

PT.FINNET INDONESIA



# 195 Engine

v.1.2

Development Unit

## Change History

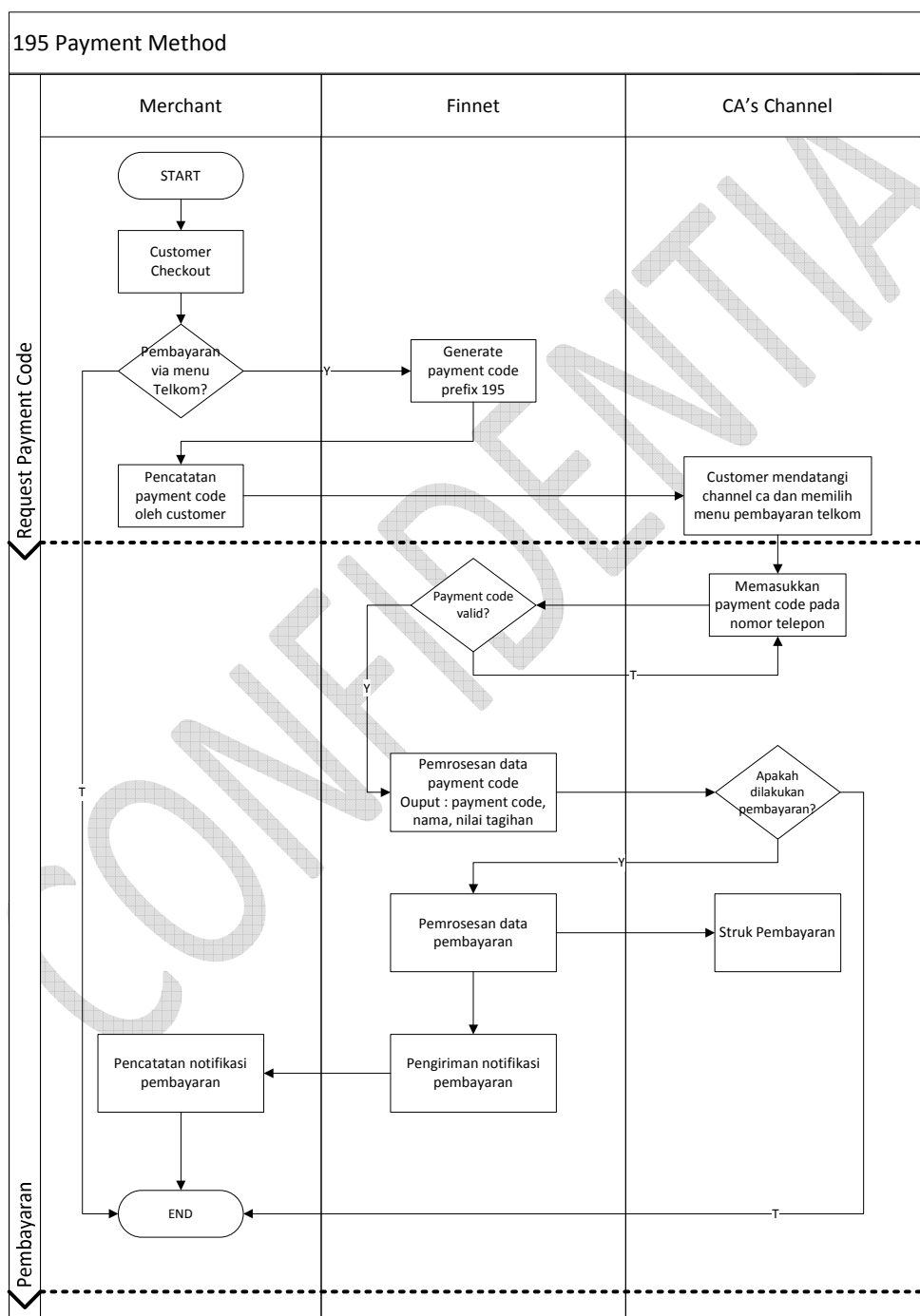
Versi	Date	Description	By
1.1	June 30 <sup>th</sup> , 2011	<ul style="list-style-type: none"><li>• Improvement on merchant signature</li><li>• Change timeout setting from seconds to minutes</li></ul>	ASP
1.2	August 12 <sup>th</sup> , 2011	<ul style="list-style-type: none"><li>• Add point reconcile and settlement</li></ul>	ASP

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## 1. Introduction

195 engine is a payment method option using Telkom's bill payment menu that available in all Bank channel delivery, POS, and another collecting agents.

## 2. Payment Code's Request and Payment Flow



### 3. Parameters

#### 3.1 Merchant Request : merchant's initiation to get Finnet's payment code

No	Parameter	Data type	Description
1	mer_signature	varchar(64)	Please see merchant signature
2	merchant_id	an : varchar(12)	merchant id given from PT.Finnet
3	invoice	an : varchar(25)	Transaction's unique code generated by merchant
4	amount	double	Transaction amount that has to be paid by customer
5	add_info1	varchar(30)	optional, all information regarding transaction (e.g. customer name, merchant name) so that the information can be displayed on payment receipt.
6	add_info2	varchar(30)	
7	add_info3	varchar(30)	
8	add_info4	varchar(30)	
9	add_info5	varchar(30)	
10	timeout	numeric	In minutes, fill this parameter with expiry time you want
11	return_url	varchar(250)	url to get responses contains payment result and expiry status from 195 engine

#### 3.2 195 Response – payment code : response contains payment code to merchant's return url

No	Parameter	Tipe	Keterangan
1	mer_signature	varchar(64)	Please see merchant signature
2	trax_type	varchar(20)	Always fill with "195Code"
3	merchant_id	an : varchar(12)	Merchant id given from PT.Finnet
4	invoice	an : varchar(25)	Transaction's unique code generated by merchant
5	payment_code	varchar(20)	Code with prefix 195 generated by Finnet that can be paid on Telkom's bill payment menu on ATM, sms banking or Internet banking.

#### 3.3 195 Response – payment notification : notification sent to merchant's return url when the payment code is already paid by customer

No	Parameter	Tipe	Keterangan
1	mer_signature	varchar(64)	Please see merchant signature
2	trax_type	varchar(20)	Always fill with "Payment"
3	merchant_id	an : varchar(12)	Merchant id given from PT.Finnet
4	invoice	an : varchar(25)	Transaction's unique code generated by

			merchant
5	payment_code	varchar(20)	Code with prefix 195 generated by Finnet that can be paid on Telkom's bill payment menu on ATM, sms banking or Internet banking.
6	result_code	varchar(5)	00 : transaction success, else transaction failed
7	result_desc	varchar(125)	Description for result code
8	log_no	varchar(20)	195 reference to trace transactions
9	payment_source	varchar(20)	Payment code that is done

### 3.4 195 Response – reversal notification : reversal notification sent to merchant's return url

No	Parameter	Tipe	Keterangan
1	mer_signature	varchar(64)	Please see merchant signature
2	trax_type	varchar(20)	Always fill with "Payment"
3	merchant_id	an : varchar(12)	Merchant id given from PT.Finnet
4	invoice	an : varchar(25)	Transaction's unique code generated by merchant
5	payment_code	varchar(20)	Code with prefix 195 generated by Finnet that can be paid on Telkom's bill payment menu on ATM, sms banking or Internet banking.
6	result_code	varchar(5)	00 : transaction success, else transaction failed
7	result_desc	varchar(125)	Description for result code
8	original_log_no	varchar(20)	195 reference code in payment notification
10	log_no	varchar(20)	195 reference to trace transactions

## 4. Merchant Signature

Every parameter sent and received must include with merchant signature to increase data security.

Merchant signature's mechanism:

1. Hashing use SHA 256 algorithm
2. All parameter's value sent to Finnet must be joined and separated by '%' (percent).
3. Convert the result to uppercase string.
4. Add merchant password at the end of joined string at point 2.
5. Hash the result of joined string at point 3 and convert it to uppercase string.

Example :

1. Parameter sent :

- merchant\_id : 0843
- invoice : 2319AB9323
- amount : 10000
- add\_info1 : IRA
- add\_info2 :
- add\_info3 : Info3
- add\_info4 : Info4
- add\_info5 : Info5
- timeout : 30
- return\_url : http://www.merchant.com/get\_response.php

2. Join the string : 0843%2319AB9323%10000%IRA%Info3% Info4% Info5%30%http://www.merchant.com/get\_response.php

3. Uppercase the string : 0843%2319AB9323%10000%IRA%INFO3%INFO4% INFO5%30%HTTP://WWW.MERCHANT.COM/GET\_RESPONSE.PHP

4. Add password (without uppercase), for example the password is "kata-Andi" :  
0843%2319AB9323%10000%IRA%INFO3%INFO4%  
INFO5%30%HTTP://WWW.MERCHANT.COM/GET\_RESPONSE.PHP%kata-Andi

5. Hashing 256, so the final result is :  
FE053B4EC17E09A78C4CF6BBBC9CDDE1D0880C0E2ACF88326335B271B3C71E04

Note :

- If the parameter's value is null, it's unnecessary to put into hashing part.

## 5. Reconcile and Settlement

### A. Reconcile

The reconcile system refers to OSA reconcile system, below are the rules :

1. Reconcile referred data is the reconcile result between Finnet and banks in OSA system.
2. Reconcile referred data is being accessed by merchants to adjust it with merchants internal system.
3. Finnet doesn't need merchants' data to do reconcile.
4. Merchants can check reconcile results on IRA website : [https://ira.finnet-indonesia.com/webira/web\\_files/index.php](https://ira.finnet-indonesia.com/webira/web_files/index.php)

### B. Settlement

Settlement will be made after the reconciliation process between Finnet and banks completed, about 12:00 PM (H+1).

## 6. UAT Scenario

### UAT SCENARIO

No	Item	Result		Note
		Expected	Actual	
1	Merchant post request payment code to Finnet's system ( <a href="https://billhosting.finnet-indonesia.com/prepaidsystem/195/response-insert.php">https://billhosting.finnet-indonesia.com/prepaidsystem/195/response-insert.php</a> )			
1.1	Merchant can read direct response from Finnet's page	RC : 00		
1.2	Merchant sent wrong merchant signature	RC : 01		
1.3	Another error, e.g. : one or more mandatory parameters weren't sent	RC : 99		
1.4	Merchant sent request and received payment code through its return URL, Finnet got direct response 00	payment code received		
1.5	Merchant sent request with duplicate invoice and get the same payment code. Finnet's DB didn't updated.	data didn't updated		
2	Pay the payment code from bank channels			
2.1	Payment succeed, merchant got success response from Finnet	RC : 00		
2.2	Payment failed, merchant didn't get response from Finnet.	no response		
2.3	The payment code already expired, merchant got payment code expired notification.	RC : 05		
2.4	Payment code expired notification failed to send because merchant host is down, the notification will be sent in the next 3 minutes.	Notification sent in the next 3 minutes		
2.5	Finnet sent messages with wrong signature.	Merchant recorded in a special log		
2.6	Channel bank sent reversal for the cancelled transactions, Finnet sent cancelled/reversal notifications to merchant and merchant cancel the payment.	RC : 00		
3	Access to payment code reporting			
3.1	Merchant can view request and payment logs	Log shown		
4	Access to IRA (Integrated Reconcile Application) reporting transactions			
3.1	Merchant can view reconcile result in IRA	Login successful		