



## **Adding Paydirekt payment method**

**PayZen 2.7**

Document version 1.0

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# 1. HISTORY OF THE DOCUMENT

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Version	Author	Date	Comment
1.0	Lyra Network	12/21/2016	Document creation

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## 2. GETTING IN TOUCH WITH TECHNICAL SUPPORT

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Looking for help? Check our FAQ on our website

<https://payzen.io/de-DE/faq/sitemap.html>

For technical inquiries or support, you can reach us from Monday to Friday, between 9am and 6pm

by phone at: +33 (820) 902 103 oder +49 (0) 69 59 77 17 27 (Hotline) from Germany

by e-mail: [support@payzen.eu](mailto:support@payzen.eu)

To facilitate the processing of your demands, you will be asked to communicate your shop ID (an 8-digit number) .

This information is available in the "registration of your shop" e-mail or in the Back Office (menu **Settings** > **Shop** > **Configuration**).

### 3. PAYDIREKT : A GERMAN ONLINE PAYMENT SOLUTION

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PayZen has enriched its online payment gateway by integrating the Paydirekt payment solution.

Paydirekt is a German online banking solution. It offers buyers the possibility to make online payments without having to communicate their bank account details.

Paydirekt is a solution operated by **Paydirekt GmbH** according to the German banking standard.

To use the service, one must have a current account in a partner bank and create an account on Paydirekt. With the help of the identifier and password, buyers can use Paydirekt as a payment method during their online purchases. The amount of the transaction is debited directly from the buyer's bank account.

This solution offers advantages both to the buyer and the merchant:

- The merchants obtain a convenient, fast, safe and efficient payment method.
  - They benefit from a payment guarantee and a protection against potential fraud.
  - They increase their sales potential, as this payment method attracts many buyers.
- The buyers obtain access to a secure, simple, fast payment method available in several German and Austrian online shops.

## 4. INTEGRATING PAYDIREKT INTO THE PAYMENT PAGE

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Important information about the addition of this payment method:

- **Type of integration**

Only available via integration with payment form redirection.

- **Restriction**

Integration is not possible via Web Services.

- **Field name for customizing the list of payment methods**

vads\_payment\_cards

- **Value of vads\_payment\_cards**

PAYDIREKT

### Example

E.g., for integrating Visa, MasterCard and Paydirekt into the payment page, the line of code in the payment form is:

```
<input type="hidden" name="vads_payment_cards" value="VISA;MASTERCARD;PAYDIREKT" />
```

### Note:

If the **vads\_payment\_cards** parameter is empty, all the available payment methods (depending on the currency, the minimum or maximum amount, technical constraints such as whether the shopping cart data, the account holder's address and the shipping address are present or not, etc.) associated with the shop will be suggested.

### 4.1. Prerequisites

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#### Bank prerequisites

##### For the merchant

- Create a contract with Paydirekt GmbH.
- Create and configure an account with the help of a user name and a password.

##### For the buyer

- Be the holder of a current bank account in a partner bank of the payment gateway.
- Create a Paydirekt account with the help of a user name and a password.
- Provide a valid phone number to Paydirekt.

#### Acquirer prerequisites

##### For the merchant

- Subscribe to the Paydirekt offer via PayZen.
- Communicate the user name and the password of the Paydirekt account.

In order to enable Paydirekt on the payment page, the acquirer must:

- generate a contract number made up of 32 hexadecimal characters,

- use the user name and the password provided by the merchant.

## 4.2. Viewing the progress of Paydirekt payment on the payment page

The diagram below presents the exchange process from the point of view of the buyer.

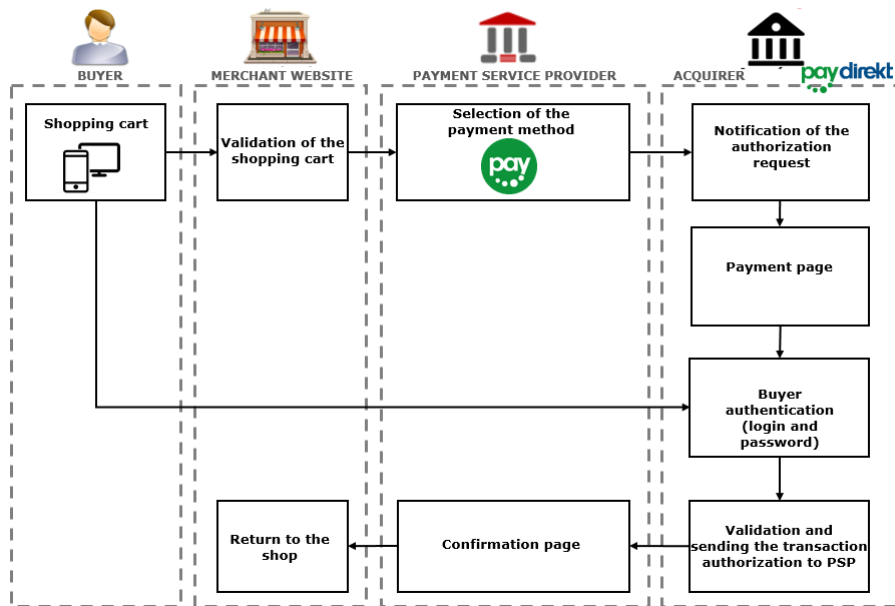


Figure 1: Exchange process

### 1. The buyer validates the shopping cart..

The merchant website redirects the buyer to the payment gateway.

When the parameters and their signature have been verified, the payment method selection page opens.

For more information, refer to the Payment Form Implementation Guide available on our web site <https://payzen.io/de-DE/>.

### 2. The buyer selects the Paydirekt payment method.

The payment gateway redirects the buyer to the authentication page of Paydirekt

### 3. The buyer enters his/her user name and password registered via Paydirekt and validates the entry.

In some cases, for security reasons, Paydirekt may ask to enter a TAN (Transaction Authentication Number).

The buyer can also ask for a TAN request to be put in place for each payment.

In those cases, Paydirekt sends a code by SMS to the phone number provided by the buyer at the moment of account creation.

### 4. The acquirer presents the page of payment confirmation.

### 5. The acquirer clicks on **Buy now**.

### 6. The acquirer processes the information and sends a response to the payment gateway.

### 7. The payment gateway displays the confirmation page of the transaction.

If the payment has been successfully completed, payment details are presented to the buyer with the option to download the ticket in PDF format.

In case the transaction fails, a message will appear. The buyer will be informed if the payment request has been rejected.

8. A link is provided to return to the merchant website.

### 4.3. Viewing a Paydirekt transaction in the Back Office

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Transactions can be viewed in the Back Office via the menu **Management > Transactions**.

Via the **Management** menu, the merchant has access to real and TEST transactions.

**Note:**

*Depending on the access rights, TEST transactions (example: developer profile) and/or real transactions (example: accountant profile) can be viewed.*

The content of the **Transactions in progress** tab is displayed by default. All the transactions of the day are listed.

**Characteristics of a payment made with Paydirekt:**

**Note**

*The default capture delay is set to 1 hour after the payment.*

*The merchant has the possibility to increase this capture delay.*

Pending or failed payments are visible in the PayZen Merchant Back Office > **Transactions in progress** tab.

Successful and captured payments are visible in the PayZen Merchant Back Office > **Captured transactions** tab, but their reconciliation status is **Pending**.

To view transaction details:

1. Select a transaction.
2. Right click on it and select **Display transaction details** or double-click the transaction you wish to see the details of.

The dialog box **Details of a transaction in progress** appears.

The details include for example:

- The payment method that was used: Paydirekt.
- The transaction ID
- The order reference
- The transaction amount
- The creation date of the transaction
- The transaction status
- The reconciliation status



## 5. GENERATING A PAYMENT FORM

To generate a payment request, you must create an HTML form as follows:

```
<form method="POST" action="https://secure.payzen.eu/vads-payment/">
  <input type="hidden" name="parameter1" value="value1" />
  <input type="hidden" name="parameter2" value="value2" />
  <input type="hidden" name="parameter3" value="value3" />
  <input type="hidden" name="signature" value="signature"/>
  <input type="submit" name="pay" value="Pay"/>
</form>
```

It contains:

The following technical elements:

- The `<form>` and `</form>` tags that allow to create an HTML form
- The `method="POST"` attribute that defines the method used for sending data.
- The `action="https://secure.payzen.eu/vads-payment/"` attribute that defines where to send the form data.

Form data:

- Shop ID.
- Information about the payment depending on the use case.
- Additional information, depending on your requirements.
- Signature that certifies the integrity of the form.

This data is added to the form by using the `<input>` tag:

```
<input type="hidden" name="parameter1" value="value1" />
```

All the data in the form must be encoded in **UTF-8**.

Special characters (accents, punctuation marks, etc.) will then be correctly interpreted by the payment gateway. Otherwise, the signature will not be computed correctly and the form will be rejected.

The **Pay** button that will allow to send data:

```
<input type="submit" name="pay" value="Pay"/>
```

### 5.1. Creating a payment Paydirekt

Paydirekt payment is an immediate payment with one-hour delay.

The buyer pays the total sum for the purchase at once.

The payment is captured in the bank on the same day except if the merchant configures another date.

1. Use all the fields of the table below to create your payment form.

Field name	Description	Value
<b>vads_site_id</b>	Shop ID	E.g.: 12345678
<b>vads_ctx_mode</b>	Operating mode	<b>TEST</b> or <b>PRODUCTION</b>
<b>vads_trans_id</b>	Transaction number	E.g.: 123456

Field name	Description	Value
<b>vads_trans_date</b>	Date and time (in UTC format) of the payment form	E.g.: 20161019130025
<b>vads_capture_delay</b>	Delay before capture by the bank	E.g.: 0 It is a deferred payment, therefore the merchant can modify the value.
<b>vads_payment_config</b>	Payment type	<b>SINGLE</b>
<b>vads_amount</b>	Payment amount (in the smallest currency unit)	E.g.: 3000 for 30 euros
<b>vads_currency</b>	Country code of the card in compliance with the ISO 4217 standard.	E.g.: 978 for euro or 840 for USD
<b>vads_action_mode</b>	Acquisition mode for credit card data	<b>INTERACTIVE</b>
<b>vads_page_action</b>	Action to perform	<b>PAYMENT</b>
<b>vads_contract_used</b>	Value of the contract associated with the transaction.	<u>Example</u> : 8a82941854bf24050154bfd1f3200891
<b>vads_validation_mode</b>	Validation mode	<b>0</b> (Automatic)
<b>signature</b>	Alphanumeric signature	E.g.:  +NS0gyNeJw5IbQZZgX4XrFkKiQAC7r03OgBlhkgScJM=
<b>vads_version</b>	Version of the exchange protocol	<b>V2</b>

Table 1: List of required fields for a payment Paydirekt

- Use all the fields of the table below to set the mandatory buyer information to include in the authorization request to send to Paydirekt.

Field name	Description	Format	Required	Value
<b>vads_cust_title</b>	Buyer's marital status.	string		E.g.: Mister
<b>vads_cust_first_name</b>	Buyer's first name.	an..63	yes	E.g.: John
<b>vads_cust_last_name</b>	Buyer's last name.	an..63	yes	E.g.: Dupont
<b>vads_cust_address</b>	Buyer's street name. Can contain space, dot, period, apostrophe, dash and slash (/)	ans..255	yes	E.g.: test street
<b>vads_cust_zip</b>	Buyer's zip code	n5	yes	E.g.: 31000
<b>vads_cust_city</b>	Buyer's city. Can contain dash and apostrophe.	an..128	yes	E.g.: Toulouse
<b>vads_cust_country</b>	Allows to specify the country code in compliance with the ISO 3166 standard. Only French country code can be set.	a2	yes	<b>FR</b>
<b>vads_cust_cell_phone</b>	Buyer's cell phone number. from 0 to 9 without space	n10		E.g.: 0612345678
<b>vads_cust_email</b>	Buyer's e-mail address.	ans..255	yes	E.g.: name@example.com
<b>vads_cust_status</b>	Status	string (enum)	yes	<b>PRIVATE</b>

#### **vads\_cust\_status**

Only the **PRIVATE** value can be set (private individual). A company (**COMPANY**) can not benefit from this payment method.

- Add optional fields according to your requirements (see chapter **Using additional features** of the Payment form implementation guide available on our website: <https://payzen.io/de-DE/>).

You can transmit information about the buyer, the delivery, the content of the order ...

4. Compute the value of the **signature** field using all the fields of your form starting with **vads\_** (see chapter **Computing the signature** of the Payment form implementation guide available on our website: <https://payzen.io/de-DE/>).

Example of a form for an immediate payment:

```
<form method="POST" action="https://secure.payzen.eu/vads-payment/">
<input type="hidden" name="vads_action_mode" value="INTERACTIVE" />
<input type="hidden" name="vads_amount" value="3000" />
<input type="hidden" name="vads_capture_delay" value="0" />
<input type="hidden" name="vads_ctx_mode" value="TEST" />
<input type="hidden" name="vads_currency" value="978" />
<input type="hidden" name="vads_page_action" value="PAYMENT" />
<input type="hidden" name="vads_payment_config" value="SINGLE" />
<input type="hidden" name="vads_contract_used" value="8a82941854bdf24050154bfd1f3200891" />
<input type="hidden" name="vads_site_id" value="12345678" />
<input type="hidden" name="vads_trans_date" value="20161019101407" />
<input type="hidden" name="vads_trans_id" value="239848" />
<input type="hidden" name="vads_version" value="V2" />
<input type="hidden" name="signature" value="+NS0gyNeJw5IbQZZgX4XrFkKiQAC7r03OgBlhkgScJM=" />
<input type="submit" name="pay" value="Pay" />
</form>
```

## 6. SENDING THE PAYMENT REQUEST

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The buyer will be able to finalize his/her purchase once he/she is redirected to the payment page.

The buyer's browser must transmit the payment form data.

### 6.1. Redirecting the buyer to the payment page

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The URL of the payment gateway is:

<https://secure.payzen.eu/vads-payment/>

### 6.2. Processing errors

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If the payment platform detects an error while receiving the form, an error message will appear and the buyer will not be able to proceed to the payment.

#### in Test mode

The message indicates the source of the error and provides a link to the FAQ to help you fix it.

#### In PRODUCTION mode

The message simply indicates to the buyer that a technical problem has occurred.

In both cases the merchant receives a notification e-mail.

It contains:

- the source of the error,
- a link to FAQ to facilitate its analysis,
- all the fields of the form.

The FAQ is available here: <https://payzen.io/de-DE/error-code/error-00.html>

It is also possible to identify the error code by referring to the data dictionary. The **Viewing parameters sorted by category** chapter lists all the fields classified by category and identifies the associated error codes. For more information, in particular on the actions required to identify and correct the problem, please see the complete description of the field in question.

## 7. ANALYZING THE PAYMENT RESULT

The analysis of the payment result is described in the **Payment Form Implementation Guide** available in our online documentation archive (<https://payzen.io/de-DE/>).

This document only describes the steps of processing data relative to the response of a Paydirekt payment.

### 7.1. Processing data specific to a Paydirekt payment response

#### Characteristics of a Paydirekt payment

Paydirekt payment is an immediate payment with one-hour delay.

A transaction is always sent automatically on the same day except if the merchant configures another date.

Therefore, in the Back Office, a captured transaction appears in the **Captured transaction** tab but with a "pending" reconciliation status.

The IPN URL will contain the following information:

Field name	Description	Value
<b>vads_trans_status</b>	Payment status	The possible values are: <ul style="list-style-type: none"><li>• <b>ABANDONED</b> Payment abandoned by the buyer</li><li>• <b>WAITING_AUTHORISATION</b> Waiting for authorization.</li><li>• <b>CAPTURED</b> Presented or captured.</li><li>• <b>REFUSED</b> Declined</li></ul> For more information, see the Payment Form Implementation Guide available in our online documentation archive ( <a href="https://payzen.io/de-DE/">https://payzen.io/de-DE/</a> ).
<b>vads_auth_mode</b>	Authorization mode	Only the <b>FULL</b> value is possible. Authorization for the total amount of the transaction. Value used for immediate payments if the period between the requested capture date and the current date is strictly shorter than the authorization validity period.
<b>vads_payment_config</b>	Payment type	<b>SINGLE</b>
<b>vads_amount</b>	Amount in the smallest currency unit	Example: 100 for 1 euro
<b>vads_currency</b>	Payment currency	Example: 978 for Euro
<b>vads_card_brand</b>	Type of payment card	<b>PAYDIREKT</b>
<b>vads_presentation_date</b>	Date of capture in the bank	Paydirekt transactions are always sent on the same day with one-hour delay except if the merchant configures another date.
<b>vads_contract_used</b>	Value of the contract associated with the transaction	32 hexadecimal characters Example: 8a82941854bf24050154bfd1f3200891

Table 2: List of fields to analyze

### 7.2. Managing return codes specific to a payment Paydirekt

To see the result of the payment authorization request, save the value of the **vads\_auth\_result**.

There are around 500 return codes used to interpret acquirer's responses. Each code consists of 3 groups of 3 digits. This codification is based on the following logic:

1. xxx = Approximative explanations.
2. xxx = Detailed explanations.
3. xxx = Exact reasons.

#### Example of a return code

**800.100.153** signifies: 800 = the bank declined the payment, 100 = the bank refused the authorization, 153 = the bank refused the authorization because of an incorrect CVV.

Some specific return codes are presented in the table below. You can contact the support team for more details.

Codes	Description
000.000.000	Transaction succeeded
000.400.101	card not participating/authentication unavailable
800.100.100	transaction declined for unknown reason
800.100.150	transaction declined (refund on gambling tx not allowed)
800.100.151	transaction declined (invalid card)
800.100.152	transaction declined by authorization system
800.100.153	transaction declined (invalid CVV)
800.100.154	transaction declined (transaction marked as invalid)
800.100.155	transaction declined (amount exceeds credit)
800.100.156	transaction declined (format error)
800.100.157	transaction declined (wrong expiry date)
800.100.158	transaction declined (suspecting manipulation)
800.100.159	transaction declined (stolen card)
800.100.160	transaction declined (card blocked)
800.100.161	transaction declined (too many invalid tries)
800.100.162	transaction declined (limit exceeded)
800.100.163	transaction declined (maximum transaction frequency exceeded)
800.100.164	transaction declined (merchants limit exceeded)
800.100.165	transaction declined (card lost)
800.100.166	transaction declined (Incorrect personal identification number)
800.100.167	transaction declined (referencing transaction does not match)
800.100.168	transaction declined (restricted card)
800.100.169	transaction declined (card type is not processed by the authorization center)
800.100.170	transaction declined (transaction not permitted)
800.100.171	transaction declined (pick up card)
800.100.172	transaction declined (account blocked)
800.100.173	transaction declined (invalid currency, not processed by authorization center)
800.100.174	transaction declined (invalid amount)
800.100.175	transaction declined (invalid brand)
800.100.176	transaction declined (account temporarily not available. Please try again later)
800.100.177	transaction declined (amount field should not be empty)
800.100.178	transaction declined (PIN entered incorrectly too often)
800.100.179	transaction declined (exceeds withdrawal count limit)
800.100.190	transaction declined (invalid configuration data)
800.100.191	transaction declined (transaction in wrong state on acquirer side)
800.100.192	transaction declined (invalid CVV, Amount has still been reserved on the customer's card and will be released in a few business days. Please ensure the CVV code is accurate before retrying the transaction)
800.100.195	transaction declined (UserAccount Number/ID unknown)
800.100.196	transaction declined (registration error)

Codes	Description
800.100.197	transaction declined (registration cancelled externally)
800.100.198	transaction declined (invalid holder)
800.100.402	cc/bank account holder not valid
800.100.500	Card holder has advised his bank to stop this recurring payment
800.100.501	Card holder has advised his bank to stop all recurring payments for this merchant
800.700.100	transaction for the same session is currently being processed, please try again later.

*Table 3: Specific return codes*

## 8. IDENTIFYING AUTHORIZED OPERATIONS PAYDIREKT

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Your Back Office enables you to execute several operations with transactions.

The operations are always accessible from these 3 areas:

- **In the title bar**

**Note:**

*Only available or authorized operations are enabled.*

- **Using right click**
- In **transaction details** (accessible by double-clicking the transaction):

The available operations for a Paydirekt transaction are:

**Transactions in progress**

- Modify

**Captured transactions**

- Refund

### 8.1. Making a refund

---

Transactions that can be refunded are those that have been captured. These transactions appear in the **Captured transactions** tab.

1. Select a transaction to refund with a right-click.

2. Select **Perform a refund** in the context menu.

The dialog box **Transaction refund** appears.

3. Enter the amount that you wish to refund.

The refund amount cannot be greater than the initial amount. Therefore, it can be less than or equal to the displayed amount.

4. Click on **Perform a refund**.

Details of this operation appear.

### 8.2. Modifying a transaction

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The **Modify** option is only available for transactions with the following statuses:

- To be validated
- To be validated and authorized
- Waiting for authorization.
- Waiting for capture.

In order to modify a transaction:

1. Select a Paydirekt transaction with a right-click.

2. Select **Modify**.

The dialog box **Editing a transaction** appears.



**3. Enter a new amount.**

Unlike in the case of an immediate payment, as long as the transaction has not reached the presentation date, the merchant can modify the amount. The new amount must be lower than the initial amount.

**4. Specify the presentation date.**

The presentation date can be changed to an earlier or a later date.

- For transactions with the **Waiting for capture** or **To be validated** status, the possible presentation range is 3 days. The authorization request valid for 3 days has already been made.
- For transactions with the **To be validated and authorized** or **Waiting for authorization** status, you can enter the presentation date of your choice.

It is also possible to validate a transaction with the **To be validated** or **To be validated and authorized** status by checking **Validate the transaction**.

**5. Click **Validate**.**

If you wish, you can display the transaction details to see the changes that have been made (right-click the modified transaction > **Display transaction details**).