For a merchant to get notified when a payment has been successfully completed for an order, merchants will provide an ipn_url in the `charges` API call. When the payment is successfully completed, Citcon, asynchronously, sends an HTTP POST to this url and passes in the following parameters:

Arguments	Description
id	transaction id
transaction_type	charge, refund, chargeback, `vault`
reference	merchant reference
amount	transaction amount
currency	ISO 3-character currency code, for example, USD
status	transaction status, For charge transactions, values may be: authorized, captured, success, cancelled, fail

	For refund transactions, values may be success, fail For chargeback transactions, values may be "Notification of Claim", "Request For Information", "Information Supplied", "Lost", "Won", "Case Closed"
time_created	create time of transaction, in the format of yyyy-MM-dd HH:mm:ss
time_completed	update time of transaction, in the format of yyyy-MM-dd HH:mm:ss
payment_method	payment method
amount_captured	amount captured from Customer
amount_refunded	total amount refunded
payment	

fields	a comma-separated list of field names included in the IPN. For example: id,transaction_type,reference,amount,currency,status,time_created,time_completed,payment_method,amount_captured,amount_refunded,payment

An example of IPN HTTP POST field:

```
{
    "id":"84571d30e61711eba6a94911fce35a55",
    "transaction_type":"charge",
    "reference":"reference132",
    "amount":100,
    "currency":"USD",
    "status":"authorized",
    "time_completed":"2021-08-14T09:47:43.000Z",
    "time_created":"2021-07-16T09:23:44.000Z",
    "payment_method":"paypal",
    "amount_captured":"",
    "amount_refunded":"",

"fields":"id,transaction_type,reference,amount,currency,status,time_completed,time_created,payment_method,amount_captured,amount_refunded",

"sign":"621233f017ad8139fe97d47b4653735e121b9f6e7dafe3638eba0fcd80801db5"
}
```

To verify and authenticate the IPN,

1. Construct a string of all key/value pairs using only keys in the "fields" field, including "fields", using the format of key1=value1&key2=value2, this list should be sorted alphabetically by keys. Note that neither the keys or values should be URL encoded. For example,

```
amount=100&amount_captured=&amount_refunded=&currency=USD&fields
=id,transaction_type,reference,amount,currency,status,time_compl
eted,time_created,payment_method,amount_captured,amount_refunded
&id=84571d30e61711eba6a94911fce35a55&payment_method=paypal&refer
ence=reference132&status=authorized&time_completed=2021-08-14T09
:47:43.000Z&time_created=2021-07-16T09:23:44.000Z&transaction_ty
pe=charge
```

2. Append &secret=<merchant API secret> to the end of the string above:

```
amount=100&amount_captured=&amount_refunded=&currency=USD&fields
=id,transaction_type,reference,amount,currency,status,time_compl
eted,time_created,payment_method,amount_captured,amount_refunded
&id=84571d30e61711eba6a94911fce35a55&payment_method=paypal&refer
ence=reference132&status=authorized&time_completed=2021-08-14T09
:47:43.000Z&time_created=2021-07-16T09:23:44.000Z&transaction_ty
pe=charge&secret=braintree
```

3. use SHA256 to hash the string above, to compute a signature. This signature should match the sign field posted in IPN.