Moneris Recurring Webhook

API Document

Document Owner: Payment Governance and Compliance

Version: **1.02**

Created: **March 30, 2021**

Revised: **May 3, 2021**

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Document Control

REV.	DATE	SUMMARY OF CHANGES
1.00	2021-03-30	- Initial release.
1.01	2021-04-09	- Section 1.2 Transaction Flow added
1.02	2021-05-03	- Updated section 1.2 Transaction Flow

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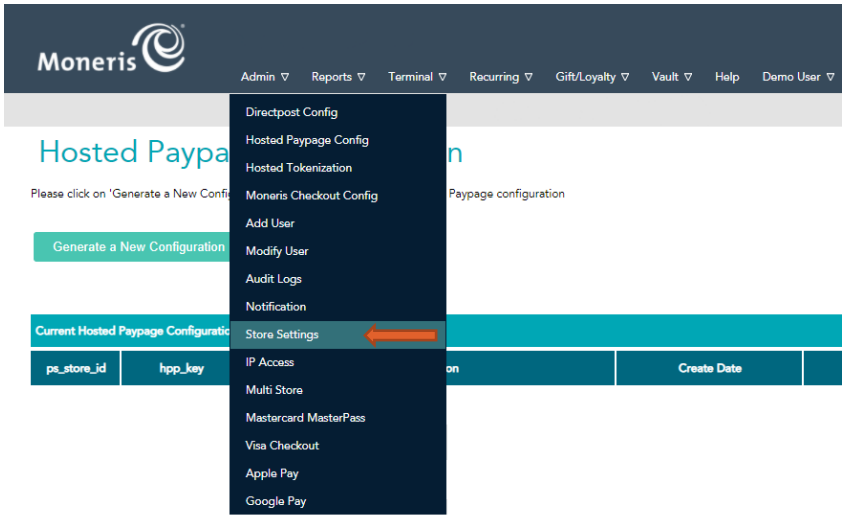
1 | Introduction

The Recurring Payment module allows merchants to take control of the customer billing process by giving merchants the flexibility to set up automated, recurring payments for fixed amounts on their customer's credit card. With this module merchants can set up and manage payments, schedule payment frequency and duration, suspend payments as required and generate credit card expiration reports in advance of upcoming billing. Moneris also stores and protects all of the credit card information, so merchants don't have to worry about keeping it on file.

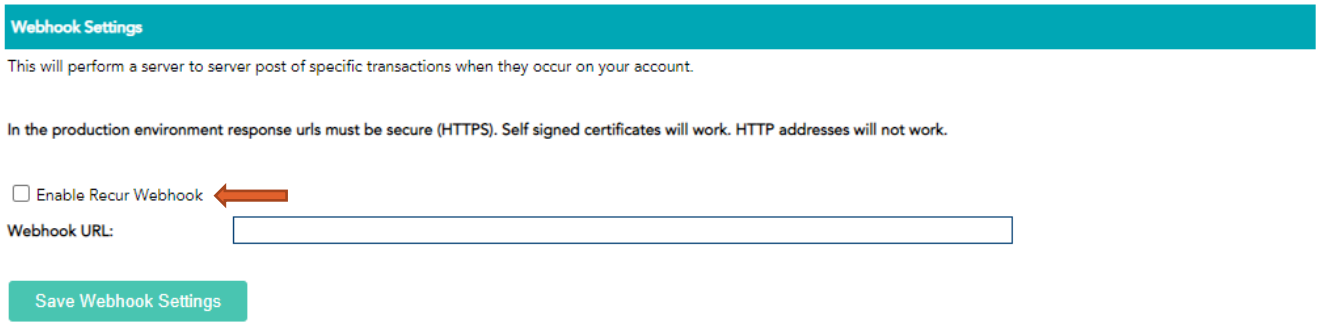
The Manage Recurring is performed by Moneris on Merchants' behalf. Merchants do not receive response for these transactions. Recurring Webhook feature is introduced to send the response message for the recurring transactions back to merchants via the secure URL provided by merchants.

1.1 Recurring Webhook Setup

Merchants can enable Recurring Webhook feature by visiting the MRC website. To access Webhook Settings, Merchants must first access Store Settings that can be accessed through the Admin menu.



In the Store Settings page, Merchants will be able to access the Webhook Settings, where the Recurring Webhook feature can be enabled using a secure URL.



To enable Recurring Webhook, merchants must:

- select the “Enable Recur Webhook” checkbox,
- enter the Webhook URL (URL must be secured i.e. https),
- click “Save Webhook Settings”.

Within Five minutes after the Recurring Webhook feature is enabled, Merchants will initially receive all approved and declined recurring transactions occurred in the current month and the past two months. Recurring transaction response message are sent *sequentially* using the message format described in *Section 1.2.1*.

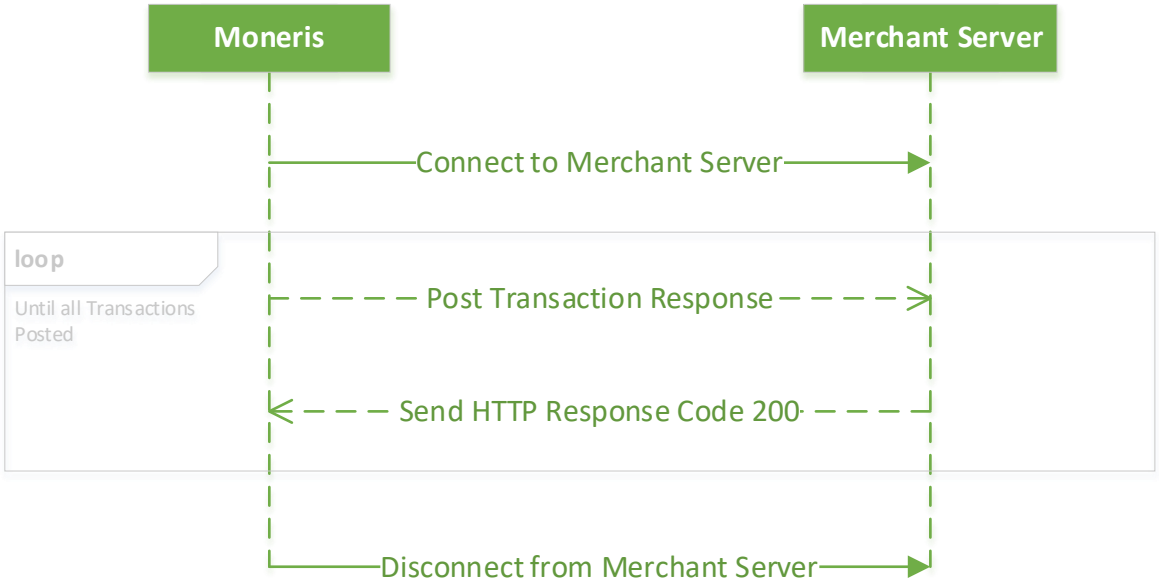
Starting on Day 2 (from when Recurring Webhook feature was enabled), merchants will only receive the responses for new approved and declined recurring transactions. Moneris system will check every 5 minutes for new recurring transactions:

- If new recurring transactions are found, merchant will receive the response messages for these approved or declined recurring transactions sequentially using the message format described in *Section 1.2.1*.
- If there are no new recurring transactions, merchant will not receive anything.

Note: If Moneris was unable to deliver transaction message to the Webhook URL provided by the Merchant, Moneris will retry posting the transactions a maximum of three times.

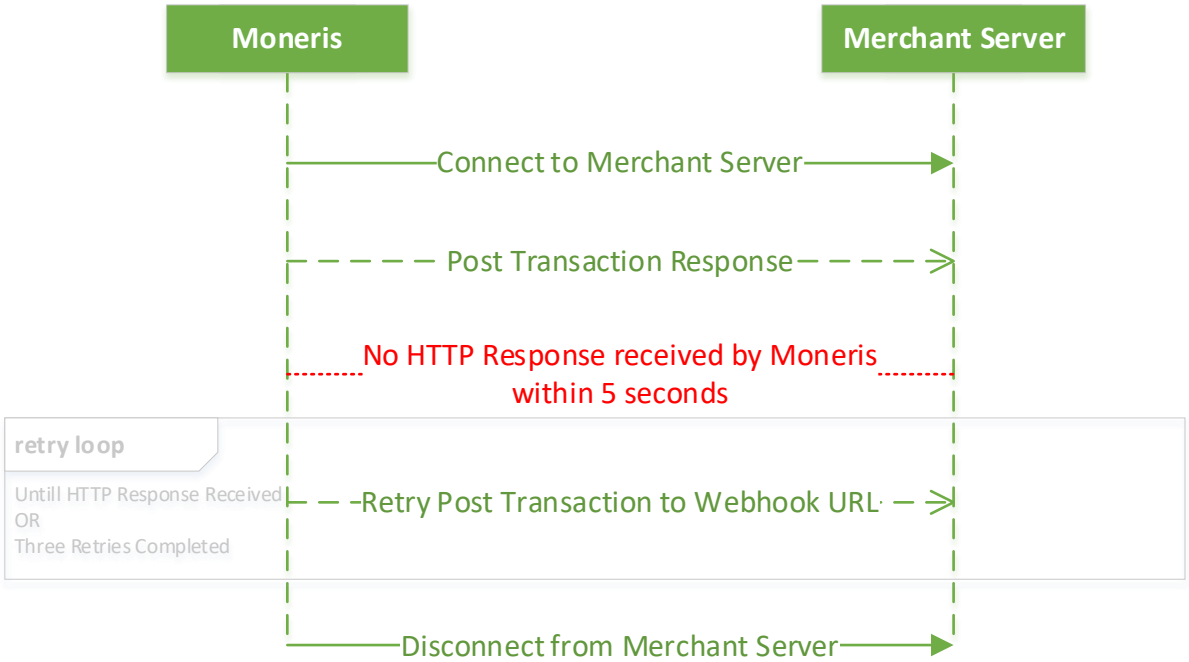
1.2 Transaction Flow

1.2.1 Standard Transaction Flow



1. Moneris will connect to the Merchant Server running on Webhook URL
2. Moneris will post / send a single transaction to Webhook URL
3. Moneris will wait maximum 5 seconds to receive HTTP Response Code 200 from Merchant Server
4. Moneris will perform Step 2 and Step 3 in a loop until all transactions are posted to Merchant Server
5. Moneris will disconnect from the Merchant Server once all transactions are posted

1.2.2 Transaction Timeout Flow



1. Moneris will connect to the Merchant Server running on Webhook URL
2. Moneris will post / send a single Transaction to Webhook URL
3. Moneris will wait maximum 5 seconds to receive HTTP Response Code 200 from Merchant Server
4. No response from Merchant Server will trigger transaction time out on Moneris
5. Moneris will retry to post / send transaction to Merchant Server until Moneris either:
    - Receives HTTP Response Code 200 from Merchant Server
      - or -
    - Three retry attempts were made
6. **Note: Moneris will retry the failed transaction 5 minutes after failure:**
   Original Transaction Attempt
   Original Transaction Fail -> Wait 5 Minutes
   First Retry Attempt
   First Retry Fail -> Wait 5 Minutes
   Second Retry Attempt
   Second Retry Fail -> Wait 5 Minutes
   Final Retry Attempt
7. **Note: Moneris will continue sending other remaining transactions in case of a failure:**
   First Transaction -> First Transaction Delivered Successfully
   Second Transaction

Second Transaction Failed -> Wait 5 minutes to retry this particular failed transaction
Third Transaction -> Third Transaction Delivered Successfully
Fourth Transaction -> Fourth Transaction Delivered Successfully
Retry Second Transaction (1st Attempt)
Retry Transaction Fail -> Wait 5 minutes to retry this particular failed transaction
Fifth Transaction -> Fifth Transaction Delivered Successfully
Sixth Transaction -> Sixth Transaction Delivered Successfully
Retry Second Transaction (2nd Attempt)
Retry Transaction Fail -> Wait 5 minutes to retry this particular failed transaction
Seventh Transaction -> Seventh Transaction Delivered Successfully
Eighth Transaction -> Eighth Transaction Delivered Successfully
Retry Second Transaction (Last Attempt)
Retry Transaction Fail -> This transaction will not be retried anymore
Ninth Transaction -> Ninth Transaction Delivered Successfully …

8. Moneris will disconnect from the Merchant Server once all transactions are posted.

1.3 Transaction Structure

1.3.1 Transaction Response Message

Moneris will send a recurring transaction response message to the secure URL provided by merchants using JSON. The sample below shows what information is sent by Moneris for a typical recurring transaction.


```
{
    "apiVersion": "1.0",
    "dataTimestamp": "2021-03-30T14:10:05.119",
    "data": {
        "amountAuthorized": "100.00",
        "cvdResultCode": null,
        "iso": "01",
        "transId": "602047-0_19",
        "maskedCardNumber": "4242***4242",
        "responseCode": "027",
        "avsResultCode": null,
        "requestId": "moneris_mrt1607787741_0",
        "transDate": "2021-03-18",
        "action": "purchase",
        "receiptId": "mrt1607787741",
        "originalReceiptId": "mrt1607787741",
        "custId": "",
        "nextRecurDate": "2021-05-19",
        "endDate": "2022-09-19",
        "authCode": "401441  ",
        "timedOut": false,
        "transTime": "10:32:19",
        "ticket": null,
        "isVisaDebit": false,
        "cardType": "V ",
        "message": "APPROVED           *                    =",
        "corporateCard": false,
        "referenceNum": "660117310018331180",
        "transAmount": "100.00",
        "transType": "00",
        "type": "recurring",
        "responseTimestamp": "2021-03-18 10:32:20",
        "bankTotals": null,
        "complete": true,
```

```
        "statusCode": "1",
        "status": "OK"
    },
    "storeId": "moneris"
}
```


1.3.2 Data Fields Definition

The table below describes the data fields sent in the transaction message.

NAME	SIZE	TYPE	DESCRIPTION
action	V50	String	Action refers to the type of transaction that Moneris has performed. The value will always be 'purchase' for action.
apiVersion	V20	String	API version number
avsResultCode	F1	String	Indicates the address verification result. For a full list of possible response codes refer to the *AVS Result Code table*.
amountAuthorized	V10	String	Returns the transaction amount from the recurring transaction request.
authCode	V8	String	Authorization code returned from the issuing institution.
bankTotals			Response data returned in a Batch Close and Open Totals request. The value will always be 'NULL' for action.
cardType	V2	String	Card Brand: V = Visa M = Mastercard AX = American Express NO = Discover C1 = JCB
complete	V5	Boolean	Indicates whether transaction was sent to authorization host and a response was received. Valid values are 'True' or 'False'
coporateCard	V5	Boolean	Indicates whether the card or the card on file used for the transaction is a corporate card. Valid values are 'True' or 'False'
custId	V30	String	Merchant defined unique identifier for the Customer / Cardholder
cvdResultCode	V2	String	Indicates the CVD validation result. The first byte is the numeric CVD indicator sent in the request; the second byte is the response code. Possible response codes are:

NAME	SIZE	TYPE	DESCRIPTION
			• M - Match • N - No Match • P - Not Processed • S - CVD should be on the card, but Merchant has indicated that CVD is not present. • U - Issuer is not a CVD participant • Y - Match for Amex/JCB only • D - Invalid security code for Amex/JCB • Other - Invalid response code
data		Object	Data applicable to this transaction type
dataTimestamp	F23	String	Date and time of the request / response Format = YYYY-MM-DDTHH:MM:SS.mmm Where YYYY-MM-DD = Date T = Separator HH:MM:SS.mmm = Time (.mmm = milliseconds)
endDate	V10	String	Indicates when the Recurring Billing transaction will end. Format: yyyy-mm-dd
iso	V2	String	ISO response code return from issuing institution. This the standardized transaction response according to the International Organization for Standardization's payment standard, ISO 8583.
isVisaDebit	V5	Boolean	Indicates whether the card processed is a Visa Debit. Valid values are 'True' or 'False'
maskedCardNumber	F11	String	Returns the first and last four digits of the primary account number (PAN). Example: 4444***5555
message	V100	String	Response description returned from issuing institution. This message should not be displayed on any cardholder facing materials. For receipt purposes, please refer to *Moneris Receipt Requirements Specification v1.0 or later*
nextRecurDate	V10	String	Indicates when the transaction will be billed again (recur). Format: yyyy-mm-dd
originalReceiptId	V100	String	Returns the original order_id from the initial recurring transaction request.
receiptId	V100	String	Returns the order_id from the request.
referenceNum	F18	String	Terminal used to process the transaction as well as the shift, batch and sequence number. This data is typically used to reference transactions on the

NAME	SIZE	TYPE	DESCRIPTION
			host systems, and must be displayed on any receipt presented to the customer. This information is to be stored by the merchant. Example: 660123450010690030 66012345: Terminal ID 001: Shift number 069: Batch number 003: Transaction number within the batch.

requestId	V50	String	Includes three components:
			• Store Name
			  ○ Contains the store name this Recurring transaction goes on
			• Receipt ID
			• Number of retries
			  ○ Max Number of retires is '3', after three retries, Moneris won't try again to send the recurring transaction response message back to the merchant secure URL
			Sample: 'store1_74629806411383195170291 8_0', in this sample requested, the Store Name is 'store1', the Receipt ID is '746298064113831951702918', the Number of retries is '0' (no retry)

responseCode	V3	String	< 050: Transaction approved ≥ 050: Transaction declined Null: Transaction incomplete. For further details on the response codes, see the Response Codes document at https://developer.moneris.com.
responseTimestamp	F19	String	Date and time of the response (YYYY-MM-DD HH:MM:SS)
status	V50	String	Response Code Description. Valid values include: • OK • DECLINED
statusCode	F1	String	Response Code. Valid values include: • '1' (Transaction OK) • '0' (Transaction DECLINED)
storeId	V10	String	Unique identifier provided by Moneris upon merchant account set up.
ticket		String	Reserved field.
timeout	V5	Boolean	Timeout occurred or not. Valid values are 'True' or 'False'

NAME	SIZE	TYPE	DESCRIPTION
transAmount	V10	String	Returns the transaction amount from the request.
transId	V20	String	Gateway Transaction identifier. This field is required for any future follow-on transactions such as Refunds, Corrections, Completions, Reversals, etc.
transDate	V10	String	This field is returned for Receipt purposes. All records of financial transactions require the date and time of the transaction. If a date is returned it will be in the format: YYYY-MM-DD
transTime	V8	String	This field is returned for Receipt purposes. All records of financial transactions require the date and time of the transaction. If a time is returned it will be in the format: HH:MM:SS
transType	F2	String	Type of transaction that was performed. The value will always be '00'.
type	V10	String	This value is hardcode to "recurring"