

Training path “Application developer - PHP / Symfony”

Project n°7 - Create a web service exposing an API

# User manual

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# Online documentation

The auto-generated API documentation can be found on this URL:

<https://<domain>/api/doc>

## Getting a new authentication token

### Request method

POST

### Request URL

<https://<domain>/oauth/v2/token>

### Request URL parameters

None

### Request headers

Key	Value	Value example
Content-Type	application/json	

### Request body data

All fields are required.

```
{
  "grant_type": "password",
  "client_id": "<client DB id and client DB random_id
                separated by an underscore>",
  "client_secret": "<client secret stored in the DB>",
  "username": "<client username>",
  "password": "<client password>"
}
```

### Request body example

```
{
  "grant_type": "password",
  "client_id": "1_r37t386jjuxo5aadak08",
  "client_secret": "x7qwl7n32cswwck0iqed5zzfwatvyha702azc3i9",
  "username": "myshop1",
  "password": "myshopPwd"
}
```

### Response

If the provided data is valid

Status: 200 OK

Received body:

```
{
  "access_token": "OGM0NzAxMTRlY2FjMGI1Mzg2MDZlMku4ZGIyNDZlMzJhMmE1ZDdjOTVmMWI2MTE0NjU1ZmRiNTNlY2Y2ODdiOA",
  "expires_in": 28800,
  "token_type": "bearer",
  "scope": null,
  "refresh_token": "YzUzMWJjOTNmODU3YWYyMzgxYWE1MTkwYzZkNGI1M2FkYzgyYjU1MDQ0ZmI3ZmVjZGY3NothYzk5MTMwMjAwZQ"
}
```

If grant\_type is missing or not valid

Status: 400 Bad Request

Received body:

```
{
  "error": "invalid_request",
  "error_description": "Invalid grant_type parameter or parameter missing"
}
```

If client\_id or client\_secret is not valid, or if client\_secret is missing

Status: 400 Bad Request

Received body:

```
{
  "error": "invalid_client",
  "error_description": "The client credentials are invalid"
}
```

If client\_id is missing

Status: 400 Bad Request

Received body:

```
{
  "error": "invalid_client",
  "error_description": "Client id was not found in the headers or body"
}
```

If the username or password is not valid

Status: 400 Bad Request

Received body:

```
{
  "error": "invalid_grant",
  "error_description": "Invalid username and password combination"
}
```

If the username or password is missing

Status: 400 Bad Request

Received body:

```
{
  "error": "invalid_request",
  "error_description": "Missing parameters. \"username\" and \"password\" required"
}
```

# Refreshing an authentication token

## Request method

POST

## Request URL

<https://<domain>/oauth/v2/token>

## Request URL parameters

None

## Request headers

Key	Value	Value example
Content-Type	application/json	

## Request body data

All fields are required.

```
{
  "grant_type": "refresh_token",
  "client_id": "<client DB id and client DB random_id
                separated by an underscore>",
  "client_secret": "<client secret stored in the DB>",
  "refresh_token": "<client refresh token>"
}
```

## Request body example

```
{
  "grant_type": "refresh_token",
  "client_id": "1_r37t386jjuxo5aadak08",
  "client_secret": "x7qwl7n32cswwck0iqed5zzfwatvyha702azc3i9",
  "refresh_token": "YzJmZTFhMWZlOM...3NwMGQ1NjNmOQ"
}
```

## Response

If each data is valid

Status: 200 OK

Received body:

```
{
  "access_token": "YTdmNjU3MDM1OWQxMjg1ZjllMTWJlM...TkzMmY5OTliODM2MzZlOTc0ZDN1Nw",
  "expires_in": 28800,
  "token_type": "bearer",
  "scope": null,
  "refresh_token": "ZmIyNGQ3N2EwNTMzODA4ZDEdGd5yY...MVhMzAzMTJjN2Y2NzhjODA1NTJjMw"
}
```

If grant\_type, client\_id or client\_secret is missing or invalid:

Same as above (see “Getting a new authentication token”).

If refresh\_token has expired

Status: 400 Bad Request

Received body:

```
{
  "error": "invalid_grant",
  "error_description": "Refresh token has expired"
}
```

If refresh\_token is not valid

Status: 400 Bad Request

Received body:

```
{
  "error": "invalid_grant",
  "error_description": "Invalid refresh token"
}
```

If refresh\_token is missing

Status: 400 Bad Request

Received body:

```
{
  "error": "invalid_request",
  "error_description": "No \"refresh_token\" parameter found"
}
```

# Getting an end user list

## Request method

GET

## Request URL

[https://<domain>/api/end-users?  
lastname=<end\\_users\\_lastname>&order=<sort\\_order>&  
limit=<nb\\_per\\_page>&page=<page\\_number>](https://<domain>/api/end-users?lastname=<end_users_lastname>&order=<sort_order>&limit=<nb_per_page>&page=<page_number>)

## Request URL parameters

*lastname* (optional): End users lastname, or a substring of the end users lastname(s).  
*Accepted values:* any string containing lowercase or uppercase letters. The research is case insensitive.  
*Default:* None

*order* (optional): Order in which the resulting end users are sorted by lastname.  
*Accepted values:* “asc” or “desc”, in lowercase.  
*Default:* asc

*limit* (optional): Max number of end users per page.  
*Accepted values:* any integer greater than 0.  
*Default:* 20

*page* (optional): Results page number.  
*Accepted values:* any integer greater than 0.  
*Default:* 1

## Request headers

Key	Value	Value example
Content-Type	application/json	
Authorization	Bearer <auth_token>	Bearer YTdmNIIMTIM...TkTliDNINw

## Request body

None

## Request URL examples

<https://<domain>/api/end-users>

<https://<domain>/api/end-users?lastname=foo&order=desc&limit=3&page=5>

## Response

If there is no error

Status: 200 OK

Example URL:

<https://<domain>/api/end-users?lastname=le&order=desc&limit=2&page=1>

Received body:

```
{
  "data": [
    {
      "id": 118,
      "first_name": "Carine",
      "last_name": "Levant",
      "email": "c.levant3@lemel.fr",
      "phone_number": "0123456777",
      "creation_date": "2020-01-20T11:17:48+00:00",
      "last_update_date": null,
      "_links": {
        "self": {
          "href": "https://oc-p7/api/end-users/118"
        },
        "modify": {
          "href": "https://oc-p7/api/end-users/118"
        },
        "delete": {
          "href": "https://oc-p7/api/end-users/118"
        }
      }
    },
    {
      "id": 20,
      "first_name": "Alice",
      "last_name": "Leleu",
      "email": "Alice.Leleu63@mail465.loc",
      "phone_number": "2380051489",
      "creation_date": "2019-06-05T13:55:10+00:00",
      "last_update_date": null,
      "_links": {
        "self": {
          "href": "https://oc-p7/api/end-users/20"
        },
        "modify": {
          "href": "https://oc-p7/api/end-users/20"
        },
        "delete": {
          "href": "https://oc-p7/api/end-users/20"
        }
      }
    }
  ],
  "meta": {
    "limit": 2,
    "current_items": 2,
    "total_items": 5,
    "offset": 1,
    "page": 1
  }
}
```

If the page number is too high

Status: 404 Not Found

Received body:

```
{
  "code": 404,
  "message": "The requested page number is out of range."
}
```

# Getting a single end user

## Request method

GET

## Request URL

[https://<domain>/api/end-users/<end\\_user\\_id>](https://<domain>/api/end-users/<end_user_id>)

## Request URL parameters

<end\_user\_id> (required) = End user DB id

## Request headers

Key	Value	Value example
Content-Type	application/json	
Authorization	Bearer <auth_token>	Bearer YTdmNIIMTIM...TkTliDNINw

## Request body

None

## Response

If there is no error

Status: 200 OK

Received body:

```
{
  "id": 1,
  "first_name": "Alice",
  "last_name": "Uzul",
  "email": "Alice.Uzul65@mail203.loc",
  "phone_number": "0125979077",
  "creation_date": "2019-06-05T13:55:10+00:00",
  "last_update_date": null,
  "_links": {
    "self": {
      "href": "http://oc-p7/api/end-users/1"
    },
    "modify": {
      "href": "http://oc-p7/api/end-users/1"
    },
    "delete": {
      "href": "http://oc-p7/api/end-users/1"
    }
  }
}
```

If the requested user does not belong to the authenticated client

Status: 403 Forbidden

Received body:

```
{
  "code": 403,
  "message": "You are not authorized to access this resource."
}
```



If the requested user does not exist

Status: 404 Not Found

Received body:

```
{  
  "code": 404,  
  "message": "User not found."  
}
```

# Adding a new end user

## Request method

POST

## Request URL

<https://<domain>/api/end-users>

## Request URL parameters

None

## Request headers

Key	Value	Value example
Content-Type	application/json	
Authorization	Bearer <auth_token>	Bearer YTdmNIIMTIM...TkTliDNINw

## Request body data

```
{
  "first_name": "<end user first name (required)>",
  "last_name": "<end user last name (required)>",
  "email": "<end user email address (required, unique)>",
  "phone_number": "<end user phone number (optional, unique)>"
}
```

## Request body examples

```
{
  "first_name": "Stéphane",
  "last_name": "Imaly",
  "email": "steph2@imaly.com",
  "phone_number": "0766661111"
}

{
  "first_name": "Jean",
  "last_name": "Martin",
  "email": "martin@mymail.net"
}
```

## Response

If there is no error

Status: 201 Created

Sent body example (with phone number):

```
{
  "first_name": "David",
  "last_name": "Madalin",
  "email": "dav@email.net",
  "phone_number": "0123456789"
}
```

Received body:

```
{
  "id": 117,
  "first_name": "David",
  "last_name": "Madalin",
  "email": "dav@email.net",
  "phone_number": "0123456789",
  "creation_date": "2020-01-20T11:13:46+00:00",
  "last_update_date": null,
  "_links": {
    "self": {
      "href": "https://oc-p7/api/end-users/117"
    },
    "modify": {
      "href": "https://oc-p7/api/end-users/117"
    },
    "delete": {
      "href": "https://oc-p7/api/end-users/117"
    }
  }
}
```

Sent body example (without phone number):

```
{
  "first_name": "Carine",
  "last_name": "Levant",
  "email": "c.levant@lemel.fr"
}
```

Received body:

```
{
  "id": 119,
  "first_name": "Carine",
  "last_name": "Levant",
  "email": "c.levant@lemel.fr",
  "phone_number": null,
  "creation_date": "2020-01-20T11:19:16+00:00",
  "last_update_date": null,
  "_links": {
    "self": {
      "href": "https://oc-p7/api/end-users/119"
    },
    "modify": {
      "href": "https://oc-p7/api/end-users/119"
    },
    "delete": {
      "href": "https://oc-p7/api/end-users/119"
    }
  }
}
```

If the email address already exists

Status: 400 Bad Request

Received body:

```
{
  "code": 400,
  "message": "The JSON sent contains invalid data. Here are the errors you need to correct: Field email: This email address already exists. "
}
```

If the phone number already exists

Status: 400 Bad Request

Received body:

```
{
  "code": 400,
  "message": "The JSON sent contains invalid data. Here are the errors you need to correct: Field phoneNumber: This phone number already exists. "
}
```

If the email address and the phone number already exist

Status: 400 Bad Request

Received body:

```
{
  "code": 400,
  "message": "The JSON sent contains invalid data. Here are the errors you need to correct: Field email: This email address already exists. Field phoneNumber: This phone number already exists. "
}
```

If the first name is empty ("first\_name": "") or missing (not present at all in the request body)

Status: 400 Bad Request

Received body:

```
{
  "code": 400,
  "message": "The JSON sent contains invalid data. Here are the errors you need to correct: Field firstName: This value should not be blank. "
}
```

If the last name is empty ("last\_name": "") or missing (not present at all in the request body)

Status: 400 Bad Request

Received body:

```
{
  "code": 400,
  "message": "The JSON sent contains invalid data. Here are the errors you need to correct: Field lastName: This value should not be blank. "
}
```

If the email address is empty ("email": "") or missing (not present at all in the request body)

Status: 400 Bad Request

Received body:

```
{
  "code": 400,
  "message": "The JSON sent contains invalid data. Here are the errors you need to correct: Field email: This value should not be blank. "
}
```

# Updating an existing end user

## Request method

PUT

## Request URL

[https://<domain>/api/end-users/<end\\_user\\_DB\\_id>](https://<domain>/api/end-users/<end_user_DB_id>)

## Request URL parameters

<end\_user\_DB\_id> (required): End user DB id

## Request headers

Key	Value	Value example
Content-Type	application/json	
Authorization	Bearer <auth_token>	Bearer YTdmNIIMTIM...TkTliDNINw

## Request body data

```
{
  "first_name": "<end user first name (required)>",
  "last_name": "<end user last name (required)>",
  "email": "<end user email address (required, unique)>",
  "phone_number": "<end user phone number (optional, unique)>"
}
```

## Request body examples

```
{
  "first_name": "Stéphane",
  "last_name": "Imaly",
  "email": "steph2@imaly.com",
  "phone_number": "0766661111"
}

{
  "first_name": "Jean",
  "last_name": "Martin",
  "email": "martin@mymail.net"
}
```

## Response

If there is no error

Status: 200 OK

Sent body example:

```
{
  "first_name": "James",
  "last_name": "Rowan",
  "email": "james@rowan.net",
  "phone_number": "0152465812"
}
```

Received body:

```
{
  "id": 120,
  "first_name": "James",
  "last_name": "Rowan",
  "email": "james@rowan.net",
  "phone_number": "0152465812",
  "creation_date": "2020-01-20T14:49:11+00:00",
  "last_update_date": "2020-01-20T14:54:04+00:00",
  "_links": {
    "self": {
      "href": "https://oc-p7/api/end-users/120"
    },
    "modify": {
      "href": "https://oc-p7/api/end-users/120"
    },
    "delete": {
      "href": "https://oc-p7/api/end-users/120"
    }
  }
}
```

If the email address already exists for another end user

Status: 400 Bad Request

Received body:

```
{
  "code": 400,
  "message": "The JSON sent contains invalid data. Here are the errors you need to correct: Field email: This email address already exists. "
}
```

If the phone number already exists for another end user

Status: 400 Bad Request

Received body:

```
{
  "code": 400,
  "message": "The JSON sent contains invalid data. Here are the errors you need to correct: Field phoneNumber: This phone number already exists. "
}
```

If the email address and the phone number already exist for another end user

Status: 400 Bad Request

Received body:

```
{
  "code": 400,
  "message": "The JSON sent contains invalid data. Here are the errors you need to correct: Field email: This email address already exists. Field phoneNumber: This phone number already exists. "
}
```

If the first name and/or the last name and/or the email address are empty (example: "first\_name": "") or missing (not present at all in the request body)

Same as above (see "Adding a new end user").

If the user requested for update does not belong to the authenticated client, or if the user requested for update does not exist

Same as above (see "Getting a single end user").

# Deleting an end user

## Request method

DELETE

## Request URL

[https://<domain>/api/end-users/<end\\_user\\_DB\\_id>](https://<domain>/api/end-users/<end_user_DB_id>)

## Request URL parameters

<end\_user\_DB\_id> (required): End user DB id

## Request headers

Key	Value	Value example
Content-Type	application/json	
Authorization	Bearer <auth_token>	Bearer YTdmNIIMTIM...TkTliDNINw

## Request body

None

## Response

If there is no error

Status: 204 No Content

Received body: Empty

If the user requested for deletion does not belong to the authenticated client

Status: 403 Forbidden

Received body:

```
{
  "code": 403,
  "message": "You are not authorized to access this resource."
}
```

If the user requested for deletion does not exist

Status: 404 Not Found

Received body:

```
{
  "code": 404,
  "message": "User not found."
}
```

# Getting a product list

## Request method

GET

## Request URL

[https://<domain>/api/products?brand=<products\\_brand>&order=<sort\\_order>&limit=<nb\\_per\\_page>&page=<page\\_number>](https://<domain>/api/products?brand=<products_brand>&order=<sort_order>&limit=<nb_per_page>&page=<page_number>)

## Request URL parameters

*brand* (optional): Products brand name, or a substring of the products brand name(s).

*Accepted values:* any string containing lowercase or uppercase letters and/or numbers. The research is case insensitive.

*Default:* None

*order* (optional): Order in which the resulting products are sorted by brand name.

*Accepted values:* "asc" or "desc", in lowercase.

*Default:* asc

*limit* (optional): Max number of products per page.

*Accepted values:* any integer greater than 0.

*Default:* 20

*page* (optional): Results page number.

*Accepted values:* any integer greater than 0.

*Default:* 1

## Request headers

Key	Value	Value example
Content-Type	application/json	
Authorization	Bearer <auth_token>	Bearer YTdmNIIMTIM...TkTliDNINw

## Request body

None

## Response

If there is no error

Status: 200 OK

Example URL: <https://<domain>/api/products>

Received body (extract):

```
{
  "data": [
    {
      "id": 5,
      "reference": "nry2IZSb4a",
      "brand": "Brand1",
      "model": "Model4",
      "mem_capacity": 16,
```



```

        "screen_size": 5.4,
        "color": "Black",
        "price": 112000,
        "stock": 29,
        "creation_date": "2019-06-05T13:55:10+00:00",
        "last_update_date": null,
        "_links": {
            "self": {
                "href": "http://oc-p7/api/products/5"
            }
        }
    },
    {
        "id": 8,
        "reference": "9LRC4WxGfw",
        "brand": "Brand1",
        "model": "Model7",
        "mem_capacity": 32,
        "screen_size": 5.9,
        "color": "Blue",
        "price": 55000,
        "stock": 40,
        "creation_date": "2019-06-05T13:55:10+00:00",
        "last_update_date": null,
        "_links": {
            "self": {
                "href": "http://oc-p7/api/products/8"
            }
        }
    },
    [...]
],
"meta": {
    "limit": 10,
    "current_items": 10,
    "total_items": 20,
    "offset": 1,
    "page": 1
}
}

```

Example URL: <https://<domain>/api/products?limit=3&page=5>

Received body:

```

{
    "data": [
        {
            "id": 19,
            "reference": "B6bPUDJaug",
            "brand": "Brand2",
            "model": "Model18",
            "mem_capacity": 16,
            "screen_size": 5.4,
            "color": "Blue",
            "price": 73000,
            "stock": 33,
            "creation_date": "2019-06-05T13:55:10+00:00",
            "last_update_date": null,
            "_links": {
                "self": {
                    "href": "http://oc-p7/api/products/19"
                }
            }
        },
        {
            "id": 20,
            "reference": "QrKDm7a69N",
            "brand": "Brand2",
            "model": "Model19",
            "mem_capacity": 16,
            "screen_size": 5.9,

```

```

        "color": "Black",
        "price": 62000,
        "stock": 8,
        "creation_date": "2019-06-05T13:55:10+00:00",
        "last_update_date": null,
        "_links": {
            "self": {
                "href": "http://oc-p7/api/products/20"
            }
        }
    },
    {
        "id": 2,
        "reference": "PuLyZqvNom",
        "brand": "Brand3",
        "model": "Model1",
        "mem_capacity": 32,
        "screen_size": 6.4,
        "color": "Blue",
        "price": 59000,
        "stock": 40,
        "creation_date": "2019-06-05T13:55:10+00:00",
        "last_update_date": null,
        "_links": {
            "self": {
                "href": "http://oc-p7/api/products/2"
            }
        }
    }
],
"meta": {
    "limit": 3,
    "current_items": 3,
    "total_items": 20,
    "offset": 13,
    "page": 5
}
}

```

If the page number is too high

Status: 404 Not Found

Received body:

```

{
  "code": 404,
  "message": "The requested page number is out of range."
}

```

# Getting a single product

## Request method

GET

## Request URL

[https://<domain>/api/products/<product\\_id>](https://<domain>/api/products/<product_id>)

## Request URL parameters

<product\_id> (required) = Product DB id

## Request headers

Key	Value	Value example
Content-Type	application/json	
Authorization	Bearer <auth_token>	Bearer YTdmNIIMTIM...TkTliDNINw

## Request body

None

## Request URL example

<https://<domain>/api/products/32>

## Response

If there is no error

Status: 200 OK

Received body:

```
{
  "id": 32,
  "reference": "0JdBWCE8Py",
  "brand": "Brand2",
  "model": "Model11",
  "mem_capacity": 16,
  "screen_size": 6.4,
  "color": "Silver",
  "price": 110000,
  "stock": 28,
  "creation_date": "2020-01-31T10:31:44+00:00",
  "last_update_date": null,
  "_links": {
    "self": {
      "href": "https://oc-p7/api/products/32"
    }
  }
}
```

If the requested product does not exist

Status: 404 Not Found

Received body:

```
{
  "code": 404,
  "message": "Product not found."
}
```

# General errors

## ***Method not allowed:***

When an unallowed method is used with a given URL.

Example:

Request method

**POST**

Request URL

<https://<domain>/api/products/>

Request URL parameters

None

Request headers

Key	Value	Value example
Content-Type	application/json	
Authorization	Bearer <auth_token>	Bearer YTdmNIIMTIM...TkTliDNINw

Request body

None

Response

Received body:

```
{
  "code": 405,
  "message": "Method Not Allowed"
}
```

## ***Bad Request:***

When a malformed request is sent. For example, if the *null* value case is not respected, and sent in uppercase (*NULL*).

Example:

Request method

POST

Request URL

<https://<domain>/api/end-users>

Request URL parameters

None

### Request headers

Key	Value	Value example
Content-Type	application/json	
Authorization	Bearer <auth_token>	Bearer YTdmNIIMTIM...TkTliDNINw

### Request body

```
{
  "first_name": "Marcel",
  "last_name": "Deleuze",
  "email": "mdeleuze246@mail.com",
  "phone_number": NULL
}
```

### Response

Received body:

```
{
  "code": 400,
  "message": "Bad Request"
}
```

=== End of document ===