



EZYPAY[®]

Direct Debit API Documentation

Web Hooks Usage Guide

1.2 | 20th February 2014 | Derek Chan

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Introduction

Webhooks are HTTP POST callbacks request sent to a URL of your choice in response to an event that happens on Ezy pay.

Ezy pay currently provides 2 Webhook events:

- When a customer is successfully added
- When a payment for any customer in your organisation has failed

Ezy pay will provide a sandbox environment for you to test out the Webhooks feature. For more information, please contact our customer service support.

Process Overview

Here are the steps to implement Webhooks.

1. Log in to the secure Ezy pay Online site.
2. From the Developer Centre, generate an authentication token.
3. Write your HTTP Post Callback function and host it publicly so that it's accessible by Ezy pay.
4. At the Developer Centre, provide your HTTP Post Callback URL under the Webhooks section.
5. Trigger an event to see if it works.

Authentication Token

The authentication token is important to protect your HTTP POST Callback URL from getting spammed from various sources. Ensure that you performed some checks from any potential POST requests before parsing the data that is being pushed to you.

To ensure that the Webhook call is coming from Ezy pay, these are the steps that you will need to do.

- Create a HMAC256 hash using your organisation code and hashing it using the authentication token.

Sample Code in C#

```
var hashMac256 = new HMACSHA256(tokenContract.Token.ToUtf8Bytes()); //your authentication token
var hashValue = hashMac256.ComputeHash(orgCode.ToUtf8Bytes()); //your org code
hashedOrgCode = Convert.ToBase64String(hashValue);
```

- Compare the hashed code that was generated with the value that is contained in the Authentication Header of the Webhook call. If it comes from Ezy pay, the hashed should match what is available on the Authentication Header.

Each user created on Ezy pay Online can be associated with only one token at a time, and only one token can be active at any single time. Hence, there could be multiple users but all of them will be associated to the same token. The token can be generated multiple times. However, once a new token is generated, the old token will be invalid and can't be used to perform API calls anymore.

Webhook Events

Customer is Created (CreateCustomer)

This Webhook event will be triggered when a customer is created through the following channels.

- Customer Online Signup
- Secure Site
- API

Account details that are returned will be masked to comply to PCI.

Example

Response

```
200 (OK)
Content-Type: application/json

{
  "ChangedEventType": "Create customer event",
  "EventDate": "2013-11-06T04:57:41.951Z",
  "Body": {
    {
      "PaymentPlanTemp": null,
      "Account": {
        "AccountHolderName": "John Doe",
        "AccountLast4Digit": "6789",
        "AccountNumber": null,
        "BankCode": "061234",
        "CardIssuer": null,
        "CustomerId": "181bff20-807d-45ea-8177-f8a5f0ba4e78",
        "ExpiryDate": null,
        "Id": "27e04ea1-6ffd-4771-b625-29fa9d637769"
      },
      "Address1": "10 Home Street",
      "Address2": "",
      "BillingStatus": "Active",
      "BusinessAccountReference": "60172",
      "CountryCode": "NZ",
      "Email": "john.doe@ezypay.com",
      "EzypayReferenceNumber": "90061715",
      "Firstname": "John",
      "Id": "181bff20-807d-45ea-8177-f8a5f0ba4e78",
      "MobilePhone": "0460402688",
      "Postcode": "0000",
      "ReferenceId": "00000243",
      "State": "",
      "Suburb": "",
      "Surname": "Doe"
    }
  }
}
```

Payment has Failed (FailedDebit)

This Webhook event will be triggered when the bank processes a failed respond for the customer's payment. A response containing the failed payment reason will be sent.

Note that the failed payment may occur 1 to 3 days after a customer has been debited.

Example

Response

```
200 (OK)
Content-Type: application/json

{
  "ChangedEventType": "Fail debit event",
  "EventDate": "2013-11-07T04:57:41.951Z",
  "Body": {
    {
      "Id": "50f0c095-5850-400f-b132-227e197da95e",
      "Amount": 12.0800,
      "CustomerId": "780e264b-dd90-4519-aaef-e2394458dfde",
      "Date": "2013-11-07T00:00:00+11:00",
      "EzypayReferenceNumber": "90061725",
      "FailedReason": "Insufficient Funds",
      "RebillDate": "2013-11-18T00:00:00+11:00",
      "RebillAmount": 19.9800
    }
  }
}
```

Customer is Updated (UpdateCustomer)

This webhook event will be triggered when any customer details are updated. A response containing the customer details will be returned.

The web hook event can be triggered when the customer is updated at:

- Secure Site

Example

Response

```
200 (OK)
Content-Type: application/json

{
  {
    {
      "ChangedEventType": "UpdateCustomer",
      "EventDate": "2014-02-20T01:24:53.887Z",
      "Body": {
        "PaymentPlanTemp": null,
        "TermsAndConditions": false,
        "TrackingCode": null,
        "Account": {
          "AccountHolderName": null,
          "AccountLast4Digit": null,
          "AccountNumber": null,
          "BankCode": null,
          "CardIssuer": null,
          "CustomerId": null,
          "ExpiryDate": null,
          "PaymentMethodId": 0,
          "SuffixNumber": null,
          "Id": null
        }
      }
    }
  }
}
```

```
    },
    "Address1": "Level 3, 9 Help Street",
    "Address2": "",
    "BillingStatus": null,
    "BusinessAccountReference": null,
    "BusinessId": null,
    "CountryCode": "AU",
    "Email": "HQ.support@iconnect360.com",
    "EzypayReferenceNumber": 90084761,
    "Firstname": "Derek",
    "Id": "d8c7fbe2-b5a8-443c-a5ba-15aa38df1dfe",
    "MobilePhone": "0412345677",
    "Postcode": "2067",
    "ReferenceId": "105",
    "State": "NSW",
    "Suburb": null,
    "Towncity": "-",
    "Surname": "McCann",
    "PaymentPlanId": null,
    "DateOfBirth": null,
    "Gender": null,
    "AgreementGuid": null,
    "IsUpdated": null,
    "BusinessGuid": null,
    "HomePhone": null,
    "CompanyName": null
  }
}
```

Customer's Billing Instruction has Changed (ChangeBillingInstruction)

This webhook event gets triggered when a customer's billing instruction has been changed (i.e. Payment from weekly to monthly/Change in weekly rate from \$9.99 to \$11.99)

A response containing the new billing instruction details will be returned.

The web hook event can be triggered when the customer billing instruction is updated at:

- Secure Site

Example

```
Response
200 (OK)
Content-Type: application/json

{
  {
    "ChangedEventType": "ChangeBillingInstruction",
    "EventDate": "2014-02-20T03:31:13.654Z",
    "Body": {
      "CustomerId": "cad63614-aala-46c1-985a-9a41a90aab61",
      "EzypayReferenceNumber": "90062116",
      "DebitFrequencyId": "Weeks",
      "DebitFrequencyMultiplier": "1",
      "RegularDebitAmount": 19.99,
      "RegularDebitStartDate": "2014-02-21T11:00:00",
      "RegularDebitEndDate": null,
      "TAC": 2000.0
    }
  }
}
```

Customer's Billing is Ended (EndBillingNow)

This web hook event will return a response when the billing of the customer has been ended on Secure Site by the user.

A response containing a summary of customer details will be returned.

The web hook event can be triggered when a customer has been manually ended at:

- Secure Site

Example

```
Response
200 (OK)
Content-Type: application/json

{
  {
    "ChangedEventType": "EndBillingNow",
    "EventDate": "2014-02-20T05:13:34.598Z",
    "Body": {
      "CustomerId": "f01db8d8-aa91-4ac1-8b42-d42aadf9b9af",
      "EzypayReferenceNumber": "90034161",
      "CustomerBillingStatus": "Inactive",
      "InactiveReason": "Cancelled",
      "LastDebitProcessedDate": "2014-02-14T00:00:00+11:00"
    }
  }
}
```

Business is Created (CreateBusiness)

This web hook event will return a response once a new child business / site has been configured on Ezypay.

A response containing the business details will be returned.

This web hook event will only be triggered when a business is created internally in Ezypay.

Example

```
Response
200 (OK)
Content-Type: application/json

{
  {
    "ChangedEventType": "EndBillingNow",
    "EventDate": "2014-02-20T05:13:34.598Z",
    "Body": {
      "CustomerId": "f01db8d8-aa91-4ac1-8b42-d42aadf9b9af",
      "EzypayReferenceNumber": "90034161",
      "CustomerBillingStatus": "Inactive",
      "InactiveReason": "Cancelled",
      "LastDebitProcessedDate": "2014-02-14T00:00:00+11:00"
    }
  }
}
```

Customer's Payment Account Details has Changed (ChangePaymentDetails)

This web hook event will return a response when the customer's payment details have changed (i.e. Payment type & account details from Credit Card to Bank and vice versa).

A response containing the updated payment account details will be returned.

The web hook event can be triggered when the customer payment details is updated at:

- Secure Site

Example

Response

```
200 (OK)
Content-Type: application/json

{
  {
    "ChangedEventType": "ChangePaymentDetails",
    "EventDate": "2014-02-20T02:40:30.061Z",
    "Body": {
      "Id": "8800099a-6dfd-4068-9062-3d2135269d87",
      "CustomerID": "cad63614-aala-46c1-985a-9a41a90aab61",
      "AccountHolderName": "John Doe",
      "AccountLast4Digit": "1231",
      "AccountNumber": "",
      "BankCode": "067012",
      "CardIssuer": "",
      "ExpiryDate": null,
      "EzypayReferenceNumber": 90062116
    }
  }
}
```