

## Express Credential on File/Card-on-File Overview

### Introduction

Many point-of-sale (POS) applications support features that enable cardholders to securely store credit card information on the POS system for future use. With cardholder data being able to be replaced by a processor-generated or network token, and as security concerns balance convenience of having a card registered on file with a favorite merchant, this practice has become broadly adopted. The "Credential on File" card brand mandate new regulations are being put in place to address this broader marketplace and bring greater definition to subsequent recurring transactions being processed from payment applications that store cardholder information.

### What is a "Credential" and when is it considered to be a "Credential on File" (COF)

Per card brand regulations, "credentials" are defined as Primary Account Number (PAN) or a token created by the Network (e.g., Visa, Mastercard) or processor (**PaymentAccountID**). When credentials are stored by a merchant to process future transactions for the cardholder, additional details identifying the COF transaction are now required. For the Express platform, the credentials on file requirements come into play whenever a token is stored for subsequent use.

With the card brand's recent interpretation of COF, transactions using a stored token need to be defined as an **installment, recurring, card-on-file** or **cardholder initiated** COF transaction. Details on the definition and use of each of these new COF types of payments are explained below.

### Examples of COF include:

- Shopping Cart checkout where online retailer stores the cardholder info.
- Merchants that use a staged Digital Wallet, for example PayPal, for full or partial prepayment.
- Wallet application with an agreed upon "replenish amount" when balance amount goes below a specific amount.
- Hotel- cardholder has a membership profile with the hotel and provides their card number for future reservations.
- Drug store in-person sale and cardholder uses QR code to link consumer to their profile with the merchant and uses stored credential.
- Any Recurring, Installment, Unscheduled COF is always COF.

### What is NOT considered a Stored Credential on File?

The COF requirements do not apply when the credential is used to complete a single transaction or purchase. This also includes purchases that encounter shipping delays and backorders, as for example, when multiple items are purchased from an e-commerce retailer and one item is backordered. The merchant will submit subsequent transactions to fulfill the entire order. Although a returned TransactionID is used, credentials are not stored as required for installment, recurring, cardholder initiated or unscheduled transaction; if the Cardholder returns they would need to enter their payment credentials to place the order.

### Examples which are not considered COF include:

1. Apple Pay Samsung Pay, Android Pay Contactless
2. Apple Pay Samsung Pay, Android Pay In-app or e-Commerce website. Pass-through wallets such as Apple Pay, Samsung Pay, and Android Pay are not considered credential on file whether accepted as contactless or through a merchant website or merchant app.

**Note:** This does not apply if the cardholder instructs the merchant to store their payment credential during an in-app or e-commerce transaction using the payment credential from their Apple Pay or Android Pay. This would be considered initial storage of a payment credential.)

- 3. Hotel- cardholder provides the payment credential to cover charges (e.g., hotel stay, incidentals such as food) associated to that specific reservation only

### COF Request and Response Flow

On the Express platform, supporting the COF mandate requires the addition of the **PaymentType**, **SubmissionType**, and **NetworkTransactionID** (used for subsequent transactions) within the request.

**Note:** A **NetworkTransactionID** may not always be returned based on the card and transaction type. If you do **not** receive a NetworkTransactionID in the response, continue to supply the **SubmissionType** and **PaymentType** appropriately and include the **NetworkTransactionID** once/if returned.

Here are the four types of COF **PaymentTypes**:

<p>① <b>Recurring</b> A <b>merchant initiated</b> transaction processed with a <b>variable amount</b> over <b>regular intervals</b>.</p>	<p>② <b>Installment</b> A <b>merchant initiated</b> transaction processed with a <b>fixed amount</b> over <b>fixed period of time</b>.</p>	<p>③ <b>Cardholder Initiated</b> A <b>cardholder initiated</b> transaction processed with a <b>variable amount</b> and <b>without a regular interval</b> or schedule.</p>	<p>④ <b>Credentials on File</b> A <b>merchant initiated</b> transaction processed with a <b>fixed or variable amount</b> <b>without a regular interval</b> or schedule.</p>
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Here are the four types of COF **SubmissionTypes**:

<p>① <b>Initial</b> Used for the <b>Initial Auth/Sale</b> for a CoF <b>PaymentType</b>.</p>	<p>② <b>Subsequent</b> Used for any <b>Subsequent Auth/Sale</b> for a CoF <b>PaymentType</b>.</p>	<p>③ <b>Resubmission*</b> Used for <b>resubmitting</b> an Auth that was declined due to insufficient funds <b>after</b> goods or services have been delivered.</p>	<p>④ <b>Re-Authorization*</b> Used for <b>initiating</b> a <b>new</b> Auth request for the <b>same</b> transaction such as when services extend past the original Auth validity.</p>
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On the transaction request use the **PaymentType** and **SubmissionType** fields based on the transaction you are sending:

**PaymentType** = "1/Recurring", "2/Installment", "3/CardHolderInitiated", "4/CredentialsOnFile"  
**SubmissionType** = "1/Initial", "2/Subsequent", "3/Resubmission", "4/ReAuthorization"

The transaction response will return a **NetworkTransactionID**:

```
<Transaction>  
  <TransactionID>8719947</TransactionID>  
  <ApprovalNumber>01626A</ApprovalNumber>  
  Additional Transaction Class Details  
  <NetworkTransactionID>000002047932032</NetworkTransactionID>  
</Transaction>
```

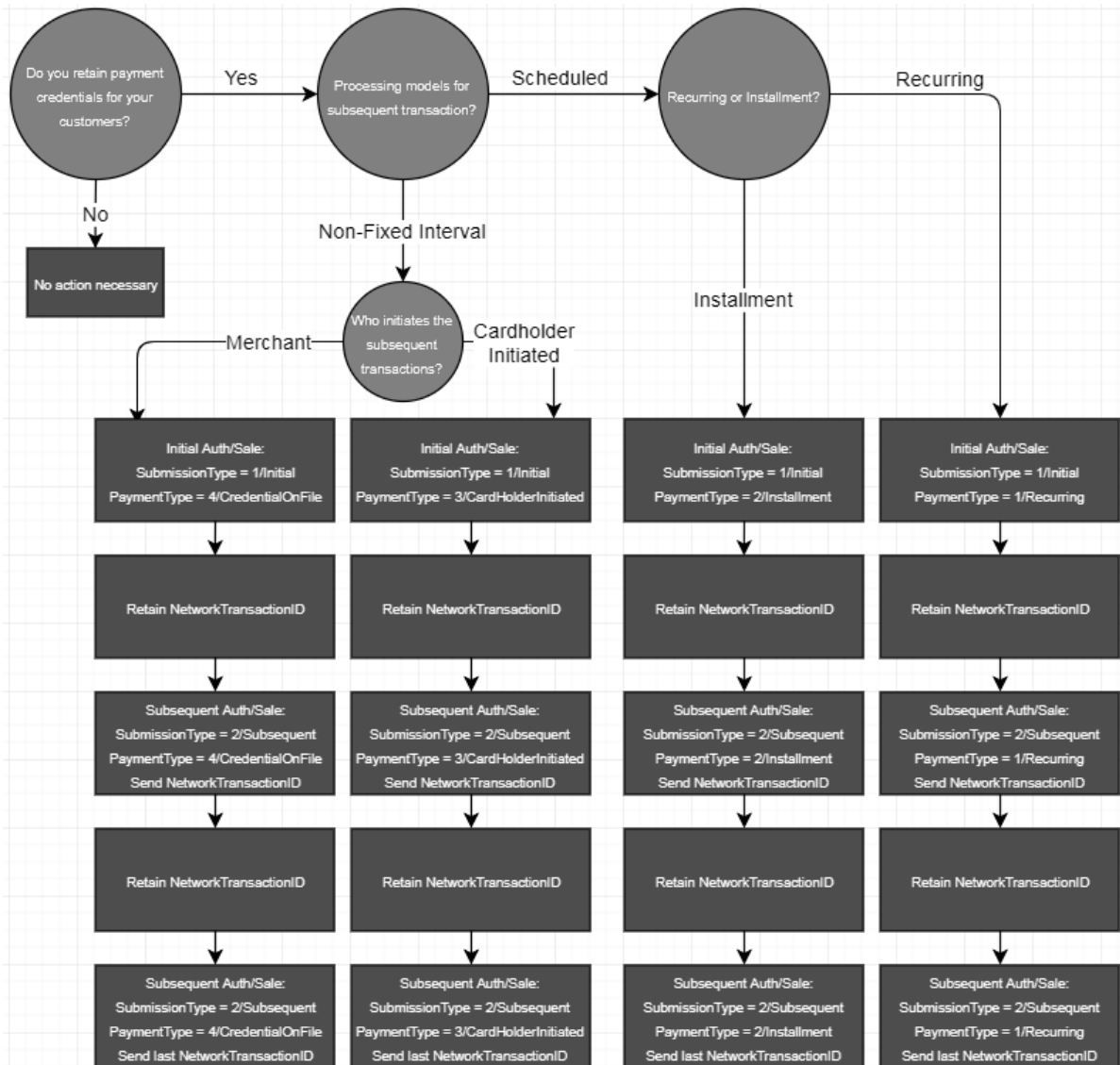
Retain the **NetworkTransactionID** from transaction response and submit in subsequent transaction requests in addition to the appropriate **PaymentType** and **SubmissionType**.

**Note:** The NetworkTransactionID will **not** be returned on Declined transactions

**Notes:** If a COF transaction declines the merchant may perform the following using the SubmissionType of "3/Resubmission":

- Resubmit the authorization up to 4 times within 16 calendar days (14 calendar days for Visa tokens only) from the date of the original decline response, in an attempt to receive an approved authorization. The resubmission of authorization can only be performed when the original decline was due to one of the following:
  - Authorization declined
  - Insufficient funds
  - Exceeds approval amount limit
  - Exceeds withdrawal frequency limit
- Should a subsequent installment transaction decline, the merchant must notify the cardholder in writing and allow the cardholder at least 7 days to pay by other means

Definitions, Cardholder Agreements and Technical Details



1. Recurring Payment - Definitions, Cardholder Agreements and Technical Details

A Recurring payment is defined as a merchant initiated transaction in a series of transactions which uses a stored credential, processed with a variable amount over regular intervals. Intervals may not exceed one year between transactions. Cardholder agreement/consent is **required** for the merchant to initiate recurring transactions.

- Examples of Recurring payments include subscription payments and bill payments such as an electric bill, gym membership, pest control, monthly car insurance payment, mobile phone bill, etc.

Recurring Cardholder Agreement

When entering into a Recurring cardholder agreement, the following information must be clearly displayed at the time the cardholder gives their consent. This information is to be displayed separately from the general purchase terms and conditions. Where required by applicable laws or regulations, the merchant or its agent must also provide to the cardholder a record of the cardholder’s consent.

- A truncated version of the stored credential (e.g., last 4 digit of the account number)
- Method in which the cardholder will be notified of any changes in the agreement
- How the stored credential will be used
- Expiration date of the agreement when applicable

Additionally, before processing the transaction, the merchant must obtain the cardholder’s consent to an agreement that contains the following:

- Transaction amount (includes all taxes and charges) or how the transaction amount will be determined.
- Transaction amount cannot contain finance charges, which must be listed separately.
- Transaction currency
- If surcharging is permitted and assesses, cardholder acknowledgement of any surcharges and associated disclosures
- Cancellation and refund policies
- Location of the merchant outlet
- The fixed dates or intervals on which the transaction will be processed
- The cardholder agreement must be retained for the duration of the agreement and provide it to the issuer upon request

**Recurring Payment Cancellation Procedures**

The merchant must provide a simple cancellation procedure to the cardholder. If the cardholder’s order was initially accepted online, the merchant may provide an online cancellation procedure. The merchant cannot complete a transaction when:

- The transaction is beyond the agreed upon duration by the cardholder
- The cardholder request that the merchant change the payment method
- Cardholder cancels according to the agreed cancelation policy
- The merchant receives a decline response

**First Time a Recurring Payment Credential is Stored**

- Merchant to ask the cardholder if they’d like the merchant to store their payment credential (card) for future transactions prior to submitting the initial/first authorization request
- The transaction must be authorized either for the amount due or, if payment not required, by submitting a zero dollar authorization request (\$0.00).
- The **MotoECICode** of the initial transaction should be set to ‘Single’ while all proceeding transactions that contain a token should use the MotoECICode ‘Recurring’

TransactionType	Parameter	Value/Enumeration
Auth/Sale	PaymentType	1/Recurring
	SubmissionType	1/Initial

**Subsequent COF Transactions for Approved Response**

TransactionType	Parameter	Value/Enumeration
Auth/Sale	PaymentType	1/Recurring
	SubmissionType	2/Subsequent
	NetworkTransactionID	Retained from initial/previous Recurring transaction response

**Subsequent Transactions for Declined Response**

TransactionType	Parameter	Value/Enumeration
Auth	PaymentType	1/Recurring
	SubmissionType	3/Resubmission

**2. Installment - Definitions, Cardholder Agreements and Technical Details**

An installment is a merchant initiated transaction in a series of transactions that uses a stored credential to make a payment for a fixed amount over a fixed period of time. Cardholder agreement/consent is required for the merchant to initiate installment transactions.

- Examples of an Installment COF include furniture purchases or home shopping network purchase where the amount paid is a fixed amount over a fixed period of time.

**Installment Cardholder Agreement**

When entering into a cardholder agreement, the following information must be clearly displayed at the time the cardholder gives their consent. This information is to be displayed separately from the general purchase terms and conditions. Where required by applicable laws or regulations, the merchant or its agent must also provide to the cardholder a record of the cardholder’s consent.

- A truncated version of the stored credential (e.g., last 4 digit of the account number)
- Method in which the cardholder will be notified of any changes in the agreement
- How the stored credential will be used
- Expiration date of the agreement when applicable

Additionally, before processing the transaction, the merchant must obtain the cardholder’s express informed consent to an agreement that contains the following:

- Transaction amount (includes all taxes and charges) or how the transaction amount will be determined
- The amount may not include interest charges for the U.S. Region
- Transaction currency
- If surcharging is permitted and assesses, cardholder acknowledgement of any surcharges and associated disclosures
- Cancellation and refund policies
- Location of the merchant outlet
- The total purchase price
- Terms of future installment payments, including the dates, amounts, and currency
- The cardholder agreement must be retained for the duration of the agreement and provide it to the issuer upon request

**Installment Cancellation Procedures**

The merchant must provide a simple cancellation procedure to the cardholder. If the cardholder’s order was initially accepted online, the merchant may provide an online cancellation procedure. The merchant cannot complete a transaction when:

- The transaction is beyond the agreed upon duration by the cardholder
- The cardholder request that the merchant change the payment method
- Cardholder cancels within the terms of the cancelation policy. Merchant must provide the cardholder a cancellation or refund confirmation in writing within 3 business days
- The merchant receives a decline response

**First Time an Installment Credential is Stored**

- Merchant to ask the cardholder if they'd like the merchant to store their payment credential (card) for future transactions prior to submitting the initial/first authorization request
- The transaction must be authorized either for the amount due or, if payment not required, by submitting a zero dollar authorization request (\$0.00).

**Note:** A merchant may not process an initial installment transaction until the merchandise or services have been provided to the cardholder and must not process individual installment transaction at intervals less than either 7 calendar days or the monthly anniversary of the shipment date.

TransactionType	Parameter	Value/Enumeration
Auth/Sale	PaymentType	2/Installment
	SubmissionType	1/Initial

**Subsequent Transactions for Approved Response**

TransactionType	Parameter	Value/Enumeration
Auth/Sale	PaymentType	2/Installment
	SubmissionType	2/Subsequent
	NetworkTransactionID	Retained from initial/previous Installment transaction response

**Subsequent Transactions for Declined Response**

TransactionType	Parameter	Value/Enumeration
Auth	PaymentType	1/Recurring
	SubmissionType	3/Resubmission

**3. Cardholder Initiated - Definitions, Cardholder Agreements and Technical Details**

A Cardholder Initiated payment is defined as a transaction in a series of transactions that uses a stored credential is neither determined by a fixed date or amount and is initiated by the cardholder. Cardholder agreement/consent is required for the merchant to store the credentials for future transactions.

- Examples of Cardholder Initiated include online retail or restaurant merchant environments that store the cardholder's payment credentials, shipping and billing address is on file, such as Amazon, The U.S. Post Office or a Pizza delivery business.

**Cardholder Initiated Agreement**

When entering into a cardholder agreement, the merchant is establishing the terms and conditions of the consent to store the cardholder's payment credentials, shipping and billing address. The following information must be clearly displayed at the time the cardholder gives their consent. This information is to be displayed separately from the general purchase terms and conditions. Where required by applicable laws or regulations, the merchant or its agent must also provide to the cardholder a record of the cardholder's consent.

- A truncated version of the stored credential (e.g., last 4 digit of the account number)
- Method in which the cardholder will be notified of any changes in the agreement
- How the stored credential will be used
- Expiration date of the agreement when applicable
- Transaction currency
- If surcharging is permitted and assesses, cardholder acknowledgement of any surcharges and associated disclosures

- Cancellation and refund policies
- Location of the merchant outlet
- The cardholder agreement must be retained for the duration of the agreement and provide it to the issuer upon request

**Cardholder Initiated Cancellation procedures**

The merchant must provide a simple cancellation procedure to the cardholder. If the cardholder’s order was initially accepted online, the merchant may provide an online cancellation procedure. The merchant cannot complete a transaction when:

- The transaction is beyond the agreed upon duration by the cardholder
- The cardholder request that the merchant change the payment method
- Cardholder cancels within the terms of the cancelation policy
- The merchant receives a decline response

**First Time a Credential is Stored**

TransactionType	Parameter	Value/Enumeration
Auth/Sale	PaymentType	3/CardHolderInitiated
	SubmissionType	1/Initial

**Subsequent Transactions for Approved Response**

TransactionType	Parameter	Value/Enumeration
Auth/Sale	PaymentType	3/CardHolderInitiated
	SubmissionType	2/Subsequent
	NetworkTransactionID	Retained from initial/previous Cardholder Initiated transaction response

**Subsequent Transactions for Declined Response**

TransactionType	Parameter	Value/Enumeration
Auth	PaymentType	3/CardHolderInitiated
	SubmissionType	3/Resubmission

**4. Credential on File (Visa Only) - Definitions, Cardholder Agreements and Technical Details**

A Credential on File (Unscheduled) COF is defined as a merchant initiated transaction in a series that uses a stored credential, processed without a regularly scheduled transaction date and with a fixed or variable amount. Cardholder agreement/consent is required for the merchant to initiate unscheduled COF transactions.

- Examples of Unscheduled COF payments include services such as snowplow service, window clearer services or vacation home cleaning services where there are agreed upon dependencies of time and conditions for the service.

**Credential on File (Unscheduled) Cardholder Agreement**

When entering into a cardholder agreement, the following information must be clearly displayed at the time the cardholder gives their consent. This information is to be displayed separately from the general purchase terms and conditions. Where required by applicable laws or regulations, the merchant or its agent must also provide to the cardholder a record of the cardholder’s consent.

- A truncated version of the stored credential (e.g., last 4 digit of the account number)
- Method in which the cardholder will be notified of any changes in the agreement
- How the stored credential will be used

- Expiration date of the agreement when applicable

Additionally, before processing the transaction, the merchant must obtain the cardholder’s express informed consent to an agreement that contains the following:

- Transaction amount (includes all taxes and charges) or how the transaction amount will be determined.
- The agreed upon event that will prompt the transaction (for example: to plow only when two inches of snow or more or the vacation home rental dates for cleaning.)
- Transaction currency
- If surcharging is permitted and assessed, cardholder acknowledgement of any surcharges and associated disclosures
- Cancellation and refund policies
- Location of the merchant outlet
- The fixed dates or intervals on which the transaction will be processed
- The cardholder agreement must be retained for the duration of the agreement and provide it to the issuer upon request

**Credential on File (Unscheduled) Cancellation Procedures**

The merchant must provide a simple cancellation procedure to the cardholder. If the cardholder’s order was initially accepted online, the merchant may provide an online cancellation procedure. The merchant cannot complete a transaction when:

- The transaction is beyond the agreed upon duration by the cardholder
- The cardholder request that the merchant change the payment method
- Cardholder cancels according to the agreed cancelation policy
- The merchant receives a decline response

**First Time an Credential on File (Unscheduled) Credential is Stored**

- Merchant to ask the cardholder if they’d like the merchant to store their payment credential (card) for future transactions prior to submitting the initial/first authorization request
- The transaction must be authorized either for the amount due or, if payment not required, by submitting a zero dollar authorization request (\$0.00).

TransactionType	Parameter	Value/Enumeration
Auth/Sale	PaymentType	4/CredentialsOnFile
	SubmissionType	1/Initial

**Subsequent Transactions for Approved Response**

TransactionType	Parameter	Value/Enumeration
Auth/Sale	PaymentType	4/CredentialsOnFile
	SubmissionType	2/Subsequent
	NetworkTransactionID	Retained from initial/previous Credential on File transaction response

**Subsequent Transactions for Declined Response**

TransactionType	Parameter	Value/Enumeration
Auth	PaymentType	4/CredentialsOnFile
	SubmissionType	3/Resubmission