



Version 1.6

PROPAY® REPORTING API SERVICE

Instruction to interface with ProPay® Reporting API

PROPAY
A TSYS® Company

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General Information about the ProPay REST Interface

REST combines a base URI, mapped Resource URI elements, and standard HTTP methods for all the ProPay Reporting API methods.

- When using the GET method, the API request does not need more information passed.
- When using POST and PUT HTTP methods, information is sent in the form of JavaScript Object Notation (JSON) objects.
- The API will return a JSON object as a response to each API request regardless of which HTTP method was used.
- When submitting JSON objects in an API request, the Content-Type should be set to 'application/json' and the Content-Length field should be set to the length of the data.
- Developers should be prepared to handle null values. In case of a null value, the ProPay Reporting REST API will return ":null".

API Authorization

The REST interface uses Basic HTTP Authentication for API requests, with the CertStr as the username and the TermId as the password. This must be added to the HTTP header as the value of the 'Authorization' field. Creating the Authorization Header value requires the following steps in the order prescribed:

1. Combine the CertStr, a Colon, and the termId (MyCertStr:MyTermId). If a termId has not been provided, only use the CertStr without a colon.
2. (MyCertStr).
3. Convert the Result of Step 1 to an ASCII Byte Array.
4. Base 64 Encode the Result of Step 2.
5. Prepend "Basic" to the Result of Step 3.
6. Add 'Authorization' as an HTTP header, and set its value to the result of Step 4.

Sample HTTP Header

HTTP Header Field	Value
Authorization	Basic RDIZRTIDNEY2MTExNEIzM0JEOUE4NUI3NEIxDZCOKQyM0U5QzRGNjExMTRCMzM=
Content-Type	application/json
Method	GET

Resource URI and HTTP Methods

The request URI is constructed from a Base URI and a Resource URI appended. A Resource URI may be used differently based on the HTTP verb of the request. Consider the following Example:

ProPay Integration environment Base URI: <https://reportsapi-ptr.propay.com/v1/>

ProPay Production environment Base URI: <https://reportsapi.propay.com/v1/>

Resource: [accounts/{account-number}/transfers](#)

HTTP Method: GET

Reporting API Restrictions

- A total of 5,000 records will be returned per API call. Therefore, the maximum range specified cannot exceed 5,000 records.
- A 30 minute waiting time period is required for any report where the same query string parameters, date range, and account number applies. For Example: reports/accounts/332127239/transfers?beginDate=03-01-2023&endDate=03-31-2023&beginRecordOffset=0&limit=5000 at 10:30 am Mountain. You must wait until 11:00 am Mountain to run this exact same Report with the exact same parameters. Therefore, we highly encourage that the data is stored or cached in order to avoid duplicate requests.

Integration

ProPay Reporting APIs are based on OpenAPI specification v3.0, allowing the use of a huge number of OpenAPI complaint tools to integrate with the APIs. The following section describes how OpenAPI tools can be used to make the integration easy and effortless.

Note: The methods documented below are generic and apply to any OpenAPI complaint API. ProPay recommends but does not require the use of these methods to integrate with the Reporting APIs. ProPay has created this API integration in compliance with the OpenAPI specification, but ProPay does not support any third party tools used to facilitate integration. Customers are expected to determine the suitability of these methods before using them.

Generate client code/SDK

Method 1: Use swagger editor (Browser based online editor)

1. Go to <https://editor.swagger.io/>
2. Select File > Import URL and type in the URL of the ProPay Reporting API's swagger endpoint:
<https://reportsapi-ptr.propay.com/swagger/v1/swagger.json>
3. Select Generate Client > Select your preferred language

SDK is generated and downloaded in your default downloads location.

Method 2: Use the OpenAPI-Generator (CLI)

This command line tool provides all the features of the browser based online swagger editor. Please see OpenAPI-Generator documentation for instructions on installing and using this tool.

Importing the APIs in Postman

Follow Swagger instructions on importing and exporting data to import ProPay's Reporting API's into Postman.

4.1 Get TRANSFERS Report

The Transfers report will return a list of ProPay SweepId's against successful Bank Transfers with their corresponding date for the given ProPay account and date range.

Swagger Documentation: <https://reportsapi-ptr.propay.com/swagger/index.html>

Query String Parameters:

- beginDate: Begin date in UTC formatted as MM-DD-YYYY.
 - beginDate cannot be in future.
 - beginDate cannot be past the endDate.
- endDate: End date in UTC formatted as MM-DD-YYYY.
- beginRecordOffset: The "offset" parameter indicating the starting point or position in the dataset. Usage examples:
 - Use 0 for the first page/record set.
 - To query for the records between 101 and 1000, set beginRecordOffset = 100 and limit = 900.
- limit: Specifies the maximum number of records to include with each response/page.
 - Max allowed value is 5,000.

The date parameter is restricted to 31 days for this report. For Example:

- begindate = 03-01-2023
- enddate = 03-31-2023

Response Elements

Element	Type	Notes
batchId	integer	This is commonly known as the "Sweep Batch Id". The batchId is the Unique identifier to tell which sweep batch the transaction is associated.
depositDate	string	
depositAmount	double	
settlementCurrency	string	

How to call this method

HTTP Element	Value
Resource URI	accounts/{account-number}/transfers
Method	GET
Authorization	Refer to API Authorization section

Sample Request

<https://reportsapi-ptr.propay.com/v1/accounts/{account-number}/transfers?beginDate=12-31-2022&endDate=01-06-2023&beginRecordOffset=0&limit=5000>

Response

```
{
  "transferResults": [
    {
      "batchId": 12345,
      "depositDate": "08-10-2023",
      "depositAmount": 1000.00,
      "settlementCurrency": "USD"
    },
    {
      "batchId": 456789,
      "depositDate": "08-11-2023",
      "depositAmount": 500.00,
      "settlementCurrency": "USD"
    }
  ]
}
```

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4.2 Get TRANSFERS By BatchId Report

The Transfers by Batch Id report will return all of the transaction information associated with the single SweepId.

Swagger Documentation: <https://reportsapi-ptr.propay.com/swagger/index.html>

Query String Parameters:

- beginRecordOffset
- limit

Response Elements

Element	Type	Notes
gatewayTransactionId	string	This is the transaction Id provided by the gateway where the transaction was processed.
transactionDate	string	The Date/Time Stamp (UTC) of when the transaction was initiated.
fundDate	string	Date/Time Stamp (UTC) of when the funds for a specific transaction were made available to the merchant. Important note: the FundDate will be the same as the TransactionDate until the transaction Funds. At that point, there will be an updated FundDate.
transNum	int	The Transaction Number.
transType	string	The transaction description to help identify the type of transaction (i.e., +CC, + ACH Payment, chargeback, etc.).
invNum	string	The Invoice Number provided at the submission of the transaction.
payerName	string	The name of the merchant's customer that was provided when the transaction was initiated.
authorizationAmount	decimal	The amount the transaction was originally authorized for.
authorizationCurrency	string	The three character currency code the transaction was authorized in (i.e. CAD, GBP, USD).
grossAmount	decimal	The Amount the transaction was originally submitted for.
discFee	decimal	The Discount fee associated with the transaction based on the discount rate.
perTransFee	decimal	The Per transaction fee associated with the transaction.
credit	decimal	The application of any processing credit used for that transaction.
totalFee	decimal	The Total fee for the transaction (Disc Fee + Per Trans Fee).
netAmount	decimal	The amount of the transaction after the application of the fee.
settlementCurrency	string	The currency in which the payment is made.
comment1	string	Display of the comment 1 data passed at the time of the transaction.
comment2	string	Display of the comment 2 data passed at the time of the transaction.

How to call this method

HTTP Element	Value
Resource URI	accounts/{account-number}/transfers/{batch-Id}
Method	GET
Authorization	Refer to API Authorization section

Sample Request

<https://reportsapi-ptr.propay.com/v1/accounts/{account-number}/transfers/{batch-id}?BeginRecordOffset=0&Limit=5000>

Response

```
"transferDetailResults": [  
  {  
    "gatewayTransactionId": null,  
    "transactionDate": "11-08-2023 12:59:56",  
    "fundDate": "11-08-2023 12:59:57",  
    "transNum": 1,  
    "transType": "+CC",  
    "invNum": "testinvoice number",  
    "payerName": null,  
    "authorizationAmount": 500.00,  
    "authorizationCurrency": "USD",  
    "grossAmount": 500.00,  
    "discFee": -15.00,  
    "perTransFee": -0.25,  
    "credit": 0.00,  
    "totalFee": -15.25,  
    "netAmount": 484.75,  
    "settlementCurrency": "USD",  
    "comment1": null,  
    "comment2": null  
  },  
  {  
    "gatewayTransactionId": null,  
    "transactionDate": "11-15-2023 01:00:05",  
    "fundDate": "11-15-2023 01:00:05",  
    "transNum": 2,  
    "transType": "-CK Pending",  
    "invNum": "Withdraw Funds",  
    "payerName": "Clint Eastwood",  
    "authorizationAmount": -484.45,  
    "authorizationCurrency": "USD",  
    "grossAmount": -484.45,  
    "discFee": 0.00,  
    "perTransFee": -0.30,  
    "credit": 0.00,  
    "totalFee": -0.30,  
    "netAmount": -484.75,  
    "settlementCurrency": "USD",  
    "comment1": null,  
    "comment2": null  
  }  
]
```

4.3 Get TRANSACTIONS Report

The Transactions report will return all of the transactions for the given merchant account based upon the date range.

Swagger Documentation: <https://reportsapi-ptr.propay.com/swagger/index.html>

Query String Parameters:

- beginDate
- endDate
- beginRecordOffset
- limit

The date parameter is restricted to 7 days for this report. For Example:

- begindate = 03-01-2023
- enddate = 03-07-2023

Response Elements

Element	Type	Notes
gatewayTransactionId	string	This is the transaction Id provided by the gateway where the transaction was processed.
transactionDate	string	The Date/Time Stamp (UTC) of when the transaction was initiated.
fundDate	string	Date/Time Stamp (UTC) of when the funds for a specific transaction were made available to the merchant. Important note: the FundDate will be the same as the TransactionDate until the transaction Funds. At that point, there will be an updated FundDate.
transNum	int	The Transaction Number.
transType	string	The transaction description to help identify the type of transaction (i.e., +CC, + ACH Payment, chargeback, etc.).
invNum	string	The Invoice Number provided at the submission of the transaction.
authorizationAmount	decimal	The amount the transaction was originally authorized for.
authorizationCurrency	decimal	The three character currency code the transaction was authorized in (i.e. CAD, GBP, USD).
grossAmount	decimal	The Amount the transaction was originally submitted for.
discFee	decimal	The Discount fee associated with the transaction based on the discount rate.
perTransFee	decimal	The Per transaction fee associated with the transaction.
credit	decimal	The application of any processing credit used for that transaction.
totalFee	decimal	The Total fee for the transaction (Disc Fee + Per Trans Fee).
netAmount	decimal	The amount of the transaction after the application of the fee.
settlementCurrency	string	The currency in which the payment is made.
comment1	string	Display of the comment 1 data passed at the time of the transaction.
comment2	string	Display of the comment 2 data passed at the time of the transaction.

How to call this method

HTTP Element	Value
Resource URI	/propayAPI/MerchantAddress/{AccountNumber}
Method	PUT
Authorization	See section 3.2.1 REST Interface

Sample Request

<https://reportsapi-ptr.propay.com/v1/accounts/{account-number}/transactions?BeginDate=12-02-2023&EndDate=12-08-2023&BeginRecordOffset=0&Limit=5000>

Response

```
"transactionResults": [  
  {  
    "gatewayTransactionId": null,  
    "transactionDate": "11-15-2023 09:30:19",  
    "fundDate": "11-15-2023 09:30:20",  
    "transNum": 1,  
    "transType": "+CC",  
    "invNum": "testinvoicenum",  
    "authorizationAmount": 5.00,  
    "authorizationCurrency": "USD",  
    "grossAmount": 5.00,  
    "discFee": -0.15,  
    "perTransFee": -0.25,  
    "credit": 0.00,  
    "totalFee": -0.40,  
    "netAmount": 4.60,  
    "settlementCurrency": "USD",  
    "comment1": null,  
    "comment2": null  
  },  
  {  
    "gatewayTransactionId": null,  
    "transactionDate": "11-15-2023 09:30:21",  
    "fundDate": "11-15-2023 09:30:21",  
    "transNum": 2,  
    "transType": "-CK Pending",  
    "invNum": "Withdraw Funds",  
    "authorizationAmount": 4.30,  
    "authorizationCurrency": "USD",  
    "grossAmount": -4.30,  
    "discFee": 0.00,  
    "perTransFee": -0.30,  
    "credit": 0.00,  
  }  
]
```

```
    "totalFee": -0.30,  
    "netAmount": -4.60,  
    "settlementCurrency": "USD",  
    "comment1": null,  
    "comment2": null  
  }  
]
```

4.4 Get CHARGEBACK Report

The Chargebacks report will return all of the transactions where a chargeback has occurred for the given merchant account based upon the date range.

Swagger Documentation: <https://reportsapi-ptr.propay.com/swagger/index.html>

Query String Parameters:

- beginDate
- endDate
- beginRecordOffset
- limit

The date parameter is restricted to 31 days for this report. For Example:

- begindate = 03-01-2023
- enddate = 03-31-2023

Response Elements

Element	Type	Notes
gatewayTransactionId	string	This is the transaction Id provided by the gateway where the transaction was processed.
originalTransactionDate	string	The Date/Time Stamp (UTC) of when the transaction was initiated.
chargebackTransactionDate	string	The date (UTC) when the chargeback notification was received from the card issuer.
originalTransNum	int	The Original Transaction Number.
chargebackTransNum	int	The Chargeback Transaction Number.
originalTransAmount	decimal	The Gross Amount of the original transaction.
chargebackTransAmount	decimal	The amount the chargeback was issued for.
settlementCurrency	string	The currency in which the payment is made.
payerName	string	The name of the merchant's customer that was provided when the transaction was initiated.
payerLast4	string	The last 4 numbers of the card processed for the transaction.
cardBrand	string	The card brand used for the transaction (Visa, Mastercard, AMEX, Discover).
invNum	string	The Invoice Number provided at the original submission of the transaction.
chargebackCode	string	The Chargeback reason code provided by the issuer when the chargeback was initiated.
chargebackCodeDescription	string	The description associated with the Chargeback reason code.

How to call this method

HTTP Element	Value
Resource URI	accounts/{account-number}/chargebacks
Method	GET
Authorization	Refer to API Authorization section

Sample Request

<https://reportsapi-ptr.propay.com/v1/accounts/{account-number}/chargebacks?BeginDate=12-02-2023&EndDate=12-08-2023&BeginRecordOffset=0&Limit=5000>

Response

```
"chargebackResults": [  
  {  
    "gatewayTransactionId": null,  
    "originalTransactionDate": "11-26-2023 09:54:15",  
    "chargebackTransactionDate": "11-29-2023 09:54:19",  
    "originalTransNum": 2,  
    "chargebackTransNum": 2,  
    "originalTransAmount": 5.00,  
    "chargebackTransAmount": 5.00,  
    "settlementCurrency": "CAD",  
    "payerName": null,  
    "payerLast4": "4090",  
    "cardBrand": "Visa",  
    "invNum": "testinvoicenum",  
    "chargebackCode": "104",  
    "chargebackCodeDescription": "Other Fraud-Card Absent Environment"  
  }  
]
```

4.5 Get ACH RETURNS Report

The ACH Returns report will return all of the transactions that represent ACH returns for the given merchant account based upon the date range.

Swagger Documentation: <https://reportsapi-ptr.propay.com/swagger/index.html>

Query String Parameters:

- beginDate
- endDate
- beginRecordOffset
- limit

The date parameter is restricted to 31 days for this report. For Example:

- begindate = 03-01-2023
- enddate = 03-31-2023

Response Elements

Element	Type	Notes
gatewayTransactionId	string	This is the transaction Id provided by the gateway where the transaction was processed.
originalTransactionDate	string	The Date/Time Stamp (UTC) of when the transaction was initiated.
returnTransactionDate	string	The date (UTC) the return was received.
originalTransNum	int	The Original Transaction Number.
transType	string	The transaction description to help identify the type of transaction (i.e., +CC, + ACH Payment, chargeback, etc.).
returnTransNum	int	The Return Transaction Number.
grossAmount	decimal	The Amount the transaction was originally submitted for.
netAmount	decimal	The amount of the transaction after the application of the fee.
settlementCurrency	string	The currency in which the payment is made.
payerName	string	The name of the merchant's customer that was provided when the transaction was initiated.
payerLast4	string	The last 4 numbers of the card processed for the transaction.
invNum	string	The Invoice Number provided at the original submission of the transaction.
returnCode	string	The return reason code for the ACH return.
returnCodeDescription	string	The description associated with the Return reason code.

How to call this method

HTTP Element	Value
Resource URI	accounts/{account-number}/ach-returns
Method	GET
Authorization	Refer to API Authorization section

Sample Request

<https://reportsapi-ptr.propay.com/v1/accounts/{account-number}/ach-returns?BeginDate=12-02-2023&EndDate=12-08-2023&BeginRecordOffset=0&Limit=5000>

Response

```
"achReturnResults": [  
  {  
    "gatewayTransactionId": null,  
    "originalTransactionDate": "11-29-2023 08:59:53",  
    "returnTransactionDate": "12-01-2023 09:00:00",  
    "originalTransNum": 1,  
    "transType": "ACH Payment Return",  
    "returnTransNum": 1,  
    "grossAmount": -10.00,  
    "netAmount": -10.00,  
    "settlementCurrency": "USD",  
    "payerName": "Test",  
    "payerLast4": "6789",  
    "invNum": "9189cbdd-59ba-462b-928b-c4919c567409",  
    "returnCode": "R05",  
    "returnCodeDescription": "Unauthorized Debit to Consumer Account Using Corporate SEC Code"  
  }  
]
```

Reporting Service Response Codes

HTTP Status	Value	Notes
400	One or more validation errors occurred	<ul style="list-style-type: none"> • The <field name> field is required. • BeginRecordOffset must be a positive number. • The value ' abc' is not valid for Limit. • Limit must be a positive number, less than or equal to 5000. • A valid BeginDate should be in the format MM-dd-yyyy. • BeginDate cannot be in future. • BeginDate cannot be greater than EndDate. • A valid EndDate should be in the format MM-dd-yyyy. • BeginDate and EndDate cannot be more than {0} days apart.
401	Invalid Credential or IP address not allowed	Invalid credentials or client certificate
403	Account not affiliated	Access to the requested account is denied
404	Not Found	The requested URL does not exist

Sample Error Responses

HTTP 400 - Bad Request

```
{
  "type": "https://httpstatuses.io/400",
  "title": "One or more validation errors occurred.",
  "status": 400,
  "errors": {
    "Limit": [
      "The value 'x' is not valid for Limit",
      "The Limit field is required.",
      "Limit must be a positive number, less than or equal to 5000."
    ],
    "EndDate": [
      "The EndDate field is required.",
      "A valid EndDate should be in the format MM-dd-yyyy.",
      "BeginDate and EndDate cannot be more than 7 days apart",
      "BeginDate and EndDate cannot be more than 31 days apart"
    ],
    "BeginDate": [
      "The BeginDate field is required.",
      "A valid BeginDate should be in the format MM-dd-yyyy.",
      "BeginDate cannot be in future",
      "BeginDate cannot be greater than EndDate"
    ],
    "BeginRecordOffset": [
      "The BeginRecordOffset field is required.",
      "BeginRecordOffset must be a positive number.",
      "The value 'x' is not valid of BeginRecordOffset"
    ]
  }
}
```

HTTP 401 - Unauthorized

```
{  
  "type": "https://httpstatuses.io/401",  
  "title": "Unauthorized",  
  "status": 401,  
  "detail": "Invalid Credentials or client certificate."  
}
```

```
{  
  "type": "https://httpstatuses.io/401",  
  "title": "Unauthorized",  
  "status": 401,  
  "detail": "The 'Authorization' header is missing.",  
}
```

HTTP 403 – Forbidden

```
{  
  "type": "https://httpstatuses.io/403",  
  "title": "Invalid BatchId.",  
  "status": 403,  
  "detail": "Access to the requested data is denied",  
}
```

```
{  
  "type": "https://httpstatuses.io/403",  
  "title": "Account is not affiliated",  
  "status": 403,  
  "detail": "Access to the requested account is denied",  
}
```