

Digital Treasury Corporation

DTCO Payment Gateway

Version 1.1.0

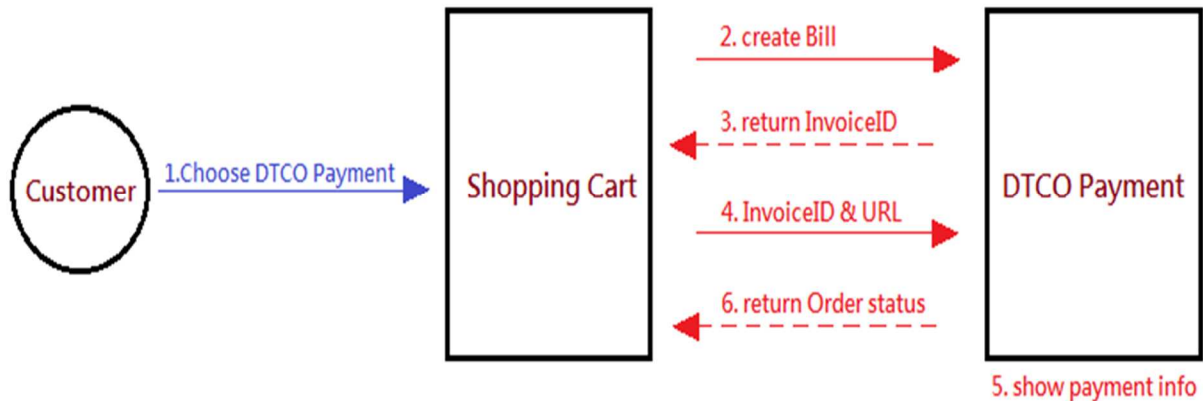
2015.05.15

I. Version History

Version	Date	Content	Editor
v 1.0.0	2015.03.18	First version	IshaHuang
v 1.0.1	2015.04.08	Part V-B Status Before : Finished, PayExpired After : Finished+PayExpired	IshaHuang
v 1.0.2	2015.04.10	Part III table2 <i>Currency of Taiwan</i> Before : NTD After : TWD	IshaHuang
v 1.0.3	2015.04.13	Part IV Emphasize the web URL	IshaHuang
v 1.1.0	2015.05.15	Part III 、 Part IV URL Before : https://merchant.dtco.co/..... After : https://payment.dtco.co/.....	IshaHuang

II. Operating Procedure

Figure 1 - STEP



1. Choose DTCO Payment by customer
Customers check out with DTCO-Payment.
2. Create Bill by shopping cart
Shopping cart create a bill which is following rules in **part III**.
3. Return Invoice ID by DTCO-Payment
It will return an invoice id to shopping cart.
 - More about invoice id is defined in **part IV**.
4. Send Invoice ID & Web URL by shopping cart
Shopping cart send the invoice id to DTCO-Payment to get the real payment info.
 - More about invoice id and web URL is defined in **part IV**.
5. Show Payment Info by DTCO-Payment
According to the invoice id, the payment info will show on the page.
 - The payment will countdown 15 minutes and show just once.
6. Return Order Status by DTCO-Payment
After pay, DTCO-Payment will send status of corresponding order to shopping cart.
 - The status rules is defined in **part V**.

III. The Bill

Those parameters of bill are defined in Table 1.

We suggest that coding with HttpRequest to get invoice id.

- URL: https://payment.dtco.co/payment_encode
- There is only **POST** can be used.

Parameter	Type	Description	Example
api_key	VARCHAR	Apply from DTCO	WI3T7okeypVr1EhCTog4FBXWC28ZtHx1
fiat_money	VARCHAR	Price of bill	100
fiat_currency	VARCHAR	Look at Table 2	TWD
order_id	VARCHAR	non-repetitive	1
return_url	VARCHAR	Look at part V-A	http://blog.dtco.co/?wc-api=WC_DTCO

Table 1 - POST Parameters for Invoice Id

Currency		Currency		Currency	
TWD	<i>Taiwan</i>	PHP	<i>Philippine</i>	VND	<i>Vietnam</i>
CNY	<i>China</i>	SGD	<i>Singapore</i>	MMK	<i>Myanmar</i>
USD	<i>America</i>	MYR	<i>Malaysian</i>	BND	<i>Brunei</i>
IDR	<i>Indonesia</i>	THB	<i>Thailand</i>	KHR	<i>Cambodia</i>
EUR	<i>Europe</i>	KRW	<i>Korea</i>	LAK	<i>Laos</i>
JPY	<i>Japan</i>	HKD	<i>Hong Kong</i>	BTC	

Table 2 - Supports Currency

IV. Invoice ID & Web URL

Send the invoice id to get the real payment info.

Those parameters are defined in Table 3.

- URL: <https://payment.dtco.co/payment>
- Both **POST** and **GET** can be used here, but we prefer "POST".

Parameter	Type	Description	Example
invoiceID	VARCHAR	Return from DTCO	a2015031718165555
weblink	VARCHAR	After pay success can return to your website. Prefer to use "urlencode" (php).	www.dtco.co

Table 3 - POST/GET Parameters for Real Payment Info

V. Return Status

Shopping cart system should develop a function to handle the return status and make it call by URL.

So that DTCO-payment can **return order status by "return_url"**.

A. Return parameters

Those parameters which are returned from DTCO-Payment are defined in Table 4.

The handle function should parse parameters.

- Both **POST** and **GET** can be used here.

It judged by "return_url" already has parameters or not.

return_url	Server Type
http://blog.dtco.co/?wc-api=WC_DTco	GET
http://blog.dtco.co/	POST

- **Shopping cart should check the validity of bill doubly.**

If there had any confusion, the status should not be changed.

Parameter	Type	Description	Example
KeyNo	VARCHAR	order id of bill	1
Status	VARCHAR	Look at Part V-B.	Finished
FiatCurrency	VARCHAR	currency of bill, for check bill	TWD
FiatMoney	VARCHAR	the price of bill, for check bill	100

Table 4 – Status from DTCO Return

B. Status

Due to the Bitcoin attribute, the payment status may finished but not enough, overpay or even pay expired.

So, when the shopping cart handle the return status.

Only to determine the keyword **"Finished"**.

- Example:

Status Value	Is Finished?
Finished	✓
Finished+PayExpired	✓
NotEnough	✗

VI. How to Test

Before testing DTCO-Payment, be sure to have following items.

- A. bitcoin wallet
- B. BTC
- C. API key – To applying from DTCO.

➤ ***Please make sure that the function in parameter "return_url" is completed.***

VII. Example Code by PHP

A. POST bill info and get the invoice id

```
function post_bill_for_InvoicdID(){
    $toURL = 'https://payment.dtco.co/payment_encode';

    $ch = curl_init();

    $params = array(
        'api_key'      => 'W13T7okeypVr1EhCTog4FBXWC28ZtHx1', //to apply from DTCO
        'fiat_money'   => '100',
        'fiat_currency' => 'TWD',
        'order_id'     => '1',
        'return_url'   => 'http://blog.dtco.co/?wc-api=WC_DTCO',
        //this return_url is for woo-commerce, DTCO-Payment will use GET to return
    );

    $options = array(
        CURLOPT_URL      => $toURL,
        CURLOPT_HEADER   => false,
        CURLOPT_RETURNTRANSFER => true,
        CURLOPT_POST     => true,
        CURLOPT_POSTFIELDS => http_build_query($post),
    );

    curl_setopt_array($ch, $options);

    $invoicd_id = curl_exec($ch);
    curl_close($ch);

    return $invoicd_id;
}
```

B. POST/GET invoice id to get real payment info(using GET here)

```
function process_order(){
    $invoiceID = post_bill_for_InvoicdID();

    $webURL = 'http://blog.dtco.co/';
    //webURL should be different by different merchant website

    return array(
        'result' => 'success',
        'redirect' => "https://payment.dtco.co/payment?invoiceID=$invoiceID&weburl=$webURL"
    );
}
```