Documentation

Billing Batch On-demand Integration

Contents

Introduction

Ezypay APIs are built around intuitive REST design, utilizing resource-oriented URLs and HTTP response codes to indicate API errors. We leverage standard HTTP features such as HTTP authentication and verbs to facilitate off-the-shelf HTTP clients. All responses from the API (including errors) are returned in JSON format.

Authentication

The Ezypay Direct Debit API uses http basic access authentication.

- You need to use the private key of your test or live environment to authenticate.
- You need to set your private key as the username.
- You don't need a password.
- All requests must be made via HTTPS. Requests made in other ways will fail.

Important Reminder: Keep your private keys secure and don't pass them to anyone.

Example

```
Request

Curl --include --header "Authorization: Basic TheAuthorizationToken" \
     --request POST \
     --data @JsonFormatData.txt
     "http://sandbox.ezypay.com/v1/debits" \


Or

Curl --include -u "TheAuthorizationToken:" \
     --request POST \
     --data @JsonFormatData.txt
     "http://sandbox.ezypay.com/v1/debits" \
```

HTTP Status Codes

The Ezypay Direct Debit API attempts to return appropriate HTTP Status codes for every request.

Code	Text	Description
200	OK	Success
400	Bad Request	The request was invalid. An accompanying error message will explain why.
401	Unauthorized	Authentication credentials were missing or incorrect.
412	Precondition Failed	The request was invalid due to validation errors such as missing required fields.
500	Internal Server Error	Something is broken.

Error Messages

Ezypay Direct Debit API will return the accompanying error message when it returns HTTP Status Codes 400, 401, 412 and 500.

Example

```
Response
{
    "Message": "There is a validation error",
    "Details": [
            {"Code": "1", "Description": "Email is required"},
            {"Code": "1", "Description": "Name is required"}
        ]
}
```

Billing File

You need to upload a billing file to Ezypay for batch processing.

Billing File Format

- The batch file must be in the ***.csv** format.
- The following fields are required in the file.
- The transaction date will be the day the billing file is uploaded.
- After batch processing, the person who has uploaded the billing file will receive a confirmation email.

Field Name	Maximum Length	Description
Business Account Reference	10	The Business's business reference number assigned by Ezypay. Use for validation purposes.
Customer Id*	16	The customer's unique identification generated by Ezypay. Optional. If this value is specified, the Reference Id will not be used.
Reference Id*	30	The customer's unique identification specified by the Business. This value is used when the Customer Id is not specified. Note that this value is required when creating a new customer.
Transaction Amount	9	Maximum value: 999999.99 Applies to both Credit Card and Direct Debit billing.

Optional field name

Billing File Upload

You are required to upload the billing file to Ezypay at the specified agreed time in order not to miss the batch processing.

Billing Filename

The filename convention for the billing file is: **YYYYMMDDHHMMSS_Billing.csv**

The vendor must add a timestamp to the file naming convention to ensure there is no lag in the data transmission between Ezypay and the vendor's system for order of processing.

Filename section	Description	Example
YYYY	The current year	2013
MM	The current month	04 for the month of April
DD	The current day	01 for the first day of the month
HH	The current hour in 24-hour format	14 for 2 p.m.
MM	The current minute	16
SS	The current second	56

Billing File Upload using API Resources

POST	/v1/transactionFiles/billing{?file}

Upload Billing Batch file
Upload a binary billing batch file. The filename is unique for each Business per upload hence the time stamp suggestion. A similar filename which is uploaded twice will be deem as duplicate upload and hence rejected.

Mandatory Fields:-
Billing File

Example

```
Request

Curl --include --header "Authorization: Basic TheAuthorizationToken" \
    --request POST \
    --data-binary @CommaSeparatedValueData.csv
    "http://sandbox.ezypay.com/v1/transactionFiles/billing" \

Response

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

Exception File

- If exceptions are found, a file is attached to the confirmation email sent after the batch processing.
- This file is not sent if there is no exceptions.
- The exception file is in the *.csv format.

Field Name	Maximum Length / Type	Description
Business Account Reference	10 (Varchar)	The Business's business reference number assigned by Ezypay
Customer Id	16 (Varchar)	The customer's unique identification generated by Ezypay
Reference Id	30 (Varchar)	The customer's unique identification specified by the Business
Transaction Amount	9 (Decimal)	Maximum value: 999999.99 Applies to both Credit Card and Direct Debit billing.
Failed Reason	100 (Varchar)	The reason for debit failure
File Name	50 (Varchar)	The uploaded filename

Exception File download using API Resources

POST	/v1/transactionFiles/exceptions/{billingFilename}

Download Exception File
This resource downloads all the exception that is thrown or validated based on the uploaded Billing Filename.

Mandatory Fields:-
Billing File

Example

```
Request

Curl --include --header "Authorization: Basic TheAuthorizationToken" \
     --request GET \

"http://sandbox.ezypay.com/v1/transactionFiles/exceptions/20130614140356_billing.csv"
\

Response

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

Failed Payments

This section clarifies the responsibilities of the Vendor if a failed payment occurs. Note that it is the responsibility of the Vendor to ensure that they implement robust business processes to deal with failed payments.

When failed payments occur, a record is made in the Daily Transaction File from Ezypay to the Vendor's software. The file lists all transactions that have failed and the reason for failure. The Vendor is able to retrieve the list from Ezypay through the API call to download the Daily Transaction File.

- Depending on the reason for failure, the Vendor may wish to implement processes within the software to deal with the failure. For example, if a customer fails due to invalid account details, the software may produce a call list for the Business to follow-up with the customers for the correct details. If the customer fails due to insufficient funds, the software may be set to automatically rebill the customers on a future date.
- Each time a customer fails payment, an Ezypay failed payment fee will be charged. If a customer fails payment multiple times, the failed payment fees are aggregated. It is the responsibility of the Business through the Vendor software to check with customers whose payments are failing.
- Failed payments are sent from the Bank to Ezypay in an asynchronous manner. This means there could be occasions whereby a customer's payment fails, but the Vendor software has already send the next invoice to the customer. In this case, the Vendor software must be able to handle failed payments that returned late. There could be other implications that need to be considered from the Vendor's perspective.

Ezypay Daily Transaction File Resource

This is a csv formatted file which records all failed transactions on a specified date. The file is sent to the Business for follow up with their customers.

Daily Transaction File Information

Field Name	Maximum Length / Type	Description
Business Account Reference	10 (Varchar)	The Business's business reference number assigned by Ezypay
Customer Id	16 (Varchar)	The customer's unique identification generated by Ezypay
Ezypay Reference Number	10 (Varchar)	The customer's unique identification generated by Ezypay
Transaction Date	10 (Date YYYY-MM-DD)	The date the debit was billed
Debit Id	16 (Varchar)	The debit's unique identifier generated by Ezypay
Failed Reason	100 (Varchar)	The reason for debit failure
File Name	50 (Varchar)	The name of the file sent to Ezypay for Billing which the data was invalid (if applicable)

Retrieve Daily Transaction File

GET	/v1/transactionFiles/daily/{date}

Retrieve the list of failed transactions reported on the specified date
The list of transactions that was reported by the bank or credit card providers as failed on a particular date.

Mandatory Fields:-
Date (format YYYY-MM-DD)

```
Request

Curl --include --header "Authorization: Basic TheAuthorizationToken" \
    --request GET \
    "http://sandbox.ezypay.com/v1/transactionFiles/daily/{date}"


Response

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

Settlement

A settlement is the process of transferring customer payments to the merchant's bank account. Prior to distributing the funds, the merchant's revenue will be subject to deductions such as billing provider fees or partner payments. Depending on the merchant's configurations, the collection period and settlement date for each merchant could be different.

Retrieve the latest settlement transaction

GET	/v1/settlements/{merchantId}-{merchantAccountReference}/latest

Retrieve the latest settlement transaction
Displays summarized information on the most recent settlement performed for the merchant. The merchantAccountReference is optional but useful when a merchantId has multiple bank accounts.

Mandatory Fields:-
merchantID

Example

```
Request

Curl --include --header "Authorization: Basic TheAuthorizationToken" \
     --request GET \
     "https://api.ezypay.com/api/v1/settlements/{merchantId}/latest"


Response

200 (OK)
    Content-Type: application/json

{
    "settlementId":926,
    "settlementDate":"2016-09-20T00:00:00",
    "settlementAmount":8106.39,
    "totalRevenue":8115.54,
    "totalDeduction":9.15,
    "collectionFrom":"2016-09-14T00:00:00",
    "collectionTo":"2016-09-14T00:00:00",
    "createdOn":"2016-09-20T09:22:47.93"
}
```

Retrieve list of settlements

GET	/v1/settlements/{merchantId}-{merchantAccountReference}/?limit={limit}&offset={offset}&start={start}&end={end}

Retrieve a list of settlements
Retrieves list of settlements performed for the merchant. The limit, offset, start and end variables are optional. If not included, the list displays the last 10 settlements by default. The merchantAccountReference is optional also but useful when a merchantId has multiple bank accounts.

Mandatory Fields:-
merchantID

Example

```
Request

Curl --include --header "Authorization: Basic TheAuthorizationToken" \
    --request GET \
    "https://api.ezypay.com/api/v1/settlements/{merchantId}"

Response

200 (OK)
    Content-Type: application/json

{
    "totalReturned":10,
    "totalRecord": 53,
    "data":[
    {
     "settlementId":926,
     "settlementDate":"2016-09-20T00:00:00",
     "settlementAmount":8106.39,
     "totalRevenue":8115.54,
     "totalDeduction":9.15,
     "collectionFrom":"2016-09-14T00:00:00",
     "collectionTo":"2016-09-14T00:00:00",
     "createdOn":"2016-09-20T09:22:47.93"
    },
...
    {
     "settlementId":916,
     "settlementDate":"2016-09-07T00:00:00",
     "settlementAmount":23577.44,
     "totalRevenue":23620.77,
     "totalDeduction":43.33,
     "collectionFrom":"2016-09-01T00:00:00",
     "collectionTo":"2016-09-01T00:00:00",
     "createdOn":"2016-09-07T09:22:47.93"
    }
    ]
}
```

Retrieve settlement revenue details

GET	/v1/settlements/{merchantId}-{merchantAccountReference}/revenue/{settlementId}

Retrieve the revenue details for a specific settlement
Displays a detailed breakdown of the merchant's revenue that was processed in the specified settlement. The returned data can be large as it lists down every single transaction that took place within the settlement's collection period. The merchantAccountReference is optional but useful when a merchantId has multiple bank accounts.

Mandatory Fields:-
merchantId, settlementId

Example

```
Request

Curl --include --header "Authorization: Basic TheAuthorizationToken" \
    --request GET \
    "https://api.ezypay.com/api/v1/settlements/{merchantId}/revenue/{settlementId}"

Response

200 (OK)
    Content-Type: application/json

{
  "totalReturned": 1,
  "totalRecord": 1,
  "data": [
  {
    "customerId": "C77D542C-C5DE-4C88-A300-DD340DB8E89E",
    "customerNo": "123456",
    "invoiceId": "73af6ae3-244e-4d0d-845d-fa2246582998",
    "firstName": "John",
    "surname": "Doe",
    "paymentDate": "2016-09-14T00:00:00",
    "amount": 500,
    "type": "RegularPayment",
    "createdOn": "2016-09-20T09:22:48.86"
  }
  ]
}
```

Retrieve settlement deduction details

GET	/v1/settlements/{merchantId}-{merchantAccountReference}/deduction/{settlementId}

Retrieve the revenue details for a specific settlement
Displays a detailed breakdown of the merchant's deductions (i.e. billing provider fees or partner payments) that were processed in the specified settlement. The returned data can be large as it lists down every single transaction that took place within the settlement's collection period. The merchantAccountReference is optional but useful when a merchantId has multiple bank accounts.

Mandatory Fields:-
merchantId, settlementId

Example

```
Request

Curl --include --header "Authorization: Basic TheAuthorizationToken" \
    --request GET \
    "https://api.ezypay.com/api/v1/settlements/{merchantId}/deduction/{settlementId}"

Response

200 (OK)
    Content-Type: application/json

{
  "totalReturned": 1,
  "totalRecord": 1,
  "data": [
  {
    "customerId": "C77D542C-C5DE-4C88-A300-DD340DB8E89E",
    "customerNo": "123456",
    "invoiceId": "73af6ae3-244e-4d0d-845d-fa2246582998",
    "firstName": "John",
    "surname": "Doe",
    "paymentDate": "2016-09-14T00:00:00",
    "amount": 0.61,
    "type": "PrincipalPaidLoadFee",
    "createdOn": "2016-09-20T09:22:48.86"
   }
  ]
}
```