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## 1 Introduction

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[3]			
[4]			
[5]			
[6]			
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## 2 Big

#### 2.1 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

#### 2.1.1 TODO

#### 2.1.1.1 TODO version 1.0

- $\checkmark$  [x] Test environment and credentials
- √ [x] specify voucher content fields
- √ [x] specify voucher pricing fields
- $\checkmark$  [x] specify payment method fields

## 2.1.1.2 TODO version 1.0-next

- ✓ [] refactor entities and apply relationships
- ✓ [] provide full resource schemas
- ✓ [] enforce validation of resource schemas

#### 2.1.2 Test environment and credentials

#### TODO

Username	Password	Description
test@test.org	test	just protected
test@gmail.com	test	just testing
testtest	test	qa

#### 2.1.3 Edge Service Registry

The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.

As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances must register themselves on the registry on startup and unregister on shutdown.

## 2.1.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.



## See [Message Relay] for more information.

#### 2.1.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

## 2.1.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints must adhere to the [JSONAPI] specification and be subject to strict [Access Control].

## 2.1.6.1 Login

## 2.1.6.1.1 Login request

Variables	Description	Example
ICP_SHOP_ID	see [Test environment and credentials]	
ICP_SHOP_PASSPHRASE	see [Test environment and credentials]	
ICP_SHOP_DIGEST	Derived from \${ICP_SHOP_ID} and \${ICP_SHOP_PASSPHRASE}	MzAwMDAwMTY6dG9wLXNIY3JI dC1wYXNzcGhyYXNI
POST /api/rest/v1/auth/login application/vnd.api+json	HTTP/1.1 Authorization: Basi	.c \${ICP_SHOP_DIGEST} Accept:

## 2.1.6.1.2 Login response

HTTP/1.1 201 Created Content-Type: application/vnd.api+json

#### 2.1.6.1.3 Cookies

Name	Value	Domain	Path	Expires	HttpOnly	Secure
SESSION	. ,	master.env.a pi.shop1.roc ks	I	Seassion	true	false

#### 2.1.6.2 Logout

## 2.1.6.2.1 Logout request

Variables Description Example



POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

#### 2.1.6.2.2 Logout response

```
HTTP/1.1 204 No Content
```

#### 2.1.6.3 Voucher list

See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields.

#### 2.1.6.3.1 Voucher list request

GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

### 2.1.6.3.2 Voucher list response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
                                                  "id": "f634f09f-9a06-4297-a326-0d703938b702",
        "data":[
                              {
"type":"voucher",
                                                                         "code": "LEBALLINNL10",
                                   "attributes":{
"currency":"EUR",
                                "ean-code": "8717472242211",
                                                                           "encryption-type":0,
                     "name":"Lebara All-in NL 10 EUR",
                                                                     "provider-code":"LEBARA",
"provider-name":"Lebara",
                                       "short-name":"All-in NL 10",
                                                                                  "value":10.0,
"price-total":11.99,
                                        "price-tax":0.00,
                                                                              "price-fee":1.99,
"payment-methods": {
                                     "wirecard-creditcard":{
                                                                                 "name":"Credit
                                                                    "provider-name": "Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                             "wirecard-paypal":
                          "name":"PayPal",
                                                                    "provider-name":"Wirecard"
                                                                "id": "a3473e20-19b4-44fe-8389-
                                        },
                                                 {
                                       "type":"voucher"
67a511854759",
                                                                                  "attributes":
                                                        "currency":"EUR",
                 "code": "LEBALLINNL15",
                                                                                          "ean-
code": "8717472242129",
                                            "encryption-type":0,
                                                                                      "kind":0,
"name":"Lebara All-in NL 15 EUR",
                                              "provider-code":"LEBARA",
                                                                                     "provider-
name":"Lebara",
                                  "short-name": "All-in NL 15",
                                                                                  "value":15.0,
                                        "price-tax":0.00,
                                                                              "price-fee":1.99,
"price-total":16.99,
"payment-methods":[
                                     "wirecard-creditcard":{
                                                                                 "name":"Credit
                                                                    "provider-name":"Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                             "wirecard-paypal":
                           "name": "PayPal",
                                                                     "provider-name": "Wirecard"
                                } ] }
```

#### 2.1.6.4 Voucher detail



2.1.6.4.1 Voucher detail request

```
GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

#### 2.1.6.4.2 Voucher detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data":{ "id":"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher", "attributes":{ "code":"LEBALLINNL10", "currency":"EUR", "ean-
code":"8717472242211",
                                     "encryption-type":0,
                                                                                          "kind":0,
"name":"Lebara All-in NL 10 EUR", "provider-code":"LEBARA",
                                                                                         "provider-
name":"Lebara", "short-name":"All-in NL 10", "value":10.0, "price-total":11.99, "price-tax":0.00, "price-fee":1.99, "payment-methods": { "name":"Credit Card",
                                                                                          "price-
                                                                                          "payment-
"provider-name": "Wirecard",
                                                      "image-url": "https://wirecard.com/logo.png"
     "wirecard-paypal":{
                                                      "name":"PayPal",
                                                                                         "provider-
name":"Wirecard"
                   }
                                         }
                                                 } } }
```

#### 2.1.6.5 Voucher order

See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields.

### 2.1.6.5.1 Voucher order request

```
POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } }
```

field name	type	constrains	description	example
id	UUID	globally unique	globally unique UUID	c91feaf3-5968- 4b60-aa5b- 62fe7fdd905c
type	string	n/a	type of request, must be "voucher- order", "voucher- order"	
voucher-code	string	n/a	code of the voucher gathered from voucher list	"VODADE15"
payment-method	string	n/a	on of the allowed methods for the voucher, denoted in voucher list response	"Wirecard VISA"



field name	type	constrains	description	example
notification-type	string	currently only "email" is supported	type of the notification target	"email"
notification-target	string	n/a	target adress	"[me@my- email.com] (mailto:me@my- email.com)"
order-success- redirect-url	string	valid URL	Where the wirecard should redirect if payment was successfull	protect
order-failed- redirect-url	string	valid URL	Where the wirecard should redirect if payment fails	protect
order-canceled- redirect-url	string	valid URL	Where the wirecard should redirect if payment was canceled	protect

#### 2.1.6.5.2 Voucher order response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
"type": "voucher-order",
                                                               "confirmation-status":
"pending", "notification-type": "email", "notification-target": "me@my-email.com",
"payment-provider": "wirecard",
                                "payment-redirect-url": "https://wpp-test.wirecard.com/?
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                          "payment-status": "pending",
method": "creditcard", "voucher-code": "LEBALLINNL10",
                                                           "voucher-currency": "EUR",
"voucher-value": 10.0
                          "voucher-status": "pending",
                                                           "order-price-total": 11.99,
                                                           "order-status": "pending",
"order-tax-total": 0.00,
                              "order-fee-total": 0.99,
"serial-number": "1234",
                                  "confirmation-date": "0",
                                                                     "batch-number":
"1234"
       } } }
```

## 2.1.6.6 Voucher order detail



#### 2.1.6.6.1 Voucher order detail request

```
GET /api/rest/v1/voucher-orders/:order-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

#### 2.1.6.6.2 Voucher order detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c",
                                                                    "type": "voucher-order",
"attributes": {
                          "notification-status": "pending",
                                                                        "confirmation-status":
           "notification-type": "email",
"pending",
                                                   "notification-target": "me@my-email.com",
"payment-provider": "wirecard",
                                    "payment-redirect-url": "https://wpp-test.wirecard.com/?
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                         "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                               "payment-status": "pending",
                                                                                     "payment-
                           "voucher-code": "LEBALLINNL10",
                                                                   "voucher-currency": "EUR",
method": "creditcard",
                             "voucher-status": "pending",
"order-fee-total": 1.99,
"voucher-value": 10.0
                                                                   "order-price-total": 11.99,
                           "order-fee-total": 1.99,
"confirmation-date": "1611313953175"
"order-tax-total": 0.00,
                                                                   "order-status": "pending",
"serial-number": "1234",
                                                                       } } }
```

#### 2.1.6.7 Provider Text

See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields.

#### 2.1.6.7.1 Provider Text request

Variables Description Example

```
GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

#### 2.1.6.7.2 Provider Text response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
"type":
"voucher-text",
                 "attributes": { "provider-code": "ABOUTYOU",
                                                                     "kind":
             "title": "Produktname", "body": "About You-Geschenkkarte"
"title",
            "id": "a598bf3b-abe0-4fc4-80fa-135a84510c81", "type": "voucher-text",
},
     {
"attributes": {
                        "provider-code": "ABOUTYOU",
                                                          "kind": "subtitle",
"title": "Slogan",
                     "body": "Hol Dir per E-Mail eine About You-Geschenkkarte."
                                                                         }
} ] }
```

#### 2.1.6.8 Content

See [Content Service] for more information on the source of these fields.

#### 2.1.6.8.1 Content request

Variables Description Example



GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json

#### 2.1.6.8.2 Content response

#### 2.1.6.9 Verification

See for more information on the source of these fields.

2.1.6.9.1 Verification request by phone number

```
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-831f-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } }
```

2.1.6.9.2 Verification by phone number response

```
HTTP/1.1 200 OK Content-Type: application/json
{    "data": { "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "ok": false, "remaining-number-of-attempts": 4, "remaining-expiration-time": 0 } } }
```

2.1.6.9.3 Verification request by sms

```
POST /api/rest/v1/auth/sms-verification-code HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } } } }
```

2.1.6.9.4 Verification by sms number response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } } }
```

#### 2.1.6.10 Cookies

2.1.6.10.1 Cookies request

```
2.1.6.10.2 Cookies response
```

```
HTTP/1.1 200 OK
```

#### 2.1.6.11 Documentation

Returns list of Json Schemas for request and response for requested rest endpoint. Use exact endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return json schemas for /api/rest/v1/vouchers endpoint.



#### 2.1.6.11.1 Documentation request

GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

#### 2.1.6.11.2 Documentation response

## Complete Response is omitted because of size, here is just a part:

```
HTTP/1.1 200 OK
    "required": [
                        "createdDate",
                                            "notificationStatus",
                                                                       "notificationTarget",
"notificationType",
                                                                              "orderStatus",
                           "orderFeeTotal",
                                                   "orderPriceTotal",
"orderTaxTotal",
                        "paymentMethod",
                                                 "paymentProvider",
                                                                            "paymentStatus",
              "voucherCode",
"shortId",
                                                                              "voucherValue"
                                 "voucherCurrency",
                                                         "voucherStatus",
] }
```

#### 2.1.6.12 i18 internationalization

✓ Retrieves i18next json based on requested language

#### 2.1.6.12.1 i18 request

```
GET api/rest/v1/content/i18next.json/de HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

#### 2.2 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

#### 2.2.1 TODO

### 2.2.1.1 TODO version 1.0

- $\checkmark$  [x] Test environment and credentials
- √ [x] specify voucher content fields
- ✓ [x] specify voucher pricing fields
- $\checkmark$  [x] specify payment method fields

## 2.2.1.2 TODO version 1.0-next

- √ [] refactor entities and apply relationships
- √ [] provide full resource schemas
- ✓ [] enforce validation of resource schemas

## 2.2.2 Test environment and credentials

#### **TODO**

Username	Password	Description
test@test.org	test	just protected
test@gmail.com	test	just testing
testtest	test	qa

### 2.2.3 Edge Service Registry



The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.

As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances must register themselves on the registry on startup and unregister on shutdown.

#### 2.2.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.

See [Message Relay] for more information.

### 2.2.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

#### 2.2.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints must adhere to the [JSONAPI] specification and be subject to strict [Access Control].

#### 2.2.6.1 Login

#### 2.2.6.1.1 Login request

Variables	Description	Example
ICP_SHOP_ID	see [Test environment and credentials]	
ICP_SHOP_PASSPHRASE	see [Test environment and credentials]	
ICP_SHOP_DIGEST	Derived from \${ICP_SHOP_ID} and \${ICP_SHOP_PASSPHRASE}	MzAwMDAwMTY6dG9wLXNIY3JI dC1wYXNzcGhyYXNI



POST /api/rest/v1/auth/login HTTP/1.1 Authorization: Basic  $\{ICP\_SHOP\_DIGEST\}$  Accept: application/vnd.api+json

#### 2.2.6.1.2 Login response

HTTP/1.1 201 Created Content-Type: application/vnd.api+json

#### 2.2.6.1.3 Cookies

Name Value Domain Path Expires HttpOnly Secure

SESSION MmQ5ZjkxO master.env.a / Seassion true false

GltMTM4My0 pi.shop1.roc

0M2E0LWI1M ks DYtYmUwZjY wMzJiZDY5

## 2.2.6.2 Logout

## 2.2.6.2.1 Logout request

Variables Description Example

POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

## 2.2.6.2.2 Logout response

HTTP/1.1 204 No Content

#### 2.2.6.3 Voucher list

See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields.



#### 2.2.6.3.1 Voucher list request

GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

#### 2.2.6.3.2 Voucher list response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "data":[
                                             "id":"f634f09f-9a06-4297-a326-0d703938b702",
"type":"voucher",
                                "attributes":{
                                                                 "code":"LEBALLINNL10",
"currency":"EUR",
                            "ean-code":"8717472242211",
                                                                   "encryption-type":0,
          "name":"Lebara All-in NL 10 EUR",
                                                               "provider-code":"LEBARA",
"kind":0,
"provider-name":"Lebara", "short-name":"All-in NL 10",
                                                                          "value":10.0,
                                                                       "price-fee":1.99,
"price-total":11.99,
                                    "price-tax":0.00,
                                "wirecard-creditcard":{
"payment-methods": {
                                                                         "name":"Credit
                                                             "provider-name": "Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                      "wirecard-paypal":
                                                           "provider-name":"Wirecard"
                        "name":"PayPal",
{
                           } },
                                                          "id":"a3473e20-19b4-44fe-8389-
                                   "type":"voucher",
67a511854759",
                                                                          "attributes":
               "code":"LEBALLINNL15",
                                                   "currency":"EUR",
{
                                                                                  "ean-
                                "encryption-type":0,
    "provider-code":"LEBARA",
code": "8717472242129",
                                                                             "kind":0,
"name":"Lebara All-in NL 15 EUR",
                                                                            "provider-
name":"Lebara", "short-name":"All-in NL 15",
                                                                         "value":15.0,
"price-total":16.99,
                                   "price-tax":0.00,
                                                                       "price-fee":1.99,
"payment-methods":[
                                "wirecard-creditcard":{
                                                                         "name":"Credit
                                                            "provider-name":"Wirecard",
Card",
"image-url": "https://wirecard.com/logo.png"
                                                                      "wirecard-paypal":
                        "name":"PayPal",
                                                              "provider-name": "Wirecard"
                      } } } }
```

#### 2.2.6.4 Voucher detail

#### 2.2.6.4.1 Voucher detail request

GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

## 2.2.6.4.2 Voucher detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
     "data":{
               "id":"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher",
                                                                    "ean-
"attributes":{
                     "code":"LEBALLINNL10",
                                                "currency":"EUR",
                            code": "8717472242211",
                                                                    "kind":0,
"name":"Lebara All-in NL 10 EUR",
                                                                   "provider-
name":"Lebara", "short-name":"All-in NL 10", "value":10.0,
                                                                    "price-
total":11.99,
                    "price-tax":0.00,
                                            "price-fee":1.99,
                                                                    "payment-
methods": {
                                                          "name":"Credit Card",
                     "wirecard-creditcard":{
"provider-name":"Wirecard",
                                         "image-url": "https://wirecard.com/logo.png"
},
                                         "name":"PayPal",
            "wirecard-paypal":{
                                                                   "provider-
name":"Wirecard"
```

#### 2.2.6.5 Voucher order

See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields.

## 2.2.6.5.1 Voucher order request



```
POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } }
```

_	-				
	field name	type	constrains	description	example
	id	UUID	globally unique	globally unique UUID	c91feaf3-5968- 4b60-aa5b- 62fe7fdd905c
	type	string	n/a	type of request, must be "voucher- order", "voucher- order"	
	voucher-code	string	n/a	code of the voucher gathered from voucher list	"VODADE15"
	payment-method	string	n/a	on of the allowed methods for the voucher, denoted in voucher list response	"Wirecard VISA"
	notification-type	string	currently only "email" is supported	type of the notification target	"email"
	notification-target	string	n/a	target adress	"[me@my- email.com] (mailto:me@my- email.com)"
	order-success- redirect-url	string	valid URL	Where the wirecard should redirect if payment was successfull	protect
	order-failed- redirect-url	string	valid URL	Where the wirecard should redirect if payment fails	protect
	order-canceled- redirect-url	string	valid URL	Where the wirecard should redirect if payment was canceled	protect



### 2.2.6.5.2 Voucher order response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
   "type": "voucher-order",
"attributes": {
                        "notification-status": "pending",
                                                                 "confirmation-status":
               "notification-type": "email",
"pending",
                                               "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                 "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                          "payment-status": "pending",
                                                                            "pavment-
                          "voucher-code": "LEBALLINNL10",
                                                            "voucher-currency": "EUR",
method": "creditcard",
                          "voucher-status": "pending",
                                                            "order-price-total": 11.99,
"voucher-value": 10.0
"order-tax-total": 0.00,
                                                             "order-status": "pending",
                              "order-fee-total": 0.99,
                                   "confirmation-date": "0",
"serial-number": "1234",
                                                                       "batch-number":
"1234"
        } } }
```

# 2.2.6.6 Voucher order detail

### 2.2.6.6.1 Voucher order detail request

```
GET /api/rest/v1/voucher-orders/:order-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

# 2.2.6.6.2 Voucher order detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "type": "voucher-order",
                        "notification-status": "pending",
"attributes": {
                                                                 "confirmation-status":
             "notification-type": "email",
"pending",
                                               "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                  "payment-session-id":
                                           "payment-status": "pending",
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                                                             "payment-
                          "voucher-code": "LEBALLINNL10",
                                                             "voucher-currency": "EUR",
method": "creditcard",
"voucher-value": 10.0
                          "voucher-status": "pending",
                                                            "order-price-total": 11.99,
"order-tax-total": 0.00,
                              "order-fee-total": 1.99,
                                                             "order-status": "pending",
                          "confirmation-date": "1611313953175"
"serial-number": "1234",
```

### 2.2.6.7 Provider Text

See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields.

## 2.2.6.7.1 Provider Text request

Variables Description Example



```
GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

# 2.2.6.7.2 Provider Text response

#### 2.2.6.8 Content

See [Content Service] for more information on the source of these fields.

# 2.2.6.8.1 Content request

Variables Description Example

GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json

## 2.2.6.8.2 Content response

### 2.2.6.9 Verification

See for more information on the source of these fields.



2.2.6.9.1 Verification request by phone number

```
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-831f-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } } }
```

2.2.6.9.2 Verification by phone number response

```
HTTP/1.1 200 OK Content-Type: application/json
{    "data": { "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "ok": false, "remaining-number-of-attempts": 4, "remaining-expiration-time": 0 } } }
```

2.2.6.9.3 Verification request by sms

```
POST /api/rest/v1/auth/sms-verification-code HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } } }
```

2.2.6.9.4 Verification by sms number response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } } }
```

#### 2.2.6.10 Cookies

2.2.6.10.1 Cookies request

2.2.6.10.2 Cookies response

```
HTTP/1.1 200 OK
```

## 2.2.6.11 Documentation

Returns list of Json Schemas for request and response for requested rest endpoint. Use exact endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return json schemas for /api/rest/v1/vouchers endpoint.

2.2.6.11.1 Documentation request

```
GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 2.2.6.11.2 Documentation response

Complete Response is omitted because of size, here is just a part:



```
HTTP/1.1 200 OK
    "required": [
                     "createdDate",
                                       "notificationStatus",
                                                                "notificationTarget",
                        "orderFeeTotal", "orderPriceTotal", "orderStatus",
"notificationType",
                                            "paymentProvider",
"orderTaxTotal",
                      "paymentMethod",
                                                                    "paymentStatus",
             "voucherCode",
                                                                      "voucherValue"
"shortId",
                           "voucherCurrency",
                                                  "voucherStatus",
```

## 2.2.6.12 i18 internationalization

✓ Retrieves i18next json based on requested language

## 2.2.6.12.1 i18 request

```
\begin{tabular}{llll} {\tt GET} & api/rest/v1/content/i18next.json/de & {\tt HTTP/1.1} & {\tt Authorization:} & {\tt No} & {\tt Auth} & {\tt Accept:} \\ & application/vnd.api+json & {\tt Secondary No} & {\tt Authorization:} & {\tt No} &
```

# 2.3 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

#### 2.3.1 TODO

# 2.3.1.1 TODO version 1.0

- $\checkmark$  [x] Test environment and credentials
- √ [x] specify voucher content fields
- √ [x] specify voucher pricing fields
- $\checkmark$  [x] specify payment method fields

# 2.3.1.2 TODO version 1.0-next

- √ [] refactor entities and apply relationships
- ✓ [] provide full resource schemas
- √ [] enforce validation of resource schemas

## 2.3.2 Test environment and credentials

## **TODO**

Username	Password	Description
test@test.org	test	just protected
test@gmail.com	test	just testing
testtest	test	qa

# 2.3.3 Edge Service Registry

The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.



As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances must register themselves on the registry on startup and unregister on shutdown.

# 2.3.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.

See [Message Relay] for more information.

# 2.3.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

## 2.3.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints must adhere to the [JSONAPI] specification and be subject to strict [Access Control].

# 2.3.6.1 Login

# 2.3.6.1.1 Login request

Variables	Description	Example
ICP_SHOP_ID	see [Test environment and credentials]	
ICP_SHOP_PASSPHRASE	see [Test environment and credentials]	
ICP_SHOP_DIGEST	Derived from \${ICP_SHOP_ID} and \${ICP_SHOP_PASSPHRASE}	MzAwMDAwMTY6dG9wLXNIY3JI dC1wYXNzcGhvYXNI



POST /api/rest/v1/auth/login HTTP/1.1 Authorization: Basic  $\{ICP\_SHOP\_DIGEST\}$  Accept: application/vnd.api+json

## 2.3.6.1.2 Login response

HTTP/1.1 201 Created Content-Type: application/vnd.api+json

#### 2.3.6.1.3 Cookies

Name Value Domain Path Expires HttpOnly Secure

SESSION MmQ5ZjkxO master.env.a / Seassion true false

GltMTM4My0 pi.shop1.roc

0M2E0LWI1M ks DYtYmUwZjY wMzJiZDY5

# 2.3.6.2 Logout

# 2.3.6.2.1 Logout request

Variables Description Example

POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 2.3.6.2.2 Logout response

HTTP/1.1 204 No Content

### 2.3.6.3 Voucher list

See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields.



## 2.3.6.3.1 Voucher list request

GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

## 2.3.6.3.2 Voucher list response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "data":[
                                             "id":"f634f09f-9a06-4297-a326-0d703938b702",
"type":"voucher",
                                "attributes":{
                                                                "code":"LEBALLINNL10",
"currency":"EUR",
                            "ean-code":"8717472242211",
                                                                   "encryption-type":0,
          "name":"Lebara All-in NL 10 EUR",
                                                               "provider-code":"LEBARA",
"kind":0,
"provider-name":"Lebara", "short-name":"All-in NL 10",
                                                                          "value":10.0,
"price-total":11.99,
                                                                       "price-fee":1.99,
                                    "price-tax":0.00,
                                "wirecard-creditcard":{
"payment-methods": {
                                                                         "name":"Credit
                                                             "provider-name": "Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                      "wirecard-paypal":
                                                           "provider-name":"Wirecard"
                        "name":"PayPal",
{
                           } },
                                                          "id":"a3473e20-19b4-44fe-8389-
                                   "type":"voucher",
67a511854759",
                                                                          "attributes":
               "code":"LEBALLINNL15",
                                                   "currency":"EUR",
{
                                                                                  "ean-
                                "encryption-type":0,
    "provider-code":"LEBARA",
code": "8717472242129",
                                                                             "kind":0,
"name":"Lebara All-in NL 15 EUR",
                                                                            "provider-
name":"Lebara", "short-name":"All-in NL 15",
                                                                         "value":15.0,
"price-total":16.99,
                                   "price-tax":0.00,
                                                                       "price-fee":1.99,
"payment-methods":[
                                "wirecard-creditcard":{
                                                                         "name":"Credit
                                                            "provider-name":"Wirecard",
Card",
"image-url": "https://wirecard.com/logo.png"
                                                                      "wirecard-paypal":
                        "name":"PayPal",
                                                              "provider-name": "Wirecard"
                      } } } }
```

### 2.3.6.4 Voucher detail

## 2.3.6.4.1 Voucher detail request

GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 2.3.6.4.2 Voucher detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
     "data":{
               "id":"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher",
                                                                    "ean-
"attributes":{
                     "code":"LEBALLINNL10",
                                                "currency":"EUR",
                            code": "8717472242211",
                                                                    "kind":0,
"name":"Lebara All-in NL 10 EUR",
                                                                   "provider-
name":"Lebara", "short-name":"All-in NL 10", "value":10.0,
                                                                    "price-
total":11.99,
                    "price-tax":0.00,
                                            "price-fee":1.99,
                                                                    "payment-
methods": {
                                                          "name":"Credit Card",
                     "wirecard-creditcard":{
"provider-name":"Wirecard",
                                         "image-url": "https://wirecard.com/logo.png"
},
                                         "name":"PayPal",
            "wirecard-paypal":{
                                                                   "provider-
name":"Wirecard"
```

### 2.3.6.5 Voucher order

See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields.

# 2.3.6.5.1 Voucher order request



```
POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } }
```

 ,				
field name	type	constrains	description	example
id	UUID	globally unique	globally unique UUID	c91feaf3-5968- 4b60-aa5b- 62fe7fdd905c
type	string	n/a	type of request, must be "voucher- order", "voucher- order"	
voucher-code	string	n/a	code of the voucher gathered from voucher list	"VODADE15"
payment-method	string	n/a	on of the allowed methods for the voucher, denoted in voucher list response	"Wirecard VISA"
notification-type	string	currently only "email" is supported	type of the notification target	"email"
notification-target	string	n/a	target adress	"[me@my- email.com] (mailto:me@my- email.com)"
order-success- redirect-url	string	valid URL	Where the wirecard should redirect if payment was successfull	protect
order-failed- redirect-url	string	valid URL	Where the wirecard should redirect if payment fails	protect
order-canceled- redirect-url	string	valid URL	Where the wirecard should redirect if payment was canceled	protect



### 2.3.6.5.2 Voucher order response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
    "type": "voucher-order",
"attributes": {
                        "notification-status": "pending",
                                                                  "confirmation-status":
"pending",
               "notification-type": "email",
                                                "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                  "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                           "payment-status": "pending",
                                                                             "payment-
method": "creditcard",
                          "voucher-code": "LEBALLINNL10",
                                                             "voucher-currency": "EUR",
                           "voucher-status": "pending",
                                                            "order-price-total": 11.99,
"voucher-value": 10.0
"order-tax-total": 0.00,
                              "order-fee-total": 0.99,
                                                             "order-status": "pending",
"serial-number": "1234",
                                   "confirmation-date": "0",
                                                                        "batch-number":
"1234"
         } } }
```

# 2.3.6.6 Voucher order detail

### 2.3.6.6.1 Voucher order detail request

```
GET /api/rest/v1/voucher-orders/:order-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 2.3.6.6.2 Voucher order detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "type": "voucher-order",
"attributes": {
                        "notification-status": "pending",
                                                                  "confirmation-status":
               "notification-type": "email",
"pending",
                                                "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                   "payment-session-id":
                                            "payment-status": "pending",
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                                                              "payment-
method": "creditcard",
                          "voucher-code": "LEBALLINNL10",
                                                             "voucher-currency": "EUR",
"voucher-value": 10.0
                           "voucher-status": "pending",
                                                             "order-price-total": 11.99,
"order-tax-total": 0.00,
                               "order-fee-total": 1.99,
                                                              "order-status": "pending",
"serial-number": "1234",
                            "confirmation-date": "1611313953175"
```

### 2.3.6.7 Provider Text

See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields.

## 2.3.6.7.1 Provider Text request

Variables Description Example



```
GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

# 2.3.6.7.2 Provider Text response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
   "data": [ {
                      "id": "f74bb480-d6df-47ad-8a17-8d7b1b176661",
                                                              "type":
              "kind":
"voucher-text",
            "title": "Produktname", "body": "About You-Geschenkkarte"
"title",
            "type": "voucher-text",
}, {
"attributes": {
                                                    "kind": "subtitle",
                   "body": "Hol Dir per E-Mail eine About You-Geschenkkarte."
"title": "Slogan",
                                                                  }
} ] }
```

#### 2.3.6.8 Content

See [Content Service] for more information on the source of these fields.

# 2.3.6.8.1 Content request

Variables Description Example

GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json

## 2.3.6.8.2 Content response

### 2.3.6.9 Verification

See for more information on the source of these fields.



2.3.6.9.1 Verification request by phone number

```
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-831f-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } }
```

2.3.6.9.2 Verification by phone number response

2.3.6.9.3 Verification request by sms

```
POST /api/rest/v1/auth/sms-verification-code HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } } }
```

2.3.6.9.4 Verification by sms number response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } } }
```

#### 2.3.6.10 Cookies

2.3.6.10.1 Cookies request

```
POST /api/rest/v1/cookies HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json {
"data": [ { "type": "cookie", "id": "shopId", "attributes": {
"name": "shopId", "value": "1234" } }, { "type": "cookie", "id": "ns_dev_id", "attributes": { "name": "ns_dev_id", "value": "device_id" } } ] }
```

2.3.6.10.2 Cookies response

```
HTTP/1.1 200 OK
```

#### 2.3.6.11 Documentation

Returns list of Json Schemas for request and response for requested rest endpoint. Use exact endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return json schemas for /api/rest/v1/vouchers endpoint.

2.3.6.11.1 Documentation request

```
GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

### 2.3.6.11.2 Documentation response

Complete Response is omitted because of size, here is just a part:



```
HTTP/1.1 200 OK
    "required": [
                      "createdDate",
                                        "notificationStatus",
                                                                "notificationTarget",
                        "orderFeeTotal", "orderPriceTotal", "orderStatus",
"notificationType",
                                            "paymentProvider",
"orderTaxTotal",
                      "paymentMethod",
                                                                     "paymentStatus",
             "voucherCode",
                                                                       "voucherValue"
"shortId",
                           "voucherCurrency",
                                                  "voucherStatus",
```

## 2.3.6.12 i18 internationalization

✓ Retrieves i18next json based on requested language

## 2.3.6.12.1 i18 request

```
\begin{tabular}{llll} {\tt GET} & api/rest/v1/content/i18next.json/de & {\tt HTTP/1.1} & {\tt Authorization:} & {\tt No} & {\tt Auth} & {\tt Accept:} \\ & application/vnd.api+json & {\tt Secondary No} & {\tt Authorization:} & {\tt No} &
```

# 2.4 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

#### 2.4.1 TODO

# 2.4.1.1 TODO version 1.0

- $\checkmark$  [x] Test environment and credentials
- ✓ [x] specify voucher content fields
- ✓ [x] specify voucher pricing fields
- $\checkmark$  [x] specify payment method fields

# 2.4.1.2 TODO version 1.0-next

- ✓ [] refactor entities and apply relationships
- ✓ [] provide full resource schemas
- ✓ [] enforce validation of resource schemas

## 2.4.2 Test environment and credentials

## **TODO**

Username	Password	Description
test@test.org	test	just protected
test@gmail.com	test	just testing
testtest	test	qa

# 2.4.3 Edge Service Registry

The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.



As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances must register themselves on the registry on startup and unregister on shutdown.

# 2.4.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.

See [Message Relay] for more information.

## 2.4.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

## 2.4.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints must adhere to the [JSONAPI] specification and be subject to strict [Access Control].

# 2.4.6.1 Login

# 2.4.6.1.1 Login request

Variables	Description	Example
ICP_SHOP_ID	see [Test environment and credentials]	
ICP_SHOP_PASSPHRASE	see [Test environment and credentials]	
ICP_SHOP_DIGEST	Derived from \${ICP_SHOP_ID} and \${ICP_SHOP_PASSPHRASE}	MzAwMDAwMTY6dG9wLXNIY3JI dC1wYXNzcGhvYXNI



POST /api/rest/v1/auth/login HTTP/1.1 Authorization: Basic  $\{ICP\_SHOP\_DIGEST\}$  Accept: application/vnd.api+json

## 2.4.6.1.2 Login response

HTTP/1.1 201 Created Content-Type: application/vnd.api+json

#### 2.4.6.1.3 Cookies

Name Value Domain Path Expires HttpOnly Secure

SESSION MmQ5ZjkxO master.env.a / Seassion true false

GltMTM4My0 pi.shop1.roc

0M2E0LWI1M ks DYtYmUwZjY wMzJiZDY5

# 2.4.6.2 Logout

# 2.4.6.2.1 Logout request

Variables Description Example

POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 2.4.6.2.2 Logout response

HTTP/1.1 204 No Content

### 2.4.6.3 Voucher list

See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields.



## 2.4.6.3.1 Voucher list request

GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

## 2.4.6.3.2 Voucher list response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "data":[
                                             "id":"f634f09f-9a06-4297-a326-0d703938b702",
"type":"voucher",
                                "attributes":{
                                                                "code":"LEBALLINNL10",
"currency":"EUR",
                            "ean-code":"8717472242211",
                                                                   "encryption-type":0,
          "name":"Lebara All-in NL 10 EUR",
                                                               "provider-code":"LEBARA",
"kind":0,
"provider-name":"Lebara", "short-name":"All-in NL 10",
                                                                          "value":10.0,
                                                                      "price-fee":1.99,
"price-total":11.99,
                                    "price-tax":0.00,
                                "wirecard-creditcard":{
"payment-methods": {
                                                                         "name":"Credit
                                                             "provider-name": "Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                      "wirecard-paypal":
                                                          "provider-name":"Wirecard"
                        "name":"PayPal",
{
                           } },
                                                          "id":"a3473e20-19b4-44fe-8389-
                                   "type":"voucher",
67a511854759",
                                                                          "attributes":
               "code":"LEBALLINNL15",
                                                   "currency":"EUR",
{
                                                                                  "ean-
                                "encryption-type":0,
    "provider-code":"LEBARA",
code": "8717472242129",
                                                                             "kind":0,
"name":"Lebara All-in NL 15 EUR",
                                                                            "provider-
name":"Lebara", "short-name":"All-in NL 15",
                                                                         "value":15.0,
"price-total":16.99,
                                   "price-tax":0.00,
                                                                      "price-fee":1.99,
"payment-methods":[
                                "wirecard-creditcard":{
                                                                         "name":"Credit
                                                            "provider-name":"Wirecard",
Card",
"image-url": "https://wirecard.com/logo.png"
                                                                      "wirecard-paypal":
                       "name":"PayPal",
                                                              "provider-name": "Wirecard"
                      } } } }
```

### 2.4.6.4 Voucher detail

## 2.4.6.4.1 Voucher detail request

GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 2.4.6.4.2 Voucher detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
     "data":{
               "id":"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher",
                                                                    "ean-
"attributes":{
                    "code":"LEBALLINNL10",
                                                "currency":"EUR",
                            code": "8717472242211",
                                                                    "kind":0,
"name":"Lebara All-in NL 10 EUR",
                                                                   "provider-
name":"Lebara", "short-name":"All-in NL 10", "value":10.0,
                                                                    "price-
total":11.99,
                    "price-tax":0.00,
                                            "price-fee":1.99,
                                                                    "payment-
methods": {
                                                          "name":"Credit Card",
                    "wirecard-creditcard":{
"provider-name":"Wirecard",
                                         "image-url": "https://wirecard.com/logo.png"
},
                                         "name":"PayPal",
            "wirecard-paypal":{
                                                                   "provider-
name":"Wirecard"
```

### 2.4.6.5 Voucher order

See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields.

# 2.4.6.5.1 Voucher order request



```
POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } }
```

_	-				
	field name	type	constrains	description	example
	id	UUID	globally unique	globally unique UUID	c91feaf3-5968- 4b60-aa5b- 62fe7fdd905c
	type	string	n/a	type of request, must be "voucher- order", "voucher- order"	
	voucher-code	string	n/a	code of the voucher gathered from voucher list	"VODADE15"
	payment-method	string	n/a	on of the allowed methods for the voucher, denoted in voucher list response	"Wirecard VISA"
	notification-type	string	currently only "email" is supported	type of the notification target	"email"
	notification-target	string	n/a	target adress	"[me@my- email.com] (mailto:me@my- email.com)"
	order-success- redirect-url	string	valid URL	Where the wirecard should redirect if payment was successfull	protect
	order-failed- redirect-url	string	valid URL	Where the wirecard should redirect if payment fails	protect
	order-canceled- redirect-url	string	valid URL	Where the wirecard should redirect if payment was canceled	protect



### 2.4.6.5.2 Voucher order response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
   "type": "voucher-order",
"attributes": {
                        "notification-status": "pending",
                                                                 "confirmation-status":
"pending",
               "notification-type": "email",
                                                "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                  "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                          "payment-status": "pending",
                                                                             "payment-
method": "creditcard",
                          "voucher-code": "LEBALLINNL10",
                                                             "voucher-currency": "EUR",
                           "voucher-status": "pending",
                                                            "order-price-total": 11.99,
"voucher-value": 10.0
"order-tax-total": 0.00,
                              "order-fee-total": 0.99,
                                                             "order-status": "pending",
"serial-number": "1234",
                                   "confirmation-date": "0",
                                                                        "batch-number":
"1234"
         } } }
```

# 2.4.6.6 Voucher order detail

### 2.4.6.6.1 Voucher order detail request

```
GET /api/rest/v1/voucher-orders/:order-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 2.4.6.6.2 Voucher order detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "type": "voucher-order",
"attributes": {
                        "notification-status": "pending",
                                                                  "confirmation-status":
               "notification-type": "email",
"pending",
                                                "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                   "payment-session-id":
                                           "payment-status": "pending",
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                                                              "payment-
                          "voucher-code": "LEBALLINNL10",
method": "creditcard",
                                                             "voucher-currency": "EUR",
"voucher-value": 10.0
                           "voucher-status": "pending",
                                                             "order-price-total": 11.99,
"order-tax-total": 0.00,
                               "order-fee-total": 1.99,
                                                              "order-status": "pending",
"serial-number": "1234",
                            "confirmation-date": "1611313953175"
```

### 2.4.6.7 Provider Text

See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields.

## 2.4.6.7.1 Provider Text request

Variables Description Example



```
GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

# 2.4.6.7.2 Provider Text response

#### 2.4.6.8 Content

See [Content Service] for more information on the source of these fields.

# 2.4.6.8.1 Content request

Variables Description Example

GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json

## 2.4.6.8.2 Content response

### 2.4.6.9 Verification

See for more information on the source of these fields.



2.4.6.9.1 Verification request by phone number

```
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-831f-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } } }
```

2.4.6.9.2 Verification by phone number response

2.4.6.9.3 Verification request by sms

```
POST /api/rest/v1/auth/sms-verification-code HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } } }
```

2.4.6.9.4 Verification by sms number response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } } }
```

#### 2.4.6.10 Cookies

2.4.6.10.1 Cookies request

```
POST /api/rest/v1/cookies HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json {
"data": [ { "type": "cookie", "id": "shopId", "attributes": {
"name": "shopId", "value": "1234" } }, { "type": "cookie", "id": "ns_dev_id", "attributes": { "name": "ns_dev_id", "value": "device_id" } } ] }
```

2.4.6.10.2 Cookies response

```
HTTP/1.1 200 OK
```

#### 2.4.6.11 Documentation

Returns list of Json Schemas for request and response for requested rest endpoint. Use exact endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return json schemas for /api/rest/v1/vouchers endpoint.

2.4.6.11.1 Documentation request

```
GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 2.4.6.11.2 Documentation response

Complete Response is omitted because of size, here is just a part:



```
HTTP/1.1 200 OK
    "required": [
                     "createdDate",
                                       "notificationStatus",
                                                                "notificationTarget",
                        "orderFeeTotal", "orderPriceTotal", "orderStatus",
"notificationType",
                                            "paymentProvider",
"orderTaxTotal",
                      "paymentMethod",
                                                                    "paymentStatus",
             "voucherCode",
                                                                      "voucherValue"
"shortId",
                          "voucherCurrency",
                                                  "voucherStatus",
```

## 2.4.6.12 i18 internationalization

✓ Retrieves i18next json based on requested language

## 2.4.6.12.1 i18 request

```
\begin{tabular}{llll} {\tt GET} & api/rest/v1/content/i18next.json/de & {\tt HTTP/1.1} & {\tt Authorization:} & {\tt No} & {\tt Auth} & {\tt Accept:} \\ & application/vnd.api+json & {\tt Secondary No} & {\tt Authorization:} & {\tt No} &
```

# 2.5 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

#### 2.5.1 TODO

# 2.5.1.1 TODO version 1.0

- $\checkmark$  [x] Test environment and credentials
- √ [x] specify voucher content fields
- ✓ [x] specify voucher pricing fields
- $\checkmark$  [x] specify payment method fields

# 2.5.1.2 TODO version 1.0-next

- √ [] refactor entities and apply relationships
- ✓ [] provide full resource schemas
- ✓ [] enforce validation of resource schemas

## 2.5.2 Test environment and credentials

## **TODO**

Username	Password	Description
test@test.org	test	just protected
test@gmail.com	test	just testing
testtest	test	qa

# 2.5.3 Edge Service Registry

The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.



As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances must register themselves on the registry on startup and unregister on shutdown.

# 2.5.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.

See [Message Relay] for more information.

## 2.5.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

## 2.5.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints must adhere to the [JSONAPI] specification and be subject to strict [Access Control].

# 2.5.6.1 Login

# 2.5.6.1.1 Login request

Variables	Description	Example
ICP_SHOP_ID	see [Test environment and credentials]	
ICP_SHOP_PASSPHRASE	see [Test environment and credentials]	
ICP_SHOP_DIGEST	Derived from \${ICP_SHOP_ID} and \${ICP_SHOP_PASSPHRASE}	MzAwMDAwMTY6dG9wLXNIY3JI dC1wYXNzcGhyYXNI



POST /api/rest/v1/auth/login HTTP/1.1 Authorization: Basic  $\{ICP\_SHOP\_DIGEST\}$  Accept: application/vnd.api+json

## 2.5.6.1.2 Login response

HTTP/1.1 201 Created Content-Type: application/vnd.api+json

#### 2.5.6.1.3 Cookies

Name Value Domain Path Expires HttpOnly Secure

SESSION MmQ5ZjkxO master.env.a / Seassion true false

GltMTM4My0 pi.shop1.roc

0M2E0LWI1M ks DYtYmUwZjY wMzJiZDY5

# 2.5.6.2 Logout

# 2.5.6.2.1 Logout request

Variables Description Example

POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 2.5.6.2.2 Logout response

HTTP/1.1 204 No Content

### 2.5.6.3 Voucher list

See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields.



## 2.5.6.3.1 Voucher list request

GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

## 2.5.6.3.2 Voucher list response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "data":[
                                             "id":"f634f09f-9a06-4297-a326-0d703938b702",
"type":"voucher",
                                "attributes":{
                                                                 "code":"LEBALLINNL10",
"currency":"EUR",
                            "ean-code": "8717472242211",
                                                                    "encryption-type":0,
          "name":"Lebara All-in NL 10 EUR",
                                                               "provider-code":"LEBARA",
"kind":0,
"provider-name":"Lebara", "short-name":"All-in NL 10",
                                                                          "value":10.0,
                                                                       "price-fee":1.99,
"price-total":11.99,
                                    "price-tax":0.00,
"payment-methods": {
                                "wirecard-creditcard":{
                                                                          "name":"Credit
                                                              "provider-name": "Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                      "wirecard-paypal":
                                                           "provider-name":"Wirecard"
                        "name": "PayPal",
{
                           } },
                                                           "id":"a3473e20-19b4-44fe-8389-
                                   "type":"voucher",
67a511854759",
                                                                          "attributes":
               "code":"LEBALLINNL15",
                                                   "currency":"EUR",
{
                                                                                  "ean-
                                "encryption-type":0,
    "provider-code":"LEBARA",
code": "8717472242129",
                                                                             "kind":0,
"name":"Lebara All-in NL 15 EUR",
                                                                            "provider-
name":"Lebara", "short-name":"All-in NL 15",
                                                                         "value":15.0,
"price-total":16.99,
                                   "price-tax":0.00,
                                                                       "price-fee":1.99,
"payment-methods":[
                                "wirecard-creditcard":{
                                                                          "name":"Credit
                                                            "provider-name":"Wirecard",
Card",
"image-url": "https://wirecard.com/logo.png"
                                                                      "wirecard-paypal":
                        "name":"PayPal",
                                                              "provider-name": "Wirecard"
                      } } } }
```

### 2.5.6.4 Voucher detail

## 2.5.6.4.1 Voucher detail request

GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 2.5.6.4.2 Voucher detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
     "data":{
               "id":"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher",
                                                                    "ean-
"attributes":{
                    "code":"LEBALLINNL10",
                                                "currency":"EUR",
                            code":"8717472242211",
                                                                    "kind":0,
"name":"Lebara All-in NL 10 EUR",
                                                                   "provider-
name":"Lebara", "short-name":"All-in NL 10", "value":10.0,
                                                                    "price-
total":11.99,
                    "price-tax":0.00,
                                            "price-fee":1.99,
                                                                    "payment-
methods": {
                                                          "name":"Credit Card",
                    "wirecard-creditcard":{
"provider-name":"Wirecard",
                                         "image-url": "https://wirecard.com/logo.png"
},
                                         "name":"PayPal",
            "wirecard-paypal":{
                                                                   "provider-
name":"Wirecard"
```

### 2.5.6.5 Voucher order

See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields.

# 2.5.6.5.1 Voucher order request



```
POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } }
```

_	-				
	field name	type	constrains	description	example
	id	UUID	globally unique	globally unique UUID	c91feaf3-5968- 4b60-aa5b- 62fe7fdd905c
	type	string	n/a	type of request, must be "voucher- order", "voucher- order"	
	voucher-code	string	n/a	code of the voucher gathered from voucher list	"VODADE15"
	payment-method	string	n/a	on of the allowed methods for the voucher, denoted in voucher list response	"Wirecard VISA"
	notification-type	string	currently only "email" is supported	type of the notification target	"email"
	notification-target	string	n/a	target adress	"[me@my- email.com] (mailto:me@my- email.com)"
	order-success- redirect-url	string	valid URL	Where the wirecard should redirect if payment was successfull	protect
	order-failed- redirect-url	string	valid URL	Where the wirecard should redirect if payment fails	protect
	order-canceled- redirect-url	string	valid URL	Where the wirecard should redirect if payment was canceled	protect



### 2.5.6.5.2 Voucher order response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
   "type": "voucher-order",
"attributes": {
                        "notification-status": "pending",
                                                                 "confirmation-status":
               "notification-type": "email",
"pending",
                                                "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                  "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                          "payment-status": "pending",
                                                                            "pavment-
                          "voucher-code": "LEBALLINNL10",
                                                             "voucher-currency": "EUR",
method": "creditcard",
                           "voucher-status": "pending",
                                                            "order-price-total": 11.99,
"voucher-value": 10.0
"order-tax-total": 0.00,
                              "order-fee-total": 0.99,
                                                             "order-status": "pending",
                                   "confirmation-date": "0",
"serial-number": "1234",
                                                                       "batch-number":
"1234"
         } } }
```

# 2.5.6.6 Voucher order detail

### 2.5.6.6.1 Voucher order detail request

```
GET /api/rest/v1/voucher-orders/:order-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

# 2.5.6.6.2 Voucher order detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "type": "voucher-order",
                        "notification-status": "pending",
"attributes": {
                                                                  "confirmation-status":
               "notification-type": "email",
"pending",
                                                "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                   "payment-session-id":
                                           "payment-status": "pending",
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                                                             "payment-
                          "voucher-code": "LEBALLINNL10",
                                                             "voucher-currency": "EUR",
method": "creditcard",
"voucher-value": 10.0
                           "voucher-status": "pending",
                                                             "order-price-total": 11.99,
"order-tax-total": 0.00,
                               "order-fee-total": 1.99,
                                                             "order-status": "pending",
                            "confirmation-date": "1611313953175"
"serial-number": "1234",
```

### 2.5.6.7 Provider Text

See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields.

## 2.5.6.7.1 Provider Text request

Variables Description Example



```
GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

# 2.5.6.7.2 Provider Text response

#### 2.5.6.8 Content

See [Content Service] for more information on the source of these fields.

# 2.5.6.8.1 Content request

Variables Description Example

GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json

## 2.5.6.8.2 Content response

### 2.5.6.9 Verification

See for more information on the source of these fields.



2.5.6.9.1 Verification request by phone number

```
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-831f-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } } }
```

2.5.6.9.2 Verification by phone number response

2.5.6.9.3 Verification request by sms

```
POST /api/rest/v1/auth/sms-verification-code HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } } }
```

2.5.6.9.4 Verification by sms number response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } } }
```

#### 2.5.6.10 Cookies

2.5.6.10.1 Cookies request

```
POST /api/rest/v1/cookies HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json {
"data": [ { "type": "cookie", "id": "shopId", "attributes": {
"name": "shopId", "value": "1234" } }, { "type": "cookie", "id": "ns_dev_id", "attributes": { "name": "ns_dev_id", "value": "device_id" } } ] }
```

2.5.6.10.2 Cookies response

```
HTTP/1.1 200 OK
```

#### 2.5.6.11 Documentation

Returns list of Json Schemas for request and response for requested rest endpoint. Use exact endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return json schemas for /api/rest/v1/vouchers endpoint.

2.5.6.11.1 Documentation request

```
GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

### 2.5.6.11.2 Documentation response

Complete Response is omitted because of size, here is just a part:



# 2.5.6.12 i18 internationalization

✓ Retrieves i18next json based on requested language

# 2.5.6.12.1 i18 request

```
\begin{tabular}{llll} {\tt GET} & api/rest/v1/content/i18next.json/de & {\tt HTTP/1.1} & {\tt Authorization:} & {\tt No} & {\tt Auth} & {\tt Accept:} \\ & application/vnd.api+json & {\tt Secondary No} & {\tt Authorization:} & {\tt No} &
```



# 3 Big

# 3.1 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

## 3.1.1 TODO

# 3.1.1.1 TODO version 1.0

- $\checkmark$  [x] Test environment and credentials
- √ [x] specify voucher content fields
- √ [x] specify voucher pricing fields
- $\checkmark$  [x] specify payment method fields

# 3.1.1.2 TODO version 1.0-next

- √ [] refactor entities and apply relationships
- ✓ [] provide full resource schemas
- √ [] enforce validation of resource schemas

# 3.1.2 Test environment and credentials

### TODO

Username	Password	Description
test@test.org	test	just protected
test@gmail.com	test	just testing
testtest	test	qa

# 3.1.3 Edge Service Registry

The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.

As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances must register themselves on the registry on startup and unregister on shutdown.

# 3.1.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.



# See [Message Relay] for more information.

# 3.1.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

# 3.1.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints must adhere to the [JSONAPI] specification and be subject to strict [Access Control].

# 3.1.6.1 Login

# 3.1.6.1.1 Login request

Variables	Description	Example
ICP_SHOP_ID	see [Test environment and credentials]	
ICD SHOD DASSDUBASE	soo [Tost onvironment and	

see [Test environment and ICP\_SHOP\_PASSPHRASE credentials]

ICP\_SHOP\_DIGEST Derived from \${ICP\_SHOP\_ID} MzAwMDAwMTY6dG9wLXNIY3JI

and \${ICP\_SHOP\_PASSPHRASE} dC1wYXNzcGhyYXNI

/api/rest/v1/auth/login HTTP/1.1 Authorization: Basic \${ICP\_SHOP\_DIGEST} application/vnd.api+json

# 3.1.6.1.2 Login response

HTTP/1.1 201 Created Content-Type: application/vnd.api+json

## 3.1.6.1.3 Cookies

Name	Value	Domain	Path	Expires	HttpOnly	Secure
SESSION	MmQ5ZjkxO GItMTM4My0 0M2E0LWI1M DYtYmUwZjY wMzJiZDY5	•	I	Seassion	true	false

# 3.1.6.2 Logout

# 3.1.6.2.1 Logout request

**Variables** Description Example



POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

## 3.1.6.2.2 Logout response

```
HTTP/1.1 204 No Content
```

#### 3.1.6.3 Voucher list

See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields.

## 3.1.6.3.1 Voucher list request

GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 3.1.6.3.2 Voucher list response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
                                                  "id": "f634f09f-9a06-4297-a326-0d703938b702",
        "data":[
                              {
"type":"voucher",
                                                                         "code": "LEBALLINNL10",
                                   "attributes":{
"currency":"EUR",
                                "ean-code": "8717472242211",
                                                                           "encryption-type":0,
                     "name":"Lebara All-in NL 10 EUR",
                                                                     "provider-code":"LEBARA",
"provider-name":"Lebara",
                                       "short-name":"All-in NL 10",
                                                                                  "value":10.0,
"price-total":11.99,
                                        "price-tax":0.00,
                                                                              "price-fee":1.99,
"payment-methods": {
                                     "wirecard-creditcard":{
                                                                                 "name":"Credit
                                                                    "provider-name": "Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                             "wirecard-paypal":
                          "name":"PayPal",
                                                                    "provider-name": "Wirecard"
                                                                "id": "a3473e20-19b4-44fe-8389-
                                        },
                                                 {
                                       "type":"voucher"
67a511854759",
                                                                                  "attributes":
                                                        "currency":"EUR",
                 "code": "LEBALLINNL15",
                                                                                          "ean-
code": "8717472242129",
                                            "encryption-type":0,
                                                                                      "kind":0,
"name":"Lebara All-in NL 15 EUR",
                                              "provider-code":"LEBARA",
                                                                                     "provider-
name":"Lebara",
                                  "short-name": "All-in NL 15",
                                                                                  "value":15.0,
                                        "price-tax":0.00,
                                                                              "price-fee":1.99,
"price-total":16.99,
"payment-methods":[
                                    "wirecard-creditcard":{
                                                                                 "name":"Credit
                                                                    "provider-name":"Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                             "wirecard-paypal":
                          "name":"PayPal",
                                                                    "provider-name": "Wirecard"
                                } ] }
```

### 3.1.6.4 Voucher detail



## 3.1.6.4.1 Voucher detail request

GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

### 3.1.6.4.2 Voucher detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data":{ "id":"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher", "attributes":{ "code":"LEBALLINNL10", "currency":"EUR", "ean-
code":"8717472242211",
                                    "encryption-type":0,
                                                                                       "kind":0,
"name":"Lebara All-in NL 10 EUR", "provider-code":"LEBARA",
                                                                                       "provider-
name":"Lebara", "short-name":"All-in NL 10", "value":10.0, total":11.99, "price-tax":0.00, "price-fee":1.99, methods": { "wirecard-creditcard":{ "name"
                                                                                        "price-
                                                                                        "payment-
                           "wirecard-creditcard":{ "name":"Credit Card",
"provider-name": "Wirecard",
                                                    "image-url": "https://wirecard.com/logo.png"
     "wirecard-paypal":{
                                                     "name":"PayPal",
                                                                                       "provider-
name":"Wirecard"
                  }
                                        }
                                               } } }
```

## 3.1.6.5 Voucher order

See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields.

## 3.1.6.5.1 Voucher order request

```
POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } }
```

field name	type	constrains	description	example
id	UUID	globally unique	globally unique UUID	c91feaf3-5968- 4b60-aa5b- 62fe7fdd905c
type	string	n/a	type of request, must be "voucher- order", "voucher- order"	
voucher-code	string	n/a	code of the voucher gathered from voucher list	"VODADE15"
payment-method	string	n/a	on of the allowed methods for the voucher, denoted in voucher list response	"Wirecard VISA"



field name	type	constrains	description	example
notification-type	string	currently only "email" is supported	type of the notification target	"email"
notification-target	string	n/a	target adress	"[me@my- email.com] (mailto:me@my- email.com)"
order-success- redirect-url	string	valid URL	Where the wirecard should redirect if payment was successfull	protect
order-failed- redirect-url	string	valid URL	Where the wirecard should redirect if payment fails	protect
order-canceled- redirect-url	string	valid URL	Where the wirecard should redirect if payment was canceled	protect

## 3.1.6.5.2 Voucher order response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
"type": "voucher-order",
                                                               "confirmation-status":
"pending", "notification-type": "email", "notification-target": "me@my-email.com",
"payment-provider": "wirecard",
                                "payment-redirect-url": "https://wpp-test.wirecard.com/?
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                          "payment-status": "pending",
method": "creditcard", "voucher-code": "LEBALLINNL10",
                                                           "voucher-currency": "EUR",
"voucher-value": 10.0
                          "voucher-status": "pending",
                                                           "order-price-total": 11.99,
                                                           "order-status": "pending",
"order-tax-total": 0.00,
                              "order-fee-total": 0.99,
"serial-number": "1234",
                                  "confirmation-date": "0",
                                                                     "batch-number":
"1234"
       } } }
```

# 3.1.6.6 Voucher order detail



## 3.1.6.6.1 Voucher order detail request

### 3.1.6.6.2 Voucher order detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c",
                                                                     "type": "voucher-order",
"attributes": {
                          "notification-status": "pending",
                                                                        "confirmation-status":
           "notification-type": "email",
                                                    "notification-target": "me@my-email.com",
"pending",
"payment-provider": "wirecard",
                                    "payment-redirect-url": "https://wpp-test.wirecard.com/?
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                         "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                               "payment-status": "pending",
                                                                                     "payment-
                           "voucher-code": "LEBALLINNL10",
                                                                   "voucher-currency": "EUR",
method": "creditcard",
                             "voucher-status": "pending",
"order-fee-total": 1.99,
"voucher-value": 10.0
                                                                   "order-price-total": 11.99,
                           "order-fee-total": 1.99,
"confirmation-date": "1611313953175"
"order-tax-total": 0.00,
                                                                   "order-status": "pending",
"serial-number": "1234",
                                                                       } } }
```

### 3.1.6.7 Provider Text

See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields.

## 3.1.6.7.1 Provider Text request

Variables Description Example

```
GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

# 3.1.6.7.2 Provider Text response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
"type":
"voucher-text",
               "kind":
            "title": "Produktname", "body": "About You-Geschenkkarte"
"title",
           "id": "a598bf3b-abe0-4fc4-80fa-135a84510c81", "type": "voucher-text",
     {
},
"attributes": {
                     "provider-code": "ABOUTYOU",
                                                    "kind": "subtitle",
"title": "Slogan",
                   "body": "Hol Dir per E-Mail eine About You-Geschenkkarte."
                                                                  }
} ] }
```

#### 3.1.6.8 Content

See [Content Service] for more information on the source of these fields.

# 3.1.6.8.1 Content request

Variables Description Example



GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json

### 3.1.6.8.2 Content response

### 3.1.6.9 Verification

See for more information on the source of these fields.

3.1.6.9.1 Verification request by phone number

```
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-831f-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } }
```

3.1.6.9.2 Verification by phone number response

```
HTTP/1.1 200 OK Content-Type: application/json {
    "data": { "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "ok": false, "remaining-expiration-time": 0 } } }
```

3.1.6.9.3 Verification request by sms

```
POST /api/rest/v1/auth/sms-verification-code HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } } } }
```

3.1.6.9.4 Verification by sms number response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } } }
```

## 3.1.6.10 Cookies

3.1.6.10.1 Cookies request

```
3.1.6.10.2 Cookies response
```

```
HTTP/1.1 200 OK
```

### 3.1.6.11 Documentation

Returns list of Json Schemas for request and response for requested rest endpoint. Use exact endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return json schemas for /api/rest/v1/vouchers endpoint.



## 3.1.6.11.1 Documentation request

GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

#### 3.1.6.11.2 Documentation response

# Complete Response is omitted because of size, here is just a part:

```
HTTP/1.1 200 OK
    "required": [
                        "createdDate",
                                            "notificationStatus",
                                                                       "notificationTarget",
"notificationType",
                                                                              "orderStatus",
                           "orderFeeTotal",
                                                   "orderPriceTotal",
"orderTaxTotal",
                        "paymentMethod",
                                                 "paymentProvider",
                                                                            "paymentStatus",
              "voucherCode",
"shortId",
                                                                              "voucherValue"
                                 "voucherCurrency",
                                                         "voucherStatus",
] }
```

## 3.1.6.12 i18 internationalization

✓ Retrieves i18next json based on requested language

# 3.1.6.12.1 i18 request

```
GET api/rest/v1/content/i18next.json/de HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

# 3.2 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

## 3.2.1 TODO

# 3.2.1.1 TODO version 1.0

- $\checkmark$  [x] Test environment and credentials
- √ [x] specify voucher content fields
- ✓ [x] specify voucher pricing fields
- $\checkmark$  [x] specify payment method fields

# 3.2.1.2 TODO version 1.0-next

- √ [] refactor entities and apply relationships
- √ [] provide full resource schemas
- ✓ [] enforce validation of resource schemas

# 3.2.2 Test environment and credentials

## **TODO**

Username	Password	Description
test@test.org	test	just protected
test@gmail.com	test	just testing
testtest	test	qa

# 3.2.3 Edge Service Registry



The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.

As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances must register themselves on the registry on startup and unregister on shutdown.

# 3.2.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.

See [Message Relay] for more information.

# 3.2.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

## 3.2.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints must adhere to the [JSONAPI] specification and be subject to strict [Access Control].

## 3.2.6.1 Login

## 3.2.6.1.1 Login request

Variables	Description	Example
ICP_SHOP_ID	see [Test environment and credentials]	
ICP_SHOP_PASSPHRASE	see [Test environment and credentials]	
ICP_SHOP_DIGEST	Derived from \${ICP_SHOP_ID} and \${ICP_SHOP_PASSPHRASE}	MzAwMDAwMTY6dG9wLXNIY3JI dC1wYXNzcGhyYXNI



POST /api/rest/v1/auth/login HTTP/1.1 Authorization: Basic  $\{ICP\_SHOP\_DIGEST\}$  Accept: application/vnd.api+json

# 3.2.6.1.2 Login response

HTTP/1.1 201 Created Content-Type: application/vnd.api+json

#### 3.2.6.1.3 Cookies

Name Value Domain Path Expires HttpOnly Secure

SESSION MmQ5ZjkxO master.env.a / Seassion true false

GltMTM4My0 pi.shop1.roc

0M2E0LWI1M ks DYtYmUwZjY wMzJiZDY5

# 3.2.6.2 Logout

# 3.2.6.2.1 Logout request

Variables Description Example

POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 3.2.6.2.2 Logout response

HTTP/1.1 204 No Content

## 3.2.6.3 Voucher list

See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields.



## 3.2.6.3.1 Voucher list request

GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

## 3.2.6.3.2 Voucher list response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "data":[
                                             "id":"f634f09f-9a06-4297-a326-0d703938b702",
"type":"voucher",
                                "attributes":{
                                                                 "code":"LEBALLINNL10",
"currency":"EUR",
                            "ean-code":"8717472242211",
                                                                   "encryption-type":0,
          "name":"Lebara All-in NL 10 EUR",
                                                               "provider-code":"LEBARA",
"kind":0,
"provider-name":"Lebara", "short-name":"All-in NL 10",
                                                                          "value":10.0,
                                                                       "price-fee":1.99,
"price-total":11.99,
                                    "price-tax":0.00,
"payment-methods": {
                                "wirecard-creditcard":{
                                                                         "name":"Credit
                                                             "provider-name": "Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                      "wirecard-paypal":
                                                           "provider-name":"Wirecard"
                        "name":"PayPal",
{
                           } },
                                                          "id":"a3473e20-19b4-44fe-8389-
                                   "type":"voucher",
67a511854759",
                                                                          "attributes":
               "code":"LEBALLINNL15",
                                                   "currency":"EUR",
{
                                                                                  "ean-
                                "encryption-type":0,
    "provider-code":"LEBARA",
code": "8717472242129",
                                                                             "kind":0,
"name":"Lebara All-in NL 15 EUR",
                                                                            "provider-
name":"Lebara", "short-name":"All-in NL 15",
                                                                         "value":15.0,
"price-total":16.99,
                                   "price-tax":0.00,
                                                                       "price-fee":1.99,
"payment-methods":[
                                "wirecard-creditcard":{
                                                                         "name":"Credit
                                                            "provider-name":"Wirecard",
Card",
"image-url": "https://wirecard.com/logo.png"
                                                                      "wirecard-paypal":
                        "name":"PayPal",
                                                              "provider-name": "Wirecard"
                      } } } }
```

#### 3.2.6.4 Voucher detail

## 3.2.6.4.1 Voucher detail request

GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 3.2.6.4.2 Voucher detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
     "data":{
               "id":"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher",
                                                                    "ean-
"attributes":{
                     "code":"LEBALLINNL10",
                                                "currency":"EUR",
                            code": "8717472242211",
                                                                    "kind":0,
"name":"Lebara All-in NL 10 EUR",
                                                                   "provider-
name":"Lebara", "short-name":"All-in NL 10", "value":10.0,
                                                                    "price-
total":11.99,
                    "price-tax":0.00,
                                            "price-fee":1.99,
                                                                    "payment-
methods": {
                                                          "name":"Credit Card",
                     "wirecard-creditcard":{
"provider-name":"Wirecard",
                                         "image-url": "https://wirecard.com/logo.png"
},
                                         "name":"PayPal",
            "wirecard-paypal":{
                                                                   "provider-
name":"Wirecard"
```

#### 3.2.6.5 Voucher order

See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields.

# 3.2.6.5.1 Voucher order request



```
POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } }
```

field name	type	constrains	description	example
id	UUID	globally unique	globally unique UUID	c91feaf3-5968- 4b60-aa5b- 62fe7fdd905c
type	string	n/a	type of request, must be "voucher- order", "voucher- order"	
voucher-code	string	n/a	code of the voucher gathered from voucher list	"VODADE15"
payment-method	string	n/a	on of the allowed methods for the voucher, denoted in voucher list response	"Wirecard VISA"
notification-type	string	currently only "email" is supported	type of the notification target	"email"
notification-target	string	n/a	target adress	"[me@my- email.com] (mailto:me@my- email.com)"
order-success- redirect-url	string	valid URL	Where the wirecard should redirect if payment was successfull	protect
order-failed- redirect-url	string	valid URL	Where the wirecard should redirect if payment fails	protect
order-canceled- redirect-url	string	valid URL	Where the wirecard should redirect if payment was canceled	protect



#### 3.2.6.5.2 Voucher order response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
   "type": "voucher-order",
"attributes": {
                        "notification-status": "pending",
                                                                 "confirmation-status":
               "notification-type": "email",
"pending",
                                                "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                  "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                          "payment-status": "pending",
                                                                            "pavment-
                          "voucher-code": "LEBALLINNL10",
                                                            "voucher-currency": "EUR",
method": "creditcard",
                          "voucher-status": "pending",
                                                            "order-price-total": 11.99,
"voucher-value": 10.0
"order-tax-total": 0.00,
                              "order-fee-total": 0.99,
                                                             "order-status": "pending",
                                   "confirmation-date": "0",
"serial-number": "1234",
                                                                       "batch-number":
"1234"
        } } }
```

# 3.2.6.6 Voucher order detail

#### 3.2.6.6.1 Voucher order detail request

```
\begin{tabular}{llll} {\tt GET} & $/$api/rest/v1/voucher-orders/:order-id & {\tt HTTP/1.1} & {\tt Authorization:} & {\tt No} & {\tt Auth} & {\tt Accept:} \\ {\tt application/vnd.api+json} & & & & & & & \\ \end{tabular}
```

## 3.2.6.6.2 Voucher order detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "type": "voucher-order",
                        "notification-status": "pending",
"attributes": {
                                                                 "confirmation-status":
               "notification-type": "email",
"pending",
                                                "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                  "payment-session-id":
                                           "payment-status": "pending",
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                                                             "payment-
                          "voucher-code": "LEBALLINNL10",
                                                             "voucher-currency": "EUR",
method": "creditcard",
"voucher-value": 10.0
                           "voucher-status": "pending",
                                                            "order-price-total": 11.99,
"order-tax-total": 0.00,
                               "order-fee-total": 1.99,
                                                             "order-status": "pending",
                            "confirmation-date": "1611313953175"
"serial-number": "1234",
```

### 3.2.6.7 Provider Text

See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields.

## 3.2.6.7.1 Provider Text request

Variables Description Example



```
GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

# 3.2.6.7.2 Provider Text response

#### 3.2.6.8 Content

See [Content Service] for more information on the source of these fields.

# 3.2.6.8.1 Content request

Variables Description Example

GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json

## 3.2.6.8.2 Content response

#### 3.2.6.9 Verification

See for more information on the source of these fields.



3.2.6.9.1 Verification request by phone number

```
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-831f-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } } }
```

3.2.6.9.2 Verification by phone number response

3.2.6.9.3 Verification request by sms

```
POST /api/rest/v1/auth/sms-verification-code HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } } }
```

3.2.6.9.4 Verification by sms number response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } } }
```

#### 3.2.6.10 Cookies

3.2.6.10.1 Cookies request

3.2.6.10.2 Cookies response

```
HTTP/1.1 200 OK
```

#### 3.2.6.11 Documentation

Returns list of Json Schemas for request and response for requested rest endpoint. Use exact endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return json schemas for /api/rest/v1/vouchers endpoint.

3.2.6.11.1 Documentation request

```
GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

### 3.2.6.11.2 Documentation response

Complete Response is omitted because of size, here is just a part:



# 3.2.6.12 i18 internationalization

✓ Retrieves i18next json based on requested language

## 3.2.6.12.1 i18 request

```
GET api/rest/v1/content/i18next.json/de HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

# 3.3 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

#### 3.3.1 TODO

# 3.3.1.1 TODO version 1.0

- $\checkmark$  [x] Test environment and credentials
- ✓ [x] specify voucher content fields
- ✓ [x] specify voucher pricing fields
- $\checkmark$  [x] specify payment method fields

# 3.3.1.2 TODO version 1.0-next

- √ [] refactor entities and apply relationships
- ✓ [] provide full resource schemas
- ✓ [] enforce validation of resource schemas

## 3.3.2 Test environment and credentials

## **TODO**

Username	Password	Description
test@test.org	test	just protected
test@gmail.com	test	just testing
testtest	test	qa

# 3.3.3 Edge Service Registry

The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.



As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances must register themselves on the registry on startup and unregister on shutdown.

# 3.3.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.

See [Message Relay] for more information.

# 3.3.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

#### 3.3.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints must adhere to the [JSONAPI] specification and be subject to strict [Access Control].

# 3.3.6.1 Login

# 3.3.6.1.1 Login request

Variables	Description	Example
ICP_SHOP_ID	see [Test environment and credentials]	
ICP_SHOP_PASSPHRASE	see [Test environment and credentials]	
ICP_SHOP_DIGEST	Derived from \${ICP_SHOP_ID} and \${ICP_SHOP_PASSPHRASE}	MzAwMDAwMTY6dG9wLXNIY3JI dC1wYXNzcGhvYXNI



POST /api/rest/v1/auth/login HTTP/1.1 Authorization: Basic  $\{ICP\_SHOP\_DIGEST\}$  Accept: application/vnd.api+json

## 3.3.6.1.2 Login response

HTTP/1.1 201 Created Content-Type: application/vnd.api+json

#### 3.3.6.1.3 Cookies

Name Value Domain Path Expires HttpOnly Secure

SESSION MmQ5ZjkxO master.env.a / Seassion true false

GltMTM4My0 pi.shop1.roc

0M2E0LWI1M ks DYtYmUwZjY wMzJiZDY5

# 3.3.6.2 Logout

# 3.3.6.2.1 Logout request

Variables Description Example

POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 3.3.6.2.2 Logout response

HTTP/1.1 204 No Content

## 3.3.6.3 Voucher list

See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields.



## 3.3.6.3.1 Voucher list request

GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

## 3.3.6.3.2 Voucher list response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "data":[
                                             "id":"f634f09f-9a06-4297-a326-0d703938b702",
"type":"voucher",
                                "attributes":{
                                                                "code":"LEBALLINNL10",
"currency":"EUR",
                            "ean-code":"8717472242211",
                                                                   "encryption-type":0,
          "name":"Lebara All-in NL 10 EUR",
                                                               "provider-code":"LEBARA",
"kind":0,
"provider-name":"Lebara", "short-name":"All-in NL 10",
                                                                          "value":10.0,
                                                                      "price-fee":1.99,
"price-total":11.99,
                                    "price-tax":0.00,
                                "wirecard-creditcard":{
"payment-methods": {
                                                                         "name":"Credit
                                                             "provider-name": "Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                      "wirecard-paypal":
                                                          "provider-name":"Wirecard"
                        "name":"PayPal",
{
                           } },
                                                          "id":"a3473e20-19b4-44fe-8389-
                                   "type":"voucher",
67a511854759",
                                                                          "attributes":
               "code":"LEBALLINNL15",
                                                   "currency":"EUR",
{
                                                                                  "ean-
                                "encryption-type":0,
    "provider-code":"LEBARA",
code": "8717472242129",
                                                                             "kind":0,
"name":"Lebara All-in NL 15 EUR",
                                                                            "provider-
name":"Lebara", "short-name":"All-in NL 15",
                                                                         "value":15.0,
"price-total":16.99,
                                   "price-tax":0.00,
                                                                      "price-fee":1.99,
"payment-methods":[
                                "wirecard-creditcard":{
                                                                         "name":"Credit
                                                            "provider-name":"Wirecard",
Card",
"image-url": "https://wirecard.com/logo.png"
                                                                      "wirecard-paypal":
                       "name":"PayPal",
                                                              "provider-name": "Wirecard"
                      } } } }
```

#### 3.3.6.4 Voucher detail

# 3.3.6.4.1 Voucher detail request

GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 3.3.6.4.2 Voucher detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
     "data":{
               "id":"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher",
                                                                   "ean-
"attributes":{
                    "code":"LEBALLINNL10",
                                                "currency":"EUR",
                            code":"8717472242211",
                                                                   "kind":0,
"name":"Lebara All-in NL 10 EUR",
                                                                   "provider-
name":"Lebara", "short-name":"All-in NL 10", "value":10.0,
                                                                    "price-
total":11.99,
                    "price-tax":0.00,
                                            "price-fee":1.99,
                                                                    "payment-
methods": {
                                                         "name":"Credit Card",
                    "wirecard-creditcard":{
"provider-name":"Wirecard",
                                         "image-url": "https://wirecard.com/logo.png"
},
                                         "name":"PayPal",
            "wirecard-paypal":{
                                                                   "provider-
name":"Wirecard"
```

#### 3.3.6.5 Voucher order

See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields.

# 3.3.6.5.1 Voucher order request



```
POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } }
```

_	-				
	field name	type	constrains	description	example
	id	UUID	globally unique	globally unique UUID	c91feaf3-5968- 4b60-aa5b- 62fe7fdd905c
	type	string	n/a	type of request, must be "voucher- order", "voucher- order"	
	voucher-code	string	n/a	code of the voucher gathered from voucher list	"VODADE15"
	payment-method	string	n/a	on of the allowed methods for the voucher, denoted in voucher list response	"Wirecard VISA"
	notification-type	string	currently only "email" is supported	type of the notification target	"email"
	notification-target	string	n/a	target adress	"[me@my- email.com] (mailto:me@my- email.com)"
	order-success- redirect-url	string	valid URL	Where the wirecard should redirect if payment was successfull	protect
	order-failed- redirect-url	string	valid URL	Where the wirecard should redirect if payment fails	protect
	order-canceled- redirect-url	string	valid URL	Where the wirecard should redirect if payment was canceled	protect



#### 3.3.6.5.2 Voucher order response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
   "type": "voucher-order",
"attributes": {
                        "notification-status": "pending",
                                                                 "confirmation-status":
               "notification-type": "email",
"pending",
                                                "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                  "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                          "payment-status": "pending",
                                                                            "pavment-
                          "voucher-code": "LEBALLINNL10",
                                                            "voucher-currency": "EUR",
method": "creditcard",
                           "voucher-status": "pending",
                                                            "order-price-total": 11.99,
"voucher-value": 10.0
"order-tax-total": 0.00,
                                                             "order-status": "pending",
                              "order-fee-total": 0.99,
                                   "confirmation-date": "0",
"serial-number": "1234",
                                                                       "batch-number":
"1234"
         } } }
```

## 3.3.6.6 Voucher order detail

#### 3.3.6.6.1 Voucher order detail request

```
GET /api/rest/v1/voucher-orders/:order-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

# 3.3.6.6.2 Voucher order detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "type": "voucher-order",
                        "notification-status": "pending",
"attributes": {
                                                                  "confirmation-status":
               "notification-type": "email",
"pending",
                                                "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                   "payment-session-id":
                                           "payment-status": "pending",
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                                                             "payment-
                          "voucher-code": "LEBALLINNL10",
                                                             "voucher-currency": "EUR",
method": "creditcard",
"voucher-value": 10.0
                           "voucher-status": "pending",
                                                            "order-price-total": 11.99,
"order-tax-total": 0.00,
                               "order-fee-total": 1.99,
                                                             "order-status": "pending",
                            "confirmation-date": "1611313953175"
"serial-number": "1234",
```

### 3.3.6.7 Provider Text

See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields.

## 3.3.6.7.1 Provider Text request

Variables Description Example



```
GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

# 3.3.6.7.2 Provider Text response

#### 3.3.6.8 Content

See [Content Service] for more information on the source of these fields.

# 3.3.6.8.1 Content request

Variables Description Example

GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json

## 3.3.6.8.2 Content response

#### 3.3.6.9 Verification

See for more information on the source of these fields.



3.3.6.9.1 Verification request by phone number

```
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-831f-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } } }
```

3.3.6.9.2 Verification by phone number response

3.3.6.9.3 Verification request by sms

```
POST /api/rest/v1/auth/sms-verification-code HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } } } }
```

3.3.6.9.4 Verification by sms number response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } } }
```

#### 3.3.6.10 Cookies

3.3.6.10.1 Cookies request

```
POST /api/rest/v1/cookies HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json {
"data": [ { "type": "cookie", "id": "shopId", "attributes": {
"name": "shopId", "value": "1234" } }, { "type": "cookie", "id": "ns_dev_id", "attributes": { "name": "ns_dev_id", "value": "device_id" } } ] }
```

3.3.6.10.2 Cookies response

```
HTTP/1.1 200 OK
```

#### 3.3.6.11 Documentation

Returns list of Json Schemas for request and response for requested rest endpoint. Use exact endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return json schemas for /api/rest/v1/vouchers endpoint.

3.3.6.11.1 Documentation request

```
GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

### 3.3.6.11.2 Documentation response

Complete Response is omitted because of size, here is just a part:



## 3.3.6.12 i18 internationalization

✓ Retrieves i18next json based on requested language

## 3.3.6.12.1 i18 request

# 3.4 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

#### 3.4.1 TODO

# 3.4.1.1 TODO version 1.0

- $\checkmark$  [x] Test environment and credentials
- √ [x] specify voucher content fields
- ✓ [x] specify voucher pricing fields
- $\checkmark$  [x] specify payment method fields

# 3.4.1.2 TODO version 1.0-next

- √ [] refactor entities and apply relationships
- ✓ [] provide full resource schemas
- ✓ [] enforce validation of resource schemas

## 3.4.2 Test environment and credentials

## **TODO**

Username	Password	Description
test@test.org	test	just protected
test@gmail.com	test	just testing
testtest	test	qa

# 3.4.3 Edge Service Registry

The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.



As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances must register themselves on the registry on startup and unregister on shutdown.

# 3.4.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.

See [Message Relay] for more information.

# 3.4.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

## 3.4.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints must adhere to the [JSONAPI] specification and be subject to strict [Access Control].

# 3.4.6.1 Login

# 3.4.6.1.1 Login request

Variables	Description	Example
ICP_SHOP_ID	see [Test environment and credentials]	
ICP_SHOP_PASSPHRASE	see [Test environment and credentials]	
ICP_SHOP_DIGEST	Derived from \${ICP_SHOP_ID} and \${ICP_SHOP_PASSPHRASE}	MzAwMDAwMTY6dG9wLXNIY3JI dC1wYXNzcGhvYXNI



POST /api/rest/v1/auth/login HTTP/1.1 Authorization: Basic  $\{ICP\_SHOP\_DIGEST\}$  Accept: application/vnd.api+json

## 3.4.6.1.2 Login response

HTTP/1.1 201 Created Content-Type: application/vnd.api+json

#### 3.4.6.1.3 Cookies

Name Value Domain Path Expires HttpOnly Secure

SESSION MmQ5ZjkxO master.env.a / Seassion true false

GltMTM4My0 pi.shop1.roc

0M2E0LWI1M ks DYtYmUwZjY wMzJiZDY5

# 3.4.6.2 Logout

# 3.4.6.2.1 Logout request

Variables Description Example

POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 3.4.6.2.2 Logout response

HTTP/1.1 204 No Content

#### 3.4.6.3 Voucher list

See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields.



## 3.4.6.3.1 Voucher list request

GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

## 3.4.6.3.2 Voucher list response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "data":[
                                           "id":"f634f09f-9a06-4297-a326-0d703938b702",
"type":"voucher",
                              "attributes":{
                                                              "code":"LEBALLINNL10",
"encryption-type":0,
                                                            "provider-code":"LEBARA",
"provider-name":"Lebara", "short-name":"All-in NL 10",
                                                                       "value":10.0,
                                                                    "price-fee":1.99,
"price-total":11.99,
                                  "price-tax":0.00,
                               "wirecard-creditcard":{
"payment-methods": {
                                                                      "name":"Credit
                                                           "provider-name": "Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                   "wirecard-paypal":
                                                        "provider-name":"Wirecard"
                       "name":"PayPal",
{
                          } },
                                                        "id":"a3473e20-19b4-44fe-8389-
                                  "type":"voucher",
67a511854759",
                                                                       "attributes":
               "code":"LEBALLINNL15",
                                                 "currency":"EUR",
{
                                                                              "ean-
                               "encryption-type":0,
    "provider-code":"LEBARA",
code": "8717472242129",
                                                                          "kind":0,
"name":"Lebara All-in NL 15 EUR",
                                                                         "provider-
name":"Lebara", "short-name":"All-in NL 15",
                                                                      "value":15.0,
"price-total":16.99,
                                 "price-tax":0.00,
                                                                    "price-fee":1.99,
"payment-methods":[
                              "wirecard-creditcard":{
                                                                      "name":"Credit
                                                         "provider-name":"Wirecard",
Card",
"image-url": "https://wirecard.com/logo.png"
                                                                   "wirecard-paypal":
                       "name":"PayPal",
                                                            "provider-name": "Wirecard"
                     } } } }
```

#### 3.4.6.4 Voucher detail

## 3.4.6.4.1 Voucher detail request

GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 3.4.6.4.2 Voucher detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
     "data":{
               "id":"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher",
                                                                    "ean-
"attributes":{
                    "code":"LEBALLINNL10",
                                                "currency":"EUR",
                            code": "8717472242211",
                                                                    "kind":0,
"name":"Lebara All-in NL 10 EUR",
                                                                   "provider-
name":"Lebara", "short-name":"All-in NL 10", "value":10.0,
                                                                    "price-
total":11.99,
                    "price-tax":0.00,
                                            "price-fee":1.99,
                                                                    "payment-
methods": {
                                                          "name":"Credit Card",
                    "wirecard-creditcard":{
"provider-name":"Wirecard",
                                         "image-url": "https://wirecard.com/logo.png"
},
                                         "name":"PayPal",
            "wirecard-paypal":{
                                                                   "provider-
name":"Wirecard"
```

#### 3.4.6.5 Voucher order

See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields.

# 3.4.6.5.1 Voucher order request

```
| Variables | Description | Example | | ------- | -------| -------|
```



```
POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } }
```

_	-				
	field name	type	constrains	description	example
	id	UUID	globally unique	globally unique UUID	c91feaf3-5968- 4b60-aa5b- 62fe7fdd905c
	type	string	n/a	type of request, must be "voucher- order", "voucher- order"	
	voucher-code	string	n/a	code of the voucher gathered from voucher list	"VODADE15"
	payment-method	string	n/a	on of the allowed methods for the voucher, denoted in voucher list response	"Wirecard VISA"
	notification-type	string	currently only "email" is supported	type of the notification target	"email"
	notification-target	string	n/a	target adress	"[me@my- email.com] (mailto:me@my- email.com)"
	order-success- redirect-url	string	valid URL	Where the wirecard should redirect if payment was successfull	protect
	order-failed- redirect-url	string	valid URL	Where the wirecard should redirect if payment fails	protect
	order-canceled- redirect-url	string	valid URL	Where the wirecard should redirect if payment was canceled	protect



#### 3.4.6.5.2 Voucher order response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
   "type": "voucher-order",
"attributes": {
                        "notification-status": "pending",
                                                                 "confirmation-status":
"pending",
               "notification-type": "email",
                                                "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                  "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                          "payment-status": "pending",
                                                                             "payment-
method": "creditcard",
                          "voucher-code": "LEBALLINNL10",
                                                             "voucher-currency": "EUR",
                           "voucher-status": "pending",
                                                            "order-price-total": 11.99,
"voucher-value": 10.0
"order-tax-total": 0.00,
                              "order-fee-total": 0.99,
                                                             "order-status": "pending",
"serial-number": "1234",
                                   "confirmation-date": "0",
                                                                        "batch-number":
"1234"
         } } }
```

# 3.4.6.6 Voucher order detail

#### 3.4.6.6.1 Voucher order detail request

```
GET /api/rest/v1/voucher-orders/:order-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 3.4.6.6.2 Voucher order detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "type": "voucher-order",
"attributes": {
                        "notification-status": "pending",
                                                                  "confirmation-status":
               "notification-type": "email",
"pending",
                                                "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                   "payment-session-id":
                                           "payment-status": "pending",
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                                                              "payment-
                          "voucher-code": "LEBALLINNL10",
method": "creditcard",
                                                             "voucher-currency": "EUR",
"voucher-value": 10.0
                           "voucher-status": "pending",
                                                             "order-price-total": 11.99,
"order-tax-total": 0.00,
                               "order-fee-total": 1.99,
                                                              "order-status": "pending",
"serial-number": "1234",
                            "confirmation-date": "1611313953175"
```

### 3.4.6.7 Provider Text

See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields.

## 3.4.6.7.1 Provider Text request

Variables Description Example



```
GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

# 3.4.6.7.2 Provider Text response

#### 3.4.6.8 Content

See [Content Service] for more information on the source of these fields.

# 3.4.6.8.1 Content request

Variables Description Example

GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json

## 3.4.6.8.2 Content response

#### 3.4.6.9 Verification

See for more information on the source of these fields.



3.4.6.9.1 Verification request by phone number

```
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-831f-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } } }
```

3.4.6.9.2 Verification by phone number response

3.4.6.9.3 Verification request by sms

```
POST /api/rest/v1/auth/sms-verification-code HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } } }
```

3.4.6.9.4 Verification by sms number response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } } }
```

#### 3.4.6.10 Cookies

3.4.6.10.1 Cookies request

3.4.6.10.2 Cookies response

```
HTTP/1.1 200 OK
```

#### 3.4.6.11 Documentation

Returns list of Json Schemas for request and response for requested rest endpoint. Use exact endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return json schemas for /api/rest/v1/vouchers endpoint.

3.4.6.11.1 Documentation request

```
GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 3.4.6.11.2 Documentation response

Complete Response is omitted because of size, here is just a part:



```
HTTP/1.1 200 OK
    "required": [
                      "createdDate",
                                        "notificationStatus",
                                                                "notificationTarget",
                        "orderFeeTotal", "orderPriceTotal", "orderStatus",
"notificationType",
                                            "paymentProvider",
"orderTaxTotal",
                      "paymentMethod",
                                                                     "paymentStatus",
                                                                       "voucherValue"
"shortId",
             "voucherCode",
                           "voucherCurrency",
                                                  "voucherStatus",
```

## 3.4.6.12 i18 internationalization

✓ Retrieves i18next json based on requested language

## 3.4.6.12.1 i18 request

```
\begin{tabular}{llll} {\tt GET} & api/rest/v1/content/i18next.json/de & {\tt HTTP/1.1} & {\tt Authorization:} & {\tt No} & {\tt Auth} & {\tt Accept:} \\ & application/vnd.api+json & {\tt Secondary Model of Mathematical Content of Mathe
```

# 3.5 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

#### 3.5.1 TODO

# 3.5.1.1 TODO version 1.0

- $\checkmark$  [x] Test environment and credentials
- √ [x] specify voucher content fields
- ✓ [x] specify voucher pricing fields
- $\checkmark$  [x] specify payment method fields

# 3.5.1.2 TODO version 1.0-next

- √ [] refactor entities and apply relationships
- ✓ [] provide full resource schemas
- ✓ [] enforce validation of resource schemas

## 3.5.2 Test environment and credentials

## **TODO**

Username	Password	Description
test@test.org	test	just protected
test@gmail.com	test	just testing
testtest	test	qa

# 3.5.3 Edge Service Registry

The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.



As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances must register themselves on the registry on startup and unregister on shutdown.

# 3.5.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.

See [Message Relay] for more information.

# 3.5.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

## 3.5.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints must adhere to the [JSONAPI] specification and be subject to strict [Access Control].

# 3.5.6.1 Login

# 3.5.6.1.1 Login request

Variables	Description	Example
ICP_SHOP_ID	see [Test environment and credentials]	
ICP_SHOP_PASSPHRASE	see [Test environment and credentials]	
ICP_SHOP_DIGEST	Derived from \${ICP_SHOP_ID} and \${ICP_SHOP_PASSPHRASE}	MzAwMDAwMTY6dG9wLXNIY3JI dC1wYXNzcGhyYXNI



POST /api/rest/v1/auth/login HTTP/1.1 Authorization: Basic  $\{ICP\_SHOP\_DIGEST\}$  Accept: application/vnd.api+json

## 3.5.6.1.2 Login response

HTTP/1.1 201 Created Content-Type: application/vnd.api+json

#### 3.5.6.1.3 Cookies

Name Value Domain Path Expires HttpOnly Secure

SESSION MmQ5ZjkxO master.env.a / Seassion true false

GltMTM4My0 pi.shop1.roc

0M2E0LWI1M ks DYtYmUwZjY wMzJiZDY5

# 3.5.6.2 Logout

# 3.5.6.2.1 Logout request

Variables Description Example

POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 3.5.6.2.2 Logout response

HTTP/1.1 204 No Content

#### 3.5.6.3 Voucher list

See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields.



## 3.5.6.3.1 Voucher list request

GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

## 3.5.6.3.2 Voucher list response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
                                           "id":"f634f09f-9a06-4297-a326-0d703938b702",
   "data":[
"type":"voucher",
                              "attributes":{
                                                              "code":"LEBALLINNL10",
                                                                "encryption-type":0,
                                                            "provider-code":"LEBARA",
"provider-name":"Lebara", "short-name":"All-in NL 10",
                                                                      "value":10.0,
                                                                   "price-fee":1.99,
"price-total":11.99,
                                  "price-tax":0.00,
                               "wirecard-creditcard":{
"payment-methods": {
                                                                      "name":"Credit
                                                           "provider-name": "Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                   "wirecard-paypal":
                                                        "provider-name":"Wirecard"
                       "name":"PayPal",
{
                         } },
                                                        "id":"a3473e20-19b4-44fe-8389-
                                  "type":"voucher",
67a511854759",
                                                                     "attributes":
               "code":"LEBALLINNL15",
                                                 "currency":"EUR",
{
                                                                              "ean-
                               "encryption-type":0,
    "provider-code":"LEBARA",
code": "8717472242129",
                                                                          "kind":0,
                                                                        "provider-
"name":"Lebara All-in NL 15 EUR",
name":"Lebara", "short-name":"All-in NL 15",
                                                                      "value":15.0,
"price-total":16.99,
                                 "price-tax":0.00,
                                                                   "price-fee":1.99,
"payment-methods":[
                              "wirecard-creditcard":{
                                                                      "name":"Credit
                                                         "provider-name":"Wirecard",
Card",
"image-url": "https://wirecard.com/logo.png"
                                                                   "wirecard-paypal":
                       "name":"PayPal",
                                                           "provider-name": "Wirecard"
                     } } } }
```

#### 3.5.6.4 Voucher detail

## 3.5.6.4.1 Voucher detail request

GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 3.5.6.4.2 Voucher detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
     "data":{
                "id":"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher",
"attributes":{
                                                                         "ean-
                                                    "currency":"EUR",
                      "code":"LEBALLINNL10",
                              "encryption-type":0,
    "provider-code":"LEBARA",
                                                                        "kind":0,
code":"8717472242211",
"name":"Lebara All-in NL 10 EUR",
                                                                        "provider-
name":"Lebara", "short-name":"All-in NL 10", "value":10.0,
                                                                         "price-
total":11.99,
                                               "price-fee":1.99,
                     "price-tax":0.00,
                                                                         "payment-
                      "wirecard-creditcard":{
                                                              "name":"Credit Card",
methods": {
"provider-name":"Wirecard",
                                            "image-url": "https://wirecard.com/logo.png"
},
                                            "name":"PayPal",
             "wirecard-paypal":{
                                                                        "provider-
name":"Wirecard"
```

#### 3.5.6.5 Voucher order

See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields.

```
3.5.6.5.1 Voucher order request
```



```
POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } }
```

field name	type	constrains	description	example
id	UUID	globally unique	globally unique UUID	c91feaf3-5968- 4b60-aa5b- 62fe7fdd905c
type	string	n/a	type of request, must be "voucher- order", "voucher- order"	
voucher-code	string	n/a	code of the voucher gathered from voucher list	"VODADE15"
payment-method	string	n/a	on of the allowed methods for the voucher, denoted in voucher list response	"Wirecard VISA"
notification-type	string	currently only "email" is supported	type of the notification target	"email"
notification-target	string	n/a	target adress	"[me@my- email.com] (mailto:me@my- email.com)"
order-success- redirect-url	string	valid URL	Where the wirecard should redirect if payment was successfull	protect
order-failed- redirect-url	string	valid URL	Where the wirecard should redirect if payment fails	protect
order-canceled- redirect-url	string	valid URL	Where the wirecard should redirect if payment was canceled	protect



#### 3.5.6.5.2 Voucher order response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
   "attributes": {
                       "notification-status": "pending",
                                                              "confirmation-status":
          "notification-type": "email",
"pending",
                                             "notification-target": "me@my-email.com",
                                "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                               "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                       "payment-status": "pending",
                                                                         "pavment-
                         "voucher-code": "LEBALLINNL10",
                                                          "voucher-currency": "EUR",
method": "creditcard",
                         "voucher-status": "pending",
                                                         "order-price-total": 11.99,
"voucher-value": 10.0
"order-tax-total": 0.00,
                                                          "order-status": "pending",
                            "order-fee-total": 0.99,
                                 "confirmation-date": "0",
"serial-number": "1234",
                                                                    "batch-number":
"1234"
        } } }
```

#### 3.5.6.6 Voucher order detail

#### 3.5.6.6.1 Voucher order detail request

```
GET /api/rest/v1/voucher-orders/:order-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

# 3.5.6.6.2 Voucher order detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "type": "voucher-order",
                        "notification-status": "pending",
"attributes": {
                                                                "confirmation-status":
          "notification-type": "email",
"pending",
                                             "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                 "payment-session-id":
                                          "payment-status": "pending",
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                                                            "payment-
                         "voucher-code": "LEBALLINNL10",
                                                            "voucher-currency": "EUR",
method": "creditcard",
                          "voucher-status": "pending",
"voucher-value": 10.0
                                                           "order-price-total": 11.99,
"order-tax-total": 0.00,
                              "order-fee-total": 1.99,
                                                            "order-status": "pending",
                          "confirmation-date": "1611313953175"
"serial-number": "1234",
```

### 3.5.6.7 Provider Text

See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields.

## 3.5.6.7.1 Provider Text request

Variables Description Example



```
GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

# 3.5.6.7.2 Provider Text response

#### 3.5.6.8 Content

See [Content Service] for more information on the source of these fields.

# 3.5.6.8.1 Content request

Variables Description Example

GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json

## 3.5.6.8.2 Content response

#### 3.5.6.9 Verification

See for more information on the source of these fields.



3.5.6.9.1 Verification request by phone number

```
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-831f-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } }
```

3.5.6.9.2 Verification by phone number response

```
HTTP/1.1 200 OK Content-Type: application/json { "data": { "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "ok": false, "remaining-number-of-attempts": 4, "remaining-expiration-time": 0 } } }
```

3.5.6.9.3 Verification request by sms

```
POST /api/rest/v1/auth/sms-verification-code HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } } } }
```

3.5.6.9.4 Verification by sms number response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } } }
```

#### 3.5.6.10 Cookies

3.5.6.10.1 Cookies request

```
POST /api/rest/v1/cookies HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json {
"data": [ { "type": "cookie", "id": "shopId", "attributes": {
"name": "shopId", "value": "1234" } }, { "type": "cookie", "id": "ns_dev_id", "attributes": { "name": "ns_dev_id", "value": "device_id" } } ] }
```

```
3.5.6.10.2 Cookies response
```

```
HTTP/1.1 200 OK
```

#### 3.5.6.11 Documentation

Returns list of Json Schemas for request and response for requested rest endpoint. Use exact endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return json schemas for /api/rest/v1/vouchers endpoint.

3.5.6.11.1 Documentation request

```
GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 3.5.6.11.2 Documentation response

Complete Response is omitted because of size, here is just a part:



## 3.5.6.12 i18 internationalization

✓ Retrieves i18next json based on requested language

# 3.5.6.12.1 i18 request

```
\begin{tabular}{llll} {\tt GET} & api/rest/v1/content/i18next.json/de & {\tt HTTP/1.1} & {\tt Authorization:} & {\tt No} & {\tt Auth} & {\tt Accept:} \\ & application/vnd.api+json & {\tt Secondary No} & {\tt Authorization:} & {\tt No} &
```



# 4 Big

# 4.1 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

## 4.1.1 TODO

# 4.1.1.1 TODO version 1.0

- $\checkmark$  [x] Test environment and credentials
- √ [x] specify voucher content fields
- √ [x] specify voucher pricing fields
- $\checkmark$  [x] specify payment method fields

# 4.1.1.2 TODO version 1.0-next

- ✓ [] refactor entities and apply relationships
- ✓ [] provide full resource schemas
- ✓ [] enforce validation of resource schemas

# 4.1.2 Test environment and credentials

## TODO

Username	Password	Description	
test@test.org	test	just protected	
test@gmail.com	test	just testing	
testtest	test	qa	

# 4.1.3 Edge Service Registry

The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.

As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances must register themselves on the registry on startup and unregister on shutdown.

# 4.1.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.



# See [Message Relay] for more information.

## 4.1.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

# 4.1.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints must adhere to the [JSONAPI] specification and be subject to strict [Access Control].

# 4.1.6.1 Login

# 4.1.6.1.1 Login request

Variables	Description	Example
ICP_SHOP_ID	see [Test environment and credentials]	
ICP_SHOP_PASSPHRASE	see [Test environment and credentials]	
ICP_SHOP_DIGEST	Derived from \${ICP_SHOP_ID} and \${ICP_SHOP_PASSPHRASE}	MzAwMDAwMTY6dG9wLXNIY3JI dC1wYXNzcGhyYXNI
POST /api/rest/v1/auth/login	HTTP/1.1 Authorization: Basi	.c \${ICP_SHOP_DIGEST} Accept:

# 4.1.6.1.2 Login response

application/vnd.api+json

HTTP/1.1 201 Created Content-Type: application/vnd.api+json

# 4.1.6.1.3 Cookies

Name	Value	Domain	Path	Expires	HttpOnly	Secure
SESSION	MmQ5ZjkxO GltMTM4My0 0M2E0LWI1M DYtYmUwZjY wMzJiZDY5		I	Seassion	true	false

# 4.1.6.2 Logout

# 4.1.6.2.1 Logout request

Variables Description Example



POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

## 4.1.6.2.2 Logout response

```
HTTP/1.1 204 No Content
```

#### 4.1.6.3 Voucher list

See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields.

## 4.1.6.3.1 Voucher list request

GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 4.1.6.3.2 Voucher list response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
                                                  "id": "f634f09f-9a06-4297-a326-0d703938b702",
        "data":[
                              {
"type":"voucher",
                                                                         "code": "LEBALLINNL10",
                                   "attributes":{
"currency":"EUR",
                                "ean-code": "8717472242211",
                                                                          "encryption-type":0,
                     "name":"Lebara All-in NL 10 EUR",
                                                                     "provider-code":"LEBARA",
"provider-name":"Lebara",
                                       "short-name":"All-in NL 10",
                                                                                  "value":10.0,
"price-total":11.99,
                                        "price-tax":0.00,
                                                                              "price-fee":1.99,
"payment-methods": {
                                     "wirecard-creditcard":{
                                                                                 "name":"Credit
                                                                    "provider-name": "Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                             "wirecard-paypal":
                          "name":"PayPal",
                                                                    "provider-name": "Wirecard"
                                                                "id": "a3473e20-19b4-44fe-8389-
                                        },
                                                 {
                                       "type":"voucher"
67a511854759",
                                                                                  "attributes":
                                                        "currency":"EUR",
                 "code": "LEBALLINNL15",
                                                                                          "ean-
code": "8717472242129",
                                            "encryption-type":0,
                                                                                      "kind":0,
"name":"Lebara All-in NL 15 EUR",
                                              "provider-code":"LEBARA",
                                                                                     "provider-
                                  "short-name":"All-in NL 15",
name":"Lebara",
                                                                                  "value":15.0,
                                        "price-tax":0.00,
                                                                              "price-fee":1.99,
"price-total":16.99,
"payment-methods":[
                                    "wirecard-creditcard":{
                                                                                 "name":"Credit
                                                                    "provider-name":"Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                             "wirecard-paypal":
                          "name": "PayPal",
                                                                    "provider-name": "Wirecard"
                                } ] }
```

#### 4.1.6.4 Voucher detail



## 4.1.6.4.1 Voucher detail request

GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

### 4.1.6.4.2 Voucher detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data":{ "id":"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher", "attributes":{ "code":"LEBALLINNL10", "currency":"EUR", "ean-
code":"8717472242211",
                                    "encryption-type":0,
                                                                                         "kind":0,
"name":"Lebara All-in NL 10 EUR", "provider-code":"LEBARA",
                                                                                         "provider-
name":"Lebara", "short-name":"All-in NL 10", "value":10.0, "price-total":11.99, "price-tax":0.00, "price-fee":1.99, "payment-methods": { "name":"Credit Card",
                                                                                          "price-
                                                                                          "payment-
"provider-name":"Wirecard",
                                                      "image-url": "https://wirecard.com/logo.png"
     "wirecard-paypal":{
                                                      "name":"PayPal",
                                                                                         "provider-
name":"Wirecard" }
                                         }
                                                } } }
```

### 4.1.6.5 Voucher order

See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields.

## 4.1.6.5.1 Voucher order request

| Variables | Description | Example | | ------| ------| ------| | |

```
POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } }
```

field name	type	constrains	description	example
id	UUID	globally unique	globally unique UUID	c91feaf3-5968- 4b60-aa5b- 62fe7fdd905c
type	string	n/a	type of request, must be "voucher- order", "voucher- order"	
voucher-code	string	n/a	code of the voucher gathered from voucher list	"VODADE15"
payment-method	string	n/a	on of the allowed methods for the voucher, denoted in voucher list response	"Wirecard VISA"



field name	type	constrains	description	example
notification-type	string	currently only "email" is supported	type of the notification target	"email"
notification-target	string	n/a	target adress	"[me@my- email.com] (mailto:me@my- email.com)"
order-success- redirect-url	string	valid URL	Where the wirecard should redirect if payment was successfull	protect
order-failed- redirect-url	string	valid URL	Where the wirecard should redirect if payment fails	protect
order-canceled- redirect-url	string	valid URL	Where the wirecard should redirect if payment was canceled	protect

## 4.1.6.5.2 Voucher order response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
"type": "voucher-order",
                                                               "confirmation-status":
"pending", "notification-type": "email", "notification-target": "me@my-email.com",
"payment-provider": "wirecard",
                                "payment-redirect-url": "https://wpp-test.wirecard.com/?
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                          "payment-status": "pending",
method": "creditcard", "voucher-code": "LEBALLINNL10",
                                                           "voucher-currency": "EUR",
"voucher-value": 10.0
                         "voucher-status": "pending",
                                                           "order-price-total": 11.99,
                                                           "order-status": "pending",
"order-tax-total": 0.00,
                             "order-fee-total": 0.99,
"serial-number": "1234",
                                 "confirmation-date": "0",
                                                                     "batch-number":
"1234"
       } } }
```

# 4.1.6.6 Voucher order detail



## 4.1.6.6.1 Voucher order detail request

```
GET /api/rest/v1/voucher-orders/:order-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

### 4.1.6.6.2 Voucher order detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c",
                                                                   "type": "voucher-order",
"attributes": {
                          "notification-status": "pending",
                                                                       "confirmation-status":
"pending",
           "notification-type": "email", "notification-target": "me@my-email.com",
"payment-provider": "wirecard",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                        "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                               "payment-status": "pending",
                                                                                    "payment-
                           "voucher-code": "LEBALLINNL10",
method": "creditcard",
                                                                  "voucher-currency": "EUR",
                             "voucher-status": "pending",
    "order-fee-total": 1.99,
"voucher-value": 10.0
                                                                  "order-price-total": 11.99,
                           "order-fee-total": 1.99,
"confirmation-date": "1611313953175"
"order-tax-total": 0.00,
                                                                  "order-status": "pending",
"serial-number": "1234",
                                                                      } }}
```

### 4.1.6.7 Provider Text

See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields.

## 4.1.6.7.1 Provider Text request

Variables Description Example

```
GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 4.1.6.7.2 Provider Text response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
"type":
"voucher-text",
                 "attributes": { "provider-code": "ABOUTYOU",
                                                                    "kind":
             "title": "Produktname", "body": "About You-Geschenkkarte"
"title",
            "id": "a598bf3b-abe0-4fc4-80fa-135a84510c81", "type": "voucher-text",
},
     {
                        "provider-code": "ABOUTYOU",
"attributes": {
                                                          "kind": "subtitle",
"title": "Slogan",
                     "body": "Hol Dir per E-Mail eine About You-Geschenkkarte."
                                                                         }
} ] }
```

#### 4.1.6.8 Content

See [Content Service] for more information on the source of these fields.

## 4.1.6.8.1 Content request

Variables Description Example



GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json

#### 4.1.6.8.2 Content response

#### 4.1.6.9 Verification

See for more information on the source of these fields.

*4.1.6.9.1 Verification request by phone number* 

```
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-831f-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } }
```

4.1.6.9.2 Verification by phone number response

4.1.6.9.3 Verification request by sms

```
POST /api/rest/v1/auth/sms-verification-code HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } } } }
```

4.1.6.9.4 Verification by sms number response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } } }
```

## 4.1.6.10 Cookies

4.1.6.10.1 Cookies request

```
POST /api/rest/v1/cookies HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json {
"data": [ { "type": "cookie", "id": "shopId", "attributes": {
"name": "shopId", "value": "1234" } }, { "type":
"cookie", "id": "ns_dev_id", "attributes": { "name": "ns_dev_id",
"value": "device_id" } } ] }
```

4.1.6.10.2 Cookies response

```
HTTP/1.1 200 OK
```

#### 4.1.6.11 Documentation

Returns list of Json Schemas for request and response for requested rest endpoint. Use exact endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return json schemas for /api/rest/v1/vouchers endpoint.



## 4.1.6.11.1 Documentation request

GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

### 4.1.6.11.2 Documentation response

# Complete Response is omitted because of size, here is just a part:

```
HTTP/1.1 200 OK
    "required": [
                       "createdDate",
                                          "notificationStatus",
                                                                    "notificationTarget",
"notificationType",
                                                                          "orderStatus",
                         "orderFeeTotal",
                                                 "orderPriceTotal",
"orderTaxTotal",
                       "paymentMethod",
                                               "paymentProvider",
                                                                        "paymentStatus",
"shortId", "voucherCode",
                            "voucherCurrency",
                                                     "voucherStatus",
                                                                          "voucherValue"
] }
```

## 4.1.6.12 i18 internationalization

✓ Retrieves i18next json based on requested language

## 4.1.6.12.1 i18 request

```
GET api/rest/v1/content/i18next.json/de HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 4.2 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

## 4.2.1 TODO

## 4.2.1.1 TODO version 1.0

- $\checkmark$  [x] Test environment and credentials
- √ [x] specify voucher content fields
- ✓ [x] specify voucher pricing fields
- $\checkmark$  [x] specify payment method fields

# 4.2.1.2 TODO version 1.0-next

- √ [] refactor entities and apply relationships
- √ [] provide full resource schemas
- ✓ [] enforce validation of resource schemas

## 4.2.2 Test environment and credentials

## TODO

Username	Password	Description
test@test.org	test	just protected
test@gmail.com	test	just testing
testtest	test	qa

# 4.2.3 Edge Service Registry



The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.

As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances must register themselves on the registry on startup and unregister on shutdown.

## 4.2.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.

See [Message Relay] for more information.

## 4.2.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

### 4.2.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints must adhere to the [JSONAPI] specification and be subject to strict [Access Control].

## 4.2.6.1 Login

## 4.2.6.1.1 Login request

Variables	Description	Example
ICP_SHOP_ID	see [Test environment and credentials]	
ICP_SHOP_PASSPHRASE	see [Test environment and credentials]	
ICP_SHOP_DIGEST	Derived from \${ICP_SHOP_ID} and \${ICP_SHOP_PASSPHRASE}	MzAwMDAwMTY6dG9wLXNIY3JI dC1wYXNzcGhyYXNI



POST /api/rest/v1/auth/login HTTP/1.1 Authorization: Basic  $\{ICP\_SHOP\_DIGEST\}$  Accept: application/vnd.api+json

## 4.2.6.1.2 Login response

HTTP/1.1 201 Created Content-Type: application/vnd.api+json

#### 4.2.6.1.3 Cookies

Name Value Domain Path Expires HttpOnly Secure

SESSION MmQ5ZjkxO master.env.a / Seassion true false

GltMTM4My0 pi.shop1.roc

0M2E0LWI1M ks DYtYmUwZjY wMzJiZDY5

# 4.2.6.2 Logout

# 4.2.6.2.1 Logout request

Variables Description Example

POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 4.2.6.2.2 Logout response

HTTP/1.1 204 No Content

#### 4.2.6.3 Voucher list

See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields.



## 4.2.6.3.1 Voucher list request

GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

## 4.2.6.3.2 Voucher list response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
                                           "id":"f634f09f-9a06-4297-a326-0d703938b702",
   "data":[
"type":"voucher",
                              "attributes":{
                                                             "code":"LEBALLINNL10",
"encryption-type":0,
                                                            "provider-code":"LEBARA",
"provider-name":"Lebara", "short-name":"All-in NL 10",
                                                                      "value":10.0,
                                                                   "price-fee":1.99,
"price-total":11.99,
                                  "price-tax":0.00,
                              "wirecard-creditcard":{
"payment-methods": {
                                                                      "name":"Credit
                                                           "provider-name": "Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                   "wirecard-paypal":
                                                        "provider-name":"Wirecard"
                       "name":"PayPal",
{
                         } },
                                                        "id":"a3473e20-19b4-44fe-8389-
                                 "type":"voucher",
67a511854759",
                                                                     "attributes":
               "code":"LEBALLINNL15",
                                                "currency":"EUR",
{
                                                                              "ean-
                               "encryption-type":0,
    "provider-code":"LEBARA",
code": "8717472242129",
                                                                          "kind":0,
                                                                        "provider-
"name":"Lebara All-in NL 15 EUR",
name":"Lebara", "short-name":"All-in NL 15",
                                                                      "value":15.0,
"price-total":16.99,
                                 "price-tax":0.00,
                                                                   "price-fee":1.99,
"payment-methods":[
                              "wirecard-creditcard":{
                                                                      "name":"Credit
                                                         "provider-name":"Wirecard",
Card",
"image-url": "https://wirecard.com/logo.png"
                                                                   "wirecard-paypal":
                      "name":"PayPal",
                                                           "provider-name": "Wirecard"
                     } } } }
```

### 4.2.6.4 Voucher detail

## 4.2.6.4.1 Voucher detail request

GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 4.2.6.4.2 Voucher detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
     "data":{
                "id":"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher",
"attributes":{
                                                                         "ean-
                                                    "currency":"EUR",
                      "code":"LEBALLINNL10",
                              "encryption-type":0,
    "provider-code":"LEBARA",
                                                                        "kind":0,
code":"8717472242211",
"name":"Lebara All-in NL 10 EUR",
                                                                        "provider-
name":"Lebara", "short-name":"All-in NL 10", "value":10.0,
                                                                         "price-
total":11.99,
                                               "price-fee":1.99,
                     "price-tax":0.00,
                                                                         "payment-
                      "wirecard-creditcard":{
                                                              "name":"Credit Card",
methods": {
"provider-name":"Wirecard",
                                            "image-url": "https://wirecard.com/logo.png"
},
                                            "name":"PayPal",
             "wirecard-paypal":{
                                                                        "provider-
name":"Wirecard"
```

#### 4.2.6.5 Voucher order

See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields.

```
4.2.6.5.1 Voucher order request
```

```
| Variables | Description | Example | | -------
```



```
POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } }
```

 ,				
field name	type	constrains	description	example
id	UUID	globally unique	globally unique UUID	c91feaf3-5968- 4b60-aa5b- 62fe7fdd905c
type	string	n/a	type of request, must be "voucher- order", "voucher- order"	
voucher-code	string	n/a	code of the voucher gathered from voucher list	"VODADE15"
payment-method	string	n/a	on of the allowed methods for the voucher, denoted in voucher list response	"Wirecard VISA"
notification-type	string	currently only "email" is supported	type of the notification target	"email"
notification-target	string	n/a	target adress	"[me@my- email.com] (mailto:me@my- email.com)"
order-success- redirect-url	string	valid URL	Where the wirecard should redirect if payment was successfull	protect
order-failed- redirect-url	string	valid URL	Where the wirecard should redirect if payment fails	protect
order-canceled- redirect-url	string	valid URL	Where the wirecard should redirect if payment was canceled	protect



#### 4.2.6.5.2 Voucher order response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
   "attributes": {
                       "notification-status": "pending",
                                                              "confirmation-status":
          "notification-type": "email",
"pending",
                                             "notification-target": "me@my-email.com",
                                "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                               "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                       "payment-status": "pending",
                                                                         "pavment-
                         "voucher-code": "LEBALLINNL10",
                                                          "voucher-currency": "EUR",
method": "creditcard",
                         "voucher-status": "pending",
                                                         "order-price-total": 11.99,
"voucher-value": 10.0
"order-tax-total": 0.00,
                                                          "order-status": "pending",
                            "order-fee-total": 0.99,
                                 "confirmation-date": "0",
"serial-number": "1234",
                                                                    "batch-number":
"1234"
        } } }
```

#### 4.2.6.6 Voucher order detail

### 4.2.6.6.1 Voucher order detail request

```
GET /api/rest/v1/voucher-orders/:order-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 4.2.6.6.2 Voucher order detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "type": "voucher-order",
                        "notification-status": "pending",
"attributes": {
                                                                "confirmation-status":
          "notification-type": "email",
"pending",
                                              "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                 "payment-session-id":
                                           "payment-status": "pending",
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                                                            "payment-
                         "voucher-code": "LEBALLINNL10",
                                                            "voucher-currency": "EUR",
method": "creditcard",
                          "voucher-status": "pending",
"voucher-value": 10.0
                                                            "order-price-total": 11.99,
"order-tax-total": 0.00,
                              "order-fee-total": 1.99,
                                                            "order-status": "pending",
                          "confirmation-date": "1611313953175"
"serial-number": "1234",
```

### 4.2.6.7 Provider Text

See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields.

## 4.2.6.7.1 Provider Text request

Variables Description Example



```
GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 4.2.6.7.2 Provider Text response

#### 4.2.6.8 Content

See [Content Service] for more information on the source of these fields.

# 4.2.6.8.1 Content request

Variables Description Example

GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json

## 4.2.6.8.2 Content response

### 4.2.6.9 Verification

See for more information on the source of these fields.



4.2.6.9.1 Verification request by phone number

```
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-831f-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } } }
```

4.2.6.9.2 Verification by phone number response

```
HTTP/1.1 200 OK Content-Type: application/json { "data": { "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "ok": false, "remaining-number-of-attempts": 4, "remaining-expiration-time": 0 } } }
```

4.2.6.9.3 Verification request by sms

```
POST /api/rest/v1/auth/sms-verification-code HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } } }
```

4.2.6.9.4 Verification by sms number response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } } }
```

#### 4.2.6.10 Cookies

4.2.6.10.1 Cookies request

4.2.6.10.2 Cookies response

```
HTTP/1.1 200 OK
```

#### 4.2.6.11 Documentation

Returns list of Json Schemas for request and response for requested rest endpoint. Use exact endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return json schemas for /api/rest/v1/vouchers endpoint.

4.2.6.11.1 Documentation request

```
GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 4.2.6.11.2 Documentation response

Complete Response is omitted because of size, here is just a part:



# 4.2.6.12 i18 internationalization

✓ Retrieves i18next json based on requested language

## 4.2.6.12.1 i18 request

```
\begin{tabular}{llll} {\tt GET} & api/rest/v1/content/i18next.json/de & {\tt HTTP/1.1} & {\tt Authorization:} & {\tt No} & {\tt Auth} & {\tt Accept:} \\ & application/vnd.api+json & {\tt Secondary No} & {\tt Authorization:} & {\tt No} &
```

# 4.3 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

#### 4.3.1 TODO

## 4.3.1.1 TODO version 1.0

- $\checkmark$  [x] Test environment and credentials
- √ [x] specify voucher content fields
- ✓ [x] specify voucher pricing fields
- $\checkmark$  [x] specify payment method fields

## 4.3.1.2 TODO version 1.0-next

- ✓ [] refactor entities and apply relationships
- √ [] provide full resource schemas
- ✓ [] enforce validation of resource schemas

### 4.3.2 Test environment and credentials

## **TODO**

Username	Password	Description
test@test.org	test	just protected
test@gmail.com	test	just testing
testtest	test	qa

# 4.3.3 Edge Service Registry

The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.



As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances must register themselves on the registry on startup and unregister on shutdown.

# 4.3.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.

See [Message Relay] for more information.

# 4.3.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

#### 4.3.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints must adhere to the [JSONAPI] specification and be subject to strict [Access Control].

## 4.3.6.1 Login

## 4.3.6.1.1 Login request

Variables	Description	Example
ICP_SHOP_ID	see [Test environment and credentials]	
ICP_SHOP_PASSPHRASE	see [Test environment and credentials]	
ICP_SHOP_DIGEST	Derived from \${ICP_SHOP_ID} and \${ICP_SHOP_PASSPHRASE}	MzAwMDAwMTY6dG9wLXNIY3JI dC1wYXNzcGhyYXNI



POST /api/rest/v1/auth/login HTTP/1.1 Authorization: Basic  $\{ICP\_SHOP\_DIGEST\}$  Accept: application/vnd.api+json

## 4.3.6.1.2 Login response

HTTP/1.1 201 Created Content-Type: application/vnd.api+json

#### 4.3.6.1.3 Cookies

Name Value Domain Path Expires HttpOnly Secure

SESSION MmQ5ZjkxO master.env.a / Seassion true false

GltMTM4My0 pi.shop1.roc

0M2E0LWI1M ks DYtYmUwZjY wMzJiZDY5

# 4.3.6.2 Logout

# 4.3.6.2.1 Logout request

Variables Description Example

POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 4.3.6.2.2 Logout response

HTTP/1.1 204 No Content

#### 4.3.6.3 Voucher list

See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields.



## 4.3.6.3.1 Voucher list request

GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

## 4.3.6.3.2 Voucher list response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
                                           "id":"f634f09f-9a06-4297-a326-0d703938b702",
   "data":[
"type":"voucher",
                              "attributes":{
                                                              "code":"LEBALLINNL10",
"ean-code":"8717472242211",
                                                                "encryption-type":0,
                                                            "provider-code":"LEBARA",
"provider-name":"Lebara", "short-name":"All-in NL 10",
                                                                       "value":10.0,
                                                                   "price-fee":1.99,
"price-total":11.99,
                                  "price-tax":0.00,
                               "wirecard-creditcard":{
"payment-methods": {
                                                                      "name":"Credit
                                                           "provider-name": "Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                   "wirecard-paypal":
                                                        "provider-name":"Wirecard"
                       "name":"PayPal",
{
                         } },
                                                        "id":"a3473e20-19b4-44fe-8389-
                                  "type":"voucher",
67a511854759",
                                                                     "attributes":
               "code":"LEBALLINNL15",
                                                "currency":"EUR",
{
                                                                              "ean-
                               "encryption-type":0,
    "provider-code":"LEBARA",
code": "8717472242129",
                                                                          "kind":0,
                                                                        "provider-
"name":"Lebara All-in NL 15 EUR",
name":"Lebara", "short-name":"All-in NL 15",
                                                                      "value":15.0,
"price-total":16.99,
                                 "price-tax":0.00,
                                                                   "price-fee":1.99,
"payment-methods":[
                              "wirecard-creditcard":{
                                                                      "name":"Credit
                                                         "provider-name":"Wirecard",
Card",
"image-url": "https://wirecard.com/logo.png"
                                                                   "wirecard-paypal":
                      "name":"PayPal",
                                                           "provider-name": "Wirecard"
                     } } } }
```

### 4.3.6.4 Voucher detail

# 4.3.6.4.1 Voucher detail request

GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 4.3.6.4.2 Voucher detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
     "data":{
               "id":"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher",
"attributes":{
                                                                   "ean-
                    "code":"LEBALLINNL10",
                                                "currency":"EUR",
                            "kind":0,
code": "8717472242211",
"name":"Lebara All-in NL 10 EUR",
                                                                   "provider-
name":"Lebara", "short-name":"All-in NL 10", "value":10.0,
                                                                   "price-
total":11.99,
                    "price-tax":0.00,
                                            "price-fee":1.99,
                                                                    "payment-
                    "wirecard-creditcard":{
methods": {
                                                         "name":"Credit Card",
"provider-name":"Wirecard",
                                         "image-url": "https://wirecard.com/logo.png"
},
                                         "name":"PayPal",
            "wirecard-paypal":{
                                                                   "provider-
name":"Wirecard"
```

#### 4.3.6.5 Voucher order

See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields.

# 4.3.6.5.1 Voucher order request

```
| Variables | Description | Example | | -------| ------| ------| -------|
```



```
POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } }
```

field name	type	constrains	description	example
id	UUID	globally unique	globally unique UUID	c91feaf3-5968- 4b60-aa5b- 62fe7fdd905c
type	string	n/a	type of request, must be "voucher- order", "voucher- order"	
voucher-code	string	n/a	code of the voucher gathered from voucher list	"VODADE15"
payment-method	string	n/a	on of the allowed methods for the voucher, denoted in voucher list response	"Wirecard VISA"
notification-type	string	currently only "email" is supported	type of the notification target	"email"
notification-target	string	n/a	target adress	"[me@my- email.com] (mailto:me@my- email.com)"
order-success- redirect-url	string	valid URL	Where the wirecard should redirect if payment was successfull	protect
order-failed- redirect-url	string	valid URL	Where the wirecard should redirect if payment fails	protect
order-canceled- redirect-url	string	valid URL	Where the wirecard should redirect if payment was canceled	protect



## 4.3.6.5.2 Voucher order response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
   "attributes": {
                       "notification-status": "pending",
                                                               "confirmation-status":
"pending",
              "notification-type": "email",
                                              "notification-target": "me@my-email.com",
                                 "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                               "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                         "payment-status": "pending",
                                                                          "pavment-
                         "voucher-code": "LEBALLINNL10",
                                                          "voucher-currency": "EUR",
method": "creditcard",
                         "voucher-status": "pending",
                                                          "order-price-total": 11.99,
"voucher-value": 10.0
"order-tax-total": 0.00,
                                                           "order-status": "pending",
                            "order-fee-total": 0.99,
                                  "confirmation-date": "0",
"serial-number": "1234",
                                                                     "batch-number":
"1234"
        } } }
```

#### 4.3.6.6 Voucher order detail

### 4.3.6.6.1 Voucher order detail request

```
 \begin{tabular}{lllll} GET & /api/rest/v1/voucher-orders/:order-id & HTTP/1.1 & Authorization: & No & Auth & Accept: application/vnd.api+json \\ \end{tabular}
```

# 4.3.6.6.2 Voucher order detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "type": "voucher-order",
                        "notification-status": "pending",
"attributes": {
                                                                 "confirmation-status":
            "notification-type": "email",
"pending",
                                              "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                  "payment-session-id":
                                           "payment-status": "pending",
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                                                            "payment-
                         "voucher-code": "LEBALLINNL10",
                                                            "voucher-currency": "EUR",
method": "creditcard",
"voucher-value": 10.0
                          "voucher-status": "pending",
                                                            "order-price-total": 11.99,
"order-tax-total": 0.00,
                              "order-fee-total": 1.99,
                                                             "order-status": "pending",
                          "confirmation-date": "1611313953175"
"serial-number": "1234",
```

### 4.3.6.7 Provider Text

See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields.

## 4.3.6.7.1 Provider Text request

Variables Description Example



```
GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 4.3.6.7.2 Provider Text response

#### 4.3.6.8 Content

See [Content Service] for more information on the source of these fields.

# 4.3.6.8.1 Content request

Variables Description Example

GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json

## 4.3.6.8.2 Content response

### 4.3.6.9 Verification

See for more information on the source of these fields.



4.3.6.9.1 Verification request by phone number

```
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-831f-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } } }
```

4.3.6.9.2 Verification by phone number response

4.3.6.9.3 Verification request by sms

```
POST /api/rest/v1/auth/sms-verification-code HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } } }
```

4.3.6.9.4 Verification by sms number response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } } }
```

#### 4.3.6.10 Cookies

4.3.6.10.1 Cookies request

4.3.6.10.2 Cookies response

```
HTTP/1.1 200 OK
```

#### 4.3.6.11 Documentation

Returns list of Json Schemas for request and response for requested rest endpoint. Use exact endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return json schemas for /api/rest/v1/vouchers endpoint.

4.3.6.11.1 Documentation request

```
GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 4.3.6.11.2 Documentation response

Complete Response is omitted because of size, here is just a part:



# 4.3.6.12 i18 internationalization

✓ Retrieves i18next json based on requested language

## 4.3.6.12.1 i18 request

```
\begin{tabular}{llll} {\tt GET} & api/rest/v1/content/i18next.json/de & {\tt HTTP/1.1} & {\tt Authorization:} & {\tt No} & {\tt Auth} & {\tt Accept:} \\ & application/vnd.api+json & {\tt Secondary No} & {\tt Authorization:} & {\tt No} &
```

# 4.4 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

#### 4.4.1 TODO

## 4.4.1.1 TODO version 1.0

- $\checkmark$  [x] Test environment and credentials
- ✓ [x] specify voucher content fields
- ✓ [x] specify voucher pricing fields
- $\checkmark$  [x] specify payment method fields

## 4.4.1.2 TODO version 1.0-next

- ✓ [] refactor entities and apply relationships
- ✓ [] provide full resource schemas
- ✓ [] enforce validation of resource schemas

## 4.4.2 Test environment and credentials

## **TODO**

Username	Password	Description
test@test.org	test	just protected
test@gmail.com	test	just testing
testtest	test	qa

# 4.4.3 Edge Service Registry

The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.



As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances must register themselves on the registry on startup and unregister on shutdown.

## 4.4.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.

See [Message Relay] for more information.

# 4.4.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

#### 4.4.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints must adhere to the [JSONAPI] specification and be subject to strict [Access Control].

## 4.4.6.1 Login

## 4.4.6.1.1 Login request

Variables	Description	Example
ICP_SHOP_ID	see [Test environment and credentials]	
ICP_SHOP_PASSPHRASE	see [Test environment and credentials]	
ICP_SHOP_DIGEST	Derived from \${ICP_SHOP_ID} and \${ICP_SHOP_PASSPHRASE}	MzAwMDAwMTY6dG9wLXNIY3JI dC1wYXNzcGhyYXNI



POST /api/rest/v1/auth/login HTTP/1.1 Authorization: Basic  $\{ICP\_SHOP\_DIGEST\}$  Accept: application/vnd.api+json

## 4.4.6.1.2 Login response

HTTP/1.1 201 Created Content-Type: application/vnd.api+json

#### 4.4.6.1.3 Cookies

Name Value Domain Path Expires HttpOnly Secure

SESSION MmQ5ZjkxO master.env.a / Seassion true false

GltMTM4My0 pi.shop1.roc

0M2E0LWI1M ks DYtYmUwZjY wMzJiZDY5

# 4.4.6.2 Logout

# 4.4.6.2.1 Logout request

Variables Description Example

POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 4.4.6.2.2 Logout response

HTTP/1.1 204 No Content

#### 4.4.6.3 Voucher list

See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields.



## 4.4.6.3.1 Voucher list request

GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

## 4.4.6.3.2 Voucher list response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
                                                "id":"f634f09f-9a06-4297-a326-0d703938b702",
    "data":[
"type":"voucher", "attributes":{
"currency":"EUR", "ean-code":"8717472242211",
"kind":0, "name":"Lebara All-in NL 10 EUR",
                                                                    "code":"LEBALLINNL10",
                                                                       "encryption-type":0,
                                                                   "provider-code":"LEBARA",
"provider-name":"Lebara", "short-name":"All-in NL 10",
                                                                              "value":10.0,
                                                                           "price-fee":1.99,
"price-total":11.99,
                                      "price-tax":0.00,
                                  "wirecard-creditcard":{
"payment-methods": {
                                                                              "name":"Credit
                                                                 "provider-name": "Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                          "wirecard-paypal":
                                                              "provider-name":"Wirecard"
                         "name":"PayPal",
{
                            } },
                                                              "id":"a3473e20-19b4-44fe-8389-
                                     "type":"voucher",
67a511854759",
                                                                             "attributes":
                "code":"LEBALLINNL15",
                                                      "currency":"EUR",
{
                                                                                       "ean-
                                  "encryption-type":0,
    "provider-code":"LEBARA",
code": "8717472242129",
                                                                                  "kind":0,
                                                                                "provider-
"name":"Lebara All-in NL 15 EUR",
name":"Lebara", "short-name":"All-in NL 15",
                                                                             "value":15.0,
"price-total":16.99,
                                     "price-tax":0.00,
                                                                           "price-fee":1.99,
"payment-methods":[
                                  "wirecard-creditcard":{
                                                                              "name":"Credit
                                                                "provider-name":"Wirecard",
Card",
"image-url": "https://wirecard.com/logo.png"
                                                                          "wirecard-paypal":
                         "name":"PayPal",
                                                                  "provider-name": "Wirecard"
                        } } } }
```

### 4.4.6.4 Voucher detail

## 4.4.6.4.1 Voucher detail request

GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 4.4.6.4.2 Voucher detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
     "data":{
                "id":"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher",
"attributes":{
                                                                         "ean-
                                                    "currency":"EUR",
                      "code":"LEBALLINNL10",
                              "encryption-type":0,
    "provider-code":"LEBARA",
                                                                        "kind":0,
code":"8717472242211",
"name":"Lebara All-in NL 10 EUR",
                                                                        "provider-
name":"Lebara", "short-name":"All-in NL 10", "value":10.0,
                                                                         "price-
total":11.99,
                                               "price-fee":1.99,
                     "price-tax":0.00,
                                                                         "payment-
                      "wirecard-creditcard":{
                                                              "name":"Credit Card",
methods": {
"provider-name":"Wirecard",
                                            "image-url": "https://wirecard.com/logo.png"
},
                                            "name":"PayPal",
             "wirecard-paypal":{
                                                                        "provider-
name":"Wirecard"
```

#### 4.4.6.5 Voucher order

See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields.

# 4.4.6.5.1 Voucher order request

```
| Variables | Description | Example | | -------| ------| ------|
```



```
POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } }
```

field name	type	constrains	description	example
id	UUID	globally unique	globally unique UUID	c91feaf3-5968- 4b60-aa5b- 62fe7fdd905c
type	string	n/a	type of request, must be "voucher- order", "voucher- order"	
voucher-code	string	n/a	code of the voucher gathered from voucher list	"VODADE15"
payment-method	string	n/a	on of the allowed methods for the voucher, denoted in voucher list response	"Wirecard VISA"
notification-type	string	currently only "email" is supported	type of the notification target	"email"
notification-target	string	n/a	target adress	"[me@my- email.com] (mailto:me@my- email.com)"
order-success- redirect-url	string	valid URL	Where the wirecard should redirect if payment was successfull	protect
order-failed- redirect-url	string	valid URL	Where the wirecard should redirect if payment fails	protect
order-canceled- redirect-url	string	valid URL	Where the wirecard should redirect if payment was canceled	protect



#### 4.4.6.5.2 Voucher order response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
   "attributes": {
                       "notification-status": "pending",
                                                               "confirmation-status":
"pending",
              "notification-type": "email",
                                              "notification-target": "me@my-email.com",
                                 "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                               "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                         "payment-status": "pending",
                                                                          "pavment-
                         "voucher-code": "LEBALLINNL10",
                                                          "voucher-currency": "EUR",
method": "creditcard",
                         "voucher-status": "pending",
                                                          "order-price-total": 11.99,
"voucher-value": 10.0
"order-tax-total": 0.00,
                                                           "order-status": "pending",
                            "order-fee-total": 0.99,
                                  "confirmation-date": "0",
"serial-number": "1234",
                                                                     "batch-number":
"1234"
        } } }
```

#### 4.4.6.6 Voucher order detail

### 4.4.6.6.1 Voucher order detail request

```
GET /api/rest/v1/voucher-orders/:order-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 4.4.6.6.2 Voucher order detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "type": "voucher-order",
                        "notification-status": "pending",
"attributes": {
                                                                 "confirmation-status":
            "notification-type": "email",
"pending",
                                              "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                  "payment-session-id":
                                           "payment-status": "pending",
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                                                            "payment-
                         "voucher-code": "LEBALLINNL10",
                                                            "voucher-currency": "EUR",
method": "creditcard",
"voucher-value": 10.0
                          "voucher-status": "pending",
                                                            "order-price-total": 11.99,
"order-tax-total": 0.00,
                              "order-fee-total": 1.99,
                                                             "order-status": "pending",
                          "confirmation-date": "1611313953175"
"serial-number": "1234",
```

### 4.4.6.7 Provider Text

See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields.

## 4.4.6.7.1 Provider Text request

Variables Description Example



```
GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 4.4.6.7.2 Provider Text response

#### 4.4.6.8 Content

See [Content Service] for more information on the source of these fields.

# 4.4.6.8.1 Content request

Variables Description Example

GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json

## 4.4.6.8.2 Content response

### 4.4.6.9 Verification

See for more information on the source of these fields.



4.4.6.9.1 Verification request by phone number

```
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-831f-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } } }
```

4.4.6.9.2 Verification by phone number response

4.4.6.9.3 Verification request by sms

```
POST /api/rest/v1/auth/sms-verification-code HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } } }
```

4.4.6.9.4 Verification by sms number response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } } }
```

#### 4.4.6.10 Cookies

4.4.6.10.1 Cookies request

4.4.6.10.2 Cookies response

```
HTTP/1.1 200 OK
```

#### 4.4.6.11 Documentation

Returns list of Json Schemas for request and response for requested rest endpoint. Use exact endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return json schemas for /api/rest/v1/vouchers endpoint.

4.4.6.11.1 Documentation request

```
GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 4.4.6.11.2 Documentation response

Complete Response is omitted because of size, here is just a part:



# 4.4.6.12 i18 internationalization

✓ Retrieves i18next json based on requested language

## 4.4.6.12.1 i18 request

```
\begin{tabular}{llll} {\tt GET} & api/rest/v1/content/i18next.json/de & {\tt HTTP/1.1} & {\tt Authorization:} & {\tt No} & {\tt Auth} & {\tt Accept:} \\ & application/vnd.api+json & {\tt Secondary No} & {\tt Authorization:} & {\tt No} &
```

# 4.5 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

#### 4.5.1 TODO

## 4.5.1.1 TODO version 1.0

- $\checkmark$  [x] Test environment and credentials
- √ [x] specify voucher content fields
- √ [x] specify voucher pricing fields
- $\checkmark$  [x] specify payment method fields

## 4.5.1.2 TODO version 1.0-next

- ✓ [] refactor entities and apply relationships
- ✓ [] provide full resource schemas
- ✓ [] enforce validation of resource schemas

## 4.5.2 Test environment and credentials

## **TODO**

Username	Password	Description
test@test.org	test	just protected
test@gmail.com	test	just testing
testtest	test	qa

# 4.5.3 Edge Service Registry

The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.



As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances must register themselves on the registry on startup and unregister on shutdown.

## 4.5.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.

See [Message Relay] for more information.

# 4.5.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

#### 4.5.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints must adhere to the [JSONAPI] specification and be subject to strict [Access Control].

## 4.5.6.1 Login

## 4.5.6.1.1 Login request

Variables	Description	Example
ICP_SHOP_ID	see [Test environment and credentials]	
ICP_SHOP_PASSPHRASE	see [Test environment and credentials]	
ICP_SHOP_DIGEST	Derived from \${ICP_SHOP_ID} and \${ICP_SHOP_PASSPHRASE}	MzAwMDAwMTY6dG9wLXNIY3JI dC1wYXNzcGhvYXNI



POST /api/rest/v1/auth/login HTTP/1.1 Authorization: Basic  $\{ICP\_SHOP\_DIGEST\}$  Accept: application/vnd.api+json

## 4.5.6.1.2 Login response

HTTP/1.1 201 Created Content-Type: application/vnd.api+json

#### 4.5.6.1.3 Cookies

Name Value Domain Path Expires HttpOnly Secure

SESSION MmQ5ZjkxO master.env.a / Seassion true false

GltMTM4My0 pi.shop1.roc

0M2E0LWI1M ks DYtYmUwZjY wMzJiZDY5

# 4.5.6.2 Logout

# 4.5.6.2.1 Logout request

Variables Description Example

POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 4.5.6.2.2 Logout response

HTTP/1.1 204 No Content

#### 4.5.6.3 Voucher list

See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields.



## 4.5.6.3.1 Voucher list request

GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

## 4.5.6.3.2 Voucher list response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
    "data":[
                                                "id":"f634f09f-9a06-4297-a326-0d703938b702",
"type":"voucher", "attributes":{
"currency":"EUR", "ean-code":"8717472242211",
"kind":0, "name":"Lebara All-in NL 10 EUR",
                                                                    "code":"LEBALLINNL10",
                                                                       "encryption-type":0,
                                                                   "provider-code":"LEBARA",
"provider-name":"Lebara", "short-name":"All-in NL 10",
                                                                              "value":10.0,
                                                                           "price-fee":1.99,
"price-total":11.99,
                                      "price-tax":0.00,
                                  "wirecard-creditcard":{
"payment-methods": {
                                                                              "name":"Credit
                                                                 "provider-name": "Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                          "wirecard-paypal":
                                                              "provider-name":"Wirecard"
                         "name":"PayPal",
{
                            } },
                                                              "id":"a3473e20-19b4-44fe-8389-
                                     "type":"voucher",
67a511854759",
                                                                            "attributes":
                "code":"LEBALLINNL15",
                                                      "currency":"EUR",
{
                                                                                       "ean-
                                  "encryption-type":0,
    "provider-code":"LEBARA",
code": "8717472242129",
                                                                                  "kind":0,
                                                                                "provider-
"name":"Lebara All-in NL 15 EUR",
name":"Lebara", "short-name":"All-in NL 15",
                                                                             "value":15.0,
"price-total":16.99,
                                     "price-tax":0.00,
                                                                           "price-fee":1.99,
"payment-methods":[
                                  "wirecard-creditcard":{
                                                                              "name":"Credit
                                                                "provider-name":"Wirecard",
Card",
"image-url": "https://wirecard.com/logo.png"
                                                                          "wirecard-paypal":
                         "name":"PayPal",
                                                                  "provider-name": "Wirecard"
                        } } } }
```

### 4.5.6.4 Voucher detail

# 4.5.6.4.1 Voucher detail request

GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 4.5.6.4.2 Voucher detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
     "data":{
                "id":"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher",
"attributes":{
                                                                         "ean-
                                                    "currency":"EUR",
                      "code":"LEBALLINNL10",
                              "encryption-type":0,
    "provider-code":"LEBARA",
                                                                        "kind":0,
code": "8717472242211",
"name":"Lebara All-in NL 10 EUR",
                                                                         "provider-
name":"Lebara", "short-name":"All-in NL 10", "value":10.0,
                                                                         "price-
total":11.99,
                     "price-tax":0.00,
                                               "price-fee":1.99,
                                                                         "payment-
                      "wirecard-creditcard":{
methods": {
                                                              "name":"Credit Card",
"provider-name":"Wirecard",
                                            "image-url": "https://wirecard.com/logo.png"
},
                                            "name":"PayPal",
             "wirecard-paypal":{
                                                                        "provider-
name":"Wirecard"
```

#### 4.5.6.5 Voucher order

See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields.

# 4.5.6.5.1 Voucher order request

```
| Variables | Description | Example | | -------| ------| ------|
```



```
POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } }
```

field name	type	constrains	description	example
id	UUID	globally unique	globally unique UUID	c91feaf3-5968- 4b60-aa5b- 62fe7fdd905c
type	string	n/a	type of request, must be "voucher- order", "voucher- order"	
voucher-code	string	n/a	code of the voucher gathered from voucher list	"VODADE15"
payment-method	string	n/a	on of the allowed methods for the voucher, denoted in voucher list response	"Wirecard VISA"
notification-type	string	currently only "email" is supported	type of the notification target	"email"
notification-target	string	n/a	target adress	"[me@my- email.com] (mailto:me@my- email.com)"
order-success- redirect-url	string	valid URL	Where the wirecard should redirect if payment was successfull	protect
order-failed- redirect-url	string	valid URL	Where the wirecard should redirect if payment fails	protect
order-canceled- redirect-url	string	valid URL	Where the wirecard should redirect if payment was canceled	protect



#### 4.5.6.5.2 Voucher order response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
   "type": "voucher-order",
"attributes": {
                        "notification-status": "pending",
                                                                 "confirmation-status":
"pending",
               "notification-type": "email",
                                               "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                 "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                          "payment-status": "pending",
                                                                            "pavment-
                          "voucher-code": "LEBALLINNL10",
                                                            "voucher-currency": "EUR",
method": "creditcard",
                          "voucher-status": "pending",
                                                            "order-price-total": 11.99,
"voucher-value": 10.0
"order-tax-total": 0.00,
                                                            "order-status": "pending",
                             "order-fee-total": 0.99,
                                   "confirmation-date": "0",
"serial-number": "1234",
                                                                       "batch-number":
"1234"
        } } }
```

#### 4.5.6.6 Voucher order detail

### 4.5.6.6.1 Voucher order detail request

```
GET /api/rest/v1/voucher-orders/:order-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

# 4.5.6.6.2 Voucher order detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "type": "voucher-order",
                        "notification-status": "pending",
"attributes": {
                                                                 "confirmation-status":
            "notification-type": "email",
"pending",
                                              "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                  "payment-session-id":
                                           "payment-status": "pending",
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                                                            "payment-
                         "voucher-code": "LEBALLINNL10",
                                                            "voucher-currency": "EUR",
method": "creditcard",
"voucher-value": 10.0
                          "voucher-status": "pending",
                                                            "order-price-total": 11.99,
"order-tax-total": 0.00,
                              "order-fee-total": 1.99,
                                                             "order-status": "pending",
                          "confirmation-date": "1611313953175"
"serial-number": "1234",
```

### 4.5.6.7 Provider Text

See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields.

## 4.5.6.7.1 Provider Text request

Variables Description Example



```
GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 4.5.6.7.2 Provider Text response

#### 4.5.6.8 Content

See [Content Service] for more information on the source of these fields.

# 4.5.6.8.1 Content request

Variables Description Example

GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json

## 4.5.6.8.2 Content response

### 4.5.6.9 Verification

See for more information on the source of these fields.



4.5.6.9.1 Verification request by phone number

```
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-831f-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } } }
```

4.5.6.9.2 Verification by phone number response

4.5.6.9.3 Verification request by sms

```
POST /api/rest/v1/auth/sms-verification-code HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } } }
```

4.5.6.9.4 Verification by sms number response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } } }
```

#### 4.5.6.10 Cookies

4.5.6.10.1 Cookies request

```
POST /api/rest/v1/cookies HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json {
"data": [ { "type": "cookie", "id": "shopId", "attributes": {
"name": "shopId", "value": "1234" } }, { "type": "cookie", "id": "ns_dev_id", "attributes": { "name": "ns_dev_id", "value": "device_id" } } ] }
```

4.5.6.10.2 Cookies response

```
HTTP/1.1 200 OK
```

#### 4.5.6.11 Documentation

Returns list of Json Schemas for request and response for requested rest endpoint. Use exact endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return json schemas for /api/rest/v1/vouchers endpoint.

4.5.6.11.1 Documentation request

```
GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

### 4.5.6.11.2 Documentation response

Complete Response is omitted because of size, here is just a part:



### 4.5.6.12 i18 internationalization

✓ Retrieves i18next json based on requested language

# 4.5.6.12.1 i18 request

```
\begin{tabular}{llll} {\tt GET} & api/rest/v1/content/i18next.json/de & {\tt HTTP/1.1} & {\tt Authorization:} & {\tt No} & {\tt Auth} & {\tt Accept:} \\ & application/vnd.api+json & {\tt Secondary No} & {\tt Authorization:} & {\tt No} &
```



# 5 Big

# 5.1 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

### 5.1.1 TODO

# 5.1.1.1 TODO version 1.0

- $\checkmark$  [x] Test environment and credentials
- √ [x] specify voucher content fields
- √ [x] specify voucher pricing fields
- $\checkmark$  [x] specify payment method fields

# 5.1.1.2 TODO version 1.0-next

- ✓ [] refactor entities and apply relationships
- ✓ [] provide full resource schemas
- √ [] enforce validation of resource schemas

# 5.1.2 Test environment and credentials

#### TODO

Username	Password	Description
test@test.org	test	just protected
test@gmail.com	test	just testing
testtest	test	qa

# 5.1.3 Edge Service Registry

The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.

As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances must register themselves on the registry on startup and unregister on shutdown.

# 5.1.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.



# See [Message Relay] for more information.

### 5.1.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

# 5.1.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints must adhere to the [JSONAPI] specification and be subject to strict [Access Control].

# 5.1.6.1 Login

# 5.1.6.1.1 Login request

Variables	Description	Example
ICP_SHOP_ID	see [Test environment and credentials]	
ICP_SHOP_PASSPHRASE	see [Test environment and credentials]	
ICP_SHOP_DIGEST	Derived from \${ICP_SHOP_ID} and \${ICP_SHOP_PASSPHRASE}	MzAwMDAwMTY6dG9wLXNIY3JI dC1wYXNzcGhyYXNI
POST /api/rest/v1/auth/login	HTTP/1.1 Authorization: Basi	Lc \${ICP_SHOP_DIGEST} Accept:

# 5.1.6.1.2 Login response

application/vnd.api+json

HTTP/1.1 201 Created Content-Type: application/vnd.api+json

# 5.1.6.1.3 Cookies

Name	Value	Domain	Path	Expires	HttpOnly	Secure
SESSION	MmQ5ZjkxO GltMTM4My0 0M2E0LWI1M DYtYmUwZjY wMzJiZDY5	master.env.a pi.shop1.roc ks	I	Seassion	true	false

# 5.1.6.2 Logout

# 5.1.6.2.1 Logout request

Variables Description Example



POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

### 5.1.6.2.2 Logout response

```
HTTP/1.1 204 No Content
```

#### 5.1.6.3 Voucher list

See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields.

### 5.1.6.3.1 Voucher list request

GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

### 5.1.6.3.2 Voucher list response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
                                                  "id": "f634f09f-9a06-4297-a326-0d703938b702",
        "data":[
                              {
"type":"voucher",
                                                                         "code": "LEBALLINNL10",
                                   "attributes":{
"currency":"EUR",
                                "ean-code": "8717472242211",
                                                                          "encryption-type":0,
                     "name":"Lebara All-in NL 10 EUR",
                                                                     "provider-code":"LEBARA",
"provider-name":"Lebara",
                                       "short-name":"All-in NL 10",
                                                                                  "value":10.0,
"price-total":11.99,
                                        "price-tax":0.00,
                                                                              "price-fee":1.99,
"payment-methods": {
                                     "wirecard-creditcard":{
                                                                                 "name":"Credit
                                                                    "provider-name": "Wirecard",
"image-url":"https://wirecard.com/logo.png"
                                                                             "wirecard-paypal":
                          "name":"PayPal",
                                                                    "provider-name": "Wirecard"
                                                                "id": "a3473e20-19b4-44fe-8389-
                                        },
                                                 {
                                       "type":"voucher"
67a511854759",
                                                                                  "attributes":
                                                        "currency":"EUR",
                 "code": "LEBALLINNL15",
                                                                                          "ean-
code": "8717472242129",
                                            "encryption-type":0,
                                                                                      "kind":0,
"name":"Lebara All-in NL 15 EUR",
                                              "provider-code":"LEBARA",
                                                                                     "provider-
name":"Lebara",
                                  "short-name": "All-in NL 15",
                                                                                  "value":15.0,
                                        "price-tax":0.00,
                                                                              "price-fee":1.99,
"price-total":16.99,
"payment-methods":[
                                    "wirecard-creditcard":{
                                                                                 "name":"Credit
                                                                    "provider-name":"Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                             "wirecard-paypal":
                          "name": "PayPal",
                                                                    "provider-name": "Wirecard"
                                } ] }
```

#### 5.1.6.4 Voucher detail



### 5.1.6.4.1 Voucher detail request

GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

#### 5.1.6.4.2 Voucher detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data":{ "id":"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher", "attributes":{ "code":"LEBALLINNL10", "currency":"EUR", "ean-
code":"8717472242211",
                                    "encryption-type":0,
                                                                                         "kind":0,
"name":"Lebara All-in NL 10 EUR", "provider-code":"LEBARA",
                                                                                        "provider-
name":"Lebara", "short-name":"All-in NL 10", "value":10.0, "price-total":11.99, "price-tax":0.00, "price-fee":1.99, "payment-methods": { "name":"Credit Card",
                                                                                          "price-
                                                                                         "payment-
"provider-name":"Wirecard",
                                                     "image-url": "https://wirecard.com/logo.png"
     "wirecard-paypal":{
                                                      "name":"PayPal",
                                                                                        "provider-
name":"Wirecard" }
                                         }
                                                } }}
```

### 5.1.6.5 Voucher order

See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields.

# 5.1.6.5.1 Voucher order request

```
POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } }
```

field name	type	constrains	description	example
id	UUID	globally unique	globally unique UUID	c91feaf3-5968- 4b60-aa5b- 62fe7fdd905c
type	string	n/a	type of request, must be "voucher- order", "voucher- order"	
voucher-code	string	n/a	code of the voucher gathered from voucher list	"VODADE15"
payment-method	string	n/a	on of the allowed methods for the voucher, denoted in voucher list response	"Wirecard VISA"



field name	type	constrains	description	example
notification-type	string	currently only "email" is supported	type of the notification target	"email"
notification-target	string	n/a	target adress	"[me@my- email.com] (mailto:me@my- email.com)"
order-success- redirect-url	string	valid URL	Where the wirecard should redirect if payment was successfull	protect
order-failed- redirect-url	string	valid URL	Where the wirecard should redirect if payment fails	protect
order-canceled- redirect-url	string	valid URL	Where the wirecard should redirect if payment was canceled	protect

### 5.1.6.5.2 Voucher order response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
"type": "voucher-order",
                                                               "confirmation-status":
"pending", "notification-type": "email", "notification-target": "me@my-email.com",
"payment-provider": "wirecard",
                                "payment-redirect-url": "https://wpp-test.wirecard.com/?
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                          "payment-status": "pending",
method": "creditcard", "voucher-code": "LEBALLINNL10",
                                                           "voucher-currency": "EUR",
"voucher-value": 10.0
                         "voucher-status": "pending",
                                                           "order-price-total": 11.99,
                                                           "order-status": "pending",
"order-tax-total": 0.00,
                             "order-fee-total": 0.99,
"serial-number": "1234",
                                 "confirmation-date": "0",
                                                                     "batch-number":
"1234"
       } } }
```

# 5.1.6.6 Voucher order detail



### 5.1.6.6.1 Voucher order detail request

```
GET /api/rest/v1/voucher-orders/:order-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

#### 5.1.6.6.2 Voucher order detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c",
                                                                   "type": "voucher-order",
"attributes": {
                          "notification-status": "pending",
                                                                       "confirmation-status":
"pending",
           "notification-type": "email", "notification-target": "me@my-email.com",
"payment-provider": "wirecard",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                        "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                               "payment-status": "pending",
                                                                                    "payment-
                           "voucher-code": "LEBALLINNL10",
method": "creditcard",
                                                                  "voucher-currency": "EUR",
                             "voucher-status": "pending",
    "order-fee-total": 1.99,
"voucher-value": 10.0
                                                                  "order-price-total": 11.99,
                           "order-fee-total": 1.99,
"confirmation-date": "1611313953175"
"order-tax-total": 0.00,
                                                                  "order-status": "pending",
"serial-number": "1234",
                                                                      } }}
```

### 5.1.6.7 Provider Text

See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields.

### 5.1.6.7.1 Provider Text request

Variables Description Example

```
GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

# 5.1.6.7.2 Provider Text response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
"type":
"voucher-text",
                 "attributes": { "provider-code": "ABOUTYOU",
                                                                    "kind":
             "title": "Produktname", "body": "About You-Geschenkkarte"
"title",
            "id": "a598bf3b-abe0-4fc4-80fa-135a84510c81", "type": "voucher-text",
},
     {
                        "provider-code": "ABOUTYOU",
"attributes": {
                                                          "kind": "subtitle",
"title": "Slogan",
                     "body": "Hol Dir per E-Mail eine About You-Geschenkkarte."
                                                                         }
} ] }
```

#### 5.1.6.8 Content

See [Content Service] for more information on the source of these fields.

### 5.1.6.8.1 Content request

Variables Description Example



GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json

### 5.1.6.8.2 Content response

#### 5.1.6.9 Verification

See for more information on the source of these fields.

5.1.6.9.1 Verification request by phone number

```
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-831f-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } }
```

5.1.6.9.2 Verification by phone number response

```
HTTP/1.1 200 OK Content-Type: application/json {
    "data": { "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "ok": false, "remaining-number-of-attempts": 4, "remaining-expiration-time": 0 } } }
```

5.1.6.9.3 Verification request by sms

```
POST /api/rest/v1/auth/sms-verification-code HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } } } }
```

5.1.6.9.4 Verification by sms number response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } } }
```

### 5.1.6.10 Cookies

5.1.6.10.1 Cookies request

```
5.1.6.10.2 Cookies response
```

```
HTTP/1.1 200 OK
```

#### 5.1.6.11 Documentation

Returns list of Json Schemas for request and response for requested rest endpoint. Use exact endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return json schemas for /api/rest/v1/vouchers endpoint.



### 5.1.6.11.1 Documentation request

GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

### 5.1.6.11.2 Documentation response

# Complete Response is omitted because of size, here is just a part:

```
HTTP/1.1 200 OK
    "required": [
                       "createdDate",
                                          "notificationStatus",
                                                                    "notificationTarget",
"notificationType",
                                                                           "orderStatus",
                          "orderFeeTotal",
                                                 "orderPriceTotal",
"orderTaxTotal",
                       "paymentMethod",
                                               "paymentProvider",
                                                                         "paymentStatus",
"shortId", "voucherCode",
                                "voucherCurrency",
                                                      "voucherStatus",
                                                                           "voucherValue"
] }
```

### 5.1.6.12 i18 internationalization

✓ Retrieves i18next json based on requested language

# 5.1.6.12.1 i18 request

```
GET api/rest/v1/content/i18next.json/de HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

# 5.2 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

### 5.2.1 TODO

# 5.2.1.1 TODO version 1.0

- $\checkmark$  [x] Test environment and credentials
- √ [x] specify voucher content fields
- ✓ [x] specify voucher pricing fields
- $\checkmark$  [x] specify payment method fields

# 5.2.1.2 TODO version 1.0-next

- √ [] refactor entities and apply relationships
- √ [] provide full resource schemas
- ✓ [] enforce validation of resource schemas

# 5.2.2 Test environment and credentials

# TODO

Username	Password	Description
test@test.org	test	just protected
test@gmail.com	test	just testing
testtest	test	qa

# 5.2.3 Edge Service Registry



The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.

As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances must register themselves on the registry on startup and unregister on shutdown.

### 5.2.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.

See [Message Relay] for more information.

# 5.2.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

### 5.2.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints must adhere to the [JSONAPI] specification and be subject to strict [Access Control].

### 5.2.6.1 Login

### 5.2.6.1.1 Login request

Variables	Description	Example
ICP_SHOP_ID	see [Test environment and credentials]	
ICP_SHOP_PASSPHRASE	see [Test environment and credentials]	
ICP_SHOP_DIGEST	Derived from \${ICP_SHOP_ID} and \${ICP_SHOP_PASSPHRASE}	MzAwMDAwMTY6dG9wLXNIY3JI dC1wYXNzcGhyYXNI



POST /api/rest/v1/auth/login HTTP/1.1 Authorization: Basic  $\{ICP\_SHOP\_DIGEST\}$  Accept: application/vnd.api+json

### 5.2.6.1.2 Login response

HTTP/1.1 201 Created Content-Type: application/vnd.api+json

#### 5.2.6.1.3 Cookies

Name Value Domain Path Expires HttpOnly Secure

SESSION MmQ5ZjkxO master.env.a / Seassion true false

GltMTM4My0 pi.shop1.roc

0M2E0LWI1M ks DYtYmUwZjY wMzJiZDY5

# 5.2.6.2 Logout

# 5.2.6.2.1 Logout request

Variables Description Example

POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 5.2.6.2.2 Logout response

HTTP/1.1 204 No Content

### 5.2.6.3 Voucher list

See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields.



### 5.2.6.3.1 Voucher list request

GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

### 5.2.6.3.2 Voucher list response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
                                           "id":"f634f09f-9a06-4297-a326-0d703938b702",
{ "data":[
"type":"voucher",
                              "attributes":{
                                                              "code":"LEBALLINNL10",
"ean-code":"8717472242211",
                                                                "encryption-type":0,
                                                            "provider-code":"LEBARA",
"provider-name":"Lebara", "short-name":"All-in NL 10",
                                                                      "value":10.0,
                                                                   "price-fee":1.99,
"price-total":11.99,
                                  "price-tax":0.00,
                              "wirecard-creditcard":{
"payment-methods": {
                                                                      "name":"Credit
                                                           "provider-name": "Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                   "wirecard-paypal":
                                                        "provider-name":"Wirecard"
                       "name":"PayPal",
{
                         } },
                                                        "id":"a3473e20-19b4-44fe-8389-
                                  "type":"voucher",
67a511854759",
                                                                     "attributes":
               "code":"LEBALLINNL15",
                                                "currency":"EUR",
{
                                                                              "ean-
                               "encryption-type":0,
    "provider-code":"LEBARA",
code": "8717472242129",
                                                                          "kind":0,
                                                                        "provider-
"name":"Lebara All-in NL 15 EUR",
name":"Lebara", "short-name":"All-in NL 15",
                                                                      "value":15.0,
"price-total":16.99,
                                 "price-tax":0.00,
                                                                   "price-fee":1.99,
"payment-methods":[
                              "wirecard-creditcard":{
                                                                      "name":"Credit
                                                         "provider-name":"Wirecard",
Card",
"image-url": "https://wirecard.com/logo.png"
                                                                   "wirecard-paypal":
                      "name":"PayPal",
                                                           "provider-name": "Wirecard"
                     } } } }
```

#### 5.2.6.4 Voucher detail

### 5.2.6.4.1 Voucher detail request

GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 5.2.6.4.2 Voucher detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
     "data":{
               "id":"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher",
"attributes":{
                                                                   "ean-
                    "code":"LEBALLINNL10",
                                                "currency":"EUR",
                            "kind":0,
code": "8717472242211",
"name":"Lebara All-in NL 10 EUR",
                                                                   "provider-
name":"Lebara", "short-name":"All-in NL 10", "value":10.0,
                                                                   "price-
total":11.99,
                                            "price-fee":1.99,
                    "price-tax":0.00,
                                                                    "payment-
                    "wirecard-creditcard":{
                                                         "name":"Credit Card",
methods": {
"provider-name":"Wirecard",
                                         "image-url": "https://wirecard.com/logo.png"
},
                                         "name":"PayPal",
            "wirecard-paypal":{
                                                                   "provider-
name":"Wirecard"
```

#### 5.2.6.5 Voucher order

See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields.

# 5.2.6.5.1 Voucher order request

```
| Variables | Description | Example | | ------ | ------| ------| -------|
```



```
POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } }
```

_	-				
	field name	type	constrains	description	example
	id	UUID	globally unique	globally unique UUID	c91feaf3-5968- 4b60-aa5b- 62fe7fdd905c
	type	string	n/a	type of request, must be "voucher- order", "voucher- order"	
	voucher-code	string	n/a	code of the voucher gathered from voucher list	"VODADE15"
	payment-method	string	n/a	on of the allowed methods for the voucher, denoted in voucher list response	"Wirecard VISA"
	notification-type	string	currently only "email" is supported	type of the notification target	"email"
	notification-target	string	n/a	target adress	"[me@my- email.com] (mailto:me@my- email.com)"
	order-success- redirect-url	string	valid URL	Where the wirecard should redirect if payment was successfull	protect
	order-failed- redirect-url	string	valid URL	Where the wirecard should redirect if payment fails	protect
	order-canceled- redirect-url	string	valid URL	Where the wirecard should redirect if payment was canceled	protect



#### 5.2.6.5.2 Voucher order response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
   "attributes": {
                       "notification-status": "pending",
                                                              "confirmation-status":
          "notification-type": "email",
"pending",
                                              "notification-target": "me@my-email.com",
                                "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                               "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                        "payment-status": "pending",
                                                                         "pavment-
                         "voucher-code": "LEBALLINNL10",
                                                          "voucher-currency": "EUR",
method": "creditcard",
                         "voucher-status": "pending",
                                                         "order-price-total": 11.99,
"voucher-value": 10.0
"order-tax-total": 0.00,
                                                          "order-status": "pending",
                            "order-fee-total": 0.99,
                                 "confirmation-date": "0",
"serial-number": "1234",
                                                                    "batch-number":
"1234"
        } } }
```

#### 5.2.6.6 Voucher order detail

#### 5.2.6.6.1 Voucher order detail request

```
\begin{tabular}{llll} {\tt GET} & $/$api/rest/v1/voucher-orders/:order-id & {\tt HTTP/1.1} & {\tt Authorization:} & {\tt No} & {\tt Auth} & {\tt Accept:} \\ {\tt application/vnd.api+json} & & & & & & & \\ \end{tabular}
```

# 5.2.6.6.2 Voucher order detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "type": "voucher-order",
                        "notification-status": "pending",
"attributes": {
                                                                 "confirmation-status":
          "notification-type": "email",
"pending",
                                              "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                  "payment-session-id":
                                           "payment-status": "pending",
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                                                            "payment-
                         "voucher-code": "LEBALLINNL10",
                                                            "voucher-currency": "EUR",
method": "creditcard",
                          "voucher-status": "pending",
"voucher-value": 10.0
                                                            "order-price-total": 11.99,
"order-tax-total": 0.00,
                              "order-fee-total": 1.99,
                                                            "order-status": "pending",
                          "confirmation-date": "1611313953175"
"serial-number": "1234",
```

### 5.2.6.7 Provider Text

See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields.

### 5.2.6.7.1 Provider Text request

Variables Description Example



```
GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

# 5.2.6.7.2 Provider Text response

#### 5.2.6.8 Content

See [Content Service] for more information on the source of these fields.

# 5.2.6.8.1 Content request

Variables Description Example

GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json

### 5.2.6.8.2 Content response

#### 5.2.6.9 Verification

See for more information on the source of these fields.



5.2.6.9.1 Verification request by phone number

```
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-831f-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } } }
```

5.2.6.9.2 Verification by phone number response

```
HTTP/1.1 200 OK Content-Type: application/json { "data": { "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "ok": false, "remaining-number-of-attempts": 4, "remaining-expiration-time": 0 } } }
```

5.2.6.9.3 Verification request by sms

```
POST /api/rest/v1/auth/sms-verification-code HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } } } }
```

5.2.6.9.4 Verification by sms number response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } } }
```

#### 5.2.6.10 Cookies

5.2.6.10.1 Cookies request

5.2.6.10.2 Cookies response

```
HTTP/1.1 200 OK
```

#### 5.2.6.11 Documentation

Returns list of Json Schemas for request and response for requested rest endpoint. Use exact endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return json schemas for /api/rest/v1/vouchers endpoint.

5.2.6.11.1 Documentation request

```
GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

### 5.2.6.11.2 Documentation response

Complete Response is omitted because of size, here is just a part:



# 5.2.6.12 i18 internationalization

✓ Retrieves i18next json based on requested language

### 5.2.6.12.1 i18 request

```
GET api/rest/v1/content/i18next.json/de HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

# 5.3 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

#### 5.3.1 TODO

# 5.3.1.1 TODO version 1.0

- $\checkmark$  [x] Test environment and credentials
- ✓ [x] specify voucher content fields
- ✓ [x] specify voucher pricing fields
- $\checkmark$  [x] specify payment method fields

# 5.3.1.2 TODO version 1.0-next

- √ [] refactor entities and apply relationships
- ✓ [] provide full resource schemas
- ✓ [] enforce validation of resource schemas

### 5.3.2 Test environment and credentials

### **TODO**

Username	Password	Description
test@test.org	test	just protected
test@gmail.com	test	just testing
testtest	test	qa

# 5.3.3 Edge Service Registry

The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.



As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances must register themselves on the registry on startup and unregister on shutdown.

# 5.3.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.

See [Message Relay] for more information.

### 5.3.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

#### 5.3.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints must adhere to the [JSONAPI] specification and be subject to strict [Access Control].

# 5.3.6.1 Login

# 5.3.6.1.1 Login request

Variables	Description	Example
ICP_SHOP_ID	see [Test environment and credentials]	
ICP_SHOP_PASSPHRASE	see [Test environment and credentials]	
ICP_SHOP_DIGEST	Derived from \${ICP_SHOP_ID} and \${ICP_SHOP_PASSPHRASE}	MzAwMDAwMTY6dG9wLXNIY3JI dC1wYXNzcGhyYXNI



POST /api/rest/v1/auth/login HTTP/1.1 Authorization: Basic  $\{ICP\_SHOP\_DIGEST\}$  Accept: application/vnd.api+json

### 5.3.6.1.2 Login response

HTTP/1.1 201 Created Content-Type: application/vnd.api+json

#### 5.3.6.1.3 Cookies

Name Value Domain Path Expires HttpOnly Secure

SESSION MmQ5ZjkxO master.env.a / Seassion true false

GltMTM4My0 pi.shop1.roc

0M2E0LWI1M ks DYtYmUwZjY wMzJiZDY5

# 5.3.6.2 Logout

# 5.3.6.2.1 Logout request

Variables Description Example

POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 5.3.6.2.2 Logout response

HTTP/1.1 204 No Content

#### 5.3.6.3 Voucher list

See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields.



### 5.3.6.3.1 Voucher list request

GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

### 5.3.6.3.2 Voucher list response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
"id":"f634f09f-9a06-4297-a326-0d703938b702",
"type":"voucher",
                              "attributes":{
                                                             "code":"LEBALLINNL10",
"ean-code":"8717472242211",
                                                                "encryption-type":0,
                                                           "provider-code":"LEBARA",
"provider-name":"Lebara", "short-name":"All-in NL 10",
                                                                      "value":10.0,
                                                                   "price-fee":1.99,
"price-total":11.99,
                                  "price-tax":0.00,
                              "wirecard-creditcard":{
"payment-methods": {
                                                                     "name":"Credit
                                                          "provider-name": "Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                  "wirecard-paypal":
                                                       "provider-name":"Wirecard"
                       "name":"PayPal",
{
                         } },
                                                       "id":"a3473e20-19b4-44fe-8389-
                                 "type":"voucher",
67a511854759",
                                                                      "attributes":
              "code":"LEBALLINNL15",
                                                "currency":"EUR",
{
                                                                             "ean-
                              "encryption-type":0,
    "provider-code":"LEBARA",
code": "8717472242129",
                                                                         "kind":0,
"name":"Lebara All-in NL 15 EUR",
                                                                        "provider-
name":"Lebara", "short-name":"All-in NL 15",
                                                                     "value":15.0,
"price-total":16.99,
                                 "price-tax":0.00,
                                                                   "price-fee":1.99,
"payment-methods":[
                              "wirecard-creditcard":{
                                                                     "name":"Credit
                                                         "provider-name":"Wirecard",
Card",
"image-url": "https://wirecard.com/logo.png"
                                                                  "wirecard-paypal":
                      "name":"PayPal",
                                                           "provider-name": "Wirecard"
                     } } } }
```

#### 5.3.6.4 Voucher detail

### 5.3.6.4.1 Voucher detail request

GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 5.3.6.4.2 Voucher detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
     "data":{
               "id":"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher",
"attributes":{
                                                                   "ean-
                    "code":"LEBALLINNL10",
                                                "currency":"EUR",
                            code": "8717472242211",
                                                                   "kind":0,
"name":"Lebara All-in NL 10 EUR",
                                                                   "provider-
name":"Lebara", "short-name":"All-in NL 10", "value":10.0,
                                                                    "price-
total":11.99,
                    "price-tax":0.00,
                                            "price-fee":1.99,
                                                                    "payment-
methods": {
                                                         "name":"Credit Card",
                    "wirecard-creditcard":{
"provider-name":"Wirecard",
                                         "image-url": "https://wirecard.com/logo.png"
},
                                         "name":"PayPal",
            "wirecard-paypal":{
                                                                   "provider-
name":"Wirecard"
```

#### 5.3.6.5 Voucher order

See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields.

# 5.3.6.5.1 Voucher order request

```
| Variables | Description | Example | | -------| ------| ------|
```



```
POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } }
```

_	-				
	field name	type	constrains	description	example
	id	UUID	globally unique	globally unique UUID	c91feaf3-5968- 4b60-aa5b- 62fe7fdd905c
	type	string	n/a	type of request, must be "voucher- order", "voucher- order"	
	voucher-code	string	n/a	code of the voucher gathered from voucher list	"VODADE15"
	payment-method	string	n/a	on of the allowed methods for the voucher, denoted in voucher list response	"Wirecard VISA"
	notification-type	string	currently only "email" is supported	type of the notification target	"email"
	notification-target	string	n/a	target adress	"[me@my- email.com] (mailto:me@my- email.com)"
	order-success- redirect-url	string	valid URL	Where the wirecard should redirect if payment was successfull	protect
	order-failed- redirect-url	string	valid URL	Where the wirecard should redirect if payment fails	protect
	order-canceled- redirect-url	string	valid URL	Where the wirecard should redirect if payment was canceled	protect



#### 5.3.6.5.2 Voucher order response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
   "type": "voucher-order",
"attributes": {
                        "notification-status": "pending",
                                                                 "confirmation-status":
"pending",
               "notification-type": "email",
                                               "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                 "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                          "payment-status": "pending",
                                                                            "pavment-
                          "voucher-code": "LEBALLINNL10",
                                                            "voucher-currency": "EUR",
method": "creditcard",
                          "voucher-status": "pending",
                                                            "order-price-total": 11.99,
"voucher-value": 10.0
"order-tax-total": 0.00,
                                                             "order-status": "pending",
                             "order-fee-total": 0.99,
                                   "confirmation-date": "0",
"serial-number": "1234",
                                                                       "batch-number":
"1234"
        } } }
```

#### 5.3.6.6 Voucher order detail

#### 5.3.6.6.1 Voucher order detail request

```
GET /api/rest/v1/voucher-orders/:order-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

# 5.3.6.6.2 Voucher order detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "type": "voucher-order",
                        "notification-status": "pending",
"attributes": {
                                                                 "confirmation-status":
            "notification-type": "email",
"pending",
                                               "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                  "payment-session-id":
                                           "payment-status": "pending",
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                                                             "payment-
                          "voucher-code": "LEBALLINNL10",
                                                             "voucher-currency": "EUR",
method": "creditcard",
"voucher-value": 10.0
                          "voucher-status": "pending",
                                                            "order-price-total": 11.99,
"order-tax-total": 0.00,
                              "order-fee-total": 1.99,
                                                             "order-status": "pending",
                          "confirmation-date": "1611313953175"
"serial-number": "1234",
```

### 5.3.6.7 Provider Text

See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields.

### 5.3.6.7.1 Provider Text request

Variables Description Example



```
GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

# 5.3.6.7.2 Provider Text response

#### 5.3.6.8 Content

See [Content Service] for more information on the source of these fields.

# 5.3.6.8.1 Content request

Variables Description Example

GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json

### 5.3.6.8.2 Content response

#### 5.3.6.9 Verification

See for more information on the source of these fields.



5.3.6.9.1 Verification request by phone number

```
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-831f-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } } }
```

5.3.6.9.2 Verification by phone number response

```
HTTP/1.1 200 OK Content-Type: application/json { "data": { "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "ok": false, "remaining-number-of-attempts": 4, "remaining-expiration-time": 0 } } }
```

5.3.6.9.3 Verification request by sms

```
POST /api/rest/v1/auth/sms-verification-code HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } } } }
```

5.3.6.9.4 Verification by sms number response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } } }
```

#### 5.3.6.10 Cookies

#### 5.3.6.10.1 Cookies request

```
POST /api/rest/v1/cookies HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json {
"data": [ { "type": "cookie", "id": "shopId", "attributes": {
"name": "shopId", "value": "1234" } }, { "type": "cookie", "id": "ns_dev_id", "attributes": { "name": "ns_dev_id", "value": "device_id" } } ] }
```

### 5.3.6.10.2 Cookies response

```
HTTP/1.1 200 OK
```

#### 5.3.6.11 Documentation

Returns list of Json Schemas for request and response for requested rest endpoint. Use exact endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return json schemas for /api/rest/v1/vouchers endpoint.

### 5.3.6.11.1 Documentation request

```
GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

### 5.3.6.11.2 Documentation response

Complete Response is omitted because of size, here is just a part:



# 5.3.6.12 i18 internationalization

✓ Retrieves i18next json based on requested language

### 5.3.6.12.1 i18 request

```
\begin{tabular}{llll} {\tt GET} & api/rest/v1/content/i18next.json/de & {\tt HTTP/1.1} & {\tt Authorization:} & {\tt No} & {\tt Auth} & {\tt Accept:} \\ & application/vnd.api+json & {\tt Secondary No} & {\tt Authorization:} & {\tt No} &
```

# 5.4 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

#### 5.4.1 TODO

# 5.4.1.1 TODO version 1.0

- $\checkmark$  [x] Test environment and credentials
- ✓ [x] specify voucher content fields
- ✓ [x] specify voucher pricing fields
- $\checkmark$  [x] specify payment method fields

# 5.4.1.2 TODO version 1.0-next

- √ [] refactor entities and apply relationships
- ✓ [] provide full resource schemas
- ✓ [] enforce validation of resource schemas

### 5.4.2 Test environment and credentials

### **TODO**

Username	Password	Description
test@test.org	test	just protected
test@gmail.com	test	just testing
testtest	test	qa

# 5.4.3 Edge Service Registry

The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.



As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances must register themselves on the registry on startup and unregister on shutdown.

# 5.4.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.

See [Message Relay] for more information.

# 5.4.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

#### 5.4.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints must adhere to the [JSONAPI] specification and be subject to strict [Access Control].

# 5.4.6.1 Login

# 5.4.6.1.1 Login request

Variables	Description	Example
ICP_SHOP_ID	see [Test environment and credentials]	
ICP_SHOP_PASSPHRASE	see [Test environment and credentials]	
ICP_SHOP_DIGEST	Derived from \${ICP_SHOP_ID} and \${ICP_SHOP_PASSPHRASE}	MzAwMDAwMTY6dG9wLXNIY3JI dC1wYXNzcGhyYXNI



POST /api/rest/v1/auth/login HTTP/1.1 Authorization: Basic  $\{ICP\_SHOP\_DIGEST\}$  Accept: application/vnd.api+json

### 5.4.6.1.2 Login response

HTTP/1.1 201 Created Content-Type: application/vnd.api+json

#### 5.4.6.1.3 Cookies

Name Value Domain Path Expires HttpOnly Secure

SESSION MmQ5ZjkxO master.env.a / Seassion true false

GltMTM4My0 pi.shop1.roc

0M2E0LWI1M ks DYtYmUwZjY wMzJiZDY5

# 5.4.6.2 Logout

# 5.4.6.2.1 Logout request

Variables Description Example

POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 5.4.6.2.2 Logout response

HTTP/1.1 204 No Content

#### 5.4.6.3 Voucher list

See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields.



### 5.4.6.3.1 Voucher list request

GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

#### 5.4.6.3.2 Voucher list response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
                                           "id":"f634f09f-9a06-4297-a326-0d703938b702",
   "data":[
"type":"voucher",
                              "attributes":{
                                                              "code":"LEBALLINNL10",
"ean-code":"8717472242211",
                                                                "encryption-type":0,
                                                            "provider-code":"LEBARA",
"provider-name":"Lebara", "short-name":"All-in NL 10",
                                                                       "value":10.0,
                                                                   "price-fee":1.99,
"price-total":11.99,
                                  "price-tax":0.00,
                               "wirecard-creditcard":{
"payment-methods": {
                                                                      "name":"Credit
                                                           "provider-name": "Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                   "wirecard-paypal":
                                                        "provider-name":"Wirecard"
                       "name":"PayPal",
{
                         } },
                                                        "id":"a3473e20-19b4-44fe-8389-
                                  "type":"voucher",
67a511854759",
                                                                     "attributes":
               "code":"LEBALLINNL15",
                                                 "currency":"EUR",
{
                                                                              "ean-
                               "encryption-type":0,
    "provider-code":"LEBARA",
code": "8717472242129",
                                                                          "kind":0,
                                                                        "provider-
"name":"Lebara All-in NL 15 EUR",
name":"Lebara", "short-name":"All-in NL 15",
                                                                      "value":15.0,
"price-total":16.99,
                                 "price-tax":0.00,
                                                                   "price-fee":1.99,
"payment-methods":[
                              "wirecard-creditcard":{
                                                                      "name":"Credit
                                                         "provider-name":"Wirecard",
Card",
"image-url": "https://wirecard.com/logo.png"
                                                                   "wirecard-paypal":
                      "name":"PayPal",
                                                           "provider-name": "Wirecard"
                     } } } }
```

#### 5.4.6.4 Voucher detail

### 5.4.6.4.1 Voucher detail request

GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 5.4.6.4.2 Voucher detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
     "data":{
               "id":"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher",
"attributes":{
                                                                   "ean-
                    "code":"LEBALLINNL10",
                                                "currency":"EUR",
                            "kind":0,
code": "8717472242211",
"name":"Lebara All-in NL 10 EUR",
                                                                   "provider-
name":"Lebara", "short-name":"All-in NL 10", "value":10.0,
                                                                   "price-
total":11.99,
                                            "price-fee":1.99,
                    "price-tax":0.00,
                                                                    "payment-
                    "wirecard-creditcard":{
methods": {
                                                         "name":"Credit Card",
"provider-name":"Wirecard",
                                         "image-url": "https://wirecard.com/logo.png"
},
                                         "name":"PayPal",
            "wirecard-paypal":{
                                                                   "provider-
name":"Wirecard"
```

#### 5.4.6.5 Voucher order

See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields.

# 5.4.6.5.1 Voucher order request



```
POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } }
```

field name	type	constrains	description	example
id	UUID	globally unique	globally unique UUID	c91feaf3-5968- 4b60-aa5b- 62fe7fdd905c
type	string	n/a	type of request, must be "voucher- order", "voucher- order"	
voucher-code	string	n/a	code of the voucher gathered from voucher list	"VODADE15"
payment-method	string	n/a	on of the allowed methods for the voucher, denoted in voucher list response	"Wirecard VISA"
notification-type	string	currently only "email" is supported	type of the notification target	"email"
notification-target	string	n/a	target adress	"[me@my- email.com] (mailto:me@my- email.com)"
order-success- redirect-url	string	valid URL	Where the wirecard should redirect if payment was successfull	protect
order-failed- redirect-url	string	valid URL	Where the wirecard should redirect if payment fails	protect
order-canceled- redirect-url	string	valid URL	Where the wirecard should redirect if payment was canceled	protect



#### 5.4.6.5.2 Voucher order response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
   "type": "voucher-order",
"attributes": {
                        "notification-status": "pending",
                                                                 "confirmation-status":
               "notification-type": "email",
"pending",
                                               "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                  "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                          "payment-status": "pending",
                                                                            "pavment-
                          "voucher-code": "LEBALLINNL10",
                                                            "voucher-currency": "EUR",
method": "creditcard",
                          "voucher-status": "pending",
                                                            "order-price-total": 11.99,
"voucher-value": 10.0
"order-tax-total": 0.00,
                                                             "order-status": "pending",
                              "order-fee-total": 0.99,
                                   "confirmation-date": "0",
"serial-number": "1234",
                                                                       "batch-number":
"1234"
        } } }
```

#### 5.4.6.6 Voucher order detail

#### 5.4.6.6.1 Voucher order detail request

```
GET /api/rest/v1/voucher-orders/:order-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

### 5.4.6.6.2 Voucher order detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "type": "voucher-order",
                        "notification-status": "pending",
"attributes": {
                                                                 "confirmation-status":
            "notification-type": "email",
"pending",
                                               "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                  "payment-session-id":
                                           "payment-status": "pending",
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                                                             "payment-
                          "voucher-code": "LEBALLINNL10",
                                                             "voucher-currency": "EUR",
method": "creditcard",
"voucher-value": 10.0
                          "voucher-status": "pending",
                                                            "order-price-total": 11.99,
"order-tax-total": 0.00,
                              "order-fee-total": 1.99,
                                                             "order-status": "pending",
                          "confirmation-date": "1611313953175"
"serial-number": "1234",
```

### 5.4.6.7 Provider Text

See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields.

### 5.4.6.7.1 Provider Text request

Variables Description Example



```
GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

# 5.4.6.7.2 Provider Text response

#### 5.4.6.8 Content

See [Content Service] for more information on the source of these fields.

# 5.4.6.8.1 Content request

Variables Description Example

GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json

### 5.4.6.8.2 Content response

#### 5.4.6.9 Verification

See for more information on the source of these fields.



5.4.6.9.1 Verification request by phone number

```
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-831f-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } } }
```

5.4.6.9.2 Verification by phone number response

5.4.6.9.3 Verification request by sms

```
POST /api/rest/v1/auth/sms-verification-code HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } } } } }
```

5.4.6.9.4 Verification by sms number response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } } }
```

#### 5.4.6.10 Cookies

5.4.6.10.1 Cookies request

```
POST /api/rest/v1/cookies HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json {
"data": [ { "type": "cookie", "id": "shopId", "attributes": {
"name": "shopId", "value": "1234" } }, { "type": "cookie", "id": "ns_dev_id", "attributes": { "name": "ns_dev_id", "value": "device_id" } } ] }
```

5.4.6.10.2 Cookies response

```
HTTP/1.1 200 OK
```

#### 5.4.6.11 Documentation

Returns list of Json Schemas for request and response for requested rest endpoint. Use exact endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return json schemas for /api/rest/v1/vouchers endpoint.

5.4.6.11.1 Documentation request

```
GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

### 5.4.6.11.2 Documentation response

Complete Response is omitted because of size, here is just a part:



# 5.4.6.12 i18 internationalization

✓ Retrieves i18next json based on requested language

### 5.4.6.12.1 i18 request

```
\begin{tabular}{llll} {\tt GET} & api/rest/v1/content/i18next.json/de & {\tt HTTP/1.1} & {\tt Authorization:} & {\tt No} & {\tt Auth} & {\tt Accept:} \\ & application/vnd.api+json & {\tt Secondary Model of Mathematical Content of Mathe
```

# 5.5 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

#### 5.5.1 TODO

# 5.5.1.1 TODO version 1.0

- $\checkmark$  [x] Test environment and credentials
- ✓ [x] specify voucher content fields
- ✓ [x] specify voucher pricing fields
- $\checkmark$  [x] specify payment method fields

# 5.5.1.2 TODO version 1.0-next

- √ [] refactor entities and apply relationships
- ✓ [] provide full resource schemas
- ✓ [] enforce validation of resource schemas

### 5.5.2 Test environment and credentials

### **TODO**

Username	Password	Description
test@test.org	test	just protected
test@gmail.com	test	just testing
testtest	test	qa

# 5.5.3 Edge Service Registry

The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.



As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances must register themselves on the registry on startup and unregister on shutdown.

# 5.5.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.

See [Message Relay] for more information.

# 5.5.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

#### 5.5.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints must adhere to the [JSONAPI] specification and be subject to strict [Access Control].

# 5.5.6.1 Login

# 5.5.6.1.1 Login request

Variables	Description	Example
ICP_SHOP_ID	see [Test environment and credentials]	
ICP_SHOP_PASSPHRASE	see [Test environment and credentials]	
ICP_SHOP_DIGEST	Derived from \${ICP_SHOP_ID} and \${ICP_SHOP_PASSPHRASE}	MzAwMDAwMTY6dG9wLXNIY3JI dC1wYXNzcGhvYXNI



POST /api/rest/v1/auth/login HTTP/1.1 Authorization: Basic  $\{ICP\_SHOP\_DIGEST\}$  Accept: application/vnd.api+json

### 5.5.6.1.2 Login response

HTTP/1.1 201 Created Content-Type: application/vnd.api+json

#### 5.5.6.1.3 Cookies

Name Value Domain Path Expires HttpOnly Secure

SESSION MmQ5ZjkxO master.env.a / Seassion true false

GltMTM4My0 pi.shop1.roc

0M2E0LWI1M ks DYtYmUwZjY wMzJiZDY5

# 5.5.6.2 Logout

# 5.5.6.2.1 Logout request

Variables Description Example

POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 5.5.6.2.2 Logout response

HTTP/1.1 204 No Content

#### 5.5.6.3 Voucher list

See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields.



### 5.5.6.3.1 Voucher list request

GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

### 5.5.6.3.2 Voucher list response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
                                           "id":"f634f09f-9a06-4297-a326-0d703938b702",
   "data":[
"type":"voucher",
                                                              "code":"LEBALLINNL10",
                                                                "encryption-type":0,
                                                            "provider-code":"LEBARA",
"provider-name":"Lebara", "short-name":"All-in NL 10",
                                                                      "value":10.0,
                                                                   "price-fee":1.99,
"price-total":11.99,
                                  "price-tax":0.00,
                               "wirecard-creditcard":{
"payment-methods": {
                                                                      "name":"Credit
                                                           "provider-name": "Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                   "wirecard-paypal":
                                                        "provider-name":"Wirecard"
                       "name":"PayPal",
{
                         } },
                                                        "id":"a3473e20-19b4-44fe-8389-
                                  "type":"voucher",
67a511854759",
                                                                     "attributes":
               "code":"LEBALLINNL15",
                                                "currency":"EUR",
{
                                                                              "ean-
                               "encryption-type":0,
    "provider-code":"LEBARA",
code": "8717472242129",
                                                                          "kind":0,
                                                                        "provider-
"name":"Lebara All-in NL 15 EUR",
name":"Lebara", "short-name":"All-in NL 15",
                                                                      "value":15.0,
"price-total":16.99,
                                 "price-tax":0.00,
                                                                   "price-fee":1.99,
"payment-methods":[
                              "wirecard-creditcard":{
                                                                      "name":"Credit
                                                         "provider-name":"Wirecard",
Card",
"image-url": "https://wirecard.com/logo.png"
                                                                   "wirecard-paypal":
                       "name":"PayPal",
                                                           "provider-name": "Wirecard"
                      } } } }
```

#### 5.5.6.4 Voucher detail

### 5.5.6.4.1 Voucher detail request

GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 5.5.6.4.2 Voucher detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
     "data":{
                "id":"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher",
"attributes":{
                                                                         "ean-
                                                    "currency":"EUR",
                      "code":"LEBALLINNL10",
                              "encryption-type":0,
    "provider-code":"LEBARA",
                                                                        "kind":0,
code":"8717472242211",
"name":"Lebara All-in NL 10 EUR",
                                                                        "provider-
name":"Lebara", "short-name":"All-in NL 10", "value":10.0,
                                                                         "price-
total":11.99,
                                               "price-fee":1.99,
                     "price-tax":0.00,
                                                                         "payment-
                      "wirecard-creditcard":{
                                                              "name":"Credit Card",
methods": {
"provider-name":"Wirecard",
                                            "image-url": "https://wirecard.com/logo.png"
},
                                            "name":"PayPal",
             "wirecard-paypal":{
                                                                        "provider-
name":"Wirecard"
```

#### 5.5.6.5 Voucher order

See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields.

```
5.5.6.5.1 Voucher order request
```



```
POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } }
```

_	-				
	field name	type	constrains	description	example
	id	UUID	globally unique	globally unique UUID	c91feaf3-5968- 4b60-aa5b- 62fe7fdd905c
	type	string	n/a	type of request, must be "voucher- order", "voucher- order"	
	voucher-code	string	n/a	code of the voucher gathered from voucher list	"VODADE15"
	payment-method	string	n/a	on of the allowed methods for the voucher, denoted in voucher list response	"Wirecard VISA"
	notification-type	string	currently only "email" is supported	type of the notification target	"email"
	notification-target	string	n/a	target adress	"[me@my- email.com] (mailto:me@my- email.com)"
	order-success- redirect-url	string	valid URL	Where the wirecard should redirect if payment was successfull	protect
	order-failed- redirect-url	string	valid URL	Where the wirecard should redirect if payment fails	protect
	order-canceled- redirect-url	string	valid URL	Where the wirecard should redirect if payment was canceled	protect



#### 5.5.6.5.2 Voucher order response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
   "attributes": {
                       "notification-status": "pending",
                                                              "confirmation-status":
          "notification-type": "email",
"pending",
                                             "notification-target": "me@my-email.com",
                                "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                               "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                       "payment-status": "pending",
                                                                         "pavment-
                         "voucher-code": "LEBALLINNL10",
                                                          "voucher-currency": "EUR",
method": "creditcard",
                         "voucher-status": "pending",
                                                         "order-price-total": 11.99,
"voucher-value": 10.0
"order-tax-total": 0.00,
                                                          "order-status": "pending",
                            "order-fee-total": 0.99,
                                 "confirmation-date": "0",
"serial-number": "1234",
                                                                    "batch-number":
"1234"
        } } }
```

#### 5.5.6.6 Voucher order detail

#### 5.5.6.6.1 Voucher order detail request

```
GET /api/rest/v1/voucher-orders/:order-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 5.5.6.6.2 Voucher order detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "type": "voucher-order",
                        "notification-status": "pending",
"attributes": {
                                                                "confirmation-status":
          "notification-type": "email",
"pending",
                                             "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                 "payment-session-id":
                                           "payment-status": "pending",
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                                                            "payment-
                         "voucher-code": "LEBALLINNL10",
                                                            "voucher-currency": "EUR",
method": "creditcard",
                          "voucher-status": "pending",
"voucher-value": 10.0
                                                            "order-price-total": 11.99,
"order-tax-total": 0.00,
                              "order-fee-total": 1.99,
                                                            "order-status": "pending",
                          "confirmation-date": "1611313953175"
"serial-number": "1234",
```

### 5.5.6.7 Provider Text

See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields.

## 5.5.6.7.1 Provider Text request

Variables Description Example



```
GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 5.5.6.7.2 Provider Text response

#### 5.5.6.8 Content

See [Content Service] for more information on the source of these fields.

## 5.5.6.8.1 Content request

Variables Description Example

GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json

## 5.5.6.8.2 Content response

#### 5.5.6.9 Verification

See for more information on the source of these fields.



## 5.5.6.9.1 Verification request by phone number

```
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-831f-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } }
```

## 5.5.6.9.2 Verification by phone number response

## 5.5.6.9.3 Verification request by sms

```
POST /api/rest/v1/auth/sms-verification-code HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } } } }
```

## 5.5.6.9.4 Verification by sms number response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } } }
```

#### 5.5.6.10 Cookies

#### 5.5.6.10.1 Cookies request

## 5.5.6.10.2 Cookies response

```
HTTP/1.1 200 OK
```

#### 5.5.6.11 Documentation

Returns list of Json Schemas for request and response for requested rest endpoint. Use exact endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return json schemas for /api/rest/v1/vouchers endpoint.

# 5.5.6.11.1 Documentation request

```
GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

### 5.5.6.11.2 Documentation response

Complete Response is omitted because of size, here is just a part:



## 5.5.6.12 i18 internationalization

✓ Retrieves i18next json based on requested language

## 5.5.6.12.1 i18 request

```
\begin{tabular}{llll} {\tt GET} & api/rest/v1/content/i18next.json/de & {\tt HTTP/1.1} & {\tt Authorization:} & {\tt No} & {\tt Auth} & {\tt Accept:} \\ & application/vnd.api+json & {\tt Secondary No} & {\tt Authorization:} & {\tt No} &
```



# 6 Big

## 6.1 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

## 6.1.1 TODO

## 6.1.1.1 TODO version 1.0

- $\checkmark$  [x] Test environment and credentials
- ✓ [x] specify voucher content fields
- √ [x] specify voucher pricing fields
- $\checkmark$  [x] specify payment method fields

# 6.1.1.2 TODO version 1.0-next

- ✓ [] refactor entities and apply relationships
- ✓ [] provide full resource schemas
- ✓ [] enforce validation of resource schemas

## 6.1.2 Test environment and credentials

## TODO

Username	Password	Description
test@test.org	test	just protected
test@gmail.com	test	just testing
testtest	test	qa

## 6.1.3 Edge Service Registry

The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.

As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances must register themselves on the registry on startup and unregister on shutdown.

# 6.1.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.



# See [Message Relay] for more information.

## 6.1.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

# 6.1.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints must adhere to the [JSONAPI] specification and be subject to strict [Access Control].

# 6.1.6.1 Login

# 6.1.6.1.1 Login request

Variables	Description	Example
ICP_SHOP_ID	see [Test environment and credentials]	
ICP_SHOP_PASSPHRASE	see [Test environment and credentials]	
ICP_SHOP_DIGEST	Derived from \${ICP_SHOP_ID} and \${ICP_SHOP_PASSPHRASE}	MzAwMDAwMTY6dG9wLXNIY3JI dC1wYXNzcGhyYXNI
POST /api/rest/v1/auth/login	HTTP/1.1 Authorization: Basi	Lc \${ICP_SHOP_DIGEST} Accept:

# 6.1.6.1.2 Login response

application/vnd.api+json

HTTP/1.1 201 Created Content-Type: application/vnd.api+json

# 6.1.6.1.3 Cookies

Name	Value	Domain	Path	Expires	HttpOnly	Secure
SESSION	MmQ5ZjkxO GItMTM4My0 0M2E0LWI1M DYtYmUwZjY wMzJiZDY5		I	Seassion	true	false

## 6.1.6.2 Logout

# 6.1.6.2.1 Logout request

Variables Description Example



POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

## 6.1.6.2.2 Logout response

```
HTTP/1.1 204 No Content
```

### 6.1.6.3 Voucher list

See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields.

## 6.1.6.3.1 Voucher list request

GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

## 6.1.6.3.2 Voucher list response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
                                                    "id": "f634f09f-9a06-4297-a326-0d703938b702",
         "data":[
                               {
"type":"voucher",
                                                                           "code": "LEBALLINNL10",
                                    "attributes":{
"currency":"EUR", "ean-coue . G.I..."
"Mand": "Lebara All-in NL 10 EUR", "abort-name":"All-
                                 "ean-code": "8717472242211",
                                                                             "encryption-type":0,
                                                                       "provider-code":"LEBARA",
"provider-name":"Lebara",
                                        "short-name":"All-in NL 10",
                                                                                    "value":10.0,
"price-total":11.99,
                                         "price-tax":0.00,
                                                                                "price-fee":1.99,
"payment-methods": {
                                      "wirecard-creditcard":{
                                                                                   "name":"Credit
                                                                      "provider-name": "Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                               "wirecard-paypal":
                           "name":"PayPal",
                                                                      "provider-name":"Wirecard"
                                                                  "id": "a3473e20-19b4-44fe-8389-
                                         },
                                                  {
                                        "type":"voucher"
67a511854759",
                                                                                    "attributes":
                                                         "currency":"EUR",
                  "code": "LEBALLINNL15",
                                                                                            "ean-
code": "8717472242129",
                                             "encryption-type":0,
                                                                                        "kind":0,
"name":"Lebara All-in NL 15 EUR",
                                                "provider-code":"LEBARA",
                                                                                       "provider-
                                   "short-name":"All-in NL 15",
name":"Lebara",
                                                                                    "value":15.0,
                                         "price-tax":0.00,
                                                                                "price-fee":1.99,
"price-total":16.99,
"payment-methods":[
                                      "wirecard-creditcard":{
                                                                                   "name":"Credit
                                                                      "provider-name":"Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                               "wirecard-paypal":
                           "name":"PayPal",
                                                                       "provider-name": "Wirecard"
                                 } ] }
```

#### 6.1.6.4 Voucher detail



## 6.1.6.4.1 Voucher detail request

GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

#### 6.1.6.4.2 Voucher detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data":{ "id":"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher", "attributes":{ "code":"LEBALLINNL10", "currency":"EUR", "ean-
                                    "encryption-type":0,
code":"8717472242211",
                                                                                         "kind":0,
"name":"Lebara All-in NL 10 EUR", "provider-code":"LEBARA",
                                                                                         "provider-
name":"Lebara", "short-name":"All-in NL 10", "value":10.0, "price-total":11.99, "price-tax":0.00, "price-fee":1.99, "payment-methods": { "name":"Credit Card",
                                                                                          "price-
                                                                                          "payment-
"provider-name":"Wirecard",
                                                      "image-url": "https://wirecard.com/logo.png"
     "wirecard-paypal":{
                                                      "name":"PayPal",
                                                                                         "provider-
name":"Wirecard" }
                                         }
                                                } } }
```

### 6.1.6.5 Voucher order

See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields.

## 6.1.6.5.1 Voucher order request

| Variables | Description | Example | | ------| ------| ------| | |

```
POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } }
```

field name	type	constrains	description	example
id	UUID	globally unique	globally unique UUID	c91feaf3-5968- 4b60-aa5b- 62fe7fdd905c
type	string	n/a	type of request, must be "voucher- order", "voucher- order"	
voucher-code	string	n/a	code of the voucher gathered from voucher list	"VODADE15"
payment-method	string	n/a	on of the allowed methods for the voucher, denoted in voucher list response	"Wirecard VISA"



field name	type	constrains	description	example
notification-type	string	currently only "email" is supported	type of the notification target	"email"
notification-target	string	n/a	target adress	"[me@my- email.com] (mailto:me@my- email.com)"
order-success- redirect-url	string	valid URL	Where the wirecard should redirect if payment was successfull	protect
order-failed- redirect-url	string	valid URL	Where the wirecard should redirect if payment fails	protect
order-canceled- redirect-url	string	valid URL	Where the wirecard should redirect if payment was canceled	protect

## 6.1.6.5.2 Voucher order response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
"type": "voucher-order",
                                                               "confirmation-status":
"pending", "notification-type": "email", "notification-target": "me@my-email.com",
"payment-provider": "wirecard",
                                "payment-redirect-url": "https://wpp-test.wirecard.com/?
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                          "payment-status": "pending",
method": "creditcard", "voucher-code": "LEBALLINNL10",
                                                           "voucher-currency": "EUR",
"voucher-value": 10.0
                         "voucher-status": "pending",
                                                          "order-price-total": 11.99,
                                                           "order-status": "pending",
"order-tax-total": 0.00,
                             "order-fee-total": 0.99,
"serial-number": "1234",
                                 "confirmation-date": "0",
                                                                     "batch-number":
"1234"
       } } }
```

# 6.1.6.6 Voucher order detail



## 6.1.6.6.1 Voucher order detail request

```
GET /api/rest/v1/voucher-orders/:order-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

#### 6.1.6.6.2 Voucher order detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c",
                                                                   "type": "voucher-order",
"attributes": {
                          "notification-status": "pending",
                                                                       "confirmation-status":
"pending",
           "notification-type": "email", "notification-target": "me@my-email.com",
"payment-provider": "wirecard",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                        "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                               "payment-status": "pending",
                                                                                    "payment-
                           "voucher-code": "LEBALLINNL10",
method": "creditcard",
                                                                  "voucher-currency": "EUR",
                             "voucher-status": "pending",
"order-fee-total": 1.99,
"voucher-value": 10.0
                                                                  "order-price-total": 11.99,
                           "order-fee-total": 1.99,
"confirmation-date": "1611313953175"
"order-tax-total": 0.00,
                                                                 "order-status": "pending",
"serial-number": "1234",
                                                                      } }}
```

### 6.1.6.7 Provider Text

See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields.

## 6.1.6.7.1 Provider Text request

Variables Description Example

```
GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 6.1.6.7.2 Provider Text response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
"type":
"voucher-text",
                 "attributes": { "provider-code": "ABOUTYOU",
                                                                    "kind":
             "title": "Produktname", "body": "About You-Geschenkkarte"
"title",
            "id": "a598bf3b-abe0-4fc4-80fa-135a84510c81", "type": "voucher-text",
},
     {
                        "provider-code": "ABOUTYOU",
"attributes": {
                                                          "kind": "subtitle",
"title": "Slogan",
                     "body": "Hol Dir per E-Mail eine About You-Geschenkkarte."
                                                                         }
} ] }
```

#### 6.1.6.8 Content

See [Content Service] for more information on the source of these fields.

## 6.1.6.8.1 Content request

Variables Description Example



GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json

## 6.1.6.8.2 Content response

#### 6.1.6.9 Verification

See for more information on the source of these fields.

6.1.6.9.1 Verification request by phone number

```
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-831f-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } }
```

6.1.6.9.2 Verification by phone number response

6.1.6.9.3 Verification request by sms

```
POST /api/rest/v1/auth/sms-verification-code HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } } } }
```

6.1.6.9.4 Verification by sms number response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } } }
```

## 6.1.6.10 Cookies

6.1.6.10.1 Cookies request

```
6.1.6.10.2 Cookies response
```

```
HTTP/1.1 200 OK
```

#### 6.1.6.11 Documentation

Returns list of Json Schemas for request and response for requested rest endpoint. Use exact endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return json schemas for /api/rest/v1/vouchers endpoint.



## 6.1.6.11.1 Documentation request

GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

### 6.1.6.11.2 Documentation response

# Complete Response is omitted because of size, here is just a part:

```
HTTP/1.1 200 OK
    "required": [
                       "createdDate",
                                          "notificationStatus",
                                                                    "notificationTarget",
"notificationType",
                                                                           "orderStatus",
                          "orderFeeTotal",
                                                 "orderPriceTotal",
"orderTaxTotal",
                       "paymentMethod",
                                               "paymentProvider",
                                                                         "paymentStatus",
"shortId", "voucherCode",
                                "voucherCurrency",
                                                      "voucherStatus",
                                                                           "voucherValue"
] }
```

## 6.1.6.12 i18 internationalization

✓ Retrieves i18next json based on requested language

## 6.1.6.12.1 i18 request

## 6.2 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

## 6.2.1 TODO

## 6.2.1.1 TODO version 1.0

- $\checkmark$  [x] Test environment and credentials
- √ [x] specify voucher content fields
- ✓ [x] specify voucher pricing fields
- $\checkmark$  [x] specify payment method fields

# 6.2.1.2 TODO version 1.0-next

- ✓ [] refactor entities and apply relationships
- √ [] provide full resource schemas
- ✓ [] enforce validation of resource schemas

## 6.2.2 Test environment and credentials

## TODO

Username	Password	Description
test@test.org	test	just protected
test@gmail.com	test	just testing
testtest	test	qa

## 6.2.3 Edge Service Registry



The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.

As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances must register themselves on the registry on startup and unregister on shutdown.

## 6.2.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.

See [Message Relay] for more information.

## 6.2.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

### 6.2.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints must adhere to the [JSONAPI] specification and be subject to strict [Access Control].

## 6.2.6.1 Login

## 6.2.6.1.1 Login request

Variables	Description	Example
ICP_SHOP_ID	see [Test environment and credentials]	
ICP_SHOP_PASSPHRASE	see [Test environment and credentials]	
ICP_SHOP_DIGEST	Derived from \${ICP_SHOP_ID} and \${ICP_SHOP_PASSPHRASE}	MzAwMDAwMTY6dG9wLXNIY3JI dC1wYXNzcGhyYXNI



POST /api/rest/v1/auth/login HTTP/1.1 Authorization: Basic  $\{ICP\_SHOP\_DIGEST\}$  Accept: application/vnd.api+json

## 6.2.6.1.2 Login response

HTTP/1.1 201 Created Content-Type: application/vnd.api+json

#### 6.2.6.1.3 Cookies

Name Value Domain Path Expires HttpOnly Secure

SESSION MmQ5ZjkxO master.env.a / Seassion true false

GltMTM4My0 pi.shop1.roc

0M2E0LWI1M ks DYtYmUwZjY wMzJiZDY5

# 6.2.6.2 Logout

# 6.2.6.2.1 Logout request

Variables Description Example

POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 6.2.6.2.2 Logout response

HTTP/1.1 204 No Content

## 6.2.6.3 Voucher list

See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields.



## 6.2.6.3.1 Voucher list request

GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

### 6.2.6.3.2 Voucher list response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
                                           "id":"f634f09f-9a06-4297-a326-0d703938b702",
   "data":[
"type":"voucher",
                              "attributes":{
                                                              "code":"LEBALLINNL10",
"ean-code":"8717472242211",
                                                                "encryption-type":0,
                                                            "provider-code":"LEBARA",
"provider-name":"Lebara", "short-name":"All-in NL 10",
                                                                       "value":10.0,
                                                                   "price-fee":1.99,
"price-total":11.99,
                                  "price-tax":0.00,
                               "wirecard-creditcard":{
"payment-methods": {
                                                                      "name":"Credit
                                                           "provider-name": "Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                   "wirecard-paypal":
                                                        "provider-name":"Wirecard"
                       "name":"PayPal",
{
                         } },
                                                        "id":"a3473e20-19b4-44fe-8389-
                                  "type":"voucher",
67a511854759",
                                                                     "attributes":
               "code":"LEBALLINNL15",
                                                 "currency":"EUR",
{
                                                                              "ean-
                               "encryption-type":0,
    "provider-code":"LEBARA",
code": "8717472242129",
                                                                          "kind":0,
                                                                        "provider-
"name":"Lebara All-in NL 15 EUR",
name":"Lebara", "short-name":"All-in NL 15",
                                                                      "value":15.0,
"price-total":16.99,
                                 "price-tax":0.00,
                                                                   "price-fee":1.99,
"payment-methods":[
                              "wirecard-creditcard":{
                                                                      "name":"Credit
                                                         "provider-name":"Wirecard",
Card",
"image-url": "https://wirecard.com/logo.png"
                                                                   "wirecard-paypal":
                      "name":"PayPal",
                                                           "provider-name": "Wirecard"
                     } } } }
```

#### 6.2.6.4 Voucher detail

## 6.2.6.4.1 Voucher detail request

GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 6.2.6.4.2 Voucher detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
     "data":{
               "id":"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher",
"attributes":{
                                                                   "ean-
                    "code":"LEBALLINNL10",
                                                "currency":"EUR",
                            "kind":0,
code": "8717472242211",
"name":"Lebara All-in NL 10 EUR",
                                                                   "provider-
name":"Lebara", "short-name":"All-in NL 10", "value":10.0,
                                                                   "price-
total":11.99,
                    "price-tax":0.00,
                                            "price-fee":1.99,
                                                                    "payment-
                    "wirecard-creditcard":{
methods": {
                                                         "name":"Credit Card",
"provider-name":"Wirecard",
                                         "image-url": "https://wirecard.com/logo.png"
},
                                         "name":"PayPal",
            "wirecard-paypal":{
                                                                   "provider-
name":"Wirecard"
```

#### 6.2.6.5 Voucher order

See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields.

```
6.2.6.5.1 Voucher order request
```

```
| Variables | Description | Example | | ------ | ------| ------| -------|
```



```
POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } } }
```

field name	type	constrains	description	example
id	UUID	globally unique	globally unique UUID	c91feaf3-5968- 4b60-aa5b- 62fe7fdd905c
type	string	n/a	type of request, must be "voucher- order", "voucher- order"	
voucher-code	string	n/a	code of the voucher gathered from voucher list	"VODADE15"
payment-method	string	n/a	on of the allowed methods for the voucher, denoted in voucher list response	"Wirecard VISA"
notification-type	string	currently only "email" is supported	type of the notification target	"email"
notification-target	string	n/a	target adress	"[me@my- email.com] (mailto:me@my- email.com)"
order-success- redirect-url	string	valid URL	Where the wirecard should redirect if payment was successfull	protect
order-failed- redirect-url	string	valid URL	Where the wirecard should redirect if payment fails	protect
order-canceled- redirect-url	string	valid URL	Where the wirecard should redirect if payment was canceled	protect



#### 6.2.6.5.2 Voucher order response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
   "attributes": {
                       "notification-status": "pending",
                                                              "confirmation-status":
          "notification-type": "email",
"pending",
                                              "notification-target": "me@my-email.com",
                                "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                               "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                        "payment-status": "pending",
                                                                         "pavment-
                         "voucher-code": "LEBALLINNL10",
                                                          "voucher-currency": "EUR",
method": "creditcard",
                         "voucher-status": "pending",
                                                          "order-price-total": 11.99,
"voucher-value": 10.0
"order-tax-total": 0.00,
                                                          "order-status": "pending",
                            "order-fee-total": 0.99,
                                 "confirmation-date": "0",
"serial-number": "1234",
                                                                    "batch-number":
"1234"
        } } }
```

#### 6.2.6.6 Voucher order detail

#### 6.2.6.6.1 Voucher order detail request

```
GET /api/rest/v1/voucher-orders/:order-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 6.2.6.6.2 Voucher order detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "type": "voucher-order",
                        "notification-status": "pending",
"attributes": {
                                                                 "confirmation-status":
          "notification-type": "email",
"pending",
                                              "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                  "payment-session-id":
                                           "payment-status": "pending",
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                                                            "payment-
                         "voucher-code": "LEBALLINNL10",
                                                            "voucher-currency": "EUR",
method": "creditcard",
"voucher-value": 10.0
                          "voucher-status": "pending",
                                                            "order-price-total": 11.99,
"order-tax-total": 0.00,
                              "order-fee-total": 1.99,
                                                            "order-status": "pending",
                          "confirmation-date": "1611313953175"
"serial-number": "1234",
```

### 6.2.6.7 Provider Text

See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields.

## 6.2.6.7.1 Provider Text request

Variables Description Example



```
GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 6.2.6.7.2 Provider Text response

#### 6.2.6.8 Content

See [Content Service] for more information on the source of these fields.

## 6.2.6.8.1 Content request

Variables Description Example

GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json

## 6.2.6.8.2 Content response

#### 6.2.6.9 Verification

See for more information on the source of these fields.



6.2.6.9.1 Verification request by phone number

```
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-831f-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } } }
```

6.2.6.9.2 Verification by phone number response

6.2.6.9.3 Verification request by sms

```
POST /api/rest/v1/auth/sms-verification-code HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } } } }
```

6.2.6.9.4 Verification by sms number response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } } }
```

#### 6.2.6.10 Cookies

#### 6.2.6.10.1 Cookies request

```
POST /api/rest/v1/cookies HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json {
"data": [ { "type": "cookie", "id": "shopId", "attributes": {
"name": "shopId", "value": "1234" } }, { "type": "cookie", "id": "ns_dev_id", "attributes": { "name": "ns_dev_id", "value": "device_id" } } ] }
```

## 6.2.6.10.2 Cookies response

```
HTTP/1.1 200 OK
```

#### 6.2.6.11 Documentation

Returns list of Json Schemas for request and response for requested rest endpoint. Use exact endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return json schemas for /api/rest/v1/vouchers endpoint.

## 6.2.6.11.1 Documentation request

```
GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 6.2.6.11.2 Documentation response

Complete Response is omitted because of size, here is just a part:



# 6.2.6.12 i18 internationalization

✓ Retrieves i18next json based on requested language

## 6.2.6.12.1 i18 request

## 6.3 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

#### 6.3.1 TODO

## 6.3.1.1 TODO version 1.0

- $\checkmark$  [x] Test environment and credentials
- ✓ [x] specify voucher content fields
- ✓ [x] specify voucher pricing fields
- $\checkmark$  [x] specify payment method fields

# 6.3.1.2 TODO version 1.0-next

- √ [] refactor entities and apply relationships
- ✓ [] provide full resource schemas
- √ [] enforce validation of resource schemas

## 6.3.2 Test environment and credentials

## **TODO**

Username	Password	Description
test@test.org	test	just protected
test@gmail.com	test	just testing
testtest	test	qa

# 6.3.3 Edge Service Registry

The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.



As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances must register themselves on the registry on startup and unregister on shutdown.

## 6.3.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.

See [Message Relay] for more information.

## 6.3.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

#### 6.3.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints must adhere to the [JSONAPI] specification and be subject to strict [Access Control].

## 6.3.6.1 Login

## 6.3.6.1.1 Login request

Variables	Description	Example
ICP_SHOP_ID	see [Test environment and credentials]	
ICP_SHOP_PASSPHRASE	see [Test environment and credentials]	
ICP_SHOP_DIGEST	Derived from \${ICP_SHOP_ID} and \${ICP_SHOP_PASSPHRASE}	MzAwMDAwMTY6dG9wLXNIY3JI dC1wYXNzcGhyYXNI



POST /api/rest/v1/auth/login HTTP/1.1 Authorization: Basic  $\{ICP\_SHOP\_DIGEST\}$  Accept: application/vnd.api+json

## 6.3.6.1.2 Login response

HTTP/1.1 201 Created Content-Type: application/vnd.api+json

#### 6.3.6.1.3 Cookies

Name Value Domain Path Expires HttpOnly Secure

SESSION MmQ5ZjkxO master.env.a / Seassion true false

GltMTM4My0 pi.shop1.roc

0M2E0LWI1M ks DYtYmUwZjY wMzJiZDY5

# 6.3.6.2 Logout

# 6.3.6.2.1 Logout request

Variables Description Example

POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 6.3.6.2.2 Logout response

HTTP/1.1 204 No Content

#### 6.3.6.3 Voucher list

See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields.



## 6.3.6.3.1 Voucher list request

GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

### 6.3.6.3.2 Voucher list response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
                                          "id":"f634f09f-9a06-4297-a326-0d703938b702",
   "data":[
{
"type":"voucher",
                              "attributes":{
                                                             "code":"LEBALLINNL10",
"encryption-type":0,
                                                            "provider-code":"LEBARA",
"provider-name":"Lebara", "short-name":"All-in NL 10",
                                                                      "value":10.0,
                                                                   "price-fee":1.99,
"price-total":11.99,
                                  "price-tax":0.00,
                              "wirecard-creditcard":{
"payment-methods": {
                                                                      "name":"Credit
                                                          "provider-name": "Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                  "wirecard-paypal":
                                                       "provider-name":"Wirecard"
                       "name":"PayPal",
{
                         } },
                                                       "id":"a3473e20-19b4-44fe-8389-
                                 "type":"voucher",
67a511854759",
                                                                    "attributes":
              "code":"LEBALLINNL15",
                                                "currency":"EUR",
{
                                                                             "ean-
                              "encryption-type":0,
    "provider-code":"LEBARA",
code": "8717472242129",
                                                                         "kind":0,
                                                                        "provider-
"name":"Lebara All-in NL 15 EUR",
name":"Lebara", "short-name":"All-in NL 15",
                                                                     "value":15.0,
"price-total":16.99,
                                 "price-tax":0.00,
                                                                   "price-fee":1.99,
"payment-methods":[
                              "wirecard-creditcard":{
                                                                      "name":"Credit
                                                         "provider-name":"Wirecard",
Card",
"image-url": "https://wirecard.com/logo.png"
                                                                  "wirecard-paypal":
                      "name":"PayPal",
                                                           "provider-name": "Wirecard"
                     } } } }
```

#### 6.3.6.4 Voucher detail

## 6.3.6.4.1 Voucher detail request

GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 6.3.6.4.2 Voucher detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
     "data":{
               "id":"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher",
"attributes":{
                                                                   "ean-
                    "code":"LEBALLINNL10",
                                                "currency":"EUR",
                            "kind":0,
code": "8717472242211",
"name":"Lebara All-in NL 10 EUR",
                                                                   "provider-
name":"Lebara", "short-name":"All-in NL 10", "value":10.0,
                                                                   "price-
total":11.99,
                    "price-tax":0.00,
                                            "price-fee":1.99,
                                                                    "payment-
                    "wirecard-creditcard":{
methods": {
                                                         "name":"Credit Card",
"provider-name":"Wirecard",
                                         "image-url": "https://wirecard.com/logo.png"
},
                                         "name":"PayPal",
            "wirecard-paypal":{
                                                                   "provider-
name":"Wirecard"
```

#### 6.3.6.5 Voucher order

See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields.

# 6.3.6.5.1 Voucher order request



```
POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } }
```

field name	type	constrains	description	example
id	UUID	globally unique	globally unique UUID	c91feaf3-5968- 4b60-aa5b- 62fe7fdd905c
type	string	n/a	type of request, must be "voucher- order", "voucher- order"	
voucher-code	string	n/a	code of the voucher gathered from voucher list	"VODADE15"
payment-method	string	n/a	on of the allowed methods for the voucher, denoted in voucher list response	"Wirecard VISA"
notification-type	string	currently only "email" is supported	type of the notification target	"email"
notification-target	string	n/a	target adress	"[me@my- email.com] (mailto:me@my- email.com)"
order-success- redirect-url	string	valid URL	Where the wirecard should redirect if payment was successfull	protect
order-failed- redirect-url	string	valid URL	Where the wirecard should redirect if payment fails	protect
order-canceled- redirect-url	string	valid URL	Where the wirecard should redirect if payment was canceled	protect



#### 6.3.6.5.2 Voucher order response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
   "attributes": {
                       "notification-status": "pending",
                                                               "confirmation-status":
"pending",
              "notification-type": "email",
                                              "notification-target": "me@my-email.com",
                                 "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                               "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                        "payment-status": "pending",
                                                                          "pavment-
                         "voucher-code": "LEBALLINNL10",
                                                          "voucher-currency": "EUR",
method": "creditcard",
                         "voucher-status": "pending",
                                                          "order-price-total": 11.99,
"voucher-value": 10.0
"order-tax-total": 0.00,
                                                          "order-status": "pending",
                            "order-fee-total": 0.99,
                                  "confirmation-date": "0",
"serial-number": "1234",
                                                                     "batch-number":
"1234"
        } } }
```

#### 6.3.6.6 Voucher order detail

#### 6.3.6.6.1 Voucher order detail request

```
GET /api/rest/v1/voucher-orders/:order-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 6.3.6.6.2 Voucher order detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "type": "voucher-order",
                        "notification-status": "pending",
"attributes": {
                                                                 "confirmation-status":
            "notification-type": "email",
"pending",
                                              "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                  "payment-session-id":
                                           "payment-status": "pending",
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                                                            "payment-
                         "voucher-code": "LEBALLINNL10",
                                                            "voucher-currency": "EUR",
method": "creditcard",
"voucher-value": 10.0
                          "voucher-status": "pending",
                                                            "order-price-total": 11.99,
"order-tax-total": 0.00,
                              "order-fee-total": 1.99,
                                                             "order-status": "pending",
                          "confirmation-date": "1611313953175"
"serial-number": "1234",
```

### 6.3.6.7 Provider Text

See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields.

## 6.3.6.7.1 Provider Text request

Variables Description Example



```
GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 6.3.6.7.2 Provider Text response

#### 6.3.6.8 Content

See [Content Service] for more information on the source of these fields.

## 6.3.6.8.1 Content request

Variables Description Example

GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json

## 6.3.6.8.2 Content response

#### 6.3.6.9 Verification

See for more information on the source of these fields.



6.3.6.9.1 Verification request by phone number

```
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-831f-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } } }
```

6.3.6.9.2 Verification by phone number response

```
HTTP/1.1 200 OK Content-Type: application/json { "data": { "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "ok": false, "remaining-number-of-attempts": 4, "remaining-expiration-time": 0 } } }
```

6.3.6.9.3 Verification request by sms

```
POST /api/rest/v1/auth/sms-verification-code HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } } } }
```

6.3.6.9.4 Verification by sms number response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } } }
```

#### 6.3.6.10 Cookies

#### 6.3.6.10.1 Cookies request

```
POST /api/rest/v1/cookies HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json {
"data": [ { "type": "cookie", "id": "shopId", "attributes": {
"name": "shopId", "value": "1234" } }, { "type": "cookie", "id": "ns_dev_id", "attributes": { "name": "ns_dev_id", "value": "device_id" } } ] }
```

## 6.3.6.10.2 Cookies response

```
HTTP/1.1 200 OK
```

#### 6.3.6.11 Documentation

Returns list of Json Schemas for request and response for requested rest endpoint. Use exact endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return json schemas for /api/rest/v1/vouchers endpoint.

## 6.3.6.11.1 Documentation request

```
GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

### 6.3.6.11.2 Documentation response

Complete Response is omitted because of size, here is just a part:



# 6.3.6.12 i18 internationalization

✓ Retrieves i18next json based on requested language

## 6.3.6.12.1 i18 request

# 6.4 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

#### 6.4.1 TODO

## 6.4.1.1 TODO version 1.0

- $\checkmark$  [x] Test environment and credentials
- √ [x] specify voucher content fields
- ✓ [x] specify voucher pricing fields
- $\checkmark$  [x] specify payment method fields

# 6.4.1.2 TODO version 1.0-next

- ✓ [] refactor entities and apply relationships
- ✓ [] provide full resource schemas
- ✓ [] enforce validation of resource schemas

## 6.4.2 Test environment and credentials

## **TODO**

Username	Password	Description
test@test.org	test	just protected
test@gmail.com	test	just testing
testtest	test	qa

# 6.4.3 Edge Service Registry

The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.



As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances must register themselves on the registry on startup and unregister on shutdown.

## 6.4.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.

See [Message Relay] for more information.

## 6.4.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

#### 6.4.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints must adhere to the [JSONAPI] specification and be subject to strict [Access Control].

## 6.4.6.1 Login

## 6.4.6.1.1 Login request

Variables	Description	Example
ICP_SHOP_ID	see [Test environment and credentials]	
ICP_SHOP_PASSPHRASE	see [Test environment and credentials]	
ICP_SHOP_DIGEST	Derived from \${ICP_SHOP_ID} and \${ICP_SHOP_PASSPHRASE}	MzAwMDAwMTY6dG9wLXNIY3JI dC1wYXNzcGhyYXNI



POST /api/rest/v1/auth/login HTTP/1.1 Authorization: Basic  $\{ICP\_SHOP\_DIGEST\}$  Accept: application/vnd.api+json

## 6.4.6.1.2 Login response

HTTP/1.1 201 Created Content-Type: application/vnd.api+json

#### 6.4.6.1.3 Cookies

Name Value Domain Path Expires HttpOnly Secure

SESSION MmQ5ZjkxO master.env.a / Seassion true false

GltMTM4My0 pi.shop1.roc

0M2E0LWI1M ks DYtYmUwZjY wMzJiZDY5

# 6.4.6.2 Logout

# 6.4.6.2.1 Logout request

Variables Description Example

POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 6.4.6.2.2 Logout response

HTTP/1.1 204 No Content

#### 6.4.6.3 Voucher list

See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields.



## 6.4.6.3.1 Voucher list request

GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

### 6.4.6.3.2 Voucher list response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
                                          "id":"f634f09f-9a06-4297-a326-0d703938b702",
   "data":[
{
"type":"voucher",
                              "attributes":{
                                                             "code":"LEBALLINNL10",
"encryption-type":0,
                                                           "provider-code":"LEBARA",
"provider-name":"Lebara", "short-name":"All-in NL 10",
                                                                      "value":10.0,
                                                                   "price-fee":1.99,
"price-total":11.99,
                                  "price-tax":0.00,
                              "wirecard-creditcard":{
"payment-methods": {
                                                                     "name":"Credit
                                                          "provider-name": "Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                  "wirecard-paypal":
                                                       "provider-name":"Wirecard"
                       "name":"PayPal",
{
                         } },
                                                       "id":"a3473e20-19b4-44fe-8389-
                                 "type":"voucher",
67a511854759",
                                                                    "attributes":
              "code":"LEBALLINNL15",
                                                "currency":"EUR",
{
                                                                             "ean-
                              "encryption-type":0,
    "provider-code":"LEBARA",
code": "8717472242129",
                                                                         "kind":0,
                                                                        "provider-
"name":"Lebara All-in NL 15 EUR",
name":"Lebara", "short-name":"All-in NL 15",
                                                                     "value":15.0,
"price-total":16.99,
                                 "price-tax":0.00,
                                                                   "price-fee":1.99,
"payment-methods":[
                              "wirecard-creditcard":{
                                                                     "name":"Credit
                                                         "provider-name":"Wirecard",
Card",
"image-url": "https://wirecard.com/logo.png"
                                                                  "wirecard-paypal":
                      "name":"PayPal",
                                                           "provider-name": "Wirecard"
                     } } } }
```

#### 6.4.6.4 Voucher detail

## 6.4.6.4.1 Voucher detail request

GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

## 6.4.6.4.2 Voucher detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
     "data":{
               "id":"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher",
"attributes":{
                                                                   "ean-
                                                "currency":"EUR",
                    "code":"LEBALLINNL10",
                            "kind":0,
code": "8717472242211",
"name":"Lebara All-in NL 10 EUR",
                                                                   "provider-
name":"Lebara", "short-name":"All-in NL 10", "value":10.0,
                                                                   "price-
total":11.99,
                                            "price-fee":1.99,
                    "price-tax":0.00,
                                                                    "payment-
                    "wirecard-creditcard":{
methods": {
                                                         "name":"Credit Card",
"provider-name":"Wirecard",
                                        "image-url": "https://wirecard.com/logo.png"
},
                                         "name":"PayPal",
            "wirecard-paypal":{
                                                                   "provider-
name":"Wirecard"
```

#### 6.4.6.5 Voucher order

See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields.

# 6.4.6.5.1 Voucher order request

```
| Variables | Description | Example | | -------| ------| ------|
```



```
POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } }
```

field name	type	constrains	description	example
id	UUID	globally unique	globally unique UUID	c91feaf3-5968- 4b60-aa5b- 62fe7fdd905c
type	string	n/a	type of request, must be "voucher- order", "voucher- order"	
voucher-code	string	n/a	code of the voucher gathered from voucher list	"VODADE15"
payment-method	string	n/a	on of the allowed methods for the voucher, denoted in voucher list response	"Wirecard VISA"
notification-type	string	currently only "email" is supported	type of the notification target	"email"
notification-target	string	n/a	target adress	"[me@my- email.com] (mailto:me@my- email.com)"
order-success- redirect-url	string	valid URL	Where the wirecard should redirect if payment was successfull	protect
order-failed- redirect-url	string	valid URL	Where the wirecard should redirect if payment fails	protect
order-canceled- redirect-url	string	valid URL	Where the wirecard should redirect if payment was canceled	protect



#### 6.4.6.5.2 Voucher order response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
   "type": "voucher-order",
"attributes": {
                        "notification-status": "pending",
                                                                 "confirmation-status":
"pending",
               "notification-type": "email",
                                               "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                 "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                          "payment-status": "pending",
                                                                            "pavment-
                          "voucher-code": "LEBALLINNL10",
                                                            "voucher-currency": "EUR",
method": "creditcard",
                          "voucher-status": "pending",
                                                            "order-price-total": 11.99,
"voucher-value": 10.0
"order-tax-total": 0.00,
                                                            "order-status": "pending",
                             "order-fee-total": 0.99,
                                   "confirmation-date": "0",
"serial-number": "1234",
                                                                       "batch-number":
"1234"
        } } }
```

#### 6.4.6.6 Voucher order detail

#### 6.4.6.6.1 Voucher order detail request

```
GET /api/rest/v1/voucher-orders/:order-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 6.4.6.6.2 Voucher order detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "type": "voucher-order",
                        "notification-status": "pending",
"attributes": {
                                                                 "confirmation-status":
            "notification-type": "email",
"pending",
                                               "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                  "payment-session-id":
                                           "payment-status": "pending",
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                                                             "payment-
                         "voucher-code": "LEBALLINNL10",
                                                             "voucher-currency": "EUR",
method": "creditcard",
"voucher-value": 10.0
                          "voucher-status": "pending",
                                                            "order-price-total": 11.99,
"order-tax-total": 0.00,
                              "order-fee-total": 1.99,
                                                             "order-status": "pending",
                          "confirmation-date": "1611313953175"
"serial-number": "1234",
```

### 6.4.6.7 Provider Text

See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields.

## 6.4.6.7.1 Provider Text request

Variables Description Example



```
GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 6.4.6.7.2 Provider Text response

#### 6.4.6.8 Content

See [Content Service] for more information on the source of these fields.

## 6.4.6.8.1 Content request

Variables Description Example

GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json

## 6.4.6.8.2 Content response

#### 6.4.6.9 Verification

See for more information on the source of these fields.



6.4.6.9.1 Verification request by phone number

```
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-831f-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } } }
```

6.4.6.9.2 Verification by phone number response

```
HTTP/1.1 200 OK Content-Type: application/json
{    "data": { "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "ok": false, "remaining-number-of-attempts": 4, "remaining-expiration-time": 0 } } }
```

6.4.6.9.3 Verification request by sms

```
POST /api/rest/v1/auth/sms-verification-code HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } } }
```

6.4.6.9.4 Verification by sms number response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } } }
```

#### 6.4.6.10 Cookies

6.4.6.10.1 Cookies request

6.4.6.10.2 Cookies response

```
HTTP/1.1 200 OK
```

#### 6.4.6.11 Documentation

Returns list of Json Schemas for request and response for requested rest endpoint. Use exact endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return json schemas for /api/rest/v1/vouchers endpoint.

6.4.6.11.1 Documentation request

```
GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 6.4.6.11.2 Documentation response

Complete Response is omitted because of size, here is just a part:



# 6.4.6.12 i18 internationalization

✓ Retrieves i18next json based on requested language

## 6.4.6.12.1 i18 request

```
\begin{tabular}{llll} {\tt GET} & api/rest/v1/content/i18next.json/de & {\tt HTTP/1.1} & {\tt Authorization:} & {\tt No} & {\tt Auth} & {\tt Accept:} \\ & application/vnd.api+json & {\tt Secondary No} & {\tt Authorization:} & {\tt No} &
```

# 6.5 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

#### 6.5.1 TODO

## 6.5.1.1 TODO version 1.0

- $\checkmark$  [x] Test environment and credentials
- ✓ [x] specify voucher content fields
- ✓ [x] specify voucher pricing fields
- $\checkmark$  [x] specify payment method fields

## 6.5.1.2 TODO version 1.0-next

- √ [] refactor entities and apply relationships
- ✓ [] provide full resource schemas
- ✓ [] enforce validation of resource schemas

## 6.5.2 Test environment and credentials

## **TODO**

Username	Password	Description
test@test.org	test	just protected
test@gmail.com	test	just testing
testtest	test	qa

# 6.5.3 Edge Service Registry

The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.



As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances must register themselves on the registry on startup and unregister on shutdown.

## 6.5.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.

See [Message Relay] for more information.

## 6.5.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

#### 6.5.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints must adhere to the [JSONAPI] specification and be subject to strict [Access Control].

## 6.5.6.1 Login

## 6.5.6.1.1 Login request

Variables	Description	Example
ICP_SHOP_ID	see [Test environment and credentials]	
ICP_SHOP_PASSPHRASE	see [Test environment and credentials]	
ICP_SHOP_DIGEST	Derived from \${ICP_SHOP_ID} and \${ICP_SHOP_PASSPHRASE}	MzAwMDAwMTY6dG9wLXNIY3JI dC1wYXNzcGhyYXNI



POST /api/rest/v1/auth/login HTTP/1.1 Authorization: Basic  $\{ICP\_SHOP\_DIGEST\}$  Accept: application/vnd.api+json

## 6.5.6.1.2 Login response

HTTP/1.1 201 Created Content-Type: application/vnd.api+json

#### 6.5.6.1.3 Cookies

Name Value Domain Path Expires HttpOnly Secure

SESSION MmQ5ZjkxO master.env.a / Seassion true false

GltMTM4My0 pi.shop1.roc

0M2E0LWI1M ks DYtYmUwZjY wMzJiZDY5

# 6.5.6.2 Logout

# 6.5.6.2.1 Logout request

Variables Description Example

POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 6.5.6.2.2 Logout response

HTTP/1.1 204 No Content

#### 6.5.6.3 Voucher list

See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields.



## 6.5.6.3.1 Voucher list request

GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

#### 6.5.6.3.2 Voucher list response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
                                                "id":"f634f09f-9a06-4297-a326-0d703938b702",
    "data":[
"type":"voucher", "attributes":{
"currency":"EUR", "ean-code":"8717472242211",
"kind":0, "name":"Lebara All-in NL 10 EUR",
                                                                    "code":"LEBALLINNL10",
                                                                       "encryption-type":0,
                                                                   "provider-code":"LEBARA",
"provider-name":"Lebara", "short-name":"All-in NL 10",
                                                                              "value":10.0,
                                                                           "price-fee":1.99,
"price-total":11.99,
                                      "price-tax":0.00,
                                  "wirecard-creditcard":{
"payment-methods": {
                                                                              "name":"Credit
                                                                 "provider-name": "Wirecard",
"image-url": "https://wirecard.com/logo.png"
                                                                          "wirecard-paypal":
                                                              "provider-name":"Wirecard"
                         "name":"PayPal",
{
                            } },
                                                              "id":"a3473e20-19b4-44fe-8389-
                                     "type":"voucher",
67a511854759",
                                                                             "attributes":
                "code":"LEBALLINNL15",
                                                      "currency":"EUR",
{
                                                                                       "ean-
                                  "encryption-type":0,
    "provider-code":"LEBARA",
code": "8717472242129",
                                                                                  "kind":0,
                                                                                "provider-
"name":"Lebara All-in NL 15 EUR",
name":"Lebara", "short-name":"All-in NL 15",
                                                                             "value":15.0,
"price-total":16.99,
                                     "price-tax":0.00,
                                                                           "price-fee":1.99,
"payment-methods":[
                                  "wirecard-creditcard":{
                                                                              "name":"Credit
                                                                "provider-name":"Wirecard",
Card",
"image-url": "https://wirecard.com/logo.png"
                                                                          "wirecard-paypal":
                         "name":"PayPal",
                                                                  "provider-name": "Wirecard"
                        } } } }
```

#### 6.5.6.4 Voucher detail

## 6.5.6.4.1 Voucher detail request

GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json

# 6.5.6.4.2 Voucher detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
     "data":{
                "id":"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher",
"attributes":{
                                                                         "ean-
                                                    "currency":"EUR",
                      "code":"LEBALLINNL10",
                              "encryption-type":0,
    "provider-code":"LEBARA",
                                                                        "kind":0,
code":"8717472242211",
"name":"Lebara All-in NL 10 EUR",
                                                                        "provider-
name":"Lebara", "short-name":"All-in NL 10", "value":10.0,
                                                                         "price-
total":11.99,
                                               "price-fee":1.99,
                     "price-tax":0.00,
                                                                         "payment-
                      "wirecard-creditcard":{
methods": {
                                                              "name":"Credit Card",
"provider-name":"Wirecard",
                                            "image-url": "https://wirecard.com/logo.png"
},
                                            "name":"PayPal",
             "wirecard-paypal":{
                                                                        "provider-
name":"Wirecard"
```

#### 6.5.6.5 Voucher order

See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields.

# 6.5.6.5.1 Voucher order request



```
POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } }
```

field name	type	constrains	description	example
id	UUID	globally unique	globally unique UUID	c91feaf3-5968- 4b60-aa5b- 62fe7fdd905c
type	string	n/a	type of request, must be "voucher- order", "voucher- order"	
voucher-code	string	n/a	code of the voucher gathered from voucher list	"VODADE15"
payment-method	string	n/a	on of the allowed methods for the voucher, denoted in voucher list response	"Wirecard VISA"
notification-type	string	currently only "email" is supported	type of the notification target	"email"
notification-target	string	n/a	target adress	"[me@my- email.com] (mailto:me@my- email.com)"
order-success- redirect-url	string	valid URL	Where the wirecard should redirect if payment was successfull	protect
order-failed- redirect-url	string	valid URL	Where the wirecard should redirect if payment fails	protect
order-canceled- redirect-url	string	valid URL	Where the wirecard should redirect if payment was canceled	protect



#### 6.5.6.5.2 Voucher order response

```
HTTP/1.1 201 Created Content-Type: application/vnd.api+json
   "type": "voucher-order",
"attributes": {
                        "notification-status": "pending",
                                                                 "confirmation-status":
"pending",
               "notification-type": "email",
                                               "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                 "payment-session-id":
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                          "payment-status": "pending",
                                                                            "pavment-
                          "voucher-code": "LEBALLINNL10",
                                                            "voucher-currency": "EUR",
method": "creditcard",
                          "voucher-status": "pending",
                                                            "order-price-total": 11.99,
"voucher-value": 10.0
"order-tax-total": 0.00,
                                                            "order-status": "pending",
                             "order-fee-total": 0.99,
                                   "confirmation-date": "0",
"serial-number": "1234",
                                                                       "batch-number":
"1234"
        } } }
```

#### 6.5.6.6 Voucher order detail

#### 6.5.6.6.1 Voucher order detail request

```
GET /api/rest/v1/voucher-orders/:order-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 6.5.6.6.2 Voucher order detail response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
   "type": "voucher-order",
                        "notification-status": "pending",
"attributes": {
                                                                 "confirmation-status":
            "notification-type": "email",
"pending",
                                              "notification-target": "me@my-email.com",
                                  "payment-redirect-url": "https://wpp-test.wirecard.com/?
"payment-provider": "wirecard",
wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIlM",
                                                                  "payment-session-id":
                                           "payment-status": "pending",
"4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc",
                                                                            "payment-
                         "voucher-code": "LEBALLINNL10",
                                                            "voucher-currency": "EUR",
method": "creditcard",
"voucher-value": 10.0
                          "voucher-status": "pending",
                                                            "order-price-total": 11.99,
"order-tax-total": 0.00,
                              "order-fee-total": 1.99,
                                                             "order-status": "pending",
                          "confirmation-date": "1611313953175"
"serial-number": "1234",
```

### 6.5.6.7 Provider Text

See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields.

## 6.5.6.7.1 Provider Text request

Variables Description Example



```
GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 6.5.6.7.2 Provider Text response

#### 6.5.6.8 Content

See [Content Service] for more information on the source of these fields.

## 6.5.6.8.1 Content request

Variables Description Example

GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json

## 6.5.6.8.2 Content response

#### 6.5.6.9 Verification

See for more information on the source of these fields.



6.5.6.9.1 Verification request by phone number

```
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-831f-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } } }
```

6.5.6.9.2 Verification by phone number response

```
HTTP/1.1 200 OK Content-Type: application/json
{    "data": { "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "ok": false, "remaining-number-of-attempts": 4, "remaining-expiration-time": 0 } } }
```

6.5.6.9.3 Verification request by sms

```
POST /api/rest/v1/auth/sms-verification-code HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } } } }
```

6.5.6.9.4 Verification by sms number response

```
HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } } }
```

#### 6.5.6.10 Cookies

#### 6.5.6.10.1 Cookies request

```
POST /api/rest/v1/cookies HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json {
"data": [ { "type": "cookie", "id": "shopId", "attributes": {
"name": "shopId", "value": "1234" } }, { "type": "cookie", "id": "ns_dev_id", "attributes": { "name": "ns_dev_id", "value": "device_id" } } ] }
```

## 6.5.6.10.2 Cookies response

```
HTTP/1.1 200 OK
```

#### 6.5.6.11 Documentation

Returns list of Json Schemas for request and response for requested rest endpoint. Use exact endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return json schemas for /api/rest/v1/vouchers endpoint.

6.5.6.11.1 Documentation request

```
GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
```

## 6.5.6.11.2 Documentation response

Complete Response is omitted because of size, here is just a part:



## 6.5.6.12 i18 internationalization

✓ Retrieves i18next json based on requested language

## 6.5.6.12.1 i18 request

```
\begin{tabular}{llll} {\tt GET} & api/rest/v1/content/i18next.json/de & {\tt HTTP/1.1} & {\tt Authorization:} & {\tt No} & {\tt Auth} & {\tt Accept:} \\ & application/vnd.api+json & {\tt Secondary No} & {\tt Authorization:} & {\tt No} &
```





Figure 1: Last Page