Accounting Transaction JSON API

Table of Contents

Document Version

Version	Date	Change
1	28/04/2015	Initial draft
2	14/10/2016	Invoice/Save, Receipt/Save and Receipt/Get methods
3	10/11/2017	Account status method and changes to add recurring invoice
4	17/11/2017	New Update recurring invoice and get list recurring invoices by client reference

Introduction

- RESTful JSON over https.

- UTF-8 encoding.

- Date format: ISO8601 UTC, yyyy-MM-dd'T'HH:mm:ssz e.g. 2015-05-23T00:00:00UTC.

- Amounts must be in the format 0.00 e.g. 1000.00

- API user is created under the General Settings tab -> Staff Management -> Create User. Select API User checkbox.
  - The Api Key will automatically be generated.
  - Must have the Accounting role selected.
  - Enter a password and save.

Http Post Parameters

Http Request	Description
apikey	Created in staff management in the General Settings tab. This must be set in the **http header request** for each call.
password	Created in staff management in the General Settings tab. This must be set in the **http header request** for each call.
Http content	Mime Type: application/json The JSON message in UTF-8 text format.

Account Status:

This function locates a customer with the specified unique reference and returns the status of their account.

Get

Get URL:
https://secure.billdozer.com/api/rest/accountstatus/{client reference}/{days overdue}

Sample JSON response:

Client does not exist:

```
{
    "id":null,
    "status":"NOK",
    "messages":["Cannot find any Active client with unique reference ABC10"],
    "additionalProperties":{}
}
```

Client is in arrears:

```
{
    "id":"39664",
    "status":"NOK",
    "messages":["Balance outstanding 1881.00 as at 2017-11-04"],
    "additionalProperties":{}
}
```

Client is in good standing:

```
{
    "id":"39664",
    "status":"OK",
    "messages":[],
    "additionalProperties":{}
}
```

Get Account Status Parameter Listing

Parameter	Description
Client reference	Text. Required. The unique reference of the client whose account you wish to enquire about.
Days overdue	Integer. The number of days back from today that must be used to determine if the account is overdue. If not specified it defaults to 1.

Invoice:

Save

Post URL:
https://secure.billdozer.com/api/rest/invoice/save

Sample JSON request:

```json
{
  "poNumber":null,
  "discount":0,
  "paymentTerms":0,
  "reference":"INV001",
  "paymentStatus":"UNPAID",
  "type":"INVOICE",
  "clientContactExclusive":false,
  "collectOnContract":true,
  "info":"TEST INFO",
  "dateIssued":"2016-09-28T00:00:00UTC",
  "dateDelivery":"2016-09-28T00:00:00UTC",
  "dateDue":"2016-09-28T00:00:00UTC",
  "currency":"ZAR",
  "billerData1":"TEST COMMENT",
  "billerData2":"TEST DATA",
  "arrears":false,
  "testMode":true,
  "clientTransactionLines":[
    {
      "accountingCode":{
        "code":"100"
      },
      "description":"sales one",
      "quantity":1.000,
      "unitAmountExcludingTax":200.00,
      "unitAmountIncludingTax": 0.00,
      "taxable":true
    }
  ],
  "client":{
    "id":12351,
    "accountNumber":"ACME001"
  },
  "clientContract":{
    "id":59045,
    "contractNumber":"ACME001"
  },
  "clientContact":{
    "id":59039,
    "name":"Robert Pretorius",
    "idNumber":"",
    "emailAddress":"robert@billdozer.com"
  },
  "billerTaxRate":{
    "id":51
  },
  "additionalProperties":{
    "sendImmediate" : true
  }
}
```

Sample JSON response:

Failed:

```
{
  "id":null,
  "status":"NOK",
  "messages":[
    "Reference: INV003 already in use."
  ],
  "additionalProperties":{
    "isTestMode":true
  }
}
```

Success:

```
{
  "id":"20151",
  "status":"OK",
  "messages":[

  ],
  "additionalProperties":{
    "reference":"INV006",
    "isTestMode":false
  }
}

{
  "id":"0",
  "status":"OK",
  "messages":[

  ],
  "additionalProperties":{
    "reference":"INV006",
    "isTestMode":true,
    "resultJson":"{ full transaction object returned in json format }"
  }
}
```

Invoice Parameter Listing

*Flag: O = Optional, R = Required

Name	Flag	Availability		Description
id			get	Long. Unique id of this invoice.
type	R	add	get	String. The type of transaction object. Either "INVOICE", "RECEIPT", "CREDIT NOTE", "DEBIT NOTE", "ADJUSTMENT"
paymentStatus	R	add	get	Ignore this parameter, it is automatically set to UNPAID. If you want to mark it as PAID then you need to create a receipt
dateIssued	R	add	get	String. ISO8601. The date listed on the invoice. This is usually the same as the created date, however it is different when invoices are generated ahead of time.
dateDue	R	add	get	String. ISO8601. The date at which the invoice is due.
dateDelivery	O	add	get	String. ISO8601. The date the goods or service was delivered.
reference	O	add	get	String. The unique reference of the invoice. This is not strictly digits only, for example "INV002/15" is valid. If this value is omitted then the reference is automatically generated.
poNumber	O	add	get	String. An optional purchase number to show for the invoice.
currency	R	add	get	String. Currency in ISO 4217 format charged in. e.g. ZAR
discount	O	add	get	Integer. Indicating the discount that was applied on the invoice
paymentTerms	O	add	get	Integer. Indicating the paymentTerms that was applied on the invoice
clientContactExclusive	O	add	get	Boolean, set to true if the invoice must only be sent to the assigned contact in this transaction. If false, will be sent to all recipients marked as notifyEmail in the Client.
collectOnContract	O	add	get	Boolean, set to true if you would like this invoice to be collected in a debit order batch.
info	O	add	get	String. Text information field
billerData1	O	add	get	String. Additional Text information field
billerData2	O	add	get	String. Additional Text information field
arrears	O	add	get	Boolean. If true then this is an arrears invoice.
testMode	O	add	get	Boolean. Default false. If set to true then additions and updates are not committed to the database. The transaction id and reference will also not automatically created. "resultJson" property will also be returned in the Response which contains the full json of the transaction

Name	Flag	Availability		Description
				object for debugging.
clientTransactionLines	R	add	get	An array of all the invoice lines
↳ accountingCode	O	add	get	Accounting Item Code Object
↳↳ code	R	add	get	String. Code used to lookup the object
↳ id			get	The id of the invoice line
↳ description		add	get	String The description displayed on the invoice. If description is left blank and AccountingCode object is set then the description is used from the AccountingCode object.
↳ quantity	R	add	get	Amount. If quantity is left blank and AccountingCode object is set then the quantity is used from the AccountingCode object.
↳ unitAmountExcludingTax	R	add	get	Amount. The cost per unit of the line excluding tax. PLEASE NOTE: This field is required if your tax settings is set to default exclude tax. If amount is left blank and AccountingCode object is set then the amount is used from the AccountingCode object.
↳ unitAmountIncludingTax	O/R	add	get	Amount. The cost per unit of the line including tax. PLEASE NOTE: This field is required if your tax settings is set to default include tax. If amount is left blank and AccountingCode object is set then the amount is used from the AccountingCode object.
↳ taxable	R	add	get	Boolean. Indicate if tax must be calculated for this line. Please see BillerTaxRate section below.
client	R	add	get	A client object that the invoice must be generated for.
↳ id	R	add	get	Long. Unique id of the client used to lookup the client. Or
↳ accountNumber	O/R	add	get	If id is not available then can use the accountNumber to lookup the client object.
ClientContract	O	add	get	The contract that this transaction must be assigned to. If the collectOnContract property is set to true then this object is mandatory.
↳ id	R	add	get	Long. The unique id of the contract to perform a lookup.
↳ contractNumber	Or R	add	get	String. Optionally can use the contractNumber to find the object if the id is unknown.
ClientContact	O	add	get	The Client Contact that this invoice must be assigned to.
↳ id	R	add	get	Long. The unique id of the contrat to perform a lookup.
↳ name	Or R	add	get	String. Additionally use the full name to lookup the contact.

Name	Flag	Availability		Description
↳ idNumber	Or R	add	get	String. Additionally use id number to lookup the contact.
↳ emailAddress	Or R	add	get	String. Additionally use email address to lookup the contact.
billerTaxRate	O	add	get	Object. Optional. The tax object to calculate tax. If this object is left blank then the default Biller Tax Rate object will be used.
↳ id	R	add	get	Long. The unique id of the BillerTaxRate object to perform the lookup.
↳ description			get	String. Short description.
↳ taxPercentage			get	Amount. Percentage. E.g. 14.000
↳ currency			get	String. Currency in ISO 4217 format. e.g. ZAR
↳ defaultTaxRate			get	Boolean. Is this the default tax rate to be used in tax calculations
additionalProperties		add	get	Name value pair list. Used for future requirements,

Response Parameter Listing:

Name	Description
id	The id of the accounting transaction updated or created in the system. If status is NOK then this value will be set to 0.
status	OK or NOK
messages	If status is NOT then a String list will be returned of errors.
additionalProperties	Name value pair list.
↳ reference	String. The reference of the transaction created or updated. If status is NOK then this value will be set to null.
↳ testMode	Boolean. The test mode in the post request.
↳ resultJson	String. Encoded json of the transaction created. Used for debugging. This is only returned if the status is OK and testMode is true.

Receipt:

Save

Post URL:
https://secure.billdozer.com/api/rest/receipt/save

Sample JSON request:

```json
{
  "clientId":56451,
  "contractId":null,
  "reference":"",
  "info":"Payment thank-you",
  "dateIssued":"2016-10-15T09:00:00UTC",
  "currency":"ZAR",
  "amountIncludingTax":1425.00,
  "billerCode":null,
  "billerData1":"Created via API",
  "billerData2":null,
  "billerPaymentMethodId":38,
  "billerPaymentProviderId":null,
  "additionalProperties":{
    "sendImmediate":false
  },
  "allocations":[
    {
      "invoiceId":173601,
      "reference":"",
      "amountAllocated":0.00
    },
    {
      "invoiceId":173202,
      "reference":"",
      "amountAllocated":0.00
    }
  ],
  "testMode":false
}
```

Sample JSON response:

Failed:

```
{
  "id":null,
  "status":"NOK",
  "messages":[
    "Receipt needs to have either a payment method or a payment provider id."
  ],
  "additionalProperties":{
    "isTestMode":true
  }
}
```

Success:

```
{
  "id":"20151",
  "status":"OK",
  "messages":[

  ],
  "additionalProperties":{
    "reference":"R-546",
    "isTestMode":false
  }
}

{
  "id":"0",
  "status":"OK",
  "messages":[

  ],
  "additionalProperties":{
    "reference":"R-546",
    "isTestMode":true,
    "resultJson":"{ full transaction object returned in json format }"
  }
}
```

Receipt Parameter Listing:

*Flag: O = Optional, R = Required

Name	Flag	Description
clientId	R	Billdozer of the client for whom this receipt is issued
contractId	O	Billdozer id of the contract. Set to null if no value is provided
reference	O	String. The unique reference of the receipt. This is not strictly digits only, for example "REC00243" is valid. If this value is omitted then the reference is automatically generated.
Info	O	String. The info field is displayed when the receipt is listed under receipt management and also on the client statement receipt line items.
dateIssued	R	String. ISO8601. The date listed on the receipt. This is usually the same as the created date.
Currency	O	String. Currency in ISO 4217 format. e.g. ZAR. If not specified it will default the to biller currency.
amountIncludingTax	O	The total of the receipt
billerCode	O	String. Additional 50 character Text information field
billerData1	O	String. Additional 100 character Text information field
billerData2	O	String. Additional 100 character Text information field
billerPaymentMethodId	O	If the receipt is to a bank account then put the id here. To view bank account ids see General Settings – Bank Accounts, Biidozer Id column. **Either this or billerPaymentProviderId must be populated.**
billerPaymentProviderId	O	If the receipt is via a payment gateway then put the id here. To view the gateway ids see General Settings – Payment Provider, Biidozer Id column. Either this or billerPaymentMethodId must be populated
additionalProperties		Name value pair list. Used for future requirements,
Allocations	R	This is the list of invoices that the receipt is allocated and the amount that is allocated to each.

Response Parameter Listing:

Name	Description
id	The id of the accounting transaction updated or created in the system. If status is NOK then this value will be set to 0.
status	OK or NOK
messages	If status is NOT then a String list will be returned of errors.
additionalProperties	Name value pair list.
↳ reference	String. The reference of the transaction created or updated. If status is NOK then this value will be set to null.
↳ testMode	Boolean. The test mode in the post request.
↳ resultJson	String. Encoded json of the transaction created. Used for debugging. This is only returned if the status is OK and testMode is true.

Transaction:

Get

Get URL:
https://secure.billdozer.com/api/rest/transaction/get/{id}

List

Get URL:
https://secure.billdozer.com/api/rest/transaction/list

Response:
```
{
    "status":"OK", // OK or NOK
    "message":null, // Error message
    "type":"INVOICE",
    "page":1,
    "perPage":15,
    "totalResults":130,
    "results":[// List of accounting transactions
    ]
}
```

List Transactions Filters

Following parameters must be put into the Http Header

Http Header Parameter	Description
page	Integer. Required. The page of results to return.
perPage	Integer. Required. The number of results per page to return. Max 100.
clientId	Long. Optional. The id of the client whom you want to retrieve a list of transactions.
fromDateTime	DateTime. Optional. Return all transactions created or modified from this date and time UTC.
type	String. Required. The type of transaction object. Either "INVOICE", "RECEIPT", "CREDIT NOTE", "DEBIT NOTE", "ADJUSTMENT" or "QUOTE"

Recurring Invoice:

Add

Post URL:
https://secure.billdozer.com/api/rest/recurringInvoice/add

Parameter Listing:

*Flag: O = Optional, R = Required

active	R	Indicates whether this recurring invoice is active or not. An active repeating will be processed by Billdozer
runDate	R	The date that the first invoice must be generated
runInterval	R	WEEKLY, BI-WEEKLY, MONTHLY, ANNUALLY, OTHER. Where OTHER you must populate the runMonth fields to indicate which months.
RunMonth01 >> 12	R	Month of the year where runInterval = OTHER. 01 is January.
runDay	R	The day of the week to run where runInterval = WEEKLY or BI-WEEKLY
Term	R	The term in months
billerData1	O	This is the main comments field
billerData2	O	Additional comments field
collectOnContract	R	True or false flag that indicates whether the invoices are to be collected by debit order. If true then the payment method and debit order day from the contract will be used to calculate the collection date of each invoice.
clientContract	R	The id of the contract that must be assigned to this repeating invoice.
billerTaxRate	O	The id of the tax rate applicable to this repeating invoice.
clientContractEscalation	O	The id of the annual escalation method that must be applied to the repeating invoice.
clientContact	O	The id of the contact person that must receive the invoices
clientContactExclusive	O	True or false flag that indicates that the contact person specified must exclusively receive the invoices. Nomally invoices are mailed to all contact persons that are marked to receive email invoices.
additionalProperties	O	Name value pair list.
clientContractChargeLines	R	
↳ accountingCode	R	Item code of the line item
↳ quantity	R	Quantity
↳ description	R	Description
↳ UnitAmountExcluding	O	Use this if working exclusive of tax (as defined in General Settings - Tax). If not specified the item price will be looked up from the standard item code.
↳ UnitAmountIncluding	O	Use this if working inclusive of tax (as defined in General Settings - Tax)

Sample JSON request:

```
{ "active":true,
  "runDate":"2015-06-01T00:00:00UTC",
  "runInterval":"MONTHLY",
  "runMonth01":false,
  "runMonth02":false,
  "runMonth03":false,
  "runMonth04":false,
  "runMonth05":false,
  "runMonth06":false,
  "runMonth07":false,
  "runMonth08":false,
  "runMonth09":false,
  "runMonth10":false,
  "runMonth11":false,
  "runMonth12":false,
  "runDay":1,
  "term":0,
  "billerData1":"Test Comment",
  "billerData2":null,
  "collectOnContract":true,
  "clientContract":{
     "id":59109     },
  "billerTaxRate":{
     "id":51       },
  "clientContractEscalation":{
     "id":58473    },
  "clientContact":{
     "id":59107    },
  "clientContactExclusive":false,
  "testMode":false,
  "clientContractChargeLines":[
   { "accountingCode":{
     "code":"100"        },
     "description":"sales one",
     "quantity":2.000,
        "term":0,
      "unitAmountExcludingTax": 200.00,
      "unitAmountIncludingTax": 0.00,
      "taxable":true
   }
 ],
"additionalProperties":{
  "example":"xyz"
 }
}
```

Sample JSON response:

Failed:
```
{
 "id":null,
 "status":"NOK",
  "messages":[
   "Error message."
  ],
  "additionalProperties":{
   "isTestMode":true
  }
}
```

Success:
```
{
  "id":"20151",
  "status":"OK",
  "messages":[    ],
  "additionalProperties":{
   "isTestMode":true,
    "resultJson":"{ full transaction object returned in json format }"
   }
}
```

Response Parameter Listing:

Name	Description
id	The id of the recurring invoice to be created in the system. If status is NOK then this value will be set to 0.
status	OK or NOK
messages	If status is NOT then a String list will be returned of errors.
additionalProperties	Name value pair list.
↳ testMode	Boolean. The test mode in the post request.
↳ resultJson	String. Encoded json of the transaction created. Used for debugging. This is only returned if the status is OK and testMode is true.

Update

This method will add new line items to an existing recurring invoice.   Depending on the tax settings of your Billdozer account you can provide either a exclusive or inclusive unit price. If no unit amount is provided then it will looked up from the item code.

Post URL:

https://secure.billdozer.com/api/rest/recurringInvoice/update

Sample JSON request:

```
{
 "id":714100,
  "testMode":false,
  "clientContractChargeLines":[
   {"accountingCode":{
        "code":"100"
        },
        "description":"sales one",
        "quantity":2.000,
        "term":0,
        "unitAmountExcludingTax": 200.00,
        "unitAmountIncludingTax": 0.00,
        "taxable":true
   }
  ],
  "additionalProperties":{
   "example":"xyz"
  }
}
```

Sample JSON response:

Failed:
```
{   "id":"1739276",
    "status":"NOK",
    "messages":["Invalid accounting code: ICE004"],
    "additionalProperties":{
        "isTestMode":false
    }
}
```

Success:
```
{   "id":"1739276",
    "status":"OK",
    "messages":[],
    "additionalProperties":{
        "isTestMode":false}
 }
```

Get

Get URL:
https://secure.billdozer.com/api/rest/recurringInvoice/get/{id}

List

Get URL:
https://secure.billdozer.com/api/rest/recurringInvoice/list

Response:
```
{
        "status":"OK",  // OK or NOK
        "message":null, // Error message
        "type":"RecurringInvoice",
        "page":1,
        "perPage":15,
        "totalResults":2,
        "results":[  // List of recurring invoices
        ]

}
```

List Recurring Invoices Filters

Following parameters must be put into the Http Header

Http Header Parameter	Description
page	Integer. Required. The page of results to return.
perPage	Integer. Required. The number of results per page to return. Max 100.
clientUniqueReference	Text. Optional. The unique reference of the client whose account you wish to enquire about. Where provided this is used in preference to the clientId parameter
clientId	Long. Optional. The id of the client whom you want to retrieve a list of recurring invoices.
fromDateTime	DateTime. Optional. Return all recurring invoices created or modified from this date and time UTC.

Parameter Listing:

*Flag: O = Optional, R = Required

Name	Flag	Availability		Description
id			get	Long. Unique id of this recurring invoice.
active	R	add	get	Boolean. Recurring Invoice is active or not.
runDate	R	add	get	Date. The date that this recurring invoice must run and generate an invoice.
runInterval	R	add	get	String. "DAILY", "WEEKLY", "MONTHLY", "ANNUALLY", or "OTHER" If "OTHER" is selected then runMonth01 must be set.
runMonth01 - runMonth02	O	add	get	Boolean. If "OTHER" runInterval selected then indicate which month the recurring invoice must run. E.g. runMonth01 = January, runMonth12 = December.
runDay	O	add	get	Integer. If runInterval is WEEKLY, then indicate which day the charge must run. 1= Monday …. 7 = Sunday
term	O	add	get	Integer. How many months must the recurring invoice run for. Default is 0, i.e. Recurring Invoice will continue collecting if the term is 0
billerData1	O	add	get	String. Additional comments.
billerData2	O	add	get	String. Additional comments.
collectOnContract	O	add	get	Boolean. If set to true then a debit order invoice will be created against the contract and payment method for this recurring invoice.
clientContactExclusive	O	add	get	Boolean, set to true if the invoice must only be sent to the assigned contact in this transaction. If false, will be sent to all recipients marked as notifyEmail in the Client.
testMode	O	add	get	Boolean. Default false. If set to true then additions and updates are not committed to the database. The transaction id will also not automatically created. "resultJson" property will also be returned in the Response which contains the full json of the transaction object for debugging.

Name	Flag	Availability		Description
ClientContract	O	add	get	The contract that the recurring invoice must be assigned to
↳ id	R	add	get	Long. The unique id of the contract to perform a lookup.
clientContractEscalation	O	add	get	The contract escalation.
↳ id	R	add	get	The id of the contract escalation.
ClientContact	O	add	get	The Client Contact that this recurring invoice must be assigned to.
↳ id	R	add	get	Long. The unique id of the contract to perform a lookup.
billerTaxRate	O	add	get	Object. Optional. The tax object to calculate tax. If this object is left blank then the default Biller Tax Rate object will be used.
↳ id	R	add	get	Long. The unique id of the BillerTaxRate object to perform the lookup.
clientContractChargeLines	R	add	get	An array of all the invoice lines
↳ accountingCode	O	add	get	Accounting Item Code Object
↳ ↳ code	R	add	get	String. Code used to lookup the object
↳ description	O/R	add	get	String The description displayed on the invoice. If description is left blank and AccountingCode object is set then the description is used from the AccountingCode object.
↳ quantity	R	add	get	Amount. If quantity is left blank and AccountingCode object is set then the quantity is used from the AccountingCode object.
↳ term	O	add	get	Integer. How many months must the recurring invoice line item run for. Default is 0, i.e. Recurring Invoice line item will continue collecting if the term is 0
↳ unitAmountExcludingTax	R	add	get	Amount. The cost per unit of the line. If amount is left blank and AccountingCode object is set then the amount is used from the AccountingCode object.
↳ taxable	R	add	get	Boolean. Indicate if tax must be calculated for this

Name	Flag	Availability	Description
			line.
additionalProperties		add	get	Name value pair list. Used for future requirements,

Charge Calculator

Get URL:
https://secure.billdozer.com/api/rest/chargeCalculator

Response:
```
{
    "status":"OK", // OK or NOK
    "message":null, // Error message
    "type":"INVOICE",
    "page":1, // Will always be 1, i.e. no pagination
    "perPage":12, // Total invoices returned
    "totalResults":12, // Total invoices returned
    "results":[  // List of invoices


    ]
}
```

Charge Calculator Filters

Following parameters must be put into the Http Header

Http Header Parameter	Description
chargeId	Long. This is the recurring invoice id.
processDate	Date from which to calculate future invoices. If this parameter is not provided the default will be today.
numberOfDays	Integer. Number of days ahead to calculate future invoices. Max 1095. If this parameter is not provided the default will be 365.

Sample Java code:

```java
public void testAddInvoice() {
        DefaultHttpClient httpClient = new DefaultHttpClient();
        try {

            URI url = new
URIBuilder().setPath("https://secure.billdozer.com/api/rest/transaction/add").build();

            HttpPost httpPost = new HttpPost(url);

            httpPost.setHeader("apikey", "xyz");
            httpPost.setHeader("password", "xyz");

            StringEntity input = new StringEntity("{json formatted request}");
            input.setContentType(MediaType.TEXT_PLAIN);
            httpPost.setEntity(input);

            HttpResponse httpResponse = httpClient.execute(httpPost);
            if (httpResponse.getStatusLine().getStatusCode() != 200) {
                result = httpResponse.getStatusLine().getStatusCode() + " " +
httpResponse.getStatusLine().getReasonPhrase();
                HttpEntity httpEntity = httpResponse.getEntity();
                result = result + ": " + EntityUtils.toString(httpEntity);
                return;
            }

            HttpEntity httpEntity = httpResponse.getEntity();
            result = EntityUtils.toString(httpEntity);

            ObjectMapper objectMapper = new ObjectMapper();
            com.billdozer.model.api.Response response = objectMapper.readValue(re-
sult, com.billdozer.model.api.Response.class);

            System.out.println(response.toString());

        } catch (Exception e) {
            e.printStackTrace();
        } finally {
            httpClient.getConnectionManager().shutdown();
        }
    }
```