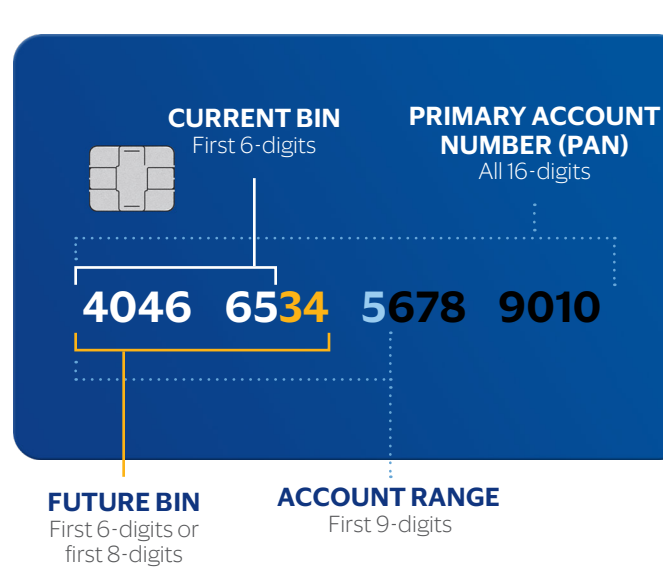
VISA

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**. However, issuers have the option to expand any or all of their 6-digit issuing BINs to 8-digits. Migrating to 8-digit BINs will allow issuers the ability to support their innovation and growth strategies by having a sufficient supply of BINs, and to optimize their growth costs.

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 issuer 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 **Numerics Initiative page on Visa Online**.

What do issuer processors need to do?

Visa urges issuer processors to begin considering the impacts of the 8-digit issuing BIN on current PAN assignment strategies. Beyond limiting PAN assignment to specific 9-digit account ranges, Visa also recommends that clients consolidate in-use 9-digit account ranges into as few future 8-digit issuing BINs as possible. Issuing within 9-digit account ranges associated with the same future 8-digit issuing BIN minimizes the number of 8-digit issuing BINs required.

In addition, if you accept cards from foreign cardholders at your ATM's, Cash Advance Machines, etc., you will also need to evaluate impacts to ensure you do not have any acquiring issues if the card being accepted belongs to an issuer using an 8-digit BIN.

Random PAN assignment across all 9-digit account ranges within a given 6-digit issuing BIN is not recommended and is prohibited for any BIN enrolling in Visa Token Service (VTS).

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 Visa card-issuing clients, vendors, third-party agents and any other partners who support transaction processing, routing and downstream activities. 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.

How does this change affect Visa transaction processing?

Because the issuing BIN is not used in VisaNet for any authorization, clearing or settlement 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 releases with carefully managed processes, schedules and checkpoints. Further, Visa follows the ISO requirements to hold BINs for a defined period before assigning to other issuers.

Trailing activity and dispute processing will continue following 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.

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.

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.

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**

What might happen if the requirements aren't met?

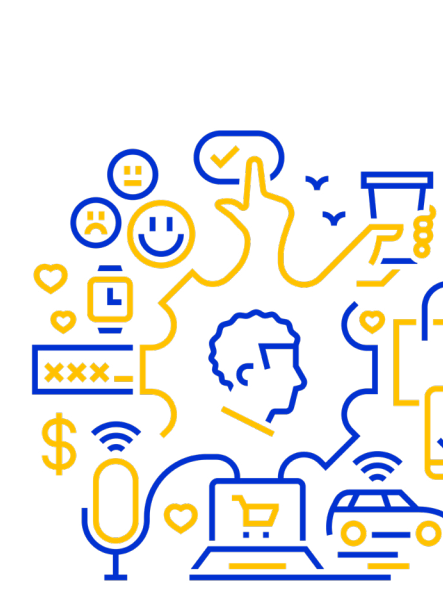
Issuer Processors may see a number of impacts to your business and to the payments ecosystem if you're not ready to receive the new 8-digit issuing BIN for new BIN assignments. Over time, the same 6-digit root will be common to BINs assigned to different issuers and used for various products.

You may also see impacts to BIN and PAN assignment strategy when the issuing BIN, the seventh digit, or the eighth digit are used to identify products. As BIN and PAN assignment strategies vary across portfolios, it is critical that you conduct an assessment across every product portfolio. You may see impacts to product management systems, product performance reporting, account assignment randomization processes and loyalty and rewards eligibility management.

Some issuer processors will see impacts on transaction processing. For example, an issuer processor may have a single BIN table commingled with issuing and acquiring BINs (which are being renamed to acquiring identifiers and will stay at six digits). This issuer would need to separate issuing BINs from acquiring identifiers to support the change to an 8-digit issuing BIN.

Co-existence of 6- and 8-digit BINs in the ecosystem

- As product type (Debit, Credit, Prepaid) is defined at the BIN level for either a 6- or 8-digit BIN, merchants must be able to read the first 8 digits to avoid mis-identifying the BIN.
- Authorization and Clearing & Settlement will be based upon a unique 6-digit processing identifier moving forward. All system logic should not utilize the first 6-digits of the PAN.
- As of the April 2022 Business Enhancement Release, Visa will no longer assign 6-digit BINs. Instead, 8-digit BINs will be assigned for all products and services.
- Acquiring Identifiers will now be a unique value distinct from other BIN or processing numerics. Identifiers must be a unique 6-digit numeric.



Failure points and severity will vary depending on the specific usage of the issuing BIN, set up of the supporting technology, dependencies across issuer processors 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 issuer processors 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 Actively engage
- Conduct impact assessment across organization
- Learn about impacts to processing and downstream systems
- Inform management

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

3 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.

Issuer processing analysis guidelines

ROUTING & AUTHORIZATION
- Identify product type
- Determine eligibility for products or services
- Set authorization parameters

CLEARING & SETTLEMENT
- Searching clearing and settlement-system tables
- Produce clearing and settlement reports

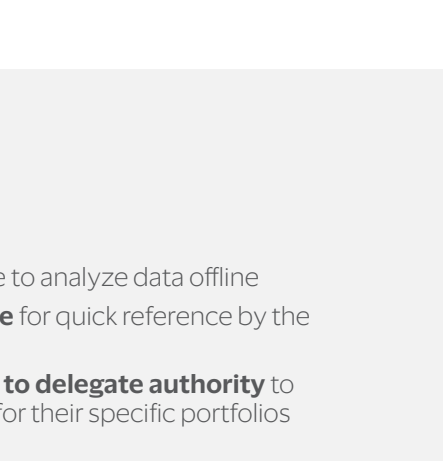
ACCOUNTING & RECONCILIATIONS
- Perform downstream reconciliation
- Support accounting processes

How can Visa help?

Visa has developed a set of tools to help you drive your analysis, planning and transition to the new 8-digit issuing BIN standard. For a complete set of tools and resources, please visit the **Visa Numerics Initiative page on Visa Online** and **Visa.com**.

Some of these tools include:

1. A client-specific Eight-Digit BIN Report can be requested from **NumericsSupport@visa.com**. The reports list the current 6-digit issuing BINs associated with a specific client Business ID (BID). Also listed is the associated future 8-digit issuing BINs and the transaction counts for each. Clients can use these reports to identify future 8-digit issuing BINs that feature low transaction activity, and might be candidates for consolidation.
2. A comprehensive training course that is available free of charge within the Visa Business School. Issuers and their processors are highly encouraged to take the training so that they understand how to migrate an existing portfolio.
3. The Issuer BIN Migration Tool (IBMT) supports clients in facilitating the 6-digit issuing BIN conversion process. The IBMT provides a simplified, user-friendly, online workflow tool that lets issuers and their processors analyze activity on their existing 6-digit BIN portfolio, migrate selected BINs to the new 8-digit format, and release to Visa any newly-converted 8-digit BINs with no activity. Using the tool and migrating unused 8-digit BINs is free of charge. Clients can migrate their existing BIN portfolio on their own schedule with little or no assistance needed from Visa.



Features of the IBMT include:

- **Interface that allows users to search**, filter and sort information by a specific 6-digit issuing BIN
- **Transaction data based upon the cardholder activity** Visa processes on a monthly basis
- **Classifications of the new 8-digit BINs** based on installation status and activity level
- **Capability to return newly-created 8-digit BINs** with no activity back to Visa directly
- **Ability to export transaction data** into a Comma Separated Values (CSV) file to analyze data offline
- **Status categories by case** for quick reference by the user
- **The ability for the issuer to delegate authority** to their processor on record for their specific portfolios

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 empowers 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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