussions of not having support in place may be significant. If you haven't started a project to make this important change, we highly recommend you begin sooner than later.

To minimize cardholder impacts, PANs and tokens will not be modified. However, if updates are not made to support 8-digit BINs across the payments ecosystem there may be significant impacts to cardholder transaction processing.

Note: It is important to evaluate any potential cardholder impacts related to the industry wide migration to 8-digit BINs with cross functional teams at your organization. For more information on how to assess program readiness, contact your Visa account representative or visit the **Numericsnitiative page on Visa Online**

What do acquirer processors need to do?

Acquirer processors that use the first six digits of the PAN to route transactions may have broad impacts across transaction processing. Any acquirer processors using 6-digit issuing BINs will need to update routing logic, processing logic and/or applicable tables to accommodate 8-digit BINs.

It's critical to assess all parts of your business that currently rely on issuing BINs, and work to ensure all systems are updated company-wide to handle 8-digit issuing BINs.

This is a significant change that will touch all parties in the payment ecosystem globally, so it's imperative that you assess the impacts of this change with your merchant clients, vendors, third-party agents and any other partners who support their transaction processing, routing and downstream activities.

You may be using internal BIN tables and/or BIN tables received from third parties that are limited to 6-digit BINs. All BIN tables must be assessed and updated to support 8-digit Issuing BINs by April 2022.

How does this change affect Visa transaction processing?

Because the issuing BIN is not used in VisaNet for any authorization, clearing or settlement of transactions or any related exception items, there is no impact from a Visa standpoint. However, **you will need to analyze the impacts to your own internal processing and downstream systems.**

As the Issuing Identifier is used to define issuing processing, you should ensure that transactions are **routed based on Visa-supplied network specific routing tables** and not based on the first six digits of the PAN.

The **Visa ARDEF (Account Range Definition) table** (sometimes known as a BIN table) delivered through the Edit Package **is for clearing transactions only**, and should not be used for routing. **If used, there is a potential risk that the transaction will be sent to the wrong entity.**

Use of incorrect tables or failure to keep tables updated may result in unnecessary declines, rejections or misrouting as well as increased reconciliation costs. This is particularly true as issuers utilize their assigned 6-digit issuing BINs by using one or more 9-digit account ranges to differentiate specific products and/or processing parameters.

Visa will continue to manage BIN assignments with carefully managed processes, schedules and checkpoints. Further, Visa follows the ISO guidelines to hold BINs for a defined period before assigning to other issuers.

Trailing activity and dispute processing will continue to follow established processes, and not be impacted by the migration. All returned 8-digit BINs will be held for a defined period in the system to manage trailing activity as is done today with any BIN delete.

Visa systems will continue to support both domestic and international transactions. If you have hard coded six-digit BIN logic in your routing and processing, you'll need to update this logic to accommodate the 8-digit issuing BIN format.

The table below shows a summary of data and uses for the tables used for clearing and routing.

Table	Data	Uses	Important Notes
Account Range Table (ARDEF) via Edit Package	Processing attributes such as funding source, type of product, geography, eligibility for cash back, etc.	Defines valid clearing account ranges and their attributes, including funding source.	Should not be used for routing. Does not contain issuing BIN.
Routing Tables	Batch files that are updated and distributed daily, weekly, etc., are based on subscription and contain account ranges (i.e., PAN prefixes) applicable to each program.	Used by Visa, PLUS and Interlink acquirers to make authorization routing decisions.	Multiple types of routing tables are defined for specific card programs (e.g., PLUS Routing File). Does not contain issuing BIN.
ACQ/ISS Identifier Table (Formerly known as BIN Validation Table - Renamed Effective July 2020)	Issuing and Acquiring Identifiers and associated attributes like country, region, type of identifier, eligibility for Visa Direct and various OCT attributes.	Used to identify the source and destination for Visa clearing transactions.	Does not contain funding source or product type. Does not contain issuing BIN.

ATM "On Us" transactions

Acquirer processors that hardcode debit BINs for their proprietary ATMs or upload the list of "on-us" BINs to ATMs may also see issues processing "on-us" and "not-on-us" ATM transactions if the impacts of 8-digit BINs are not assessed and addressed.

In addition, if you use 6-digit BINs in your fraud protection programs and risk rules, they may be impacted if you're not prepared for 8-digit BINs.

These might include:

- **Pre-validation of transactions** against specific fraud parameters (including issuing BIN)
- **Blocks on specific BINs** for authorization processing, such as Office of Foreign Assets Control (OFAC) sanctions
- **Reporting and analytics** on fraudulent transaction activity at the BIN level

It is important you measure the impact of migrating to 8-digit BINs on all your security and fraud detection systems.

Do I need to work with my partners on anything?

The change to 8-digit BINs may have an impact across your organization, and may also impact your customers, clients, service providers, and vendors. Partner readiness is critical to success, and collaboration across all customer and stakeholder groups is essential, as this is not just a technology project, and requires cross-functional attention.

Given the issuing BIN is not used in VisaNet processing, most of the changes required will not be visible to Visa as they are specific to your internal or proprietary systems.

For more information, visit the **Numerics Initiative page on Visa.com**

Do my merchant clients need to do anything?

Your merchants should be assessing and addressing any potential impacts that might occur if their systems are not ready to properly accept 8-digit BINs. This might include:

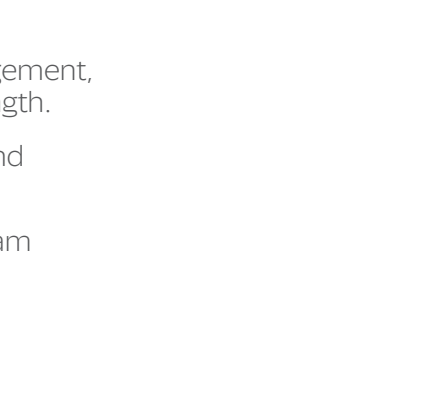
- Detailing out how the issuing BIN is used in their own POS environment, and updating and/or replacing any logic that is based on the first 6-digits.
- Assessing downstream system impacts e.g. billing, reporting, key management, etc., and making necessary changes to accommodate the longer BIN length.
- Considering needs to conduct testing to confirm seamless operations and downstream processes.
- Confirming their ability to process transactions and complete downstream activities regardless of the BIN length.
- Accessing Visa resources for more guidance.

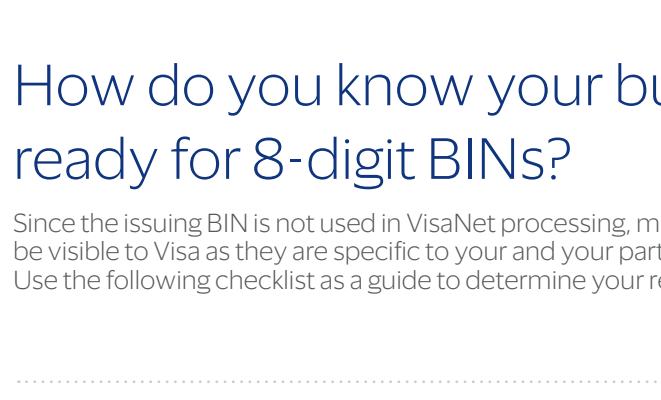
It's imperative that your merchant clients are prepared to accept 8-digit BINs to ensure there is no interruption in processing Visa transactions.

What might happen if the requirements aren't met?

Acquirer processors that are not able to handle 8-digit issuing BINs may be unable to support their clients. Acquirer processors risk failed transactions and longer resolution times and costs to complete transactions.

Failure points and severity will vary depending on the specific usage of the issuing BIN, set up of the supporting technology, dependencies across service providers and downstream process flows and associated outputs. Visa will not be able to protect its clients from these consequences as they will not be visible in VisaNet.





Will there be any changes to PCI requirements?

There are no changes to PCI Requirements to "Mask PAN when displayed" and "Render PAN Unreadable when stored". For acquirers that do use the first 6 digits of the PAN for services, Visa has updated our truncation[1] requirement to allow for the removal of at least 4 digits, allowing a maximum of first 8 digits, and any other 4 digits to be stored.[2]

1. Truncation of the PAN by permanently removing a segment of the PAN is one of four approaches to render PAN unreadable.
2. See PCI FAQ "What are **acceptable formats** for truncation of primary account numbers?"

How do you know your business is ready for 8-digit BINs?

Since the issuing BIN is not used in VisaNet processing, most of the changes required will not be visible to Visa as they are specific to your and your partners' internal or proprietary systems. Use the following checklist as a guide to determine your readiness state:

1 → 2 → 3 → ✓

Actively engage

- Conduct impact assessment across organization
- Learn about impacts to processing and downstream systems
- Inform management

Analysis underway

- Establish cross functional team
- Contact key partners, clients, suppliers and vendors
- Identify project scope and milestones
- Finalize plan and approve with management

Implementation

- Approve budget and schedule resources
- Complete organization-wide 8-digit BIN updates
- Confirm readiness with all key stakeholders
- Set up testing plan with all key stakeholders

Ready for 8-digit BINs

- Complete testing and establish risk mitigations
- Communicate readiness to all stakeholders
- Establish process for live monitoring and ongoing maintenance

Issuer processor readiness must also include any partners, clients, vendors, and other entities that participate in transaction processing on behalf of the issuer processor. It is imperative that issuer processors receive confirmation of 8-digit BIN readiness from all connected parties.

Acquirer Processing analysis guidelines

ROUTING & AUTHORIZATION

- Identify local and International transactions
- Detect "on-us" transactions
- Set risk rules
- Run pre-validation fraud checks

CLEARING & SETTLEMENT

- Identify merchant discount rate for merchant clearing, settlement and posting

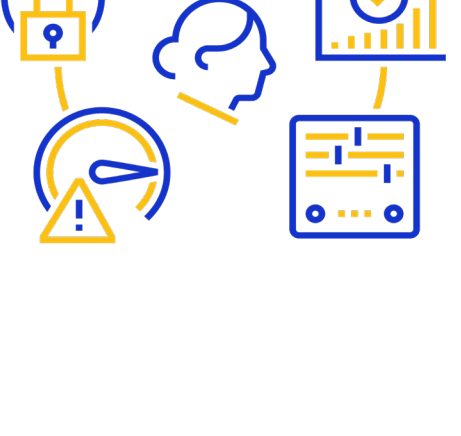
ACCOUNTING & RECONCILIATIONS

- Identify transactions to post for interchange
- Calculate interchange fees

How can Visa help?

Visa will continue to communicate regularly with payment industry stakeholders regarding the migration to the 8-digit BIN standard. We highly encourage you to visit our **Numerics Initiative Page on Visa Online** and **Visa.com** to learn more and to access the set of tools we've developed to help drive your analysis, planning and transition to this new industry standard.

Together, we're innovating the payment ecosystem. The ongoing evolution of digital payment products and form-factors will increase the necessity of our collective agility and speed to market. The continued advancement of our clients, partners and competitors empower all of us to move into the next generation of digital payments, together.



If you have questions

If you have questions on how the 8-digit BIN industry change may affect your business or have questions specific to Visa's approach to the new 8-digit BIN standard, visit the Numerics Initiative page on **Visa Online** or reach out to your Visa Representative.

Note: For Visa Online resources, you will be prompted to log in.

The 8-digit BIN expansion is here.

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