DigiPay Instalment Gateway
Merchant Integration Manual

Prepared by Digipay Co., Ltd.
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Document Revision History

Version	Description	Updated Date	Updated By
0.9.0	Initial document	19/12/2019	Chayanon Sinsawat
1.0.0	Revise endpoint and release	25/02/2020	Pornprapa Jingkijjanukul

1. Introduction

Instalment Gateway is a unified service for centralized interface with merchants. To provide payment service as web redirect. So merchants integrate to this system only, this system will connect to each issuer system.

As a payment service provider, DigiPay will connect merchandise websites of the merchants to acquirer/issuer banks' payment gateway. The connection is provided as DigiPay Instalment Gateway, the introduction and specification will be listed below.

DigiPay instalment gateway contains three parts : a landing page, OTP gateways, and a transaction summary.

1.1 Environment

The Sandbox environment provides services that are similar to those of Production environment. Recommended for testing in the Sandbox before go-live on Production environment.

Unify Service

Environment	End Point	Remark
Sandbox (UAT)		
Production		

Web Portal

Environment	Web URL	Remark
Sandbox (UAT)		
Production		

1.2 Get Started

Merchant is able to access the web portal and get this document. This document also provides an overview flow and APIs specification.

Step 1. Generate API credential
Login to web portal and download your secret key. This secret key needed to be used to hash data in payment API.

Credential

API ID & API Key	
API ID:	dsfiPDJFldfspO-_CbpmYz9VaZJGAc8JG3zBOabg
API Key:	dfodsODfEdfjiPSdfdfsopioejrjwo89idfosSODIFIF
Last Updated:	24/02/2020 16:48:22

Step 2. Integration system
Follow this document to implement and integration system.

1.3 Sign Data

When merchant starts to make payment with payment API, merchant will send request information with the **sign data.** System will verify transaction and sign data. Which must be correct according to this process.

For the **sign data guideline**, please follow below steps :

Step 1. Generate secret key
ร้านค้าทำการล็อกอินเข้า Web Portal เพื่อคัดลอก Sign Key

Sign Key

Sign Key:	OUq_-OqHE-OOVkOs6pkuPoqu6qwNoiAz_uAd9ROeP7s
Last Updated:	24/02/2020 16:21:07

Step 2. Sign data
ร้านค้านำข้อมูลรายละเอียดธุรกรรมที่จะส่งมาใน Service payment ทำการเข้ารหัส
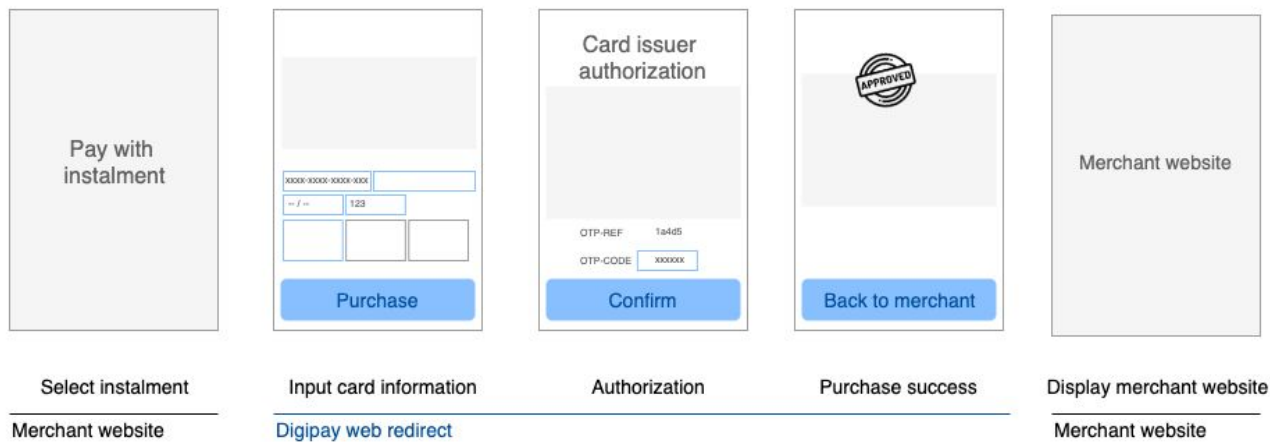a) นำข้อมูลมาแปลงเป็น JSON stringify
b) นำข้อมูลที่ได้มาทำ upper case
   และ Hash ด้วย Algorithm SHA256 โดยใช้ Sign Key ที่ได้จาก Web Portal

Step 3. Make payment
ร้านค้าส่งข้อมูลรายละเอียดธุรกรรมพร้อม Sign data มายัง Service payment เพื่อเริ่มทำธุรกรรม

2. Consumer Journey Flow

DigiPay instalment gateway contains three parts, landing page, OTP gateway, and transaction summary.

2.1 Landing Page

The landing page is the linked frontier with merchant members' website, receiving the payment information which the cardholder has made. In the page, cardholder may ask to fill the card number, name, expiry date, and other information. However, DigiPay will not store any sensitive data of the cardholder.

2.2 Issuer Gateway

The card issuer gateway is the redirected page from card issuer bank, latest step before the payment is completed, each issuer system may send the OTP for the authorization by the different channel. For example, by cardholder's registered email or sms. Once the correct OTP is sent, the payment will simultaneously authorised, and the site will return to DigiPay transaction summary page.

2.3 Transaction Summary Page

After the transaction has succeeded, the entire payment details will be shown. The system will automatically save the details in the archive, card holder can also check and save the details by printing the page from the internet browser. To proceed back to merchandise website, clicking the return button on the bottom-right.

3. Unify Payment APIs

To provide the system integration specification and integration flow. Merchant system connects to instalment gateway and then, for transaction authorization, this gateway will forward the message to card issuer system.
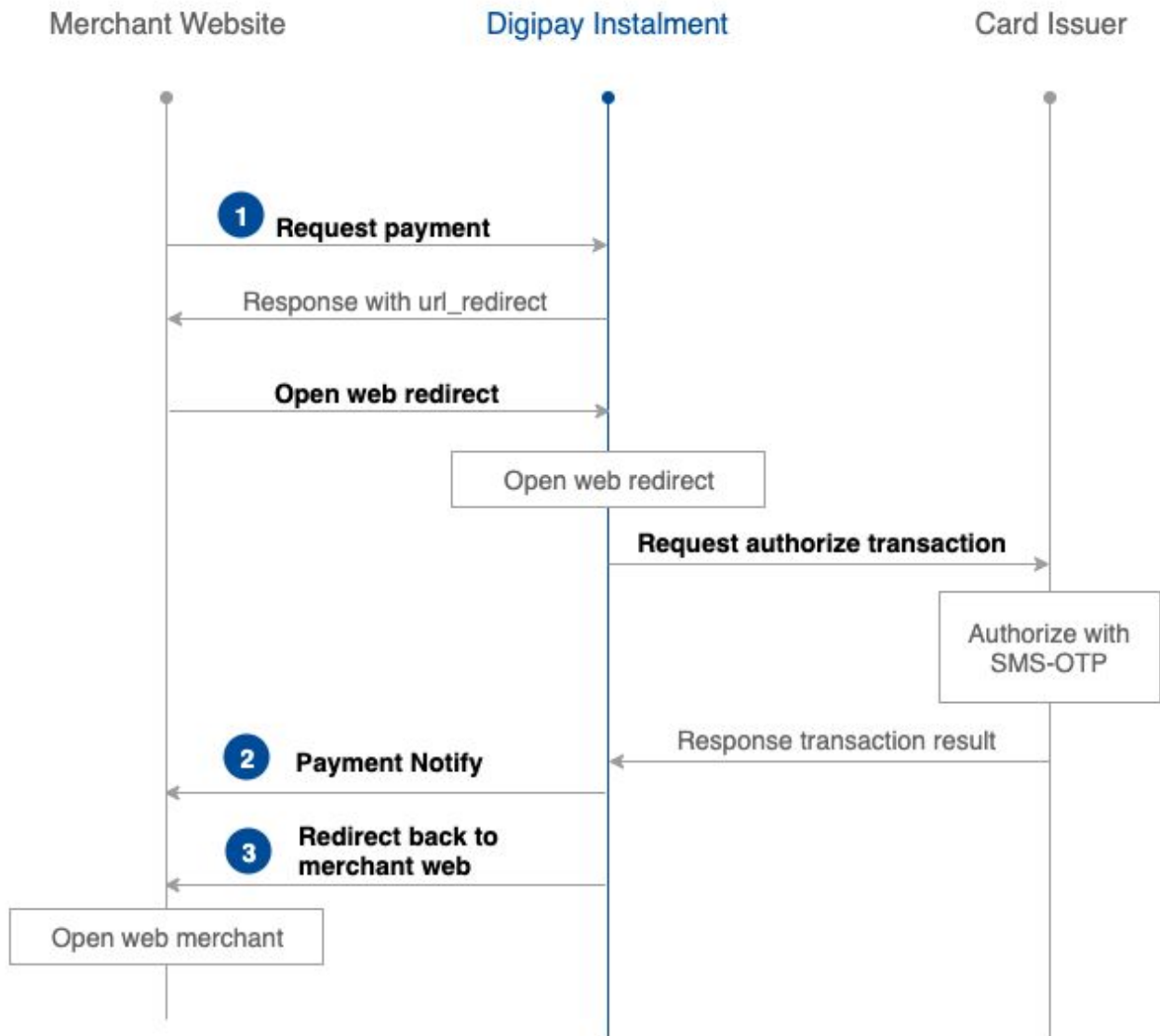
Sequence No.	API Name	Description
1	Payment	Merchant requests web redirect url
2	Payment Notify	Merchant get payment result notify (backend process)
3	Payment Callback	Redirect back to merchant website

3.1 Payment

This service for requesting web redirect url. Merchant opens a web redirect and then consumer completes the purchase transaction. After that system will send the result of the payment process back to the merchant.

Method   : post
The gateway path   : {{endpoint}}/api/v1/payment/redirect

Header

Header type	Description	Sample Data
accept	Type of response's data	application/json
content-type	Type of request's data	application/json
x-api-id	Credential for authentication. Please login to web portal and get this API ID value.	eys6EW5vaePFnKnYJ-_CbpmYz9VaZ JGAc8JG3zB0abg
x-api-key	Credential for authentication. Please login to web portal and get this API Key value.	tYYNOMbJmxGjlOlaNeoRd4p732Xocjr 98LPFpUbVZTE

Request : Payment

Parameter	Type / Length	M/O	Description	Sample Data
data	object			
data.merchant_id	AN 15	M	Merchant ID provided by DigiPay.	12345678
data.order_id	A 1-20	M	Merchant's order number	
data.amount	N 12	M	Transaction amount 12 digits with 2 decimal format	5000.00
data.url_redirect	AN 1-255	M	Return url for system redirect to **merchant website** after payment completing and consumer click back to merchant website.	https://www.merch ant.com
data.url_notify	AN 1-255	M	Return url for system redirect to **merchant backend** system after payment completing.	https://www.merch ant.com/notify

data.payment_description	AN 1-255	O	Payment detail description	
data.payment_expiry	N 1-4	O	To specify payment expiry time in minutes. Timeout period when the transaction will be expired (in minutes) Optional for merchants who need to specific expiry time.	15
data.promotion	AN 1-255	O	Promotion code which merchant deal with bank's campaign.	
data.reference_1	AN 1-255	O	Additional data. Reserved for each merchant.	
data.reference_2	AN 1-255	O	Additional data. Reserved for each merchant.	
data.reference_3	AN 1-255	O	Additional data. Reserved for each merchant.	
data.reference_4	AN 1-255	O	Additional data. Reserved for each merchant.	
data.reference_5	AN 1-255	O	Additional data. Reserved for each merchant.	
sign	AN 64	M	Hash data with SHA256+Salt The hash algorithms. Please find the section 1.3	931d0a80e8fe36ef 628ce4d3b5e671c dabcb0852b4b1f4d 3bae76a0d181f8ee b

Response : Web Redirect URL

Content Type : application/json

Parameter	Type / Length	M/O	Description	Sample Data
res_code	N 4-6	M	Response code. Refer to section response code in document	0000
res_desc	AN 1-255	M	Response description. Refer to section response code in document	Success
authorize_url	C 1-255	M	Web redirect url for input cardholder information and make payment.	https://octopus-sit.d igipay.co.th/index.h tml?ref=201912190 41848373874

reference	N 1-20	M	Internal transaction reference number.	201912190418483 73874
timestamp	C 19	M	Timestamp of when the message is sent. (UTC+7) format:YYYY-MM-DD HH:mm:ss	2019-12-01 23:59:12
order_id	AN 1-20	M	Unique merchant order's number.	

3.2 Payment Notify

Get Payment Notify คือ Service ที่ร้านค้าจะต้องจัดเตรียมไว้เพื่อรอรับผลการทำรายการ เมื่อรายการธุรกรรมประมวลผล
เสร็จสิ้น ระบบจะส่งผลการทำรายการกลับไปยังร้านค้า ผ่าน url_notify ที่ร้านค้าได้ระบุไว้ใน request ของ Payment API ซึ่งเป็นการ
ทำงานแบบ background process โดยจะส่งผลสถานะรายการธุรกรรมพร้อมทั้งรายละเอียดรายการ

Payment Notify Detail
Content Type : application/json

Parameter	Type / Length	M/O	Description	Sample Data
data	Object	-		
data.timestamp	C 19	M	Timestamp of when the message is sent. (UTC+7) format:YYYY-MM-DD HH:mm:ss	2019-12-01 23:59:12
data.merchant_id	AN 15		Merchant ID generated by DigiPay.	12345678
data.order_id	A 1-20	M	Unique merchant's order number	
data.status	N 1-20	M	Transaction status. Refer to section transaction status in document	APPROVED
data.failed_reason	AN 1-255	O	For transaction status = 'FAILED' Failed reason is responded from card issuer system	
data.card_scheme	A 1-10	O	Card scheme	
data.card_no	C 1-16	O	Card no with masking pan format 1234********5678	1234********5678
data.card_issuer	A 1-15	O	Card issuer who authorize transaction	KBANK
data.approval_code	AN 6	M	Authorization code from issuing bank.	872190
data.eci	N 2	O	ECI value responded from card issuer system	05
data.created_at	C 19	M	Transaction created date time. (UTC+7) format:YYYY-MM-DD HH:mm:ss	2019-12-01 23:55:00

data.approved_at	C 19	O	Transaction approved date time. (UTC+7) format:YYYY-MM-DD HH:mm:ss	2019-12-01 23:59:20
data.reference	N 1-20	M	Transaction reference number.	201912190418483 73874
data.amount	N 12	M	Transaction amount 12 digits with 2 decimal format	5000.00
data.term_rate	N 1-5	O	Instalment term rate (%)	0.50
data.term_month	N 2	O	Instalment term month	01
data.reference_1	AN 1-255	O	Additional data. Reserved for each merchant.	
data.reference_2	AN 1-255	O	Additional data. Reserved for each merchant.	
data.reference_3	AN 1-255	O	Additional data. Reserved for each merchant.	
data.reference_4	AN 1-255	O	Additional data. Reserved for each merchant.	
data.reference_5	AN 1-255	O	Additional data. Reserved for each merchant.	
sign	AN 64	M	Hash data with SHA256+Salt The hash algorithms. Please find the section 1.3	931d0a80e8fe36ef 628ce4d3b5e671c dabcb0852b4b1f4 d3bae76a0d181f8 eeb

3.3 Payment Callback

เมื่อลูกค้าทำรายการที่หน้าจอ Redirect Website สำหรับ ระบบจะฟอร์เวิร์ดหน้าจอกลับไปหน้าเว็บไซต์ของร้านค้า โดยเรียกไป
ยัง "url_redirect" ที่ร้านค้าส่งข้อมูลมาใน Service payment

การเรียกเปิด url_redirect นั้นระบบจะเรียกเปิดแบบ Method : Post พร้อมทั้งส่งค่าข้อมูล reference ของรายการธุรกรรม
และ status ไปใน Body ด้วย

Parameter	Type / Length	M/O	Description	Sample Data
reference	N 4-6	M	Transaction reference number.	20191219041848373874
process_status	AN 1-15	M	Status of this transaction (true=success, false=fail) - true - false	true

Appendix

A. Transaction Status

Transaction Status	Description
REQUESTED	Merchant initial transaction. Request the payment API.
PENDING	In progress for consumer input information and process to issuer bank system.
PREAUTHORIZED	In progress. Waiting for consumer confirm payment with OTP.
APPROVED	Transaction was successful.
VOIDED	Transaction was voided by merchant.
SETTLED	Transaction was settled.
CANCELED	Transaction was canceled by consumer on the redirect website screen.
FAILED	Transaction was rejected by issuer bank system.

B. Response Code / Response Description

Response Code	Response Description
0000	SUCCESS
0404	NOT FOUND. PLEASE RE-CHECK ENDPOINT OF SERVICE
0001	API KEY & SECRET NOT FOUND.
0002	HASH DATA NOT MATCH.
0003	NOT FOUND MERCHANT ID.
0004	MERCHANT IS NOT ACTIVE.
9999	VALIDATION ERROR. / SYSTEM ERROR.

C. ECI Value

ECI value (for 3D enable merchants)

VISA	
ECI Value	**Definition**
05	Both cardholder and card issuing bank are 3D enabled. 3D card authentication is successful
06	Either cardholder or card issuing bank is not 3D enrolled. 3D card authentication is unsuccessful, in sample situations as: 1. 3D cardholder not enrolled 2. Card issuing bank is not 3D Secure ready
07	Authentication is unsuccessful or not attempted. The credit card is either a non-3D card or card issuing bank does not handle it as a 3D transaction
MASTER CARD	
ECI Value	**Definition**
00	Authentication is unsuccessful or not attempted. The credit card is either a non-3D card or card issuing bank does not handle it as a 3D transaction
01	Either cardholder or card issuing bank is not 3D enrolled. 3D card authentication is unsuccessful, in sample situations as: 1. 3D Cardholder not enrolled 2. Card issuing bank is not 3D Secure ready
02	Both cardholder and card issuing bank are 3D enabled. 3D card authentication is successful
JCB	
ECI Value	**Definition**
05	Both cardholder and card issuing bank are 3D enabled. 3D card authentication is successful
06	Either cardholder or card issuing bank is not 3D enrolled. 3D card authentication is unsuccessful, in sample situations as: 1. 3D cardholder not enrolled 2. Card issuing bank is not 3D Secure ready
07	Authentication is unsuccessful or not attempted. The credit card is either a non-3D card or card issuing bank does not handle it as a 3D transaction