

Drive secure digital commerce, enable frictionless payments, and provide payment flexibility for your customers with American Express Token Service for Issuers.



DON'T *do business* **WITHOUT IT**™

American Express Token Service for Issuers

AETS Overview

The landscape of digital payments is evolving rapidly, driven by consumer preferences for convenience, security, and flexibility. The continuous rise in digital payments requires an on-going effort from Issuers to provide secure solutions that combat fraud while providing fast, frictionless payment experiences.

The powerful backing of American Express Token Services (AETS) allows Issuers to be confident they have an effective solution in place to help drive secure e-commerce while offering their customers convenience and choice.

AETS offers a scalable, integrated solution that helps reduce the risk and impact of fraud and data breaches by replacing a Card's primary account number (PAN) with random digits that make up a payment token. Merchants no longer need to store Card account information, resulting in less hassle and less risk for both Merchant and Card Member.

AETS also provides flexibility for Card Members by enabling frictionless digital payments across form factors such as smartphones and wearables, so they can easily pay where and how they want.



American Express Token Service for Issuers

AETS helps Issuers provide a secure and seamless payment experience for their Card Members while reducing the risk of data breaches and fraud.

AETS Advantage for Issuers

Card Member Flexibility and Choice

Tokenization provides a quick, easy checkout across payment form factors (such as smartphones and wearables) allowing Card Members more flexibility in how they pay—knowing their payment information is kept safe.

Increased Confidence in the Authorization Decision

Issuers can have higher confidence in the authenticity of transactions processed with a payment token, as AETS authenticates the token requestor and implements token controls, which may lead to improved authorization rates.

Reduced Payment Disruptions

Through lifecycle management, AETS keeps Card credentials up to date, eliminating the need for Card Members to update their payment information when a Card expires or is replaced. Ultimately, this reduces payment disruptions for the Merchant.

Reduced Risk of Fraud and Protection Against Data Breaches

Card Member payment credentials are replaced with random-digit payment tokens, which are generated according to strict domain controls that restrict where and how they may be used. This aids with transaction processing decisions and helps minimize fraud and the costs associated with data breaches.

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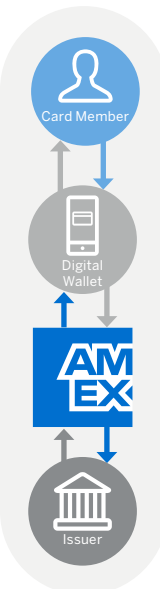


How it works: American Express® Tokenization Flows

AETS How It Works

Creating a token (aka Token Provisioning)

A token request can be consumer-initiated or issuer-initiated.



Consumer Initiated

1. Card Member enters card details on their respective Wallet App.
2. The Wallet App acts as a Token Requestor and requests token from AETS.
3. AETS routes request to Issuer for risk assessment and approval.
4. Issuer assessment can approve, deny the request or can initiate an OTP flow for additional authentication.
5. On Issuer approval, AETS generates token and provisions it securely to the card members Wallet App.
6. Wallet App stores token for future use.



Issuer Initiated

1. Card Member taps "Add to Wallet" from the issuer's app.
2. The Issuer acts as a Token Requestor and requests token from AETS.
3. Since the issuer has already authenticated the user in-app, additional step-up verification may not be required.
4. AETS creates a token and provisions it directly to the target wallet.
5. Wallet App stores token for future use.

Using a token (aka Token Presentment)

Stored token can be used for authorization in place of PAN*.



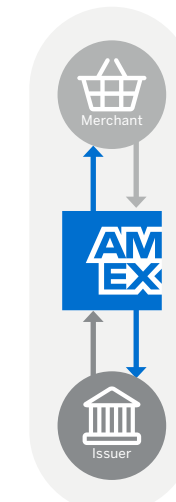
1. Card Member selects stored tokenized credential.
2. Token Requestor requests payment credential.
3. Merchant sends token & credential via auth request to Amex.
4. AETS retrieves PAN, sends to Issuer for auth.
5. Issuer makes decision, sends response to Amex.
6. Amex returns token & auth response to Merchant.

* Issuers use token metadata to:

- Differentiate tokenized vs. non-tokenized transactions.
- Detect device or wallet compromise.
- Improve fraud models with device context.
- Offer wallet-specific rewards or offers.

Managing a token (aka Life Cycle Management)

Token changes can be initiated by Requestor or Issuer.



Token Requestor Initiated

1. Token Requestor sends status update to Amex.
2. Amex processes request, updates token status.
3. Status update pushed to Issuer.



Issuer Initiated

1. Issuer sends token/account status update.
2. Amex processes request, updates token status.
3. Status update pushed to Token Requestor.



AETS Use Cases

AETS enables tokens to enhance security across a variety of use cases and throughout the digital payment ecosystem while providing a seamless customer experience.

Power Digital Commerce

Digital Wallets

Digital Wallets allow Issuers to offer broader digital payment options and capture everyday spend for Card Members who always carry mobile devices. This makes it easier to pay with a Digital Wallet over cash, **potentially leading to more transactions and top-of-wallet preference.**

Digital Wallet implementations use AETS to store payment tokens instead of Card data—helping protect payment Cards in mobile devices. Whether the Card is used in-app or at a PoS terminal, Card data is tokenized and the authorization request from the Merchant to the Network is secured with the payment token, providing a convenient, touch-free, and secure form of payment for Card Members.

Network authorization certification is required to support Digital Wallet transactions.

AETS Use Cases

Power Digital Commerce



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Power Digital Commerce

Virtual Card Number for Browser Autofill

American Express Virtual Card Number (VCN) for Browser Autofill allows Card Members the option to tokenize a Card that is already on file as a payment method with a browser—adding another layer of security to online shopping, while making it even faster and easier. A tokenized Virtual Card Number (VCN) will be created, which **autofills Card Members' payment credentials, eliminating the need for manual entry** and helping drive conversion rates and spend.

A cryptogram will allow the Card Member to **skip the step of entering the 4-digit code** from the front of their Card, enabling quicker, secure online transactions.

AETS Use Cases

Power Digital Commerce



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Virtual Card

For Issuers with a Corporate Card or Small Business Card product portfolio, American Express Virtual Card offers a B2B on-demand Virtual Card platform for business payments—designed with greater flexibility, enhanced controls, and stronger security. The platform allows Issuers to **create specific-use virtual account numbers with transaction-level spend controls and enhanced data capture.** These virtual account numbers are tokenized using AETS to enhance security.

American Express Virtual Card offers a range of deployment options—from simple web-based tools through an integrated API solution—and we will work with you to identify the best option for your business needs.



AETS Use Cases

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Secure Digital Commerce

Card-on-File Tokenization

Card-on-File Tokenization (CoFT) uses payment tokens to help secure your Card Member's payment credentials when they save their information online for frequent purchases, recurring payments, and subscriptions. **Card credentials are always kept up to date, which reduces friction due to outdated payment information** and allows Card Members to continue the payment process uninterrupted—without having to manually update their card information.

Network authorization certification is required to support CoFT transactions.

AETS Use Cases

Secure Digital Commerce



AETS Use Cases

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Secure Digital Commerce

Click to Pay with American Express

Click to Pay, enabled by the EMV® Secure Remote Commerce (SRC) technical framework, allows Card Members to have a streamlined online checkout experience across websites, mobile apps, and other digital channels. Leveraging American Express Token Service, Card Members are able to choose from a list of enrolled tokenized Card credentials, **helping provide an easy and secure payment method for e-commerce.**



AETS Supporting Services

AETS provides essential services that streamline processes and provide token management.

Core Services

Risk Assessment

Risk Assessment is a core functionality of token provisioning that allows Issuers to assess and approve all token requests. This capability enables Issuers to ensure the Cards for which tokenization is being requested are:

1. Active
2. Not under fraud suspicion
3. Eligible for tokenization
4. Belong to the Card Member for which the token is being requested

This helps Issuers better evaluate token provisioning requests and mitigate risk.



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Core Services

Life Cycle Management

AETS Supporting Services

Core Services

Through Life Cycle Management (LCM), AETS keeps payment tokens up-to-date automatically, so **Card Members and Merchants can conveniently transact without interruption when Cards are replaced**. Card Members can speed through payments, as they no longer need to manually revise expiry dates and Card numbers.

To fully realize the value of LCM and drive spend continuity, Issuer participation is essential in providing Card-account-status updates to American Express. This allows Issuers to manage the lifecycle of their tokens, including:

- Viewing the Primary Account Number (PAN)
- Triggering lifecycle management events
- Viewing real-time history of events

LCM supports the ability to update PAN/token associations through Card Attribute updates and can support provisioning lockouts. The application currently supports Apple Pay, Google Pay, Samsung Pay, Card-on-File Tokenization (CoFT), and Click to Pay (Secure Remote Commerce).



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Core Services

AETS Supporting Services

Core Services

Token Servicing

Token Servicing provides essential details about payment tokens to Issuer portals and American Express customer service portals, including:

- Token history (creation, validity, status, requester details, associated wallet, and Card Member's device details).
- Token events (status changes, origin, reasons for status change, and Card Member's device details).

Through the Token Servicing, Issuers gain greater visibility into token activity, which allows for improved servicing.



AETS Supporting Services

AETS offers value-add services that enhance user experience and provide token management.

Value-Add Services

Push-Provisioning

AETS Supporting Services

Value-Add Services

(Applies to Digital Wallets and Card-on-File Tokenization use cases.)

Push-Provisioning allows Issuers to **enable Card Members to easily “push” their payment Card credentials (in the form of a payment token) to select Merchants’ websites/apps and Digital Wallets** via the Issuer’s digital banking interface (app or website). Card Members can easily add their preferred payment Cards without manual entry, eliminating the need to save Card details with each Merchant or Digital Wallet individually, or having to enter their Card details for future purchases.

This service delivers a fast, easy, secure way for Card Members to shop with their preferred Merchants, driving top-of-wallet preference for Issuers. Issuers will be able to connect with all Merchants that have enrolled for Card-on-File Tokenization and enabled Push Provisioning. Issuers may also enable Push Provisioning for Digital Wallets, using Bank App Push (pushing credentials from Issuer bank app directly to the pay app) and Web Push (pushing credentials from Issuer website to the pay app).



AETS Supporting Services

AETS offers value-add services that enhance user experience and provide token management.

Value-Add Services

Payment Account Reference

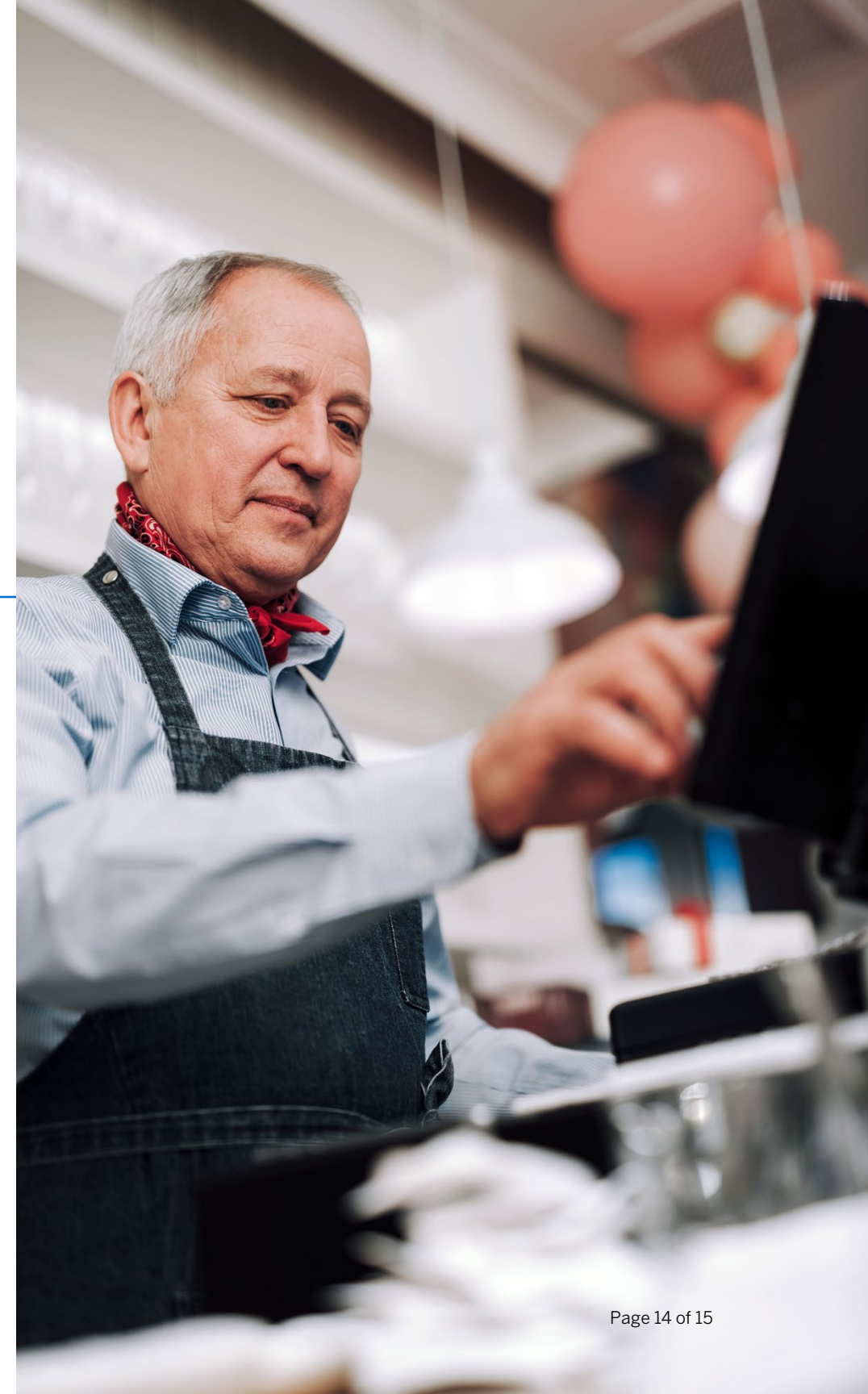
AETS Supporting Services

Value-Add Services

Payment Account Reference (PAR) connects digital and traditional transactions, allowing for better service, loyalty, and fraud controls.

PAR also links digital and traditional transactions together, so **Merchants and Issuers get a 360° view of customer spending**, allowing the linking of loyalty, rewards, and offers accordingly.

In adherence with EMVCo requirements, AETS generates a 29-character alphanumeric, non-financial data element, then assigns it to each tokenized PAN and maps it to all its affiliated payment tokens.



American Express Token Service for Issuers

Enabling American Express Token Service (AETS), along with its various use cases and supporting services, is easily accomplished through API integration.

Efficiencies may be gained by implementing multiple use cases at once. **Issuers may contact their American Express representative for additional information.**

Getting Started



DON'T do business WITHOUT IT™

