



# AUTODEBIT API DOCUMENTATION

Document No.: AXAI/API/20230516

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Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

## DOCUMENT DETAILS

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<b>Document No.:</b>	AXAI/API/20230516
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## Revision History

Version	Date of Update	Summary of Change	Updated by
1.0	5/3/2023	First release	M. Dhito Prihardhanto
1.1	11/5/2023	Add Process flow	Yap Ting How
1.2	20/6/2023	Add field txnAmount, freqMode, productCode, and signature to response	M. Dhito Prihardhanto
1.3	3/8/2023	Modify the response parameters, update logo, Document Name and Document No.	M. Dhito Prihardhanto & Yap Ting How
1.4	13/10/2023	Add Enrolment without product code	M. Dhito Prihardhanto & Yap Ting How
1.5	30/10/2023	Modify and corrected the production request URL	Yap Ting How
1.6	23/11/2023	Modify and update field name for maxDebitFreq	Yap Ting How

Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

# CONTENTS

DOCUMENT DETAILS.....	2
Revision History .....	2
CONTENTS.....	3
KNOW BEFORE YOU CODE .....	5
1    ENROLMENT WITH PRODUCT CODE .....	6
1.1    TECHNICAL FLOW.....	6
1.2    PROCESS FLOW .....	8
1.3    REQUEST URL.....	9
1.4    REQUEST PARAMETERS .....	9
1.5    REQUEST SIGNATURE.....	10
1.5.1    Request Signature Code Example .....	11
1.5.2    Request Code Sample (HTML Post) .....	12
1.6    RESPONSE PARAMETERS .....	12
1.7    RESPONSE SIGNATURE.....	14
2    DIRECT ENROLMENT (WITHOUT PRODUCT CODE).....	16
2.1    TECHNICAL FLOW.....	16
2.2    PROCESS FLOW .....	18
2.3    REQUEST URL.....	19
2.4    REQUEST PARAMETERS .....	19
2.5    REQUEST SIGNATURE.....	20
2.5.1    Request Signature Code Example .....	21
2.5.2    Request Code Sample (HTML Post) .....	23
2.6    RESPONSE PARAMETERS .....	23
2.7    RESPONSE SIGNATURE.....	25
3    INQUIRY .....	27
3.1    REQUEST URL.....	27
3.2    REQUEST PARAMETERS .....	27
3.2.1    Request Body for Enrolment Inquiry: Based on txnId.....	27
3.2.2    Request Body for Enrolment Inquiry: Based on mchtTxnId .....	28
3.3    REQUEST SIGNATURE.....	28
3.3.1    Request Signature Calculation.....	28

Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

3.3.1.1	Request Signature for Enrolment Inquiry: Based on txnId.....	29
3.3.1.2	Request Signature for Enrolment Inquiry: Based on mchtTxnId.....	29
3.3.2	Request Signature Code Example .....	30
3.3.2.1	Request Signature for Enrolment Inquiry: Based on mchtTxnId .....	30
3.3.2.2	Request Signature for Inquiry and Void Transaction: Based on txnId .....	31
3.4	RESPONSE.....	31

Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

## KNOW BEFORE YOU CODE

This integration sets up online payment options using Axaipay, which presents relevant payment options to your buyers. Prior the integration, you need to have a demo account from Axaipay and you request it by contacting us at [support@axaipay.com](mailto:support@axaipay.com).

The terms and expressions used in this document are defined as below:

- **“M”** refers as Mandatory;
- **“O”** refers as Optional;

Merchant also needs to provide two URLs to capture the response from Axaipay:

No	URL	Description
1	Redirect URL	The customer will be redirected to this URL after the customer has completed the enrolment. Axaipay will also post the transaction status payload to this URL. The merchant may use this URL to display the enrolment status page to the customer.
2	Backend URL	<p>Axaipay will post the transaction status to this URL. The transaction status payload posted to this URL is the same as the one posted to the redirect URL.</p> <p>Axaipay will also post the transaction status of future recurring charges to this backend URL.</p>

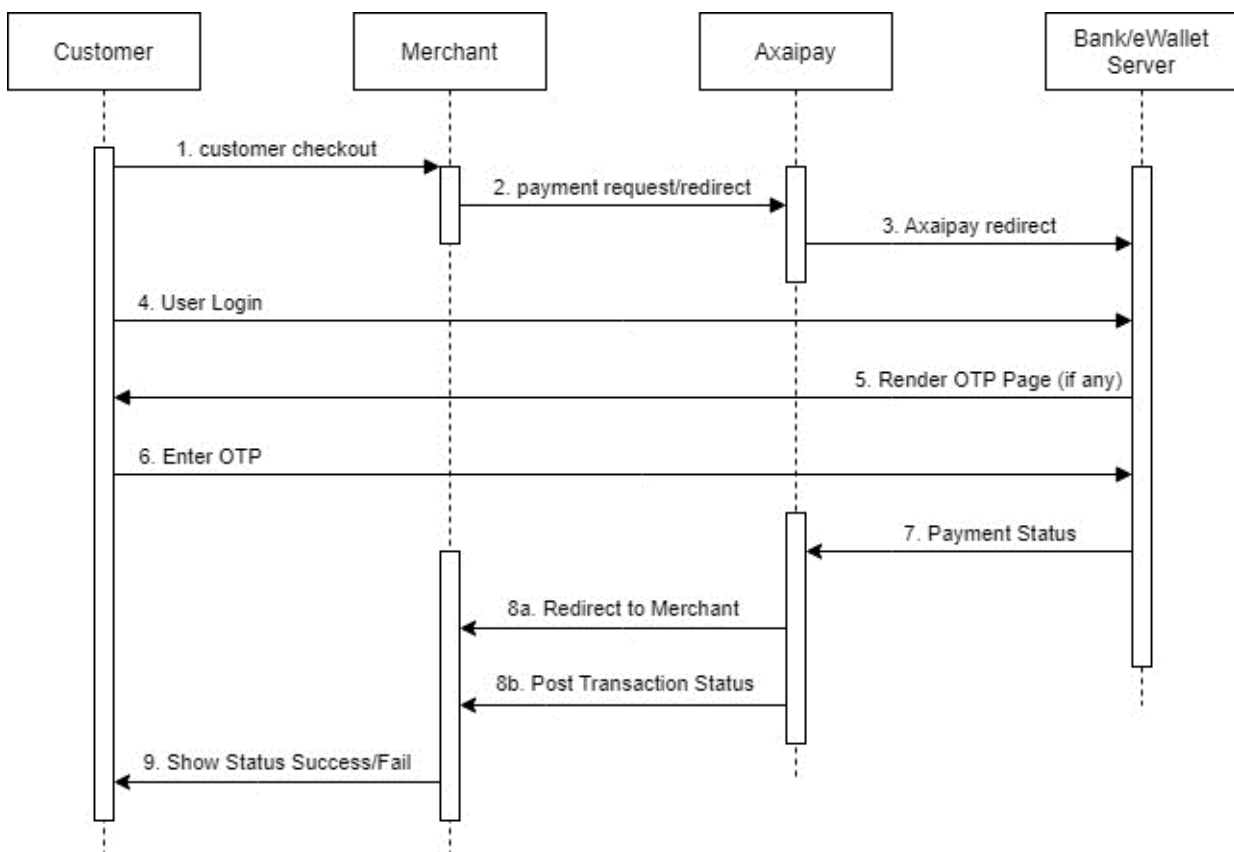
Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

# 1 ENROLMENT WITH PRODUCT CODE

To get started with recurring payments, merchants need to obtain the customer's consent through an initial payment of RM1.00. Axaipay's payment page is like regular payment, but the customer is shown the product information that will be periodically debited before they submit the payment.

The customer needs to complete the payment with the account that will be used for recurring charges in the future. After the first payment of RM1.00 is completed successfully, the customer's account will be chargeable in the future.

## 1.1 TECHNICAL FLOW

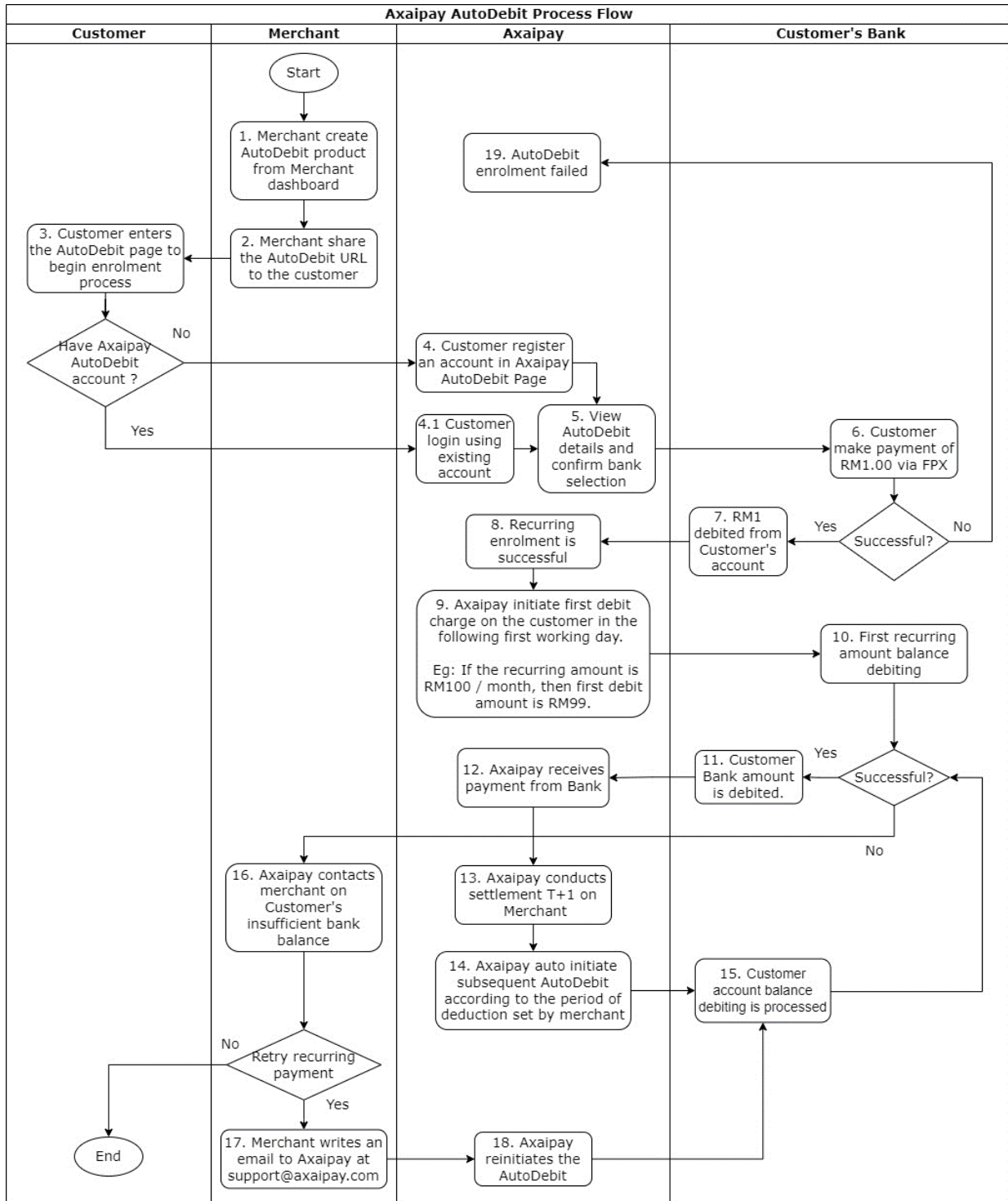


Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

No.	Description
1.	Customers check out an AudoDebit product on the merchant's page.
2.	The merchant redirects to Axaipay by submitting the enrolment API request via HTTP POST
3.	The customer verifies the AutoDebit product details, selects their bank, then submits the e-mandate application. Then they will be redirected to the internet banking page.
4.	The customer logs in to their bank account and confirms the payment
5.	Some banks may require the customer to verify the OTP to proceed with the payment
6.	The customer enters the OTP code to proceed with the payment
7.	The bank redirects the customer to Axaipay and also posts the transaction status
8a.	Axaipay redirects the customer back to the merchant's page using HTTP POST to the merchant's redirect URL.
8b.	At the same time, Axaipay also posts the payment status to the merchant's backend URL.
9.	<p>The merchant informs the customer about their enrolment status (success/fail).</p> <p>If the payment of RM1.00 is successful, it means that the enrolment has been successfully completed and the customer's account will be chargeable in the future.</p> <p>If the payment of RM1.00 is failed, it means the enrolment is also failed and the customer has to repeat the enrolment process from the beginning.</p>

Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

## 1.2 PROCESS FLOW





Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

## 1.3 REQUEST URL

**For Staging:**

<https://staging.axaipay.my/gateway/emandate/v1/enrolment>

**For Production:**

<https://secured.axaipay.my/gateway/emandate/v1/enrolment>

## 1.4 REQUEST PARAMETERS

Merchants send parameters via HTML POST request to Axaipay to initiate the enrolment. Here are some required parameters in the request:

No	Field Name	Type	Sample	M/O	Description
1	mchtId	String(50)	iboxfan	M	Merchant ID (provided by Axaipay)
2	mchtTrxnId	String(255)	12345	M	Merchant Transaction ID (generated by merchant)
3	signature	String(255)	HxH9TOdaXg 7ZGUwtNZW sbYo9VxpJH0 3lza4Q68g+v EpdTdZfLV5z OYLARrOYeD tqCu1n13ArS Z6jlYrczTjxsQ ==	M	Signature for transaction. Refer to section 1.5
4	productCode	String(255)	71aa54p	M	Product code.  You can find the product code in the payment URL generated for the E-Mandate product: <a href="https://autodebit.axaipay.my/71aa54p">https://autodebit.axaipay.my/71aa54p</a>
5	customerEmail	String(27)	abc@gmail.com	M	Customer email
6	customerName	String(40)	John Doe	M	Customer name
7	customerPhone	Integer(11)	0123456789	M	Customer phone (Malaysia phone number)
8	customerIdentityType	Integer(1)	3	M	Customer identity type

Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

					1 : New IC Number 2 : Old IC Number 3 : Passport 4 : Business Registration 5 : Others
9	customerIdentityNo	String(18)	434671	M	Customer identity number

## 1.5 REQUEST SIGNATURE

The signature must be included in the request and encrypted using HMACSHA512. It is a hash of the following fields:

- customerEmail
- customerIdentityNo
- customerIdentityType
- customerName
- customerPhone
- mchtId
- mchtTrxnId
- productCode

The fields must be set in the alphabetical order of the parameter names:

**customerEmailcustomerIdentityNocustomerIdentityTypecustomerNamecustomerPhoneMch  
tIdMchtTrxnIdproductCode**

### Example:

- customerEmail = "abc@gmail.com"
- customerIdentityNo = "434671"
- customerIdentityType = 3
- customerName = "John Doe"
- customerPhone = "0123456789"
- mchtId = "iboxfan"
- mchtTrxnId = "12345"
- productCode = "71aa54p"

The hash would be calculated on the following string:

**abc@gmail.com4346713John Doe0123456789iboxfan1234571aa54p**

Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

using the merchant signingKey provided by Axaipay (e.g. **dwdefE12324!9293**). For this example, the resulting hash signature value equals to (using HMACSHA512):

**HxH9TOdaXg7ZGUwtNZWsbYo9VxpJH03lza4Q68g+vEpdTdZfLV5zOYLARrOYeDtqCu1n13ArSZ6jlYrczTjxsQ==**

### 1.5.1 Request Signature Code Example

#### PHP:

```
<?php
$string_to_sign =
    'abc@gmail.com'. // customerEmail
    '434671'. // customerIdentityNo
    '3'. // customerIdentityType
    'John Doe'. // customerName
    '0123456789'. // customerPhone
    'iboxfan'. // mchtId
    '12345'. // mchtTrxnId
    '71aa54p' // productCode
    ;
$signing_key = 'dwdefE12324!9293';
$digest = hash_hmac('sha512', $string_to_sign, $signing_key, true);
echo base64_encode($digest);
?>
```

#### JAVA:

```
import org.apache.commons.codec.digest.HmacUtils;

public static void main(String[] args){
    String customerEmail = "abc@gmail.com";
    String customerIdentityNo = "434671";
    int customerIdentityType = 3;
    String customerName = "John Doe";
    String customerPhone = "0123456789";
    String mchtId = "iboxfan";
    String mchtTrxnId = "12345";
    String productCode = "71aa54p";
    String signingKey = "dwdefE12324!9293";

    byte[] hmac = new HmacUtils(HmacAlgorithms.HMAC_SHA_512,
signingKey).hmac(customerEmail + customerIdentityno + customerIdentityType +
customerName + customerPhone + mchtId +mchtTrxnId + productCode);

    System.out.println(Base64.getEncoder().encodeToString(hmac));
}
```

Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

## 1.5.2 Request Code Sample (HTML Post)

```
<form method="post"
action="https://secured.axaipay.my/gateway/emandate/v1/enrolment">
  <input type="hidden" name="customerEmail" value="abc@gmail.com" />
  <input type="hidden" name="customerName" value="John Doe" />
  <input type="hidden" name="customerIdentityType" value="3" />
  <input type="hidden" name="customerIdentityNo" value="434671" />
  <input type="hidden" name="customerPhone" value="0123456789" />
  <input type="hidden" name="productCode" value="71aa54p" />
  <input type="hidden" name="mchtId" value="iboxfan"/>
  <input type="hidden" name="mchtTxnId" value="12345"/>
  <input type="hidden" name="signature"
value="HxH9TOdaXg7ZGUwtNZWsbYo9VxpJH03lza4Q68g+vEpdTdZfLV5zOYLArOYeDtqCu1n1
3ArSZ6jlyRczTjxsQ==" />
  <input type="text" name="txnAmount" value="4" />
</form>
```

## 1.6 RESPONSE PARAMETERS

After the payment process is complete, we will send a response to the merchant regarding the transaction status, whether it is successful/failed/pending authorization.

Below are the response parameters sent from Axaipay to merchant via redirect and backend:

No	Field Name	Type	Sample	Description
1	debitFreqMode	String(2)	MT	Type of frequency for debiting from the customer's account.  WK = Weekly MT = Monthly YR = Yearly
2	maxDebitAmount	Decimal	25.50	The maximum amount that can be debited from the customer's account per transaction
3	maxDebitFreq	Integer	2	The maximum number of times that can be debited from the customer's account
4	mchtId	String(50)	iboxfan2021	Merchant ID
5	mchtTxnId	String(255)	12345	Transaction ID from merchant
6	productCode	String(255)	71aa54p	Product code.

Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

				This product code can be found in the payment URL generated for the E-Mandate product: <a href="https://autodebit.axaipay.my/71a54p">https://autodebit.axaipay.my/71a54p</a>
7	txnAmount	Decimal	20.00	The actual amount paid
8	txnBankName	String	OCBC Bank	Bank Name
9	txnFpxMethod	String	B2C (Retail Banking)	FPX Method: - B2C (Retail Banking) - B2B (Corporate Banking)
10	txnId	String(255)	EM20230202053432	Transaction ID from Axaipay
11	txnRecurringNo	Integer	1	The sequence of the recurring payment.  The first payment of RM1.00 is given sequence no 0 (zero).
12	txnStatus	Integer	11	Transaction status:  0 = Created 1 = In Progress 3 = Pending Authorization 11 = Paid 22 = Failed 23 = Timeout 55 = Cancel
13	txnTime	String	20230202045513	Transaction time, format yyyyMMddHHmmss
14	signature	String	n/AE0d20fz15O9TfKQ8DBtStUy2+t3VBpww60B629QVYCze67IkPO/wzP0n0vK0r4JDafS/8KfcklOPLw2dsxA==	Signature for the response payload

Please note that Axaipay will also send a response with a structure exactly like this when the next recurring charge is performed.

Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

## 1.7 RESPONSE SIGNATURE

Every payment response payload will include a signature for message content to be valid. Merchant is encouraged to generate the signature by themselves for matching purpose.

The signature for a response payload is a hash of the following fields:

- debitFreqMode
- maxDebitAmount
- maxDebitFreq
- mchtId
- mchtTrxnId
- productCode
- txnAmount
- txnBankName
- txnFpxMethod
- txnId
- txnRecurringNo
- txnStatus
- txnTime

The fields must be set in the alphabetical order of the parameter names:

**freqModemchtIdmchtTrxnIdproductCodetxnAmounttxnBankNametxnFpxMethodtxnIdtxnStatustxnTime**

### Example:

```
debitFreqMode = "MT"
maxDebitAmount = 25.50
maxDebitFreq = 2
mchtId = "iboxfan2021"
mchtTrxnId = "12345"
productCode = "71aa54p"
txnAmount = 20.00
txnBankName = "OCBC Bank"
txnFpxMethod = "B2C (Retail Banking)"
txnId = "EM20230202053432"
txnRecurringNo = 1
txnStatus = 11
txnTime = "20230202045513"
```

Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

The hash would be calculated on the following string:

**MT25.502iboxfan20211234571aa54p20.00OCBC BankB2C (Retail  
Banking)EM2023020205343211120230202045513**

and using the merchant SigningKey provided by Axaipay (e.g. **dwdefE12324!9293**), the hash signature result value equals to (using HMACSHA512):

**n/AE0d20fz15O9TfKQ8DBtStUy2+t3VBpww60B629QVYCze67lkPO/wzP0n0vK0r4JDafS/8Kfck  
IOPLw2dsxA==**

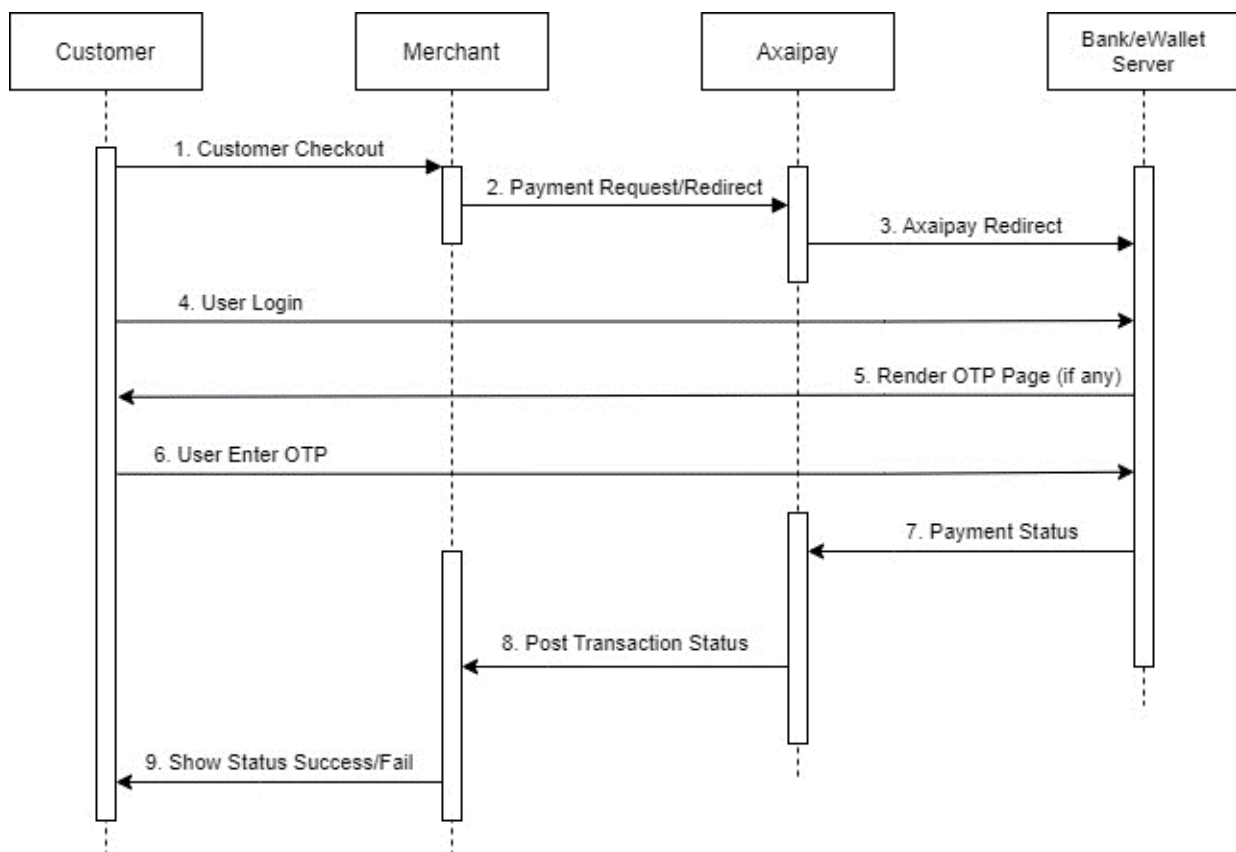
Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

## 2 DIRECT ENROLMENT (WITHOUT PRODUCT CODE)

To get started with recurring payments, merchants need to obtain the customer's consent through an initial payment of RM1.00. Axaipay's payment page is like regular payment, but the customer is shown the product information that will be periodically debited before they submit the payment.

The customer needs to complete the payment with the account that will be used for recurring charges in the future. After the first payment of RM1.00 is completed successfully, the customer's account will be chargeable in the future.

### 2.1 TECHNICAL FLOW



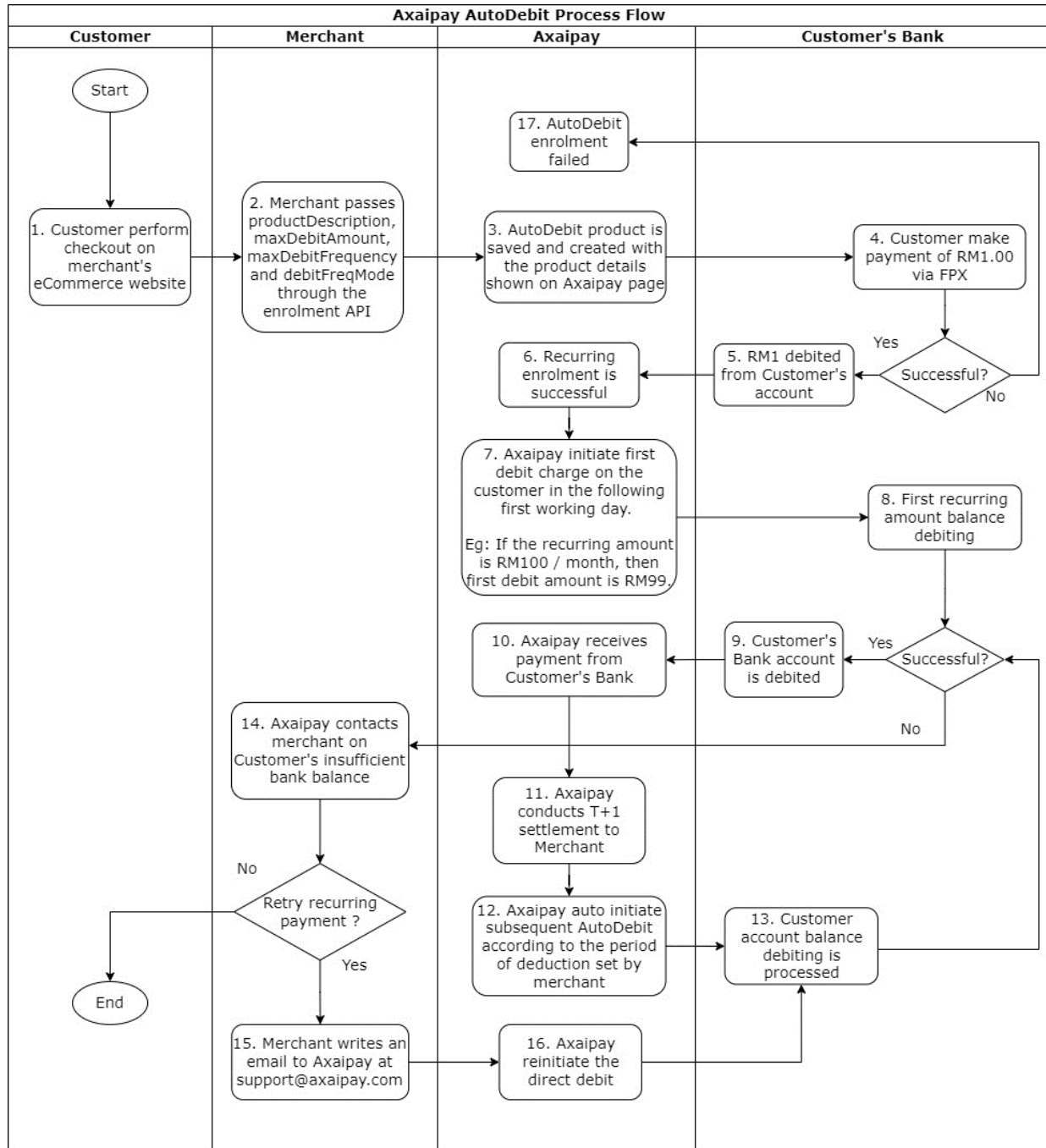


Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

No.	Description
1.	Customers check out an AudoDebit product on the merchant's page.
2.	The merchant redirects to Axaipay by submitting the enrolment API request via HTTP POST
3.	The customer verifies the AutoDebit product details, selects their bank, then submits the e-mandate application. Then they will be redirected to the internet banking page.
4.	The customer logs in to their bank account and confirms the payment
5.	Some banks may require the customer to verify the OTP to proceed with the payment
6.	The customer enters the OTP code to proceed with the payment
7.	Axaipay receives the customer's payment status upon successful enrolment.
8.	Axaipay posts the payment status to the merchant's backend URL.
9.	<p>The merchant informs the customer about their enrolment status (success/fail).</p> <p>If the payment of RM1.00 is successful, it means that the enrolment has been successfully completed and the customer's account will be chargeable in the future.</p> <p>If the payment of RM1.00 is failed, it means the enrolment is also failed and the customer has to repeat the enrolment process from the beginning.</p> <p><b>Note: the enrolment link is unique and will expire after customer has successfully paid the RM1.00 enrolment.</b></p>

Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

## 2.2 PROCESS FLOW



Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

## 2.3 REQUEST URL

### For Staging:

<https://staging.axaipay.my/gateway/emandate/v1/enrolment>

### For Production:

<https://secured.axaipay.my/gateway/emandate/v1/enrolment>

## 2.4 REQUEST PARAMETERS

Merchants send parameters via HTML POST request to Axaipay to initiate the enrolment. Here are some required parameters in the request:

No	Field Name	Type	Sample	M/O	Description
1	mchtId	String(50)	iboxfan	M	Merchant ID (provided by Axaipay)
2	mchtTrxnId	String(255)	12345	M	Merchant Transaction ID (generated by merchant)
3	signature	String(255)	HxH9TOdaXg 7ZGUwtNZW sbYo9VxpJH0 3Iza4Q68g+v EpdTdZfLV5z OYLARrOYeD tqCu1n13ArS Z6jlYrczTjxsQ ==	M	Signature for transaction. Refer to section 1.4
4	productDescription	String(255)	Suzuki MotorGP Motorbike	M	Merchant's product description to Axaipay
5	maxDebitAmount	Decimal	1000.00	M	The maximum amount that can be debited from the customer's account per transaction
6	maxDebitFreq	Integer	10	M	The maximum number of times that can be debited from the customer's account
7	debitFreqMode	String(2)	MT	M	Type of frequency for debiting from the customer's account.

Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

					WK = Weekly MT = Monthly YR = Yearly
8	customerEmail	String(27)	abc@gmail.com	M	Customer email
9	customerName	String(40)	John Doe	M	Customer name
10	customerPhone	Integer(11)	0123456789	M	Customer phone (Malaysia phone number)
11	customerIdentityType	Integer(1)	3	M	Customer identity type  1 : New IC Number 2 : Old IC Number 3 : Passport 4 : Business Registration 5 : Others
12	customerIdentityNo	String(18)	434671	M	Customer identity number

## 2.5 REQUEST SIGNATURE

The signature must be included in the request and encrypted using HMACSHA512. It is a hash of the following fields:

- customerEmail
- customerIdentityNo
- customerIdentityType
- customerName
- customerPhone
- debitFreqMode
- maxDebitAmount
- maxDebitFreq
- mchtId
- mchtTrxnId
- productDescription

The fields must be set in the alphabetical order of the parameter names:

**customerEmailcustomerIdentityNocustomerIdentityTypecustomerNamecustomerPhonedebitFreqModemaxDebitAmountmaxDebitFreqMchtIdMchtTrxnIdproductDescription**

Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

**Example:**

- customerEmail = "abc@gmail.com"
- customerIdentityNo = "434671"
- customerIdentityType = 3
- customerName = "John Doe"
- customerPhone = "0123456789"
- debitFreqMode = "MT"
- maxDebitAmount = 1000.00
- maxDebitFreq = 10
- mchtId = "iboxfan"
- mchtTrxnId = "12345"
- productDescription = "Fuji Apple 6packs"

The hash would be calculated on the following string:

**abc@gmail.com4346713John Doe0123456789MT1000.0010iboxfan12345Fuji Apple 6packs**

using the merchant signingKey provided by Axaipay (e.g. **dwdefE12324!9293**). For this example, the resulting hash signature value equals to (using HMACSHA512):

**rV02ZTNwUc0VVL+UXyQr1JmJyHaBU7XYwiEKefTQWt/7lTdaCBzOL892VWqj/zwqiDV+wi8k/a/O4b2MEcNTIQ==**

### 2.5.1 Request Signature Code Example

**PHP:**

```
<?php
    $string_to_sign =
        'abc@gmail.com'. // customerEmail
        '434671'. // customerIdentityNo
        '3'. // customerIdentityTyp
        'John Doe'. // customerName
        '0123456789'. // customerPhone
        'MT'. // debitFreqMode
        '1000.00'. // maxDebitAmount
        '10'. // maxDebitFreq
        'iboxfan'. // mchtId
        '12345'. // mchtTrxnId
        'Fuji Apple 6packs' // productDescription
    ;
    $signing_key = 'dwdefE12324!9293';
    $digest = hash_hmac('sha512', $string_to_sign, $signing_key, true);
    echo base64_encode($digest);
?>
```

Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

**JAVA:**

```
import org.apache.commons.codec.digest.HmacUtils;

public static void main(String[] args){
    String customerEmail = "abc@gmail.com";
    String customerIdentityNo = "434671";
    int customerIdentityType = 3;
    String customerName = "John Doe";
    String customerPhone = "0123456789";
    String debitFreqMode = MT;
    decimal maxDebitAmount = 1000;
    int maxDebitFreq = 10;
    String mchtId = "iboxfan";
    String mchtTrxnId = "12345";
    String productDescription = "Fuji Apple 6packs";
    String signingKey = "dwdefE12324!9293";

    byte[] hmac = new HmacUtils(HmacAlgorithms.HMAC_SHA_512,
signingKey).hmac(customerEmail + customerIdentityno + customerIdentityType +
customerName + customerPhone + mchtId +mchtTrxnId + productCode);

    System.out.println(Base64.getEncoder().encodeToString(hmac));
}
```

Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

## 2.5.2 Request Code Sample (HTML Post)

```
<form method="post"
action="https://secured.axaipay.my/gateway/emandate/v1/enrolment">
  <input type="hidden" name="customerEmail" value="abc@gmail.com" />
  <input type="hidden" name="customerName" value="John Doe" />
  <input type="hidden" name="customerIdentityType" value="3" />
  <input type="hidden" name="customerIdentityNo" value="434671" />
  <input type="hidden" name="customerPhone" value="0123456789" />
  <input type="hidden" name="debitFreqMode" value="MT" />
  <input type="hidden" name="maxDebitAmount" value="1000.00" />
  <input type="hidden" name="maxDebitFreq" value="10" />
  <input type="hidden" name="mchtId" value="iboxfan"/>
  <input type="hidden" name="mchtTxnId" value="12345"/>
  <input type="hidden" name="productDescription" value="Fuji Apple 6packs"
/>
  <input type="hidden" name="signature"
value="HxH9TOdaXg7ZGUwtNZWsbYo9VxpJH03lza4Q68g+vEpdTdZfLV5zOYLARrOYeDtqCuln1
3ArSZ6jlyrczTjxsQ==" />
  <input type="text" name="txnAmount" value="4" />
</form>
```

## 2.6 RESPONSE PARAMETERS

After the payment process is complete, we will send a response to the merchant regarding the transaction status, whether it is successful/failed/pending authorization.

Below are the response parameters sent from Axaipay to merchant via redirect and backend:

No	Field Name	Type	Sample	Description
1	debitFreqMode	String(2)	MT	Type of frequency for debiting from the customer's account.  WK = Weekly MT = Monthly YR = Yearly
2	maxDebitAmount	Decimal	1000.00	The maximum amount that can be debited from the customer's account per transaction
3	maxDebitFreq	Integer	10	The maximum number of times that can be debited from the customer's account
4	mchtId	String(50)	iboxfan2021	Merchant ID
5	mchtTxnId	String(255)	12345	Transaction ID from merchant

Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

6	productDescription	String(255)	71aa54p	<p>Production description from merchant</p> <p>This product code can be found in the payment URL generated for the E-Mandate product:  <a href="https://autodebit.axaipay.my/71aa54p">https://autodebit.axaipay.my/71aa54p</a></p>
7	txnAmount	Decimal	200.00	The actual amount paid
8	txnBankName	String	OCBC Bank	Bank Name
9	txnFpxMethod	String	B2C (Retail Banking)	<p>FPX Method:</p> <ul style="list-style-type: none"> <li>- B2C (Retail Banking)</li> <li>- B2B (Corporate Banking)</li> </ul>
10	txnId	String(255)	EM20230202053432	Transaction ID from Axaipay
11	txnRecurringNo	Integer	1	<p>The sequence of the recurring payment.</p> <p>The first payment of RM1.00 is given sequence no 0 (zero).</p>
12	txnStatus	Integer	11	<p>Transaction status:</p> <ul style="list-style-type: none"> <li>0 = Created</li> <li>1 = In Progress</li> <li>3 = Pending Authorization</li> <li>11 = Paid</li> <li>22 = Failed</li> <li>23 = Timeout</li> <li>55 = Cancel</li> </ul>
13	txnTime	String	20230202045513	Transaction time, format yyyyMMddHHmmss
14	signature	String	IZhn0r3Uk4ZHKhVW7Zu6OsdBkt43KYHylwPdskpz57HDbzZtT0ziHIXs5kSPMO2aHbKWGv+6w88uzTDR122eSQ==	Signature for the response payload. Refer to section 2.7

Please note that Axaipay will also send a response with a structure exactly like this when the next recurring charge is performed.



Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

## 2.7 RESPONSE SIGNATURE

Every payment response payload will include a signature for message content to be valid. Merchant is encouraged to generate the signature by themselves for matching purpose.

The signature for a response payload is a hash of the following fields:

- debitFreqMode
- maxDebitAmount
- maxDebitFreq
- mchtId
- mchtTrxnId
- productDescription
- txnAmount
- txnBankName
- txnFpxMethod
- txnId
- txnRecurringNo
- txnStatus
- txnTime

The fields must be set in the alphabetical order of the parameter names:

**freqModemchtIdmchtTrxnIdproductDescriptiontxnAmounttxnBankNametxnFpxMethodtxnIdtxnStatustxnTime**

### Example:

```
debitFreqMode = "MT"
maxDebitAmount = 1000.00
maxDebitFreq = 10
mchtId = "iboxfan2021"
mchtTrxnId = "12345"
productDescription = "Fuji Apple 6packs"
txnAmount = 200.00
txnBankName = "OCBC Bank"
txnFpxMethod = "B2C (Retail Banking)"
txnId = "EM20230202053432"
txnRecurringNo = 1
txnStatus = 11
txnTime = "20230202045513"
```

Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

The hash would be calculated on the following string:

**MT1000.0010iboxfan202112345Fuji Apple 6packs200.00OCBC BankB2C (Retail  
Banking)EM2023020205343211120230202045513**

and using the merchant SigningKey provided by Axaipay (e.g. **dwdefE12324!9293**), the hash signature result value equals to (using HMACSHA512):

**lZhn0r3Uk4ZHKhVW7Zu6OsdBkt43KYHylwPdskpz57HDbzZtT0ziHIXs5kSPMO2aHbKWGv+6w  
88uzTDR122eSQ==**

Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

## 3 INQUIRY

Merchants can call the inquiry API to check the transaction status based on **trxnid** or **mchtTrxnId**.

**trxnid** is the Axaipay transaction ID which will be provided by Axaipay upon transaction creation. Refer to section 1.6.

**mchtTrxnId** is the transaction ID provided by merchants in the request call during initiation of the enrolment. Refer to section 1.4.

### 3.1 REQUEST URL

#### Inquiry Transaction

##### For Staging:

<https://api-staging.axaipay.my/emandate/v1/inquiry>

##### For Production:

<https://api.axaipay.my/emandate/v1/inquiry>

### 3.2 REQUEST PARAMETERS

Merchants send request with below headers and body via REST API POST method to Axaipay.

#### Headers:

Content-Type: application/x-www-form-urlencoded

No	Field Name	Type	Sample	M/O	Description
1	x-api-key	String	iboxfanAPIkey2021	M	Merchant API key
2	x-signature	String	hOlr1m1VWIsRUC4tNmZ5wwSJdy Pw6v0qcJFZ4/nzsFxSfHPoDy+WVf zPD9xVFocceU5x1NczKCAePDfl7Jd btw==	M	Signature for transaction, refer to section 3.3

#### 3.2.1 Request Body for Enrolment Inquiry: Based on trxnid

##### Body

No	Field Name	Type	Sample	M/O	Description
1	merchantId	String	iboxfan2021	M	Merchant ID
2	trxnid	String	EM20220106045513	M	Axaipay transaction ID

Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

<b>3</b>	txnRecurringNo	Integer	1	O	<p>The sequence of the recurring payment.</p> <p>The first payment of RM1.00 is given sequence no 0 (zero).</p> <p>If this parameter is not provided, txnRecurringNo will be assumed as 0</p>
----------	----------------	---------	---	---	---

### 3.2.2 Request Body for Enrolment Inquiry: Based on mchtTrxnId

#### Body

No	Field Name	Type	Sample	M/O	Description
<b>1</b>	mchtTrxnId	String	12345	M	Transaction ID from merchants
<b>2</b>	merchantId	String	iboxfan2021	M	Merchant ID
<b>3</b>	txnRecurringNo	Integer	1	O	<p>The sequence of the recurring payment.</p> <p>The first payment of RM1.00 is given sequence no 0 (zero).</p> <p>If this parameter is not provided, txnRecurringNo will be assumed as 0</p>

## 3.3 REQUEST SIGNATURE

The signature is encrypted using HMACSHA512 and must be included in the request of inquiry.

### 3.3.1 Request Signature Calculation

Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

#### 3.3.1.1 Request Signature for Enrolment Inquiry: Based on txnId

This hash signature for a request based on **txnId** is a hash of the following two fields:

- merchantId
- txnId
- txnRecurringNo

The fields must be set alphabetically:

**merchantIdtxnIdtxnRecurringNo**

##### Example:

- merchantId = "iboxfan2021"
- txnId = "EM20220106045513"
- txnRecurringNo = 1

The hash would be calculated on the following string:

**iboxfan2021EM202302020534321**

and using the merchant signing key provided by Axaipay (e.g. **dwdefE12324!9293**), the hash signature result (using HMACSHA512) equals to:

**IBQJ+Blis0sB37bOFJmPhg1egyhb7WrY9bAqvSZFJnaUnUqelf0czoPNutQq+Aqvg94NoXLaf4P  
MyU5Tgc/OGw==**

#### 3.3.1.2 Request Signature for Enrolment Inquiry: Based on mchtTxnId

This hash signature for a request based on **mchtTxnId** is a hash of the following two fields:

- mchtTxnId
- merchantId
- txnRecurringNo

The fields must be set alphabetically:

**mchtTxnIdmerchantIdtxnRecurringNo**

##### Example:

- mchtTxnId = "12345"
- merchantId = "iboxfan2021"
- txnRecurringNo = 1

The hash would be calculated on the following string:

**12345iboxfan20211**

Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

and using the merchant signingKey provided by Axaipay (e.g. **dwdefE12324!9293**), the hash signature result (using HMACSHA512) equals to:

**gvxXE0zOBYrKrLzVhy/kl0iRsJWY89CUGL3ig9wkFysxP+S6EUoybpeqQ2wWnd4w+CAdOGpKLzqAgAoppcxEKg==**

### 3.3.2 Request Signature Code Example

#### 3.3.2.1 Request Signature for Enrolment Inquiry: Based on mchtTxnId

##### PHP:

```
<?php
    $string_to_sign = '12345'. // mchtTxnId
                      'iboxfan2021' . // merchantId
                      '1' // txnRecurringNo
                      ;
    $signing_key = 'dwdefE12324!9293';
    $digest = hash_hmac('sha512', $string_to_sign, $signing_key, true);
    echo base64_encode($digest);
?>
```

##### JAVA:

```
import org.apache.commons.codec.digest.HmacUtils;

public static void main(String[] args){
    String merchantId = "iboxfan2021";
    String mchtTxnId = "12345";
    Int txnRecurringNo = 1;
    String signingKey = "dwdefE12324!9293";

    byte[] hmac = new HmacUtils(HmacAlgorithms.HMAC_SHA_512,
signingKey).hmac(mchtTxnId + merchantId + txnRecurringNo);

    System.out.println(Base64.getEncoder().encodeToString(hmac));
}
```

Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

### 3.3.2.2 Request Signature for Inquiry and Void Transaction: Based on txnId

#### PHP:

```
<?php
    $string_to_sign = 'iboxfan2021' . // merchantId
                     'EM20230202053432' . // txnId
                     '1' // txnRecurringNo
                     ;
    $signing_key = 'dwdefE12324!9293';
    $digest = hash_hmac('sha512', $string_to_sign, $signing_key, true);
    echo base64_encode($digest);
?>
```

#### JAVA:

```
import org.apache.commons.codec.digest.HmacUtils;

public static void main(String[] args){
    String txnId = "EM20230202053432";
    String merchantId = "Iboxfan2021";
    Int txnRecurringNo = 1;
    String signingKey = "dwdefE12324!9293";

    byte[] hmac = new HmacUtils(HmacAlgorithms.HMAC_SHA_512,
signingKey).hmac(merchantId + txnId + txnRecurringNo);

    System.out.println(Base64.getEncoder().encodeToString(hmac));
}
```

## 3.4 RESPONSE

#### **HTTP Status Code**

200

#### **Header**

Content-Type: application/json

Version	Document No.	Document Name	Classification
1.6	AXAI/API/20230516	AUTODEBIT API DOCUMENTATION	EXTERNAL

### Body

The sample JSON structure is like this:

```
{
  "success": true,
  "data": {
    "debitFreqMode": "MT",
    "maxDebitAmount": 25.50,
    "maxDebitFreq": 2,
    "mchtId": "iboxfan2021",
    "mchtTrxnId": "12345",
    "productCode": "71aa54p",
    "trxnAmount": 20.00,
    "trxnBankName": "OCBC Bank",
    "trxnFpxMethod": "B2C (Retail Banking)",
    "trxnId": "EM20230202053432",
    "trxnRecurringNo": 1,
    "trxnStatus": 11,
    "trxnTime": "20230202045513",
    "signature":
    "n/AE0d20fz1509TfKQ8DBtStUy2+t3VBpwv60B629QVYCze67IkPO/wzP0n0vK0r4JDafS/8Kfc
    klOPLw2dsxA=="
  },
  "message": "Inquiry successful"
}
```

- **success** : Flag that indicates if a request is processed successfully or not (true/false)
- **message** : Message that indicates why a request cannot be processed or just simply tells "Inquiry successful" if a request is processed successfully.
- **data** : Contains the transaction detail object with field names as specified in section 1.6 if the inquiry is successful. If the inquiry is failed, this will be `null`.