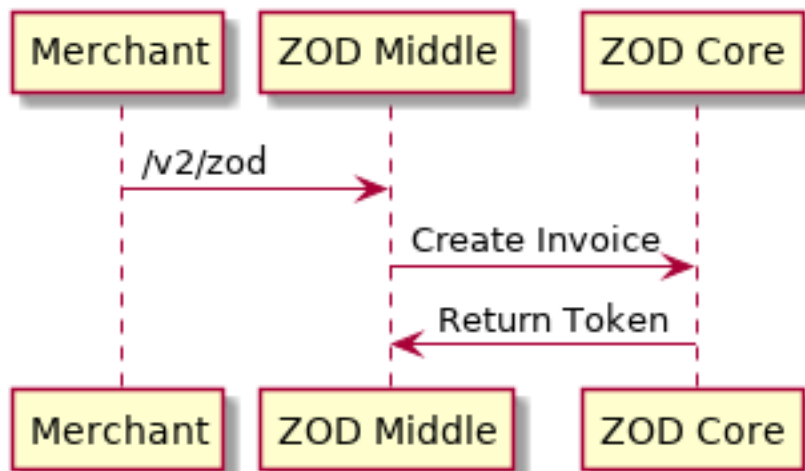

ZaloPay APIs ZOD Integration Document

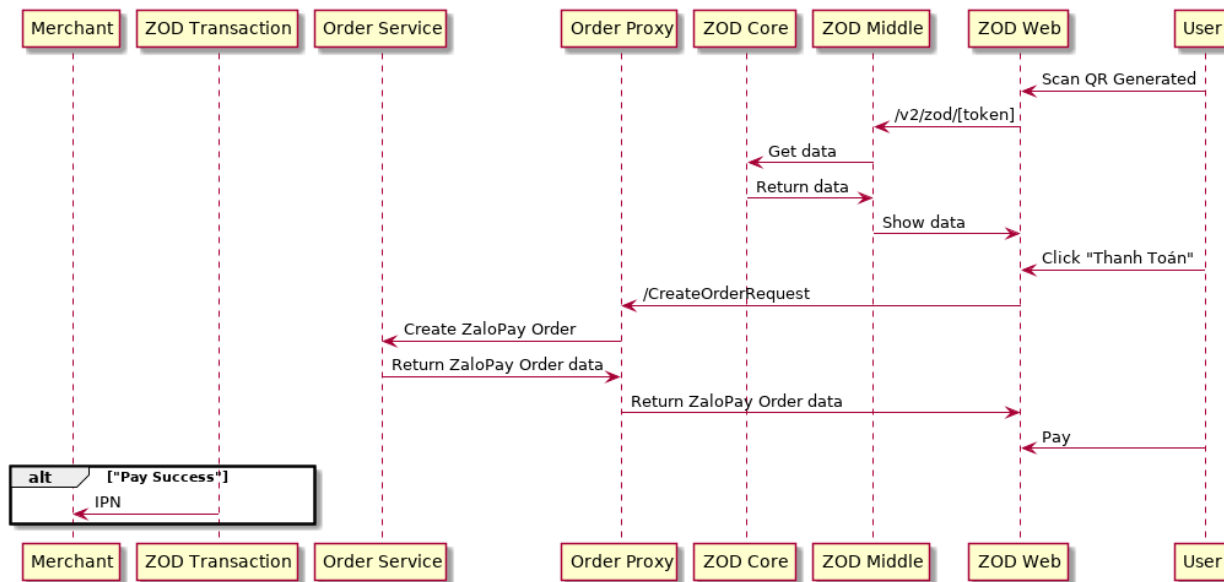
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1. Introduction

ZOD (ZaloPay on delivery) is a solution, which provides a way for Merchant to create order has the ability to pay later and support ZNS/ZMS notification message

2. Domain Analysis & Design





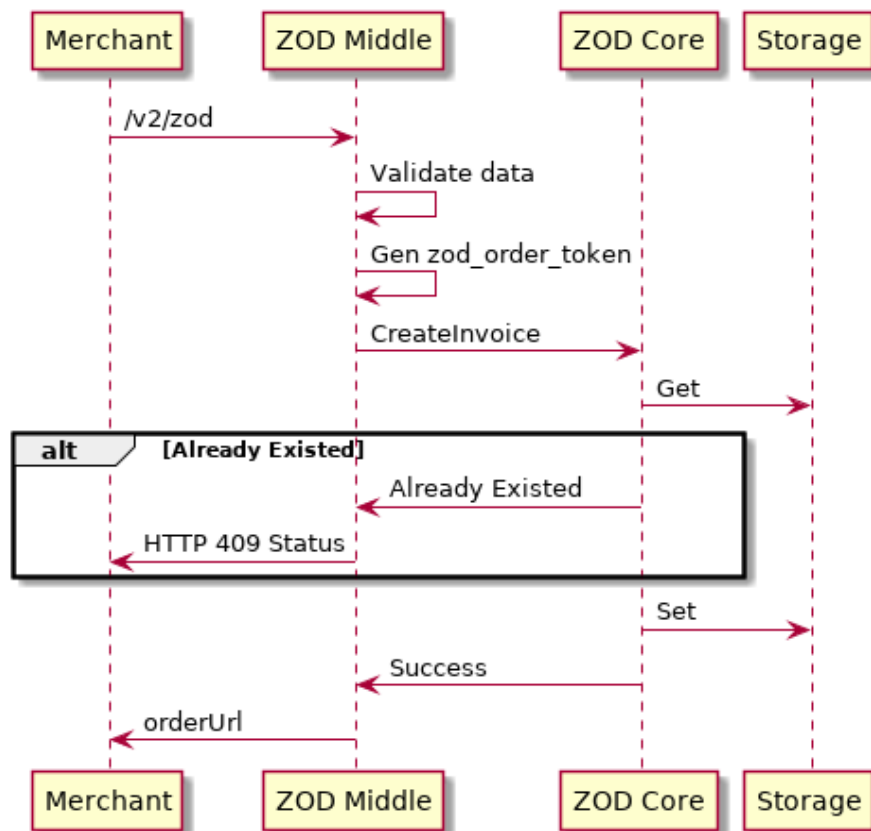
3. Deployment Architecture

Environment	Endpoint
Sandbox	https://sbapimep.zalopay.vn
Production	https://apimep.zalopay.vn

4. APIs specification

4.1 Create ZOD Invoice

- Sequence diagram



- **Request**

- URI: /v2/zod
- Method: POST
- Content-Type: application/json
- Params

No	Params	Datatype	Required	Description	Comment	Example
1	appId	string	Y	Identification of the application		
2	mcRefId	string	Y			
3	hubId	string	N		requested field	
4	driverId	string	N		requested field	
5	amount	int	Y			
6	mac	sting	Y			
7	receiver	metadata	Y			
8	orderInfo	array of OrderInfo	Y			
9	mcExtInfo	JSON Object (string:string)	Y	merchandiseSubtotal, shippingSubtotal	Used for external info.	"{\"merchandiseSubtotal\":100000, \"shippingSubtotal\":10000}"

- **Metadata**

No	Field name	Datatype	Description
1	contact	string	Receiver name

- **OrderInfo**

No	Field name	Datatype	Description
1	trackingNumber	string	Order's tracking number
2	description	string	Order's description
3	amount	int	Order's amount

- **Create authentication information**

- ✓ **mac** = HMAC(HmacSHA256, macKey, macInput)
- ✓ **macKey**: key generated by ZaloPay system for each merchant
- ✓ **macInput** = app_id|mc_ref_id|amount|mcExtInfo

- **Response**

- ✓ Content-Type: application/json
- ✓ JSON body

No	Field name	Datatype	Description
1	orderUrl	string	Url used to generate QR Code

- Example of Create Invoice request:

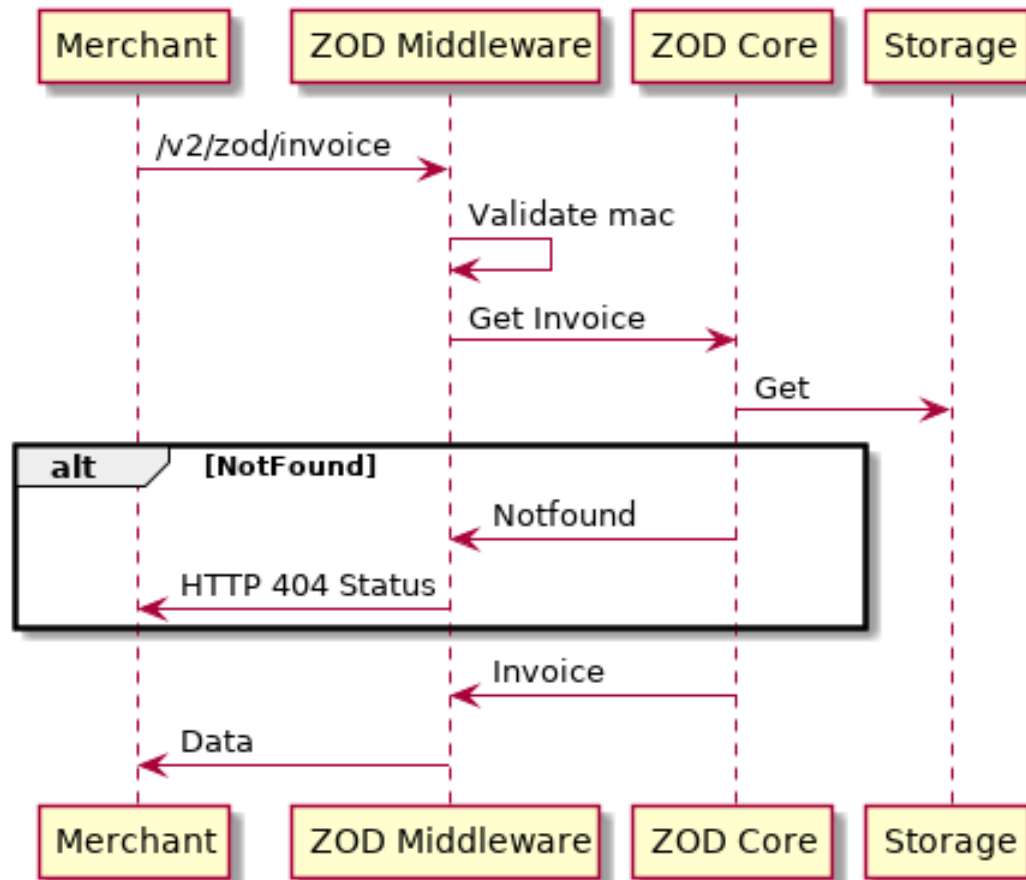
```
{
  "appId": "15011",
  "mcRefId": "LZD201230_23423440",
  "mac": "54b8629f2d6f03aef2faae20928adaa5c4354f477656d83708fb7e56ef4c2c42",
  "receiver": {
    "contact": "Nguyễn Văn A"
  },
  "orderInfo": [
    {
      "trackingNumber": "LEXTEST",
      "description": "Đơn hàng 1",
      "amount": 20000
    },
    {
      "trackingNumber": "LEXTEST2",
      "description": "Đơn hàng 2",
      "amount": 10000
    }
  ]
}
```

- Example of Create Invoice Response

```
{
  "orderUrl": "https://sbqrpay.zalopay.vn/zod/{token}"
}
```

4.2 Get Invoice

- Sequence diagram



- Request

- URI: /v2/zod/invoice
- Method: GET
- Params

No	Params	Datatype	Mandatory	Description	Comment
1	app_id	int	Y		
2	mc_ref_id	String	Y		
3	mac	String	Y		

- **Create authentication information**

- ✓ **mac** = HMAC(HmacSHA256, macKey, macInput)
- ✓ **macKey**: key generated by ZaloPay system for each merchant
- ✓ **macInput** = app_id|mc_ref_id

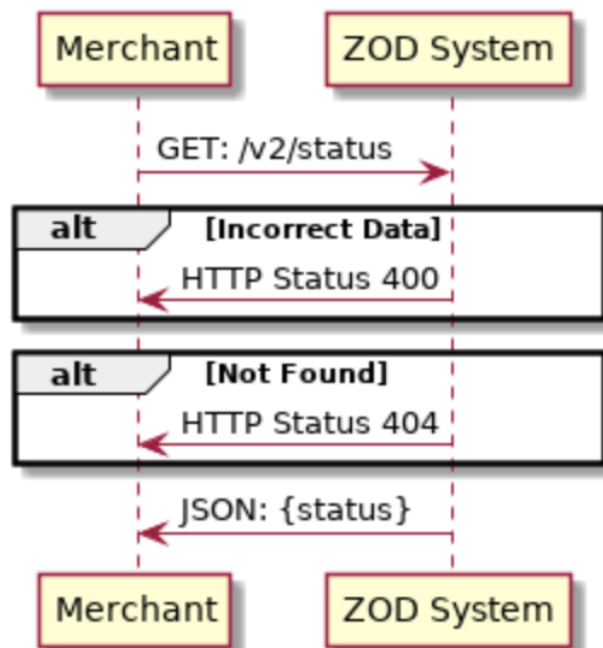
- **Response**

- ✓ Content-Type: application/json
- ✓ JSON body

No	Field name	Datatype	Description	Comment
1	order_url	string		

4.3 Query Status

- Sequence diagram



- Request

- URI: /v2/zod/status
- Method: GET
- Content-Type: application/json
- Params

No	Params	Datatype	Required	MaxLength	Description	Comment
1	appId	string	Y		AppID provided by ZaloPay	
2	mcRefId	string	Y	64	Merchant's reference ID of the order	
3	mac	string	Y			

- Create authentication information
 - ✓ **mac** = HMAC(HmacSHA256, macKey, macInput)
 - ✓ **macKey**: key generated by ZaloPay system for each merchant
 - ✓ **macInput** = appId|mcRefId
- Response
 - ✓ Content-Type: application/json
 - ✓ JSON body

No	Field name	Datatype	Description	Comment
1	status	int	Order's status	1: SUCCESS 2: FAILURE 3: UNPAID
2	amount	int	Order's amount	
3	zpTransId	string	ZaloPay transaction's ID	

4.4 Callback (Instant Payment Notification)

- Description: When the payment is successful, this notification will send to the Merchant server to notify about the transaction.
- Integration:
 - Protocol: HTTPS
 - Method: POST
 - Content-Type: application/json
 - URI: provided by the merchant
- Request body

No	Field name	Datatype	Description
1	data	JSON string	Data callback
2	mac	string	Mac string for validating the request.
3	type	int	Type of callback: 1: Order 2: Agreement

- **data**

No	Field name	Datatype	Description	Comment
1	appId	string	The app identifier is provided by ZaloPay.	
2	mcRefId	string	Merchant order's reference ID	
3	amount	int	Amount of order.	
4	zpTransId	int	The ZaloPay transaction id.	

5	serverTime	int	Server timestamp in milliseconds.	
6	channel	int	Payment channel	
7	zpUserId	string	The identifier of ZaloPay user per merchant.	
8	userFeeAmount	int	Fee amount.	
9	discountAmount	int	Discount amount.	
10	userChargeAmount	int	Amount charged from user	

- **Security:**

mac = HMAC(HmacSHA256, callbackKey, {data})

callbackKey: key generated by ZaloPay system for each merchant.

- Example of callback data:

```
{"data":{"appId":"15011","mcRefId":"LZD201230_23423453","amount":30000,"zpTranId":21012600000814,"serverTime":1611633042737,"channel":38,"zpUserId":"200601589000506","userFeeAmount":0,"discountAmount":0,"userChargeAmount":30000},"mac":"dd163f1bc82a92eb8c9619337f47298fee0c95b1c764767ad18f358f0e8120a9","type":1}
```

- **Response:** JSON string

No	Field name	Datatype	Description
1	returnCode	int	1: Success, 2: Failed
2	returnMessage	string	Description of return code

- Example response:

```
{  
  "returnCode": 1,  
  "returnMessage": "SUCCESS"  
}
```