API Integration Best Practices

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Introduction

This document is designed to help with the integration process with some of Bank of America's best practices when integrating with the available API's. These practices will help you understand some of the little items that we will recommend you use during the integration process.

General Best Practices

Receipt generation - Terminal

- When producing a receipt to a customer and they have used a credit card, we recommend that you display the following items on the receipt.
 Using these fields will help in the certification process.
- For Credit Card Swipe, keyed entry or tap information
 - Result: {{resultCode}}
 - Result Message: {{resultMessage}}
 - Card Number: {{cardNumberLastFour}}
 - Card Auth Code: {{cardAuthCode}}
 - PN Ref: {{pnRef}}
 - MID
 - TID
- For EMV(dip/chip entries) these are recommended in addition to the list above
 - EMV Terminal Verification Results: {{emvDataTvr}}
 - Application Id Name: {{emvDataApplicationName}}
 - Application PAN: {{emvDataApplicationPan}}
 - Auth Mode: {{emvDataAuthorizationMode}}
 - Authorization Repsponse Code:{{emvDataArc}}
 - Customer Verification Method: {{emvDataCustomerVerificationMethod}}
 - Entry Method: {{emvDataCardEntryMode}}
 - Transaction Status Indicator: {{emvDataTsi}}
 - Application Id: {{emvDataAid}}
 - Issuer Application Data: {{emvDatalad}}
 - MID
 - TID
- Merchant information HPP and ecommerce
 - Merchant name
 - · Customer service phone number
 - · Transaction amount
 - · Website address

Tokens

- We recommend that you use our tokenization feature to store credit card information. This is particularly useful for a few reasons:
 - · You do not have to handle or store credit card information which allows you to not have to be PCI certified.
 - Using tokens will help with making recurring and future payments easier for the ISV and the consumer.

Healthcare Transaction Broker API 3.0.0

Callback URL's

 When sending in a transaction we recommend that you use one of the 3 callback url's that are available to you. These are useful in a number of cases:

- Credit Card transactions
 - · Send transaction data back to your url for record keeping in which you do not have to use a polling method for finding transaction data.
 - Used for if there is a transition error or drop in connections while a transactions is being processed. This will give you a response back to let you know if the transaction was successful during the interruption.
- ACH transaction
 - This allows for you to receive updates for up to 60 days if there is for example a reversal on the transaction at the bank.

Remote ID

- · We recommend using this field for easier reconciliation between the ISV and Bank of America Merchant Services.
 - Used for keeping track of a 3rd party identifier alongside the transaction object. This is typically used by the ISV to assign its own identifier to the transaction for easy matching in case any network issues appear. This is not validated for uniqueness.
 - You are able to use the remote ID to look up transactions as well though the Reporting API.

Reversal

It is recommended that you use the reversal endpoint when wanting to create voids or refunds for credit cards. This endpoint will do all the
heavy lifting for you in determining if the transaction is a void or a reversal. This way you do not have to figure out if the batch has been
settled or not.

Status Results

How do I determine if a payment was successful? When determining if a payment was successful you will want to look at the transaction_stat
us message that is available in the response payload or the callback url payload. This status will tell you if the transaction has been approved,
declined or if an error has occurred.

Reporting API

• This API is very useful to help you run reports and gather any information on you batches or transactions that you might need. We recommend that you use this API to help reconcile against your own records for auditing purposes.