
LLZW

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CHAPTER 1

Authentication

This endpoint performs login action. After a successful login, the server will send you an authenticated COOKIE which represents all your privileges.

All your subsequent requests will inherit this identity.

1.1 HTTP Request

POST `http://example.com/login`

1.2 Request Parameters

Parameter	Type	Required	Default	Description
username	String	True	.	Your username
password	String	True	.	Your password

The response JSON structured like this:

```
{
  "responseId": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
  "sucess": true,
  "data": null
}
```


2.1 Registration

This endpoint registers a new user.

2.1.1 HTTP Request

POST `http://example.com/api/v1/users/register`

2.1.2 Request Parameters

Parameter	Type	Required	Default	Description
username	String	True	•	Username with pattern [a-zA-Z]{5,50}
password	String	True	•	At least 1 upper case, 1 lower case, 1 digit and 1 symbol, min length = 8
email	String	True	•	min length = 5, max length = 100
phoneNumber	String	True	•	min length = 5, max length = 20
role	String	True	•	One of ['ROLE_SELLER', 'ROLE_CUSTOMER']
nickname	String	False	username	Nickname, max length = 100.
avatar	String	False	•	Image URL of avatar, which can be external URL or hash value of an uploaded image file

2.1.3 Response Parameters

Parameter	Type	Description
data	User	The created User object

2.2 Real Name Verification

This endpoint provides real name verification details for a specific user.

2.2.1 HTTP Request

PUT `http://example.com/api/v1/users/realNameVerification`

2.2.2 Request Parameters

Parameter	Type	Required	Default	Description
identityType	String	True	.	One of ['PRC_ID', 'PASSPORT']
identityNumber	String	True	.	ID of specified document, min length = 1, max length = 20
firstName	String	True	.	min length = 1, max length = 20
lastName	String	True	.	min length = 1, max length = 20

2.2.3 Response Parameters

Parameter	Type	Description
data	User	The modified User object

Attention: Remember — You must be authenticated before using this API

2.3 Update Password

This endpoint updates a specific user's password

2.3.1 HTTP Request

PUT <http://example.com/api/v1/users/updatePassword>

2.3.2 Request Parameters

Parameter	Type	Required	Default	Description
oldPassword	String	True	.	Current password
newPassword	String	True	.	New password

2.3.3 Response Parameters

Parameter	Type	Description
data	User	The modified User object

Attention: Remember — You must be authenticated before using this API

2.4 Get Current User's Information

This endpoint retrieves a user's information

2.4.1 HTTP Request

GET `http://example.com/api/v1/users/me`

2.4.2 Response Parameters

Parameter	Type	Description
data	User	The current User object

Attention: Remember — You must be authenticated before using this API

2.5 Update Current User's Information

This endpoint updates a user's information

2.5.1 HTTP Request

PATCH `http://example.com/api/v1/users/me`

2.5.2 Request Parameters

Parameter	Type	Required	Default	Description
nickname	String	False	.	Nickname, max length = 100.
email	String	False	.	min length = 5, max length = 100
phoneNumber	String	False	.	min length = 5, max length = 20
avatar	String	False	.	Image URL of avatar, which can be external URL or hash value of an uploaded image file

2.5.3 Response Parameters

Parameter	Type	Description
data	User	The modified User object

Attention: Remember — You must be authenticated before using this API

3.1 Product Entity Definition

3.1.1 Properties

Parameter	Type	Description
id	Integer	Product ID
seller	String	Username of seller
name	String	Name of this product
introduction	String	Introduction of this product. The content is defined by client's implementation.
mainImage-Files	String[]	Hash values of product main images (max = 9). These files should be uploaded first.
createdAt	Date	Creation time
updatedAt	Date	Update time
price	Float	Price
ca	String	Certificate authority name
certId	String	Qualification certificate id
caFile	String	Certificate file hash value, this file should be uploaded first, and its type must be image or PDF
category	String	Categories of this product, separated by dot.
feature	String	Features. The content is defined by client's implementation.
stat	Product-Stat	Statistics Info for this product
valid	Boolean	Valid flag

3.1.2 Example JSON Representation

```
{
  "id": 1,
```

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```
"seller": {
  "username": "USERNAME_OF_SELLER",
  "nickname": "NICKNAME_OF_SELLER"
},
"name": "NAME_OF_THIS_PRODUCT",
"introduction": "INTRODUCTION_OF_THIS_PRODUCT",
"mainImageFiles": [
  "1dd4984b0d118569da8620fe67e7fd4bd2889bb316d5ee40ba914eb65f19107d",
  "d0673d4e73e191cc5ba3588f9eac52f7c15e4cba3fc3c229f47ea85d959f97b0"
],
"createdAt": "2019-10-1 3:00 PM GMT+1:00",
"updatedAt": "2019-10-1 3:00 PM GMT+1:00",
"price": 10.00,
"ca": "CNAS",
"certId": "XXXXXXXXXXXXXXXXXXXXXXXXXXXX",
"caFile": "28e51044f4a9cbac2bbd3d8a9d8c902ad1455d42208277ac4a913b003038a3dc",
"stat" {
  "salesLastMonth": 100,
  "currentStocks": 9999
},
"valid": true
}
```

3.2 Search Products by Parameters

This endpoint retrieves all products.

3.2.1 HTTP Request

GET <http://example.com/api/v1/products>

3.2.2 Request Parameters

Parameter	Type	Required	Default	Description
page	Integer	False	0	The page index from 0
size	Integer	False	20	Page size
valid	Boolean	False	True	Result products should be valid or invalid.
name	String	False	.	Name of this product. This field is matched in fuzzy mode.
introduction	String	False	.	Introduction of this product. This field is matched in fuzzy mode.
category	String	False	.	Categories of this product, separated by dot. This field is matched in fuzzy mode.
feature	String	False	.	Features. This field is matched in fuzzy mode.
global	String	False	.	Any product that contains this global search criterion in its name or introduction field will be matched

Note: The other fields will be ignored if `global` field is present. All other fields except `global` can be matched in combination.

3.2.3 Response Parameters

Parameter	Type	Description
data	Product[]	List of matching Product objects

3.3 Get a Specific Product

This endpoint retrieves a specific product.

3.3.1 HTTP Request

GET `http://example.com/api/v1/products/<ID>`

3.3.2 Path Parameter

Parameter	Required	Description
ID	True	Product ID

3.3.3 Response Parameters

Parameter	Type	Description
data	Product	The matching Product object

3.4 Create a Product

This endpoint creates a new product.

3.4.1 HTTP Request

POST `http://example.com/api/v1/products`

3.4.2 Request Parameters

Parameter	Type	Required	Default	Description
name	String	True	.	Name of this product
introduction	String	True	.	Introduction of this product
price	Float	True	.	Price of this product
ca	String	True	.	Certificate authority name
certId	String	True	.	Qualification certificate id
caFile	String	True	.	Hash of uploaded CA file
category	String	True	.	Categories of this product, separated by dot.
feature	String	True	.	Features. The content is defined by client's implementation.
mainImageFiles	String[]	False	.	Main image URLs for this product, which can be the HASH value of uploaded images. Max length = 9

3.4.3 Response Parameters

Parameter	Type	Description
data	Product	The created Product object

Attention: Remember — You must be authenticated with `SELLER` role before using this API

Note: The order of `mainImageFiles` will be preserved.

3.5 Update a Specific Product

This endpoint updates information of a specific product.

3.5.1 HTTP Request

PATCH `http://example.com/api/v1/products/<ID>`

3.5.2 Path Parameter

Parameter	Required	Description
ID	True	Product ID

3.5.3 Request Parameters

Parameter	Type	Required	Default	Description
name	String	False	•	Name of this product
introduction	String	False	•	Introduction of this product
price	Float	False	•	Price of this product
ca	String	False	•	Certificate authority name
certId	String	False	•	Qualification certificate id
caFile	String	False	•	Hash of uploaded CA file
mainImageFiles	String[]	False	•	Main image URLs for this product, which can be the HASH value of uploaded images. Max length = 9

Attention: Remember — You must be authenticated with <code>SELLER</code> role before using this API
--

Note: The order of `mainImageFiles` will be updated to the same as you requested (if present).

3.6 Invalidate a Specific Product

This endpoint invalidates a specific product, so all stocks of this product will no longer be in the queue for sale.

It will NOT delete it from database.

3.6.1 HTTP Request

DELETE `http://example.com/api/v1/products/<ID>`

3.6.2 Path Parameter

Parameter	Required	Description
ID	True	Product ID

Attention: Remember — You must be authenticated with `SELLER` role before using this API

4.1 Stock Entity Definition

4.1.1 Properties

Parameter	Type	Description
id	Integer	Stock ID
product	Integer	Parent product ID
createdAt	Date	Creation time
updatedAt	Date	Update time
producedAt	Date	Production time
inboundedAt	Date	Inbound time
shelfLife	Integer	Shelf-Life of this stock
totalQuantity	Integer	Total quantity of this stock
currentQuantity	Integer	Current quantity of this stock
trackingId	String	Shipment tracking id
carrierName	String	Carrier name
valid	Boolean	Valid flag

4.1.2 Example JSON Representation

```
{
  "id": 1,
  "product": 2333,
  "createdAt": "2019-10-1 3:00 PM GMT+1:00",
  "updatedAt": "2019-10-1 3:00 PM GMT+1:00",
  "producedAt": "2019-10-1 3:00 PM GMT+1:00",
  "inboundedAt": "2019-10-1 3:00 PM GMT+1:00",
  "shelfLife": 365,
```

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```
"totalQuantity": 10000,  
"currentQuantity": 6999,  
"trackingId": "XXXXXXXXXXXXXXXXXXXXXXXXXXXX",  
"carrierName": "SF-Express",  
"valid": true  
}
```

4.2 Get Stocks by Parameters

This endpoint retrieves all stocks that satisfy given parameters

4.2.1 HTTP Request

GET <http://example.com/api/v1/stocks>

4.2.2 Request Parameters

Parameter	Type	Required	Default	Description
page	Integer	False	0	The page index from 0
size	Integer	False	20	Page size
productId	Integer	False	.	ID of the product it belongs to
shelfLife	Integer	False	.	Shelf-Life of the stock
trackingId	String	False	.	Tracking ID of this shipment
carrierName	String	False	.	Carrier Name of this shipment
valid	Boolean	False	.	The status of this stock

4.2.3 Response Parameters

Parameter	Type	Description
data	Stock[]	List of matching Stock objects

Attention: Remember — You must be authenticated with SELLER or CUSTOMER role before using this API

4.3 Get a Specific Stock

This endpoint retrieves a specific stock with id

4.3.1 HTTP Request

GET `http://example.com/api/v1/stocks/<ID>`

4.3.2 Path Parameter

Parameter	Required	Description
ID	True	Stock ID

4.3.3 Response Parameters

Parameter	Type	Description
data	Stock	The matching Stock object

Attention: Remember — You must be authenticated with `SELLER` role before using this API

4.4 Create a Stock

This endpoint creates a new product.

4.4.1 HTTP Request

POST `http://example.com/api/v1/stocks`

4.4.2 Request Parameters

Parameter	Type	Required	Default	Description
productId	String	True	.	Parent product ID
producedAt	String	True	.	The producing date
shelfLife	Integer	True	.	Shelf-Life of this stock
totalQuantity	Integer	True	.	Total quantity of stock
trackingId	String	True	.	Tracking ID of this shipment
carrierName	String	True	.	Carrier Name of this shipment

Note: Example date string format: "2000-10-31T01:30:00.000-05:00"

4.4.3 Response Parameters

Parameter	Type	Description
data	Stock	The created Stock object

Attention: Remember — You must be authenticated with `SELLER` role before using this API

4.5 Invalidate a Specific Stock

This endpoint invalidates a specific stock, so all items from this stock will no longer be in the queue for sale.

It will NOT delete it from database.

4.5.1 HTTP Request

DELETE `http://example.com/api/v1/stocks/<ID>`

4.5.2 Path Parameter

Parameter	Required	Description
ID	True	Stock ID

Attention: Remember — You must be authenticated with `SELLER` role before using this API

5.1 Order Entity Definition

5.1.1 Properties

Parameter	Type	Description
id	String	Order ID
quantity	Integer	Quantity of this order
createdAt	Date	Creation time
updatedAt	Date	Update time
customer	String	Customer username who creates this order
address	AddressBean	Associated Address object of this order
product	Integer	Parent product id
stocks	Integer[]	The related stocks of this order
trackingId	String	Shipment tracking id
carrierName	String	Carrier name
totalAmount	Float	Total amount
remark	String	Additional information of this order
shippingTime	Date	The time of shipping
deliveryConfirmed	Boolean	Whether the delivery is confirmed by customer
paid	Boolean	Whether the order is paid
valid	Boolean	Valid flag

5.1.2 Example JSON Representation

```
{
  "id": "c3beaaf0-ff02-4adf-b37c-ee41dbc20319",
  "quantity": 2,
  "createdAt": "2019-10-1 3:00 PM GMT+1:00",
```

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```
"updatedAt": "2019-10-1 3:00 PM GMT+1:00",
"customer": "FOO",
"address": {
  "province": "Beijing",
  "city": "Beijing",
  "district": "Haidian",
  "address": "Jianguo Avenue",
  "zip": "100000"
},
"product": 1,
"stocks": [11, 12, 13, 14, 15],
"trackingId": "XXXXXXXXXXXXXXXXXXXXXXXXXXXX",
"carrierName": "SF-Express",
"totalAmount": 500.00,
"remark": null,
"shippingTime": "2019-10-1 3:00 PM GMT+1:00",
"deliveryConfirmed": false,
"paid": false,
"valid": true
}
```

5.2 Get Orders by Parameters

This endpoint retrieves all orders that satisfy given parameters

5.2.1 HTTP Request

GET <http://example.com/api/v1/orders>

5.2.2 Request Parameters

Parameter	Type	Required	Default	Description
page	Integer	False	0	The page index from 0
size	Integer	False	20	Page size
customerId	String	False	.	Username of the customer
trackingId	String	False	.	Tracking ID of a shipped order
stockId	Integer	False	.	The stock ID it belongs to
valid	Boolean	False	.	Valid flag
deliveryConfirmed	Boolean	False	.	Whether the delivery is confirmed by customer
paid	Boolean	False	.	Whether the order is paid

5.2.3 Response Parameters

Parameter	Type	Description
data	Order[]	List of matching Order objects

Attention: Remember — You must be authenticated with SELLER or CUSTOMER role before using this API

5.3 Get a Specific Order

This endpoint retrieves a specific order

5.3.1 HTTP Request

GET `http://example.com/api/v1/orders/<ID>`

5.3.2 Path Parameter

Parameter	Required	Description
ID	True	Order ID

5.3.3 Response Parameters

Parameter	Type	Description
data	Order	The matching Order object

Attention: Remember — You must be authenticated with SELLER or CUSTOMER role before using this API

5.4 Create an Order

This endpoint creates a new order.

5.4.1 HTTP Request

POST `http://example.com/api/v1/orders`

5.4.2 Request Parameters

Parameter	Type	Required	Default	Description
productId	Integer	True	.	ID of the product it belongs to
quantity	Integer	True	.	Quantity of this order
customerId	String	True	.	Customer username who creates this order
addressId	Integer	True	.	Destination address ID from address book
remark	String	False	.	Remark

5.4.3 Response Parameters

Parameter	Type	Description
data	Order	The created Order object

Attention: Remember — You must be authenticated with `CUSTOMER` role before using this API

5.5 Cancel a Specific Order

This endpoint cancels a specific order.

5.5.1 HTTP Request

DELETE `http://example.com/api/v1/orders/<ID>`

5.5.2 Path Parameter

Parameter	Required	Description
ID	True	Order ID

Attention: Remember — You must be authenticated with `SELLER` or `CUSTOMER` role before using this API
You can only cancel an order which has not been shipped.

5.6 Delivery Confirmation

This endpoint confirms delivery of an order.

5.6.1 HTTP Request

PATCH `http://example.com/api/v1/orders/<ID>/DELIVERY_CONFIRM`

5.6.2 Path Parameter

Parameter	Required	Description
ID	True	Order ID

5.6.3 Response Parameters

Parameter	Type	Description
data	Order	The modified Order object

Attention: Remember — You must be authenticated with `CUSTOMER` role before using this API

5.7 Update an Order

This endpoint updates shipment details of an order.

5.7.1 HTTP Request

PATCH `http://example.com/api/v1/orders/<ID>/SHIP`

5.7.2 Path Parameter

Parameter	Required	Description
ID	True	Order ID

5.7.3 Request Parameters

Parameter	Type	Required	Default	Description
trackingId	String	True	.	Tracking ID from shipment carrier
carrierName	String	True	.	Shipment carrier name
shippingTime	String	True	.	Time of shipping

Note: Example date string format: "2000-10-31T01:30:00.000-05:00"

5.7.4 Response Parameters

Parameter	Type	Description
data	Order	The modified Order object

Attention: Remember — You must be authenticated with `SELLER` role before using this API

6.1 Payment Entity Definition

6.1.1 Properties

Parameter	Type	Description
id	Integer	Payment ID
order	String	Parent Order ID
orderString	String	Alipay redirect URL
createdAt	Date	Creation time
updatedAt	Date	Update time
payer	String	Username of payer
subject	String	Subject of this payment
description	String	Description
totalAmount	Float	Total amount
status	String	One of ['PENDING', 'CONFIRMED', 'TIMEOUT', 'INVALID']
vendorTradeId	String	Unique trade id from vendor.
confirmedAt	Date	Payment confirmation time
confirmed	Boolean	Whether the payment is confirmed by system
valid	Boolean	Valid flag

6.1.2 Example JSON Representation

```
{
  "id" : 1,
  "order" : "c3beaaf0-ff02-4adf-b37c-ee41dbc20319",
  "orderString" : "https://openapi.alipaydev.com/gateway.do?XXX=XXX",
  "createdAt" : "2019-04-19T15:31:20.807+0000",
  "updatedAt" : "2019-04-19T15:31:20.807+0000",
```

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```
"payer" : "test_user_customer_username_0",
"subject" : "Test Subject",
"description" : "Test Description",
"totalAmount" : 1000.123,
"status" : "PENDING",
"vendorTradeId" : null,
"confirmedAt" : null,
"confirmed" : false,
"valid" : false
}
```

6.2 Get Related Payments for an Order

This endpoint retrieves all related payments for an order.

6.2.1 HTTP Request

GET <http://example.com/api/v1/payments>

6.2.2 Request Parameters

Parameter	Type	Required	Default	Description
orderId	String	True	.	Parent Order ID

6.2.3 Response Parameters

Parameter	Type	Description
data	Payment[]	List of matching Payment objects

Attention: Remember — You must be authenticated before using this API

The requested order must belongs to you.

6.3 Get a Specific Payment

This endpoint retrieves a specific payment with id.

6.3.1 HTTP Request

GET <http://example.com/api/v1/payments/<ID>>

6.3.2 Path Parameter

Parameter	Required	Description
ID	True	Payment ID

6.3.3 Response Parameters

Parameter	Type	Description
data	Payment	The matching Payment object

Attention: Remember — You must be authenticated before using this API
The requested payment must belongs to you.

6.4 Create a Payment

This endpoint creates a new payment.

6.4.1 HTTP Request

POST `http://example.com/api/v1/payments`

6.4.2 Request Parameters

Parameter	Type	Required	Default	Description
orderId	String	True	.	Parent Order ID
subject	String	True	.	Subject of this payment
description	String	False	.	Description

6.4.3 Response Parameters

Parameter	Type	Description
data	Payment	The created Payment object

Attention: Remember — You must be authenticated with `CUSTOMER` role before using this API
`orderString` will expire after 15 minutes.

6.5 Retry Payment Action

This endpoint re-obtains `orderString` for a payment.

6.5.1 HTTP Request

GET `http://example.com/api/v1/payments/retry/<ID>`

6.5.2 Path Parameter

Parameter	Required	Description
ID	True	Payment ID

6.5.3 Response Parameters

Parameter	Type	Description
data	Payment	The matching Payment object with new <code>orderString</code>

6.6 Verify Payment

This endpoint performs payment verification triggered by client.

Usually, the system will verify a payment in three ways:

1. Receive asynchronous verification message posted by third-party payment vendor.
2. Query payment status positively as a scheduled task.
3. Perform verification asked by client.

6.6.1 HTTP Request

GET `http://example.com/api/v1/payments/verify/<ID>`

6.6.2 Path Parameter

Parameter	Required	Description
ID	True	Payment ID

6.6.3 Response Parameters

Parameter	Type	Description
data	Boolean	The verification status

7.1 Refund Entity Definition

7.1.1 Properties

Parameter	Type	Description
id	Integer	Refund ID
order	Integer	Order ID
createdAt	Date	Creation time
updatedAt	Date	Update time
requester	String	Username of requester
requestReason	String	Reason of requester
responseReason	String	Reason of responder. e.g. The reason of rejection.
confirmedAt	Date	Refund confirm time
issuedAt	Date	Refund issue time
amount	Float	Amount
status	String	Status, one of ['PROCESSING', 'DENIED', 'ISSUED', 'CANCELLED', 'REQUESTED', 'WAITING']
trackingId	String	Shipment tracking id
carrierName	String	Carrier name
refundOnly	Boolean	If false, then customer should provide shipment information later
valid	Boolean	Valid flag

7.1.2 Example JSON Representation

```
{
  "id": 1,
  "order": 5,
  "createdAt": "2019-10-1 3:00 PM GMT+1:00",
  "updatedAt": "2019-10-1 3:00 PM GMT+1:00",
  "requester": "USERNAME_OF_REFUND_ISSUER",
  "requestReason": "I hate this product",
  "responseReason": null,
  "confirmedAt": null,
  "issuedAt": null,
  "amount": 500.0,
  "status": "REQUESTED",
  "trackingId": "XXXXXXXXXXXXXXXXXXXXXXXXXXXX",
  "carrierName": "SF-Express",
  "refundOnly": false,
  "valid": true
}
```

7.2 Get Refunds Information

This endpoint gets information of refunds.

7.2.1 HTTP Request

GET <http://example.com/api/v2/refunds>

7.2.2 Request Parameters

Parameter	Type	Required	Default	Description
page	Integer	False	0	The page index from 0
size	Integer	False	20	Page size
orderId	String	False	.	Order ID
status	String	False	.	Status, one of ['PROCESSING', 'DENIED', 'ISSUED', 'CANCELLED', 'REQUESTED', 'WAITING']
valid	Boolean	False	.	Valid flag

7.2.3 Response Parameters

Parameter	Type	Description
data	Refund[]	List of matching Refund objects

Attention: Remember — You must be authenticated with `SELLER` or `CUSTOMER` role before using this API The requested orderId (if provided) must belong to you.

7.3 Get Infomation of a Specific Refund

This endpoint get infomation of a specific refund.

7.3.1 HTTP Request

GET `http://example.com/api/v2/refunds/<ID>`

7.3.2 Path Parameter

Parameter	Required	Description
ID	True	Refund ID

7.3.3 Response Parameters

Parameter	Type	Description
data	Refund	The matching Refund object

Attention: Remember — You must be authenticated with `SELLER` or `CUSTOMER` role before using this API

7.4 Create a Refund

This endpoint creates a new refund.

7.4.1 HTTP Request

POST `http://example.com/api/v2/refunds`

7.4.2 Request Parameters

Parameter	Type	Required	Default	Description
orderId	Integer	True	•	ID of the order it belongs to
reason	String	True	•	Reason of this refund
amount	Float	True	•	Refund amount
refundOnly	Boolean	True	•	If false, then customer should provide tracking information later

7.4.3 Response Parameters

Parameter	Type	Description
data	Refund	The created Refund object

Attention: Remember — You must be authenticated with `SELLER` or `CUSTOMER` role before using this API

7.5 Provide shipment information for a refund

This endpoint provides shipment information for a refund.

7.5.1 HTTP Request

PATCH `http://example.com/api/v2/refunds/<id>`

7.5.2 Path Parameter

Parameter	Required	Description
ID	True	Refund ID

7.5.3 Request Parameters

Parameter	Type	Required	Default	Description
action	String	True	.	Should be SHIP_INIT
trackingId	String	True	.	Shipment tracking id
carrierName	String	True	.	Carrier name

7.5.4 Response Parameters

Parameter	Type	Description
data	Refund	The modified Refund object

Attention: Remember — You must be authenticated with `CUSTOMER` role before using this API
 You can only provide shipment information for a refund whose `refundOnly` is `false`

7.6 Cancel a Specific Refund

This endpoint cancels a specific refund.

7.6.1 HTTP Request

DELETE `http://example.com/api/v2/refunds/<ID>`

7.6.2 Path Parameter

Parameter	Description
ID	Refund ID

Attention: Remember — You must be authenticated with `SELLER` or `CUSTOMER` role before using this API
 You can only cancel a refund which is in [`'PENDING'`, `'WAITING'`, `'REQUESTED'`] status.

8.1 File MetaData Definition

8.1.1 Properties

Parameter	Type	Description
id	Integer	File ID
createdAt	Date	Creation time
hash	String	SHA-256 hash value of the file content
referenceCount	Integer	Reference Count of this file object
mimetype	String	MIME type of the file

8.1.2 Allowed File Types

Extension (Ignore case)	MIME Type	Size Limit
.jpg	image/jpeg	10M
.jpeg		
.gif	image/gif	
.png	image/png	
.svg	image/svg+xml	
.wav	audio/wav	5M
.mp3	audio/mpeg	
.mp4	video/mp4	100M
.avi	video/x-msvideo	
.mpeg	video/mpeg	
.pdf	application/pdf	20M

Attention: If a file has no reference (`referenceCount == 0`) 15 minutes after creation, it will be deleted from server.

8.1.3 Example JSON Representation

```
{
  "id": 1,
  "createdAt": "2019-10-1 3:00 PM GMT+1:00",
  "hash": "1dd4984b0d118569da8620fe67e7fd4bd2889bb316d5ee40ba914eb65f19107d",
  "referenceCount": 0,
  "mimetype": "image/jpeg"
}
```

8.2 Upload a File

This endpoint uploads a new file.

8.2.1 HTTP Request

POST `http://example.com/api/v1/files`

8.2.2 Request Parameters

Parameter	Type	Required	Default	Description
file	File	True	.	The file object

8.2.3 Response Parameters

Parameter	Type	Description
data	FileMeta	The associated File MetaData object of the created file

Attention: Remember — You must be authenticated before using this API

8.3 Get a Specific File

This endpoint provides a direct access to the requested file.

8.3.1 HTTP Request

GET `http://example.com/api/v1/files/<HASH>`

8.3.2 Path Parameter

Parameter	Required	Description
HASH	True	The SHA-256 hash value of a file object in server, which should be the same as the hash value returned from File-Upload API

8.4 Delete a Specific File

This endpoint decreases a file's `referenceCount`.

The file will be deleted from server once its `referenceCount` reaches zero.

8.4.1 HTTP Request

DELETE `http://example.com/api/v1/files/<HASH>`

8.4.2 Path Parameter

Parameter	Required	Description
HASH	True	The SHA-256 hash value of a file object in server, which should be the same as the hash value returned from File-Upload API

9.1 Address Entity Definition

9.1.1 Properties

Parameter	Type	Description
id	Integer	Address ID
owner	String	Username of the owner
province	String	Province
city	String	City
district	String	District
address	String	Detailed address
zip	String	ZIP code

9.1.2 Example JSON Representation

```
{
  "id": 1,
  "owner": "FOO",
  "province": "Beijing",
  "city": "Beijing",
  "district": "Haidian",
  "address": "No.XX XXX Road",
  "zip": "100000",
}
```

9.2 Get a Specific Address

This endpoint retrieves a specific address

9.2.1 HTTP Request

GET `http://example.com/api/v1/addresses/<ID>`

9.2.2 Path Parameter

Parameter	Required	Description
ID	True	Address ID

9.2.3 Response Parameters

Parameter	Type	Description
data	Address	The matching Address object

Attention: Remember — You must be authenticated before using this API.

The requested address must belong to you.

9.3 Get Current User's Addresses

This endpoint retrieves all addresses of current user.

9.3.1 HTTP Request

GET `http://example.com/api/v1/addresses`

9.3.2 Response Parameters

Parameter	Type	Description
data	Address[]	List of matching Address objects

Attention: Remember — You must be authenticated before using this API.

9.4 Create an Address

This endpoint creates a new address.

9.4.1 HTTP Request

POST `http://example.com/api/v1/addresses`

9.4.2 Request Parameters

Parameter	Type	Required	Default	Description
province	String	True	.	Province
city	String	True	.	City
district	String	True	.	District
address	String	True	.	Detailed address
zip	String	False	000000	Zip code

Attention: Remember — You must be authenticated before using this API

10.1 Standard Response Structure

All responses have same general structure

10.1.1 Response Parameters

Parameter	Type	Required	Default	Description
responseId	String	True	.	The UUID of this response
timestamp	Date	True	.	Generation time of this response
success	Boolean	True	.	The status flag which indicates whether your API call is success
data	Any	True	null	The message body of this response, which can be any object that supported by JSON
error	Error	True	null	Associated Error object (if applicable)

The response JSON structured like this

```
{  
  "responseId": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",  
  "timestamp": "2017-01-01T00:00:00.000Z",  
  "success": true,  
  "data": {},  
  "error": null  
}
```

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```

"timestamp": "2019-04-21T12:00:56.375+0000",
"sucess": true,
"data": null,
"error": null
}

{
  "responseId": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
  "timestamp": "2019-04-21T12:00:56.375+0000",
  "sucess": false,
  "data": null,
  "error": {
    "type": "API.SECURITY.ACCESS_DENIED",
    "message": "Access Denied"
  }
}

```

10.2 Standard Error Definition

10.2.1 Properties

Parameter	Type	Required	Default	Description
type	String	True	.	Error Type
message	String	True	.	Explanation of this error

10.2.2 Example JSON Representation

```

{
  "type": "API.SECURITY.ACCESS_DENIED",
  "message": "Access Denied"
}

```

10.3 HTTP Status Codes

10.3.1 Success

Success Code	Meaning
200	OK – Standard response for successful HTTP requests
201	Created – The request has been fulfilled, resulting in the creation of a new resource.
202	Accepted — The request has been accepted for processing, but the processing has not been completed.

10.3.2 Errors

The LLZW API uses the following error codes:

Error Code	Meaning
400	Bad Request – Your request is invalid.
401	Unauthorized – Your are unauthorized.
403	Forbidden — You do not have privilege to perform this request.
404	Not Found – The specified kitten could not be found.
405	Method Not Allowed – You tried to access a kitten with an invalid method.
406	Not Acceptable – You requested a format that isn't json.
410	Gone – The object requested has been removed from our servers.
429	Too Many Requests – You're requesting too many kittens! Slow down!
500	Internal Server Error – We had a problem with our server. Try again later.
503	Service Unavailable – We're temporarily offline for maintenance. Please try again later.