

# Implementation guide for Pays.cz

## Document history

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## **Definitions**

#### **COMPANY**

The company pays.cz s.r.o is entity authorized to provide payment services based on the registration with the Czech National Bank as small-scale payment service provider. Company is subject to CNB supervision.

#### **MERCHANT**

The client of COMPANY, mostly online store or provider of various services over the. user of the payment service, recipient of the funds within a payment transaction.

#### **PAYER**

Natural or legal person who has an interest to pay to the MERCHANT. The payment service user sending the funds for the execution of payment transaction.

#### **PAYS PAYMENT SYSTEM**

Or abbreviated as "payment system" is a computerized system that provides payment services mediated by pays.cz

#### **PAYS PARTNERS**

Pays.cz partners are financial institutions, providers of payment or authorization systems and other organizations, such as the card association that ensure the functioning of various payment methods.

#### **MERCHANT ACCOUNT**

Database entity within the PAYS PAYMENT SYSTEM, which records the amount of funds that were received from the PAYERS in payment transactions performed for the particular MERCHANT.

#### MERCHANT ADMINISTRATION INTERFACE

Web based interface to the PAYS PAYMENT SYSTEM through which the MERCHANT manages its MERCHANT ACCOUNT.

## Payment initiation

Implement button, link or generally GET / POST calls to your site (eg. Using html tag <a href="payment link url"> Pay here </a>), which will point to the Pays payment system:



# https://www.pays.cz/paymentorder?Merchant=111111&Shop=111111&Currency=CZK&Amount=100&MerchantOrderNumber=111111&Email=email@kupujiciho.cz

#### Explanation of the individual parameters

- Merchant and Shop identifiers of the merchant and the e-shop those will be assigned after contract signature
- Currency usually CZK unless you have also payments in USD or EUR enabled
- Amount the transaction amount expressed in the smallest units of a given currency (i.e. for EUR in cents 0.01 EUR, so 1 EUR amount is represented as 100)
- MerchantOrderNumber payment identifier can be used to identify transaction or specific goods. It is always present in the subsequent communication. It can be used to match payments and orders of the merchant. This is an arbitrary string with a maximum length of 100 characters.
- Email PAYER email address it is highly recommended to provide email address to increase the trustworthiness of the transaction. As a payment service we are providing customer service to a PAYER based on the email identification. The email address is also used for transaction confirmation.

After the successful or unsuccessful transaction the users get redirected to a special webpage (landing page) of the MERCHANT. E.g.:

#### https://yourdomain.com/paymentok.html

We redirect PAYER after the successful completion of the payment transaction to this page. It can be a "thank you" page with information about the next steps. For example, "Thank you for your order, which has just been successfully received. After confirmation of the payment you will be notified about the delivery date via email. "

This redirection does not server as a payment confirmation to the MERCHANT, i tis only informative only. Trusted confirmation is sent on the background as specified in the section "Full integration" below.

#### https://yourdomain.com/paymenterr.html

We redirect PAYER after the unsuccessful completion of the payment transaction to this page. The PAYER may have canceled the transaction or the transaction has not been approved by the bank or other partner.

The query string of redirect URL contains more details about the transaction.

## Full integration

There is background call to a page to the MERCHANT after each transaction is completed. This call is securely signed and it is the only trustworthy source of information about the transaction



Calls are performed using HTTP (S) GET

### Example:

https://yourdomain.com/paymentconfirm?PaymentOrderID=39278646&MerchantOrderNumber=OBJ20160001&PaymentOrderStatusID=3&CurrencyID=CZK&Amount=34100&CurrencyBaseUnits=100&PaymentOrderStatusDescription=Platba+kartou+byla+uspesna&hash=78b0598b7b6a8d094522df3c48b7f5ed

Explanation of the individual items of the query string:

- PaymentOrderID identifier of the payment given by COMPANY (e.g. For complaints etc.).
- MerchantOrderNumber payment identifier given by the MERCHANT
- PaymentOrderStatusID 2 = unrealized, 3 = payment has been successfully completed
- CurrencyID CZK, USD, EUR
- Amount amount in the smallest unit of currency
- CurrencyBaseUnits the number of base units in the currency (for CZK it is 100 hellers, in USD 100 cents, the resulting amount is calculated as Amount / CurrencyBaseUnits, therefore, in the example 34100/100 = 341 CZK)
- PaymentOrderStatusDescription description of the transaction status (e.g. "Card payment successful", "payment has been declined by the bank," etc.).
- Hash the signature of all relevant information in the request the system of the trader should always verify the signature and untrustworthy requirement should not accept. The hash calculation:

Data2Hash = PaymentOrderID + MerchantOrderNumber + PaymentOrderStatusID CurrencyID + Amount + CurrencyBaseUnits

Hash = MD5HMACEncode (Data2Hash, Password)

The password will be assigned after contract signature.

MD5HMAC algorithm is commonly used algorithm for secure signature information is integrated in many systems (.NET, PHP, OpenSSL and others).



# Payment request

A simple tool for sending e-mail requests for payment. For example, it can be used as a reminder for late payments. The recipient can pay by clicking on the link received.

In terms of implementation it is not necessary to do anything. Creating a payment request takes place in the MERCHANT ADMINISTRATION INTERFACE. The payment request is sent as a link embedded in the email message.