

# REST API for Paytomat Console Panel

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Paytomat is a set of blockchain software solutions, used by merchants to accept cryptocurrencies in-store or online. Console Panel allows merchants to track such transactions, manage authentication tokens and generate invoices. You can use this API to integrate crypto payments to the existing point-of-sale systems, shopping carts or mobile apps.

## Table of contents

- [REST API for Paytomat Console Panel](#)
  - [General API Information](#)
  - [Error Codes](#)
- [API authentication](#)
  - [HTTP Basic authentication](#)
  - [JWT authentication](#)
- [Basic Types](#)
  - [int](#)
  - [long](#)
  - [boolean](#)
  - [string](#)
  - [float](#)
  - [decimal](#)
  - [dateTime](#)
  - [object](#)
  - [\[object\]](#)
- [API endpoints](#)
  - [JWT token](#)
  - [Currency codes list](#)
  - [Exchange rates list](#)
  - [Current balance](#)
  - [New transaction](#)
  - [Cancel transaction](#)
  - [Chargeback transaction](#)
  - [Transaction details](#)
  - [List of transactions](#)
  - [Transaction broadcast](#)
  - [Product details](#)
  - [New product](#)
  - [Update product](#)
  - [Payment widget](#)
- [Models:](#)
  - [General Models](#)
    - [JWT](#)
    - [Error](#)
    - [Currency](#)

- [Exchange Rates](#)
- [Balance](#)
- [Payment URL](#)
- [Transaction Models](#)
  - [Transaction Short](#)
  - [Transaction Full](#)
  - [Transaction Status](#)
  - [Callback URL](#)
  - [Broadcast Code](#)
- [Product Models](#)
  - [Product](#)
  - [Product Field](#)
  - [Product Status](#)

This is an improved version of the original API that can be found [here](#).

## General API Information

- The base endpoint is: <https://app.paytomat.com/api/v1/>
- All endpoints always return a JSON object that contains a single object or an array of objects.
- Data is returned in ascending order. Oldest first, newest last.

## Error Codes

- Any API endpoint can return an error.
- Errors are always reported as JSON encoded object with **error** key.

Sample payload:

```
{
  "error": "error_description"
}
```

## API authentication

---

- Paytomat API supports two types of authentication: [HTTP Basic authentication](#) and [JWT authentication](#).
- For both types you need to create a merchant account in [Console Panel](#) and pass basic verification.
- By default **username** or **login** is the **email** you used during registration of your merchant account.
- If you want a separate login/password pair or JWT token, you can always create a new pair in [Console Panel](#) in [Settings/Branches](#) tab with **Basic** or **Token** type accordingly.

## HTTP Basic authentication

To authenticate with HTTP, you may provide a username and password with the following URL format:  
<https://username:password@app.paytomat.com/api/v1>.

For HTTP Basic authentication, encode your login and password concatenated by a colon (:) with [Base64](#) encryption.

Example HTTP header:

**Authorization: Basic** `cGVwZTp0aGVfcGln` where `cGVwZTp0aGVfcGln` is a Base64 phrase you generated above.

## JWT authentication

For JWT authentication, use JWT token you can find in [Console Panel](#) in the [Settings/Branches](#) tab.

Example HTTP header:

**Authorization: Bearer**  
`eyJhbGciOiJIUzI1NiJ9.eyJpZCI6NiwicmVhbG0iOiJtZXJjaGFudF9rZXkifQ.hTdbLIJI6mcPCyZ5u9eiYI8e6tRJ5VRtU0AbLQ8WlAw`, where string after Bearer is JWT token.

Example curl:

```
curl 'https://app.paytomat.com/api/v1/balance' -H 'Authorization: Bearer  
eyJhbGciOiJIUzI1NiJ9.eyJpZCI6NiwicmVhbG0iOiJtZXJjaGFudF9rZXkifQ.hTdbLIJI6mcPCyZ5  
u9eiYI8e6tRJ5VRtU0AbLQ8WlAw'
```

## Basic Types

---

### int

`20`

A standard JSON integer.

### long

`20`

A 64-bit two's complement JSON integer.

### boolean

`true`

A standard JSON boolean.

### string

`This suppose to be a text`

A standard JSON string. When POSTing data as `application/x-www-form-urlencoded`, use a UTF-8 encoded string instead rather than Unicode escapes.

## float

13.839039

A standard JSON floating-point decimal.

## decimal

"13.83903987"

An arbitrary-precision JSON decimal number encoded as a standard JSON string.

## dateTime

"2020-02-03T17:00:00Z"

Date and time as a string in ISO8601 combined date and time format in UTC (Coordinated Universal Time).

## object

```
{
  "rates": {
    "BTC": "0.020903",
    "DASH": "0.3338",
    "USD": "241.81",
    "WAVES": "29.874"
  }
}
```

The standard base representation for first-class objects in Paytomat, such as [Product](#), [Balance](#), [Error](#), etc.

## [object]

```
{
  "currencies": [
    {
      "code": "BTC",
      "in": true,
      "out": true,
      "title": "Bitcoin"
    },
    {
      "code": "UAH",
      "in": true,
      "out": false,
      "title": "Hryvnia"
    }
  ]
}
```

The standard base representation for an object that contains a list of first-class objects in Paytomat, such as [Product](#), [Balance](#), [Error](#), etc.

## API endpoints

---

### JWT token

```
GET /token
```

Returns JWT token for given account's credentials.

Parameters:

None

Responses:

Code	Type	Description
200	<a href="#">JWT</a>	Success
400	<a href="#">Error</a>	Bad request
default	<a href="#">Error</a>	Generic response error

Example curl:

```
//Request:
curl 'https://username:password@app.paytomat.com/api/v1/token'

//Result
{
  "token":
  "eyJhbGciOiJIUzI1NiJ9.eyJpZCI6NiwicmVhbG0iOiJtZXJjaGFudF9rZXkifQ.hTdblIJI6
  mcPCyZ5u9eiYI8e6tRJ5VRtU0AbLQ8WlAw"
}
```

### Currency codes list

```
GET /currencies
```

Returns a list of available currency codes.

Parameters:

None

Responses:

Code	Type	Description
200	[Currency]	Success
400	Error	Bad request
default	Error	Generic response error

Example curl:

```
//Request:
curl 'https://username:password@app.paytomat.com/api/v1/currencies'

//Result
{
  "currencies": [
    {
      "code": "BTC",
      "in": true,
      "out": true,
      "title": "Bitcoin"
    },
    {
      "code": "UAH",
      "in": true,
      "out": false,
      "title": "Hryvnia"
    }
  ]
}
```

## Exchange rates list

```
GET /exchange_rates
```

Returns an object of currency exchange rates for a given currency.

Parameters:

Name	Type	Required	Description
currency	string	Yes	Currency code

Responses:

Code	Type	Description
200	Exchange Rates	Success
400	Error	Bad request
default	Error	Generic response error

Example curl:

```
//Request:
curl 'https://username:password@app.paytomat.com/api/v1/exchange_rates?
currency=BTC'

//Result
{
  "rates": {
    "BTC": "0.020903",
    "DASH": "0.3338",
    "USD": "241.81",
    "WAVES": "29.874"
  }
}
```

## Current balance

GET /balance

Returns an object of current balances for currencies.

Parameters:

None

Responses:

Code	Type	Description
200	Balance	Success
400	Error	Bad request
default	Error	Generic response error

Example curl:

```
//Request:
curl 'https://username:password@app.paytomat.com/api/v1/balance'
```

```
//Result
{
  "balance": {
    "USD": 10000
  }
}
```

Object with amounts for every available currency.

## New transaction

```
POST /create_transaction
```

Creates a new transaction.

Parameters:

Name	Type	Required	Description
id	int	Yes	Transaction id. If not defined, the <b>ref</b> parameter will be used
ref	int	No	Merchant specific data. If not defined, the <b>id_UnixTimestamp</b> input will be used
currency_in	string	Yes	Payment currency of transaction
currency_out	string	Yes	Payout currency of transaction
amount_in	float	Yes	Amount of payment currency of transaction
callback_url	string	No	<a href="#">Redirect URL</a> after completed transaction

Responses:

Code	Type	Description
200	<a href="#">Transaction Short</a>	Success
400	<a href="#">Error</a>	Bad request
default	<a href="#">Error</a>	Generic response error

Example curl:

```
//Request:
curl
'https://username:password@app.paytomat.com/api/v1/create_transaction' -d
'{"ref": 125, "currency_in": "USD", "currency_out": "BTC", "amount_in":
100 }'
```



```
//Result
{
  "amount_out": 0.041896,
  "currency_out": "BTC",
  "id": 3,
  "qr_code": "bitcoin:38iub2TZpsTGQjZc7zhGcBcphxPk6eGpHa?amount=0.041896",
  "rate": 0.00041896,
  "address": "38iub2TZpsTGQjZc7zhGcBcphxPk6eGpHa",
  "note": "Please turn off transaction encryption if you encounter public key error"
}
```

## Cancel transaction

POST /cancel\_transaction

Manually cancels a pending transaction.

Parameters:

Name	Type	Required	Description
id	int	Yes	Transaction id

Responses:

Code	Type	Description
200	<a href="#">Transaction Status</a>	Success
400	<a href="#">Error</a>	Bad request
default	<a href="#">Error</a>	Generic response error

Example curl:

```
//Request:
curl
'https://username:password@app.paytomat.com/api/v1/cancel_transaction' -d
'{"id": 9}'

//Result
{
  "status": "cancelled",
  "status_description": "Transaction has been cancelled"
}
```

## Chargeback transaction

```
POST /chargeback_transaction
```

Requests chargeback for a transaction.

Parameters:

Name	Type	Required	Description
id	int	Yes	Transaction id

Responses:

Code	Type	Description
200	<a href="#">Transaction Status</a>	Success
400	<a href="#">Error</a>	Bad request
default	<a href="#">Error</a>	Generic response error

Example curl:

```
//Request:
curl
'https://username:password@app.paytomat.com/api/v1/chargeback_transaction'
-d '{ "id": 3 }'

//Result
{
  "status": "chargeback_scheduled",
  "status_description": "Transaction has been scheduled for chargeback"
}
```

## Transaction details

```
GET /transaction
```

Returns details for a single transaction.

Parameters:

Name	Type	Required	Description
id	int	Yes	Transaction id

## Responses:

Code	Type	Description
200	Transaction Full	Success
400	Error	Bad request
404		Not found
default	Error	Generic response error

## Example curl:

```
//Request:
curl 'https://username:password@app.paytomat.com/api/v1/transaction?id=1'

//Result
{
  "transaction": {
    "address": "33CyuJsTYQ3h6kPkDPT1Mawx7qZouVzmHe",
    "amount_in": "100",
    "amount_out": "0.041896",
    "comment": "Requested chargeback",
    "created": "2017-05-24 15:12:39",
    "currency_in": "USD",
    "currency_out": "BTC",
    "id": 1,
    "rate": "0.00041896",
    "ref": "CK00004",
    "status": "cancellation",
    "updated": "2017-05-24 16:34:24",
    "qr_code": "bitcoin:2N1sNUrHUmMw61rSyFPPmvDYHJrCk7QCy8x?
amount=0.0000000511751",
    "note": "Please turn off transaction encryption if you encounter
public key error"
  }
}
```

## List of transactions

```
GET /transactions
```

Returns a list of transactions.

## Parameters:

Name	Type	Required	Description
------	------	----------	-------------

Name	Type	Required	Description
status	string	No	Transaction status. Allowed values: [new, pending, confirmation, cancellation, success, canceled, failure, chargeback, timeout]
limit	int	No	Default 50; max 100
offset	int	No	Start with 0; default 0
order_by	string	No	Sort order. Allowed values: [id, status, updated, created, id, ref]

#### Responses:

Code	Type	Description
200	<a href="#">[Transaction Full]</a>	Success
400	<a href="#">Error</a>	Bad request
default	<a href="#">Error</a>	Generic response error

#### Example curl:

```
//Request:
curl 'https://username:password@app.paytomat.com/api/v1/transactions?
order_by=-updated'

//Result
{
  "transactions": [
    {
      "address": "33CyuJsTYQ3h6kPkDPT1Mawx7qZouVzmHe",
      "amount_in": "100",
      "amount_out": "0.041896",
      "comment": "Requested chargeback",
      "created": "2017-05-24 15:12:39",
      "currency_in": "USD",
      "currency_out": "BTC",
      "id": 1,
      "rate": "0.00041896",
      "ref": "CK00004",
      "status": "cancellation",
      "updated": "2017-05-24 16:34:24",
      "qr_code": "bitcoin:2N1sNUrHUmMw61rSyFPPmvDYHJrCk7QCy8x?
amount=0.0000000511751",
      "note": "Please turn off transaction encryption if you encounter
public key error"
    },
    {
      "address": "3DahmyivDiKeAo67FREygXJEZgD5G4q96u",
      "amount_in": "100",
      "amount_out": "0.041896",
      "comment": "Payment received",
```

```
    "created": "2017-05-24 15:13:11",
    "currency_in": "USD",
    "currency_out": "BTC",
    "id": 2,
    "rate": "0.00041896",
    "ref": "CK00006",
    "status": "success",
    "updated": "2017-05-24 16:34:24",
    "qr_code": "bitcoin:2N1sNUrHUmMw61rSyFPPmvDYHJrCk7QCy8x?
amount=0.0000000511751",
    "note": "Please turn off transaction encryption if you encounter
public key error"
  }
}
```

## Transaction broadcast

POST /broadcast\_transaction

Broadcasts a transaction.

Parameters:

Name	Type	Required	Description
currency	string	Yes	Transaction currency code
txid	string	Yes	Transaction id
receiver	string	Yes	Receiver address
amount	string	Yes	Transaction amount

Responses:

Code	Type	Description
200	<a href="#">Broadcast Code</a>	Success
400	<a href="#">Error</a>	Bad request
default	<a href="#">Error</a>	Generic response error

Example curl:

```
//Request:
curl
'https://username:password@app.paytomat.com/api/v1/broadcast_transaction'
-d '{"currency": "BTC", "txid":
```

```
"f39448872b469a6f49b7d8b037adf810519f1f2b583cba852e7f5128f53daf29",
"receiver": "1ApkXfxWgJ5CBHzrogVSKz23umMZ32wvNA", "amount": 0.07227808}'

//Result
{
  "success": 1
}
```

## Product details

GET /product

Returns an object with product details.

Parameters:

Name	Type	Required	Description
id	int	Yes	Internal transaction id

Responses:

Code	Type	Description
200	Product	Success
400	Error	Bad request
404		Not found
default	Error	Generic response error

Example curl:

```
//Request:
curl 'https://username:password@app.paytomat.com/api/v1/product?id=1'

//Result
{
  "product": {
    "id": 1,
    "amount": "5.00",
    "currency": "USD",
    "title": "Croissant",
    "unit": "piece"
    "fields": [],
    "callback_url": "",
    "tx_success": 7,
    "custom_css": "https://somesite.com/css/style.css",
```

```
}  
}
```

## New product

POST /create\_product

Creates a new product.

Parameters:

Name	Type	Required	Description
id	int	Yes	Internal transaction id

Responses:

Code	Type	Description
200	<a href="#">Product</a>	Success
default	<a href="#">Error</a>	Generic response error

Example curl:

```
//Request:  
curl 'https://username:password@app.paytomat.com/api/v1/create_product' -d  
'{ "title": "Pierogi", "amount": 15, "currency": "UAH", "unit": "piece",  
"fields": [ { "id": "comment", "title": "Comment", "is_required": 0,  
"type": "text", "custom_css": "is_optional" } ] }'  
  
//Result  
{  
  "id": 12  
}
```

## Update product

PUT /product/{id}

Updates product properties.

Parameters:

Name	Type	Required	Description
id	int	Yes	Internal product id

Responses:

Code	Type	Description
200	<a href="#">Product Status</a>	Success
400	<a href="#">Error</a>	Bad request
default	<a href="#">Error</a>	Generic response error

Example curl:

```
//Request:
curl 'https://username:password@app.paytomat.com/api/v1/product/12' -X PUT
-d '{ "amount": 20 }'

//Result
{
  "updated": 1
}
```

## Payment widget

```
GET /payment_url
```

Returns URL to the merchant's payment widget.

Parameters:

None

Responses:

Code	Type	Description
200	<a href="#">Product Status</a>	Success
400	<a href="#">Error</a>	Bad request
default	<a href="#">Error</a>	Generic response error

Example curl:



```
//Request:
curl curl 'https://username:password@app.paytomat.com/api/v1/payment_url'

//Result
{
  "url": "https://app.paytomat.com/pay/2mVQcpFLk9f"
}
```

## Models:

---

### General Models

#### JWT

Represents a [JSON Web Token](#) used for authentication to Paytomat Console Panel API. You can generate a new token or find an existing one in [Console Panel](#).

Name	Type	Description	Example
token	string	JWT token	

#### Error

Contains details about the encountered error during an API request. You can learn more about common types of errors in the [Error Codes](#) section.

Name	Type	Description	Example
code	long	Error code	404

#### Currency

Represents currency or cryptocurrency used in a given transaction. Currencies can be used to perform payments (invoicing system for online, mobile or in-store purchases) and payouts (merchant fund's settlement to a bank account or cryptocurrency wallet).

Name	Type	Description	Example
code	string	Currency code by country ( <a href="#">ISO 4217</a> ) or cryptocurrency code ( <a href="#">Coinmarketcap</a> )	USD
in	boolean	Is the currency allowed for payments	true
out	boolean	Is the currency allowed for payouts	false
title	string	Full name of currency by country ( <a href="#">ISO 4217</a> ) or cryptocurrency ( <a href="#">Coinmarketcap</a> )	US dollar

#### Exchange Rates

Contains a key-value pair with a currency code ([ISO 4217](#)) on the left side and exchange rate on the right for a given currency.

Name	Type	Description	Example
rates	object	Exchange rates for chosen currency	

## Balance

Contains current balances of each [currency](#) for a given merchant account. Current balance is a sum of all transactions received in this currency before it was settled.

Name	Type	Description	Example
balance	object	Amounts for all available currencies	

## Payment URL

Represents a unique link each merchant can use to accept cryptocurrency payments via [mQR standard](#) created by Paytomat. Contains a key-value pair with [url](#) on the left side and the link itself on the right.

Name	Type	Description	Example
object	object	URL to merchant's payment widget	

## Transaction Models

### Transaction Short

Contains details of a newly created transaction.

Name	Type	Description	Example
id	int	Internal transaction id	87
rate	float	Exchange rate of a given currency	0.00041896
currency_out	string	Payout currency of transaction	BTC
amount_out	float	Amount of payout currency of transaction	0.041896
qr_code	string	Transaction URL used for QR code generation	
address	string	Address to receive payout currency	
note	string	Extra details about transaction	

### Transaction Full

Contains full details of the already created transaction.

Name	Type	Description	Example
id	int	Internal transaction id	456

Name	Type	Description	Example
ref	string	Merchant's specific data	
status	string	Transaction status	pending
comment	string	Comment to transaction status	
created	dateTime	Data/time of transaction creation	
updated	dateTime	Data/time of the latest transaction update	
address	string	Address to receive payout currency	
currency_in	string	Payment currency of transaction	BTC
currency_out	string	Payout currency of transaction	LTC
amount_in	float	Amount of payment currency of transaction	1.872000
rate	float	Exchange rate of a given currency	0.00041896
qr_code	string	Transaction URL used for QR code generation	
note	string	Extra details about transaction	
callback_url	string	<a href="#">Redirect URL</a> after completed transaction	
product_id	int	Product id (if a transaction is attached to a product)	

## Transaction Status

Represents transaction status with its name and full description.

Name	Type	Description	Example
status	string	Action status	canceled
status_description	string	Status description	Transaction has been canceled

## Callback URL

Represents a postback structure of the URL to post after a transaction is completed.

Name	Type	Description	Example
merchant_id	int	Merchant id	87
product_id	int	Product id	627
tx_code	string	Internal transaction code	
tx_id	string	Transaction id on a blockchain	
amount	float	Amount of funds sent in transaction	2.345
currency	string	Currency code of sent transaction	ETH

Name	Type	Description	Example
qr_code	string	Transaction URL used for QR code generation	
details	string	Extra details about transaction	
tx_status	string	Transaction status. Allowed values: [new, pending, confirmation, cancellation, success, canceled, failure, chargeback, timeout]	pending
custom_css	string	A link for CSS file or CSS properties used for customizing transaction's UI	

## Broadcast Code

Represents a success code of the broadcasted transaction. Contains a key-value object with **success** key on the left side and success code on the right (**1** for successful, **0** for not failed operation respectively).

Name	Type	Description	Example
object	object	Broadcast code	

## Product Models

### Product

Represents a product that is intended to be sold repeatedly or in bulk. You can create a product inside of [Paytomat Console Panel](#).

Name	Type	Description	Example
id	int	Internal product id	123
amount	decimal	Product price	"13.83903987"
currency	string	Price currency code	USD
title	string	Product title	
tx_success	int	Number of successful transactions for this product	
unit	string	Allowed values: [single, piece, decimal]. Single - fixed number of products to buy; piece - products can be sold partially; decimal - any amount of products can be sold	
callback_url	string	Redirect URL used after successful transaction	
custom_css	string	A link to CSS file or CSS properties used for customizing transaction's UI	
fields	<a href="#">[Product Field]</a>	Array of objects describing product fields	

### Product Field

Represents specific property data of the product, such as its shipping address, origin, brand, manufacturer, category, etc.

Name	Type	Description	Example
id	string	Field id	shipping_address
title	string	Field title	Shipping Address
type	string	Field type	text
min_length	int	Min length of the field	10
max_length	int	Max length of the field	42
is_required	int	Is field required. Allowed values: [0,1]	1
options	string	Extra options for a field	

## Product Status

Represents a flag of either the product was updated or not. Contains a key-value pair with **updated** key on the left side and updated status on the right (**1** for updated, **0** for not updated respectively).

Name	Type	Description	Example
object	object	Update status of a product	