

Java SDK Integration and FAQs Document



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Ezetap Introduction

Ezetap is a digital payments partner that can make payments simple and configurable now and in future.

With deep integration with Enterprise systems and seamless experience to customers. Ezetap's Universal Payment Acceptance platform is a smart, simple end-to-end payments platform which is unique in its vision and architecture.

Why D200 Java SDK?

- You have an application for billing and wish to have integrated payments
- You have Windows and Linux systems in an offline mode i.e. no internet connectivity (having Java runtime) and need to accept integrated payments
- Enterprises can have quick and seamless experience integrating with the application on their own. This integration is fast and easy, we have seen merchants finish these integrations in a matter of two to three days.
- Future proof your payments with easy integration with future modes of payments such as UPI, AEPS (and others to follow!)
- Maintain one single application for your business process as well as payments

What does Ezetap Java SDK do?



Ezetap Java Offline SDK allows you take payments in Windows and Linux based offline desktops in an integrated manner allowing benefits such as

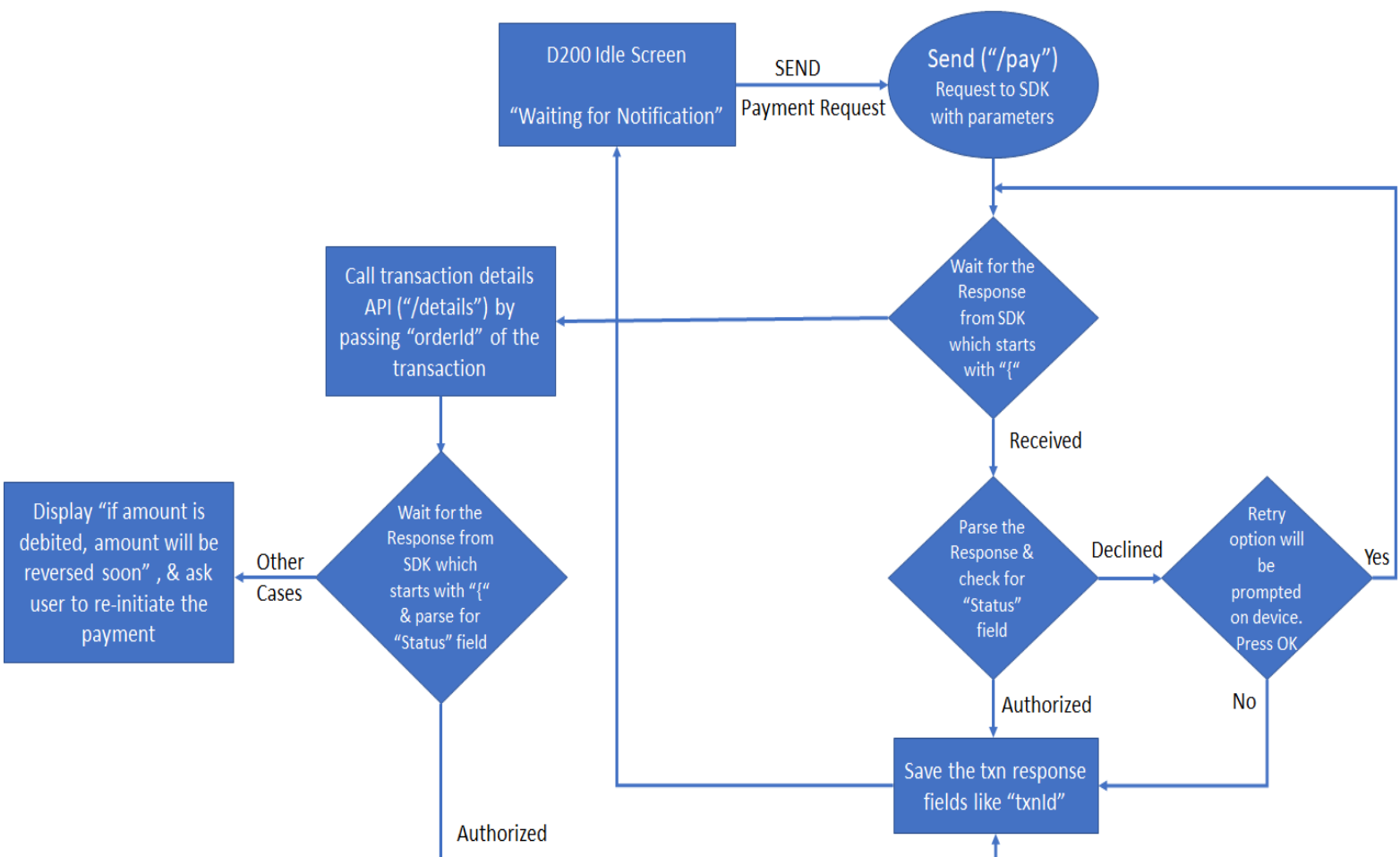
- Zero manual error in data entry
- Easy reconciliation
- Simple API called based Integration

Standard Flow Diagram

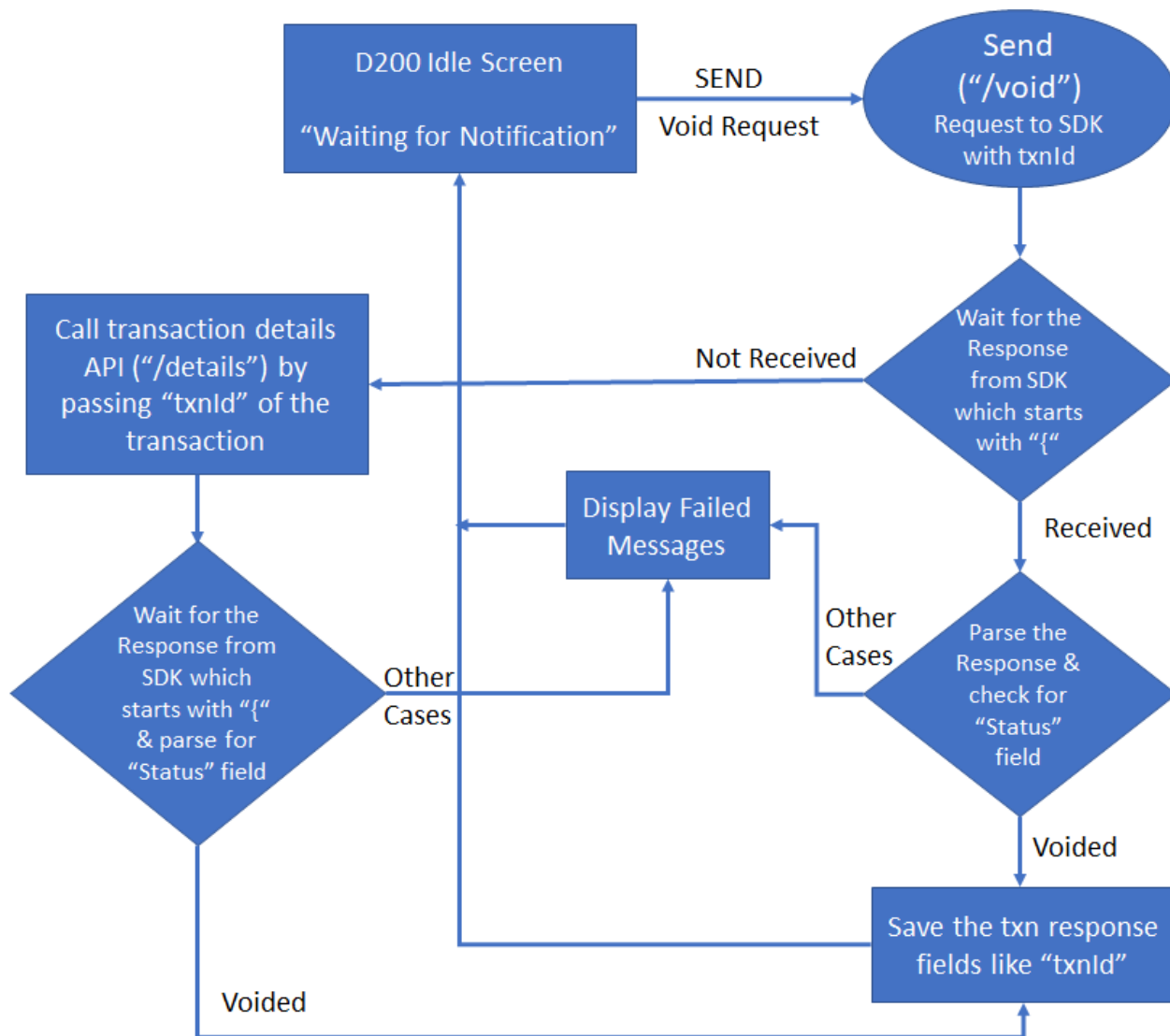
Step 1: Every Restart of the device



Step 2: To make Payment



Step 3: To Void a Transaction



How to get started with Ezetap Java SDK Integration?

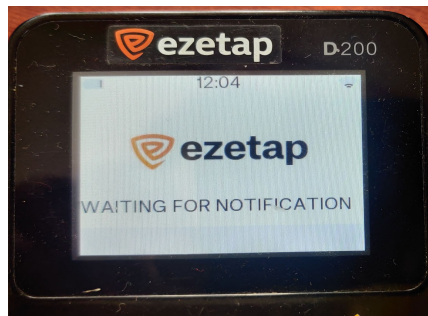
Following are the prerequisites to get started with the integration:

- OS requirements
 - Linux -Version: 64-bit - Ubuntu 18/20.
 - Windows-Version: Windows 7/8/10.
 - Java Version: 1.8.0_241+.
 - JRE: 1.8.0_241-b07+.
- Driver download links for Windows and Linux
 - [Windows USB driver](#)
 - [Linux USB driver](#)
- Linux Driver Installation Steps:
 - o Unzip the Linux Driver package attached.
 - o Execute the following command from the unzipped path.
"sudo apt-get install build-essential"
 - o Execute the following command from the unzipped path.
"sudo make install"
 - o Execute the following command from the unzipped path.
"sudo insmod ttyPos.ko"
 - o Connect D200/D190 device using USB cable and execute the following command.
"ls /dev/ttyPos*"
 - System should show the attached device as "/dev/ttyPos0" or "/dev/ttyPos1" which indicates the driver is installed properly.
- JAR file configuration

```
java -agentlib:jdwp=transport=dt_socket,server=y,suspend=n,address=5007 -Dezetap.appkey=<<1>>
-Dezetap.environment=<<2>> -Dserver.port=<<3>> -jar <<4>>
```

 - <<1>> AppKey of the merchant that is provided by Ezetap.
 - <<2>> Environment on which current system should point. Note the environment selected on the device should be given here else device will throw error saying "INVALID ENV TYPE"
 - <<3>> The port number at which SDK receives the request from the customer application. The port which we use here should be given in codepen url.
 - <<4>> The latest jar filename which is provided by Ezetap.
- Device configuration :
 - o Get the respective Linux/Windows setup-ed machine & install the corresponding device driver depending on your platform.

- o Connect the D200 device with the system using USB cable and make sure that port is identified in the system to ensure that the driver is installed properly.
- o In the D200 device, press F2+33 button, enter merchant password as "112233", select mode as "Offline POS mode" followed by "USB".
- o Device should show a "Waiting for Notification" screen on the device. Please find the screenshot below for reference.



- o Select the desired environment(prod/demo) in the device by pressing F2+32. For Admin password details, please contact the concerned Ezetap person directly.
- o Run the jar file with configuration provided in the above section.
Example: `java -agentlib:jdwp=transport=dt_socket,server=y,suspend=n,address=5007 -Dezetap.appkey=TestAppKey -Dezetap.environment=DEMO -Dserver.port=8080 -jar offline-pos-service-2.18.jar`

Above are the steps to make a setup ready to receive requests for payments.

- How to send requests to SDK?
 - o 1. Use any Websocket client app to send requests to SDK.
 - o Example: <https://codepen.io/hexcod/pen/XWJXMaN>
 - o 2. Configure the URL, request body as mentioned flow diagram and api details.
 - o 3. Send the requests to accept payments.
- o **F2 + 51 to install the latest application/firmware version** - Enter merchant password to initiate download & install of the latest application version for the device.

Integration with the Demo Environment

We recommend that you get started with a demo environment test, validate the flow and use cases and then move on to the Production environment.

You can reach-out to integrations@ezetap.com during the entire process of Integration in case of support or troubleshooting.

API details for D200 device

[Login API](#)

URL: ws://localhost:8080/login

Request:

```
{  
  "username": "<username>"  
}
```

Response:

```
{  
  "success": true,  
  "msg": "LOGIN SUCCESS"  
}
```

[Payment API](#)

This can be invoked for performing a transaction using the client API.

URL: ws://localhost:8080/pay

[Payment API Request:](#)

Parameter Data-Type Description

Field	Data Type	Description	Card	Wallet	Net Banking	UPI / Bharat QR	Cash / Cheque
username	String (20)	Username of the merchant's user. If the user has logged in to an Ezetap application / device, this is usually the user's mobile number, else is as provided by the merchant during the transaction	✓	✓	✓	✓	✓

amount	Double (15, 2)	Transaction amount	✓	✓	✓	✓	✓
txnId	String (25)	Unique Transaction ID at Ezetap	✓	✓	✓	✓	✓
orderId	String (56)	Unique Reference number as provided by the merchant during the transaction. Note: If not provided, Ezetap will generate a unique number starting with "EZ"	✓	✓	✓	✓	✓
externalRef2 till externalRef7	String (56)	Merchant can provide multiple reference numbers during the transaction & they are recorded at Ezetap - The same are available in the notification posted from Ezetap	⚑	⚑	⚑	⚑	⚑
paymentMode	String (8)	Payment mode. Valid values are CARD, WALLET, CNP, UPI, BHARATQR, CASH & CHEQUE.	✓	✓	✓	✓	✓
customerMobileNumber	String (16)	Mobile number of the customer. For transactions where mobile number and / or email are entered after transaction approval, this will not be available in the notification.	⚑	⚑	⚑	⚑	⚑

The request Json object with necessary params has to be built as shown below:

Sample Request

```
{
  "username": "9413387309",
  "transaction": {
    "amount": 9999999,
    "orderId": "Test10",
    "externalRef2": "Ankit",
```

```
"externalRef3":"Mobile",  
"customerMobile":"9717215040"  
}  
}
```

Ezetap recommends passing a unique ID in the "orderId" field for every payment request and store in your database for tracking purposes.

In case, to specify the payment mode you can pass the paymentMode attribute in the sample request.

Sample Request:

```
{  
  "username":"9413387309",  
  "transaction":{  
    "amount":9999999,  
    "orderId":"Test10",  
    "externalRef2":"Ankit",  
    "paymentMode":"CARD",  
    "externalRef3":"Mobile",  
    "customerMobile":"9717215040"  
  }  
}
```

Payment API Response:

Parameter Data-Type Description

Field	Data Type	Description	Card	Wallet	Net Banking	UPI / Bharat QR	Cash / Cheque
username	String (20)	Username of the merchant's user. If the user has logged in to an Ezetap application / device, this is usually the user's mobile number, else is as	✓	✓	✓	✓	✓

		provided by the merchant during the transaction					
amount	Double (15, 2)	Transaction amount	✓	✓	✓	✓	✓
amountOriginal	Double (15, 2)	Original transaction amount, before additional amount is added	✖	✖	✖	✖	✖
authCode	String (20)	Authorization code as generated by the issuing bank during card payment authorisation. Note: This is not a unique value.	✓	✖	✖	✖	✖
currencyCode	String (4)	ISO 4217 currency code of the transaction	✓	✓	✓	✓	✓
customerReceiptUrl	String (100)	URL of the e-chargeslip sent by Ezetap to the customer	✓	✓	✓	✓	✓
externalRefNumber	String (56)	Reference number as provided by the merchant during the transaction. Note: If not provided, Ezetap will generate a unique number starting with "EZ"	✓	✓	✓	✓	✓
txnId	String (25)	Unique Transaction ID at Ezetap	✓	✓	✓	✓	✓
status	String (20)	Transaction status. AUTHORIZED is the only value for successful transaction. Other valid values are FAILED, PENDING, VOIDED, REFUNDED, VOID_PENDING, AUTHORIZED_REFUNDED, and REFUND_PENDING.	✓	✓	✓	✓	✓
rrNumber	String (16)	Retrieval reference number of the transaction as generated by the acquiring bank or processor during card payment authorisation. Note: This is unique only for the particular TID.	✓	✖	✖	✖	✖
mid	String (16)	Merchant ID as provided by the merchant's acquiring bank during setup	✓	✖	✖	✖	✖

tid	String (16)	Terminal ID linked to the Ezetap device, as provided by the merchant's acquiring bank during setup	✓	☐	☐	☐	☐
customerEmail	String (40)	Email id of the customer. For transactions where mobile number and / or email are entered after transaction approval, this will not be available in the notification.	🚩	🚩	🚩	🚩	🚩
customerName	String (40)	Name of the customer, either as entered by the merchant user or as read from the card used for payment	🚩	🚩	🚩	🚩	🚩
deviceSerial	String (16)	Serial number of the Ezetap device used for card payment	✓	☐	☐	☐	☐
acquirerCode	String (16)	Merchant's acquirer bank code. Useful for multiple acquirer cases.	✓	☐	☐	☐	☐
formattedPan	String (25)	Masked card number of the card used for the transaction	✓	☐	☐	☐	☐
orgCode	String (25)	Merchant code as setup at Ezetap derived from the merchant name provided by the merchant during initial setup	✓	✓	✓	✓	✓
merchantName	String (40)	Merchant name as setup at Ezetap basis data provided by the merchant during initial setup	✓	✓	✓	✓	✓
chargeSlipDate	Date	Transaction date time in local time zone with time zone offset	✓	✓	✓	✓	✓
readableChargeSlipDate	String (20)	Readable date time	✓	✓	✓	✓	✓
settlementStatus	String (10)	Settlement status. Valid values are PENDING, SETTLED or POSTED	✓	✓	✓	✓	✓
amountAdditional	Double (15, 2)	Additional amount for application transactions, eg. Tip, Service Fees	🚩	🚩	🚩	🚩	🚩
amountCashBack	Double (15, 2)	For Cash @ POS transactions	🚩	🚩	🚩	🚩	🚩

txnType	String (16)	Transaction type. Valid values are CHARGE, REMOTE_PAY, REFUND, CASH_BACK and CASH_OUT	✓	✓	✓	✓	✓
payerName	String (100)	Card holder name as read on best effort basis from the card used for the transaction	✓	□	□	□	□
paymentCardBrand	String (25)	Network of the card used for the transaction, one of VISA, MASTERCARD, RUPAY, DINERS, DISCOVER, AMEX, JCB, SODEXO or UNKNOWN	✓	□	□	□	□
paymentCardType	String (25)	Type of the card used for the transaction, one of CREDIT, DEBIT or UNKNOWN	✓	□	□	□	□

Sample success Payment Response:

If response text starts with any character other than '{' display it as progress message If response text starts with '{' parse response json, this is final message received on websocket

```
{
  "success": true,
  "username": "7353552244",
  "amount": 560,
  "amountOriginal": 560,
  "authCode": "D15306",
  "currencyCode": "INR",
  "customerReceiptUrl": "http://demo1.ezetap.com/r/o/nCJXd0Qx/",
  "externalRefNumber": "245245235",
  "txnId": "200410084835059E010062116",
  "status": "AUTHORIZED",
  "reverseReferenceNumber": "RRA463A8B020B5",
  "userAgreement": "I agree to pay as per the card issuer agreement and receive chargeslip by electronic means.",
  "tid": "7876787",
  "mid": "565456543234321",
```

```
"batchNumber": "3",  
"invoiceNumber": "21",  
"paymentCardBrand": "VISA",  
"cardLastFourDigit": "9533",  
"paymentCardType": "CREDIT",  
"settlementStatus": "PENDING",  
"msg": "PAYMENT SUCCESS",  
"sessionKey": "f6e05d2d-3b2e-4b36-8db4-05fd20659af0",  
"amountAdditional": 0,  
"amountCashBack": 0,  
"totalAmount": 560,  
"additionalAmount": 0,  
"customerName": "XXXXXXXXX",  
"customerMobile": "9738461657",  
"customerEmail": "jeevan.v@ezetap.com",  
"deviceSerial": "5B334005",  
"formattedPan": "4539-60XX-XXXX-9533",  
"merchantName": "jeetest",  
"nonceStatus": "OPEN",  
"orgCode": "JEETEST_61629539",  
"merchantCode": "JEETEST_61629539",  
"payerName": "XXXXXXXXX",  
"paymentCardBin": "453960",  
"paymentMode": "CARD",  
"pgInvoiceNumber": "21",  
"postingDate": "1586528315000",  
"processCode": "_DEF_PROC",  
"rrNumber": "RRA463A8B020B5",  
"signatureId": "NR",
```

```
"txnType": "CHARGE",
"chargeSlipDate": "2020-04-10T14:18:35+0530",
"readableChargeSlipDate": "10/04/2020 14:18:35",
"cardTxnTypeDesc": "EMV with PIN",
"issuerCode": "ICICI",
"orderNumber": "245245235",
"dxMode": "WIFI",
"receiptUrl": "http://demo1.ezetap.com/r/o/nCJXd0Qx/",
"txnTypeDesc": "Charge",
"acquirerCode": "HDFC",
"displayPAN": "9533",
"cardType": "VISA",
"refundable": false,
"states": [
  "AUTHORIZED"
]
}
```

Sample failure Payment Response:

```
{
  "success": false,
  "username": "9090808080",
  "status": "FAILED",
  "errorCode": "EZETAP_1000004",
  "errorMessage": "[HDFC_508: HONOUR WITH ID] Payment Failed. Please verify ID and signature of the card holder.",
  "settlementStatus": "FAILED",
  "apiMessageTitle": "DECLINED",
}
```

```
"apiMessage": "<html><head><meta http-equiv=\"Content-Language\" content=\"en\"><meta http-equiv=\"Content-Type\" content=\"text/html; charset=UTF-8\"></head><body><p>HDFC_508: HONOUR WITH ID</p><p>Payment Failed. Please verify ID and signature of the card holder.<br><font size=\"1\">(EZETAP_1000004)</font></br></p></body></html>",  
"msg": "PAYMENT FAILED",  
"apiMessageText": "HDFC_508: HONOUR WITH ID. Payment Failed. Please verify ID and signature of the card holder. EZETAP_1000004"  
}
```

Sample progress messages:

```
0:DATA RECEIVED  
0:WAITING FOR PAYMENT MODE SELECTION  
0:PAYMENT MODE SELECTED  
0:WAITING FOR CARD  
0:CARD PROCESSED  
0:WAITING FOR PIN  
0:PIN ENTERED  
0:UPLOADING DATA  
0:AUTHORIZING  
0:WAITING FOR RETRY CONFIRMATION
```

****Notes: Rely on a field call "Status" = Authorized that is an indication of successful txn****

Transaction History API

The Endpoint that invokes the API is given below.

URL: ws://localhost:8080/history

The request Json object with necessary params has to be built as shown below:

Sample Request:

```
{  
  "username":"9413387309"
```



```
}
```

Sample success Transaction History Response:

If response text starts with any character other than '{' display it as progress message If response text starts with '{' parse response json, this is final message received on websocket

```
{
  "success": true,
  "username": "7353552244",
  "msg": "TXN SUCCESS",
  "sessionKey": "c72a06a3-4580-4c3b-a6f0-3730d8d1be0e",
  "txns": [
    {
      "success": true,
      "username": "7353552244",
      "authCode": "D00553",
      "cardLastFourDigit": "9533",
      "currencyCode": "INR",
      "customerName": "XXXXXXXXXX",
      "customerReceiptUrl": "http://demo1.ezetap.com/r/o/reLHdku6/",
      "deviceSerial": "5B334005",
      "txnId": "200410074320314E020084078",
      "formattedPan": "4539-60XX-XXXX-9533",
      "externalRefNumber": "27438924234",
      "merchantName": "jeetest",
      "nonceStatus": "OPEN",
      "orgCode": "JEETEST_61629539",
      "status": "AUTHORIZED",
      "settlementStatus": "PENDING",
      "txnType": "CHARGE",
```

```
"merchantCode": "JEETEST_61629539",
"mid": "565456543234321",
"rrNumber": "RR944C815E0821",
"payerName": "XXXXXXXXXX",
"paymentCardBrand": "VISA",
"paymentCardType": "CREDIT",
"paymentMode": "CARD",
  "userAgreement": "I agree to pay as per the card issuer agreement and receive chargeslip by electronic
means.",
"chargeSlipDate": "2020-04-10T13:13:21+0530",
"issuerCode": "ICICI",
"receiptUrl": "http://demo1.ezetap.com/r/o/reLHdku6/",
"invoiceNumber": "20",
"cardType": "VISA",
"reverseReferenceNumber": "RR944C815E0821",
"amount": 390,
"amountAdditional": 0,
"amountOriginal": 390,
"amountCashBack": 0,
"additionalAmount": 0,
"totalAmount": 390,
"states": [
  "AUTHORIZED"
]
},
{
  "success": true,
  "username": "7353552244",
  "authCode": "D24441",
```

```
"cardLastFourDigit": "9533",
"currencyCode": "INR",
"customerName": "XXXXXXXXXX",
"customerReceiptUrl": "http://demo1.ezetap.com/r/o/n42Q90G5/",
"deviceSerial": "5B334005",
"txnId": "200410074024161E020084076",
"formattedPan": "4539-60XX-XXXX-9533",
"externalRefNumber": "3654832743",
"merchantName": "jeetest",
"nonceStatus": "OPEN",
"orgCode": "JEETEST_61629539",
"status": "AUTHORIZED",
"settlementStatus": "PENDING",
"txnType": "CHARGE",
"merchantCode": "JEETEST_61629539",
"mid": "565456543234321",
"rrNumber": "RR018C346F7184",
"payerName": "XXXXXXXXXX",
"paymentCardBrand": "VISA",
"paymentCardType": "CREDIT",
"paymentMode": "CARD",
"userAgreement": "I agree to pay as per the card issuer agreement and receive chargeslip by electronic means.",
"chargeSlipDate": "2020-04-10T13:10:24+0530",
"issuerCode": "ICICI",
"receiptUrl": "http://demo1.ezetap.com/r/o/n42Q90G5/",
"invoiceNumber": "19",
"cardType": "VISA",
"reverseReferenceNumber": "RR018C346F7184",
```

```
"amount": 380,  
"amountAdditional": 0,  
"amountOriginal": 380,  
"amountCashBack": 0,  
"additionalAmount": 0,  
"totalAmount": 380,  
"states": [  
  "AUTHORIZED"  
]  
}  
]  
}
```

Sample failure Payment Response:

```
{  
  "success": false,  
  "msg": "NO TXNS AVAILABLE"  
}
```

[Transaction Details API](#)

The Endpoint that invokes the API is given below.

URL: ws://localhost:8080/details

The request Json object with necessary params has to be built as shown below:

Sample Request:

```
{  
  "username": "9413387309",  
  "txnId": "<txnId>",  
  "orderId": "<orderId>"
```

```
}
```

Sample success Transaction Detail Response:

If response text starts with any character other than '{' display it as progress message If response text starts with '{' parse response json, this is final message received on websocket

```
{
  "success": true,
  "username": "9413387309",
  "amount": 100,
  "amountOriginal": 100,
  "authCode": "D26948",
  "currencyCode": "INR",
  "customerReceiptUrl": "http://demo1.ezetap.com/r/o/aCM2Vcm0/",
  "externalRefNumber": "Test10",
  "txnId": "210509173950348E020080657",
  "status": "AUTHORIZED",
  "reverseReferenceNumber": "RR29975ADC9AF5",
  "userAgreement": "I agree to pay as per the card issuer agreement and receive chargeslip by electronic means.",
  "tid": "D190_T2",
  "mid": "D190_M2",
  "batchNumber": "15",
  "invoiceNumber": "79",
  "paymentCardBrand": "VISA",
  "cardLastFourDigit": "3534",
  "paymentCardType": "CREDIT",
  "settlementStatus": "PENDING",
  "msg": "TXN SUCCESS",
  "sessionKey": "2432e966-2a6d-46f5-97c5-96c0d188c13f",
```

"amountAdditional": 0,
"amountCashBack": 0,
"totalAmount": 100,
"additionalAmount": 0,
"customerName": "JOSHI N R",
"customerMobile": "9717215040",
"deviceSerial": "1260970358",
"formattedPan": "5241-82XX-XXXX-3534",
"merchantName": "jeetest",
"nonceStatus": "OPEN",
"orgCode": "JEETEST_61629539",
"merchantCode": "JEETEST_61629539",
"payerName": "JOSHI N R",
"paymentCardBin": "524182",
"paymentMode": "CARD",
"pgInvoiceNumber": "79",
"postingDate": "1620601830000",
"processCode": "_DEF_PROC",
"rrNumber": "RR29975ADC9AF5",
"signatureId": "NR",
"txnType": "CHARGE",
"chargeSlipDate": "2021-05-09T23:10:30+0530",
"readableChargeSlipDate": "09/05/2021 23:10:30",
"cardTxnTypeDesc": "EMV with PIN",
"issuerCode": "NONE",
"orderNumber": "Test10",
"dxMode": "WIFI",
"receiptUrl": "http://demo1.ezetap.com/r/o/aCM2Vcm0/",
"txnTypeDesc": "Charge",

```
"acquirerCode": "HDFC",  
"displayPAN": "3534",  
"cardType": "VISA",  
"refundable": false,  
"states": [  
  "AUTHORIZED"  
]  
}
```

****Notes: Rely on a field call "Status" = Authorized that is an indication of successful txn****

Sample failure Transaction Detail Response:

```
{  
  "success": false,  
  "username": "9413387309",  
  "errorCode": "EZETAP_0000061",  
  "errorMessage": "No transaction records found.",  
  "msg": "PAYMENT FAILED"  
}
```

Sample progress messages:

0:DATA RECEIVED

0:UPLOADING DATA

0:AUTHORIZING

0:TXN SUCCESS

[Void Payment API](#)

The Endpoint that invoke the API is given below.

URL: ws://localhost:8080/void

The request Json object with necessary params has to be built as shown below:

Sample Request:

```
{  
  "username": "9413387309",  
  "txnId": "<txnId>"  
}
```

Sample success Void Payment Response:

If response text starts with any character other than '{' display it as progress message. If response text starts with '{' parse response json, this is final message received on websocket

```
{  
  "success": true,  
  "username": "7353552244",  
  "amount": 380,  
  "amountOriginal": 380,  
  "authCode": "D24441",  
  "currencyCode": "INR",  
  "customerReceiptUrl": "http://demo1.ezetap.com/r/o/n42Q90G5/",  
  "externalRefNumber": "3654832743",  
  "txnId": "200410074024161E020084076",  
  "status": "VOIDED",  
  "reverseReferenceNumber": "RR018C346F7184",  
  "userAgreement": "",  
  "tid": "7876787",  
  "mid": "565456543234321",  
  "batchNumber": "3",  
  "invoiceNumber": "19",  
  "paymentCardBrand": "VISA",  
  "cardLastFourDigit": "9533",  
}
```



```
"paymentCardType": "CREDIT",  
"settlementStatus": "SETTLED",  
"msg": "VOIDED SUCCESSFULLY",  
"sessionKey": "39e599e2-c78f-4d7f-bf61-b7bd6a2c5422",  
"amountAdditional": 0,  
"amountCashBack": 0,  
"totalAmount": 380,  
"additionalAmount": 0,  
"customerName": "XXXXXXXXXX",  
"deviceSerial": "5B334005",  
"formattedPan": "4539-60XX-XXXX-9533",  
"merchantName": "jeetest",  
"nonceStatus": "CLOSED",  
"orgCode": "JEETEST_61629539",  
"merchantCode": "JEETEST_61629539",  
"payerName": "XXXXXXXXXX",  
"paymentCardBin": "453960",  
"paymentMode": "CARD",  
"pgInvoiceNumber": "19",  
"postingDate": "1586527562000",  
"processCode": "_DEF_PROC",  
"rrNumber": "RR018C346F7184",  
"signatureId": "NR",  
"txnType": "CHARGE",  
"chargeSlipDate": "2020-04-10T14:06:02+0530",  
"readableChargeSlipDate": "10/04/2020 14:06:02",  
"cardTxnTypeDesc": "EMV with PIN",  
"issuerCode": "ICICI",  
"orderNumber": "3654832743",
```

```
"dxMode": "WIFI",
"receiptUrl": "http://demo1.ezetap.com/r/o/n42Q90G5/",
"txnTypeDesc": "Charge",
"acquirerCode": "HDFC",
"displayPAN": "9533",
"cardType": "VISA",
"refundable": false,
"states": [
  "VOIDED"
]
}
```

Sample failure Void Payment Response:

```
{
  "success": false,
  "username": "7353552244",
  "errorCode": "EZETAP_0000025",
  "errorMessage": "Invalid Transaction ID: ",
  "msg": "TXN FAILED",
  "sessionKey": "51e340cf-db71-4563-b8a6-ae3bc4ada329",
  "refundable": false,
  "states": []
}
```

Sample progress messages:

0:DATA RECEIVED

0:UPLOADING

0:AUTHORIZING

0:SUCCESS

Notes: Rely on a field call "Status" = VOIDED that is an indication of successful txn

Void API works only for CARD transactions

Status Fields

Status	What it means
Authorized	Transaction has been successfully executed
Failed	Transaction has not been executed and is failed; the money won't be deducted in this scenario from the customer
Voided	The transaction was authorized, and which is now voided. In this case, money will be credited back to the customer.
Void _pending	The txn was Voided after being Authorized. It is an Intermediate state before the void takes place.
Authorized refunded	The TXN Was authorized. Somebody has initiated Refund from Ezetap Backend. The money will be refunded within 3- 21 days depending on the bank .
Refund Pending	The Money will be refunded to the customer
Refunded	The transaction was completed and after which it was refunded to the customer.

Best Practices

- a. Please pass unique identifiers to Ezetap (these are the external references) as part of SDK Integration. Ezetap can store upto 7 external references and also store additional values in EXT REF Array. "orderId" is the key to pass the external reference number.
- b. Pass the username / login name of the user in the "username" field of the Login API call.
- c. Use the value of the 'status' field in the API response to mark the txn as successful or failed. A successful txn will always have "status": "AUTHORIZED"
- d. In scenarios of your app not receiving the SDK response post a txn due to network issues or cable issues, please trigger Ezetap's Transaction Details API
 - If the txn has failed, you will get "status": "FAILED" in the response
 - If the "status": "PENDING/TC_PENDING", you need to recheck the status -> If it returns "status": "AUTHORIZED", mark it as success, otherwise mark it failed
 - If "status": "REVERSED/REVERSAL_PENDING", mark it as failed. This status means the transaction has been / is being reversed. In this case it means txn did not go through and will get reversed
- e. Always double check the reference # in the SDK response of a txn so that the corresponding response is recorded against a particular request
- f. Sample Code: <https://github.com/ezetap/java-offline-p2p-sdk/tree/master/samples>
- g. Call Diag info (every 10-15 seconds) to check whether the device is connected.

Invoking Device Info API

The Endpoint that invokes the API is given below.

URL: ws://localhost:8080/diag_info

The request Json object with necessary params has to be built as shown below:

Sample Request

```
{
  "username": "9413387309"
}
```

Sample success Diag Info Response

If response text starts with any character other than '{' display it as progress message. If response text starts with '{' parse response json, this is final message received on websocket

```
{
  "DeviceAppInfo": "PROLIN_D200_EMV_03.10.01",
  "DeviceFirmwareInfo": "Prolin2.4.129[D1]",
  "DeviceSerialNo": "5B334005",
  "Network": "WIFI",
  "SignalStrength": 0,
  "BatteryLevel": 5,
  "success": true,
  "ConnectionState": true,
  "msg": "SUCCESS"
}
```

```
}
```

Sample progress messages

0:DATA RECEIVED

0:SUCCESS

- h. Use synchronized method when Multithreading is used in the application, which means make sure that only one request should be sent at a time.

Error Codes

Common Errors

Error Code	Message
EZETAP_1000003	Card Declined. Please try again. If the problem persists, please try another card or contact card issuer. The bank that has issued this card has DECLINED the transaction and has not approved the transaction.
EZETAP_1000013	Invalid PIN. Please try again.
EZETAP_1000001	Payment Failed. Please try again. If the problem persists, please try another card or contact card issuer.
EZETAP_0000130	Operation Failed. New Keys are required by the device. Please prepare the device and try again.
EZETAP_0000089	Processing Failed. We were unable to get information from card. Please try again. If the problem persists, try a different card or call Ezetap Support.
EZETAP_1000008	Expired Card / Invalid Expiration Date. Please use a valid card.

Server Errors

Error Code	Message
Error Code	Message
EZETAP_0000000	An error occurred while processing the request on Ezetap. Please try again.
EZETAP_0000001	An error occurred while connecting to Ezetap payment platform. Please try again.
EZETAP_0000002	API version is invalid. SESSION_EXPIRED Your session has expired. Please login again.
EZETAP_0000003	Your session has expired. Please login again.
EZETAP_0000004	User cannot perform this operation.
EZETAP_0000005	This is an unsupported operation.
EZETAP_0000006	Invalid email address detected. Please enter a valid email address.
EZETAP_0000007	Name must be more than 3 characters and can containing letters, hyphen, period and space.

EZETAP_0000008	Username must be more than 3 characters containing letters and numbers. Recommended to use your mobile number.
EZETAP_0000009	Password is too short.
EZETAP_0000010	Mobile number should have less than 13 digits. You entered {0}.
EZETAP_0000011	App not found with Id: {0} and version code: {1}
EZETAP_0000012	Bad swipe detected. Please make sure that the Ezetap Device is connected properly and try again.
EZETAP_0000013	Ezetap Device cannot be used because it is already registered to another merchant. Please contact Ezetap Customer Support.
EZETAP_0000014	Ezetap Device has been deactivated. Please contact Ezetap Customer Support.
EZETAP_0000015	Unexpected Serial Length: {0}. Please try again.
EZETAP_0000016	Ezetap Device is already registered with a different serial.
EZETAP_0000017	Ezetap Device Registration or Activation Failed. Please try again.
EZETAP_0000018	Ezetap Device could not be identified. Please make sure that the Ezetap Device is connected properly and try again.
EZETAP_0000019	You cannot use this Ezetap Device.
EZETAP_0000020	Another Ezetap Device exists with the Serial No: {0}.
EZETAP_0000021	Cannot assign a Terminal to Ezetap Device.
EZETAP_0000022	A device couldn't not be determined. Either session expired or device doesn't exist. Please register the Ezetap Device and enter Serial No. again.
EZETAP_0000023	Invalid Licence Label: {0}
EZETAP_0000024	Signature already captured for {0}
EZETAP_0000025	Invalid Transaction ID: {0}.
EZETAP_0000026	Transaction not found {0}
EZETAP_0000027	Transaction cannot be voided in its current status.
EZETAP_0000028	Did not find transactionId: {0} for automatic void.
EZETAP_0000029	Transaction is not authorized.

EZETAP_0000030	Processing failed. A Terminal could not be identified for {0} card. Please try a different card.
EZETAP_0000031	Processing failed. Please try again.
EZETAP_0000032	Processing Failed. Unable to get response from Ezetap payment platform. Please try again.
EZETAP_0000033	You have already made a similar payment for the same Ref# {0} for the same amount {1}. Please check the status of the payment(s) made before you proceed.
EZETAP_0000034	Processing failed. Please try again.
EZETAP_0000035	Refund already processed.
EZETAP_0000036	Tip already processed.
EZETAP_0000037	Reference number has unsupported characters {0}. Please try again.
EZETAP_0000038	Amount more than original.
EZETAP_0000039	Amount is invalid.
EZETAP_0000040	Card swiped in pre auth and confirm/release order is not the same.
EZETAP_0000041	Processing failed. Please try again.
EZETAP_0000042	Card requires PIN and is not supported currently. Please use any Visa or MasterCard? that does not require a PIN.
EZETAP_0000043	Automatic void failed.
EZETAP_0000044	Please enter card\'s last 4 digits and try again.
EZETAP_0000045	The last 4 digits entered by the user don\'t match card\'s last 4 digits.
EZETAP_0000046	Tip cannot be processed for this Transaction.
EZETAP_0000047	Tip amount is greater than allowed.
EZETAP_0000048	Tip is not enabled for this merchant.
EZETAP_0000049	Invalid Tip Amount.
EZETAP_0000050	Transaction amount is greater than the allowed limit.
EZETAP_0000051	Limit for number of transactions allowed per day has been reached.
EZETAP_0000052	Limit for total transaction amount for the day has been reached.

EZETAP_0000053	No process data found
EZETAP_0000054	The specified process code does not exist for the merchant. Please contact Ezetap Support.
EZETAP_0000055	Specified data could not be deleted. Please contact support.
EZETAP_0000056	Terminals not configured for merchant.
EZETAP_0000057	An active Terminal could not be found. Please try again.
EZETAP_0000058	Terminal could not be found for ID: {0}
EZETAP_0000059	Payment Failed. All terminals are busy. Please try again after some time.
EZETAP_0000060	Terminal settlement failed for {0}
EZETAP_0000061	No transaction records found.
EZETAP_0000062	Transaction already signed {0}
EZETAP_0000063	Change password failed: {0}
EZETAP_0000064	Passwords entered should match.
EZETAP_0000065	Password has already been used before.
EZETAP_0000066	Password too short.
EZETAP_0000067	Password has repeating characters.
EZETAP_0000068	Password has sequences like 123.
EZETAP_0000069	Password has invalid characters.
EZETAP_0000070	Minimum alphanumeric and numeric characters not found.
EZETAP_0000071	Password has been used before.
EZETAP_0000072	Password not changed. Please try again.
EZETAP_0000073	Invalid credentials. Verify your credentials, login again, or contact your supervisor.
EZETAP_0000074	Switch Exception thrown. Settlement Failed.
EZETAP_0000075	Message cannot be saved without a code.
EZETAP_0000076	Payment Succeeded. Data Update Failed.
EZETAP_0000077	Receipt could not be sent.

EZETAP_0000078	Message not found with code {0}.
EZETAP_0000079	Ezetap payment platform received an unauthenticated request.
EZETAP_0000080	Terminal was busy processing last transaction. Please try again.
EZETAP_0000081	Payment Failed. We are still processing last request from the Ezetap Device. Payment gateways can take up to 2 minutes to respond. Please try again later.
EZETAP_0000082	Payment Failed. Please try again.
EZETAP_0000083	The transaction is being updated by another request. Please try again after some time.
EZETAP_0000084	You have attempted a similar payment for the same amount {0} using the same card within {1}. Please check the status of the payment(s) made before you proceed. To make another payment with the same card, try after {1}.
EZETAP_0000085	You can not create messages. Please contact system administrator.
EZETAP_0000086	This message can not be changed or overridden.
EZETAP_0000087	Card Declined. Merchant does not support cards starting with {0}. Please try a different Debit card.
EZETAP_0000088	Ezetap Device has not been registered. Please register the device.
EZETAP_0000089	Unable to get information from card. Please make sure that the Ezetap Device is connected properly and try again.
EZETAP_0000090	Signature is not required for a failed transaction.
EZETAP_0000091	Unsupported payment gateway for this request.
EZETAP_0000092	Terminal Settlement Failed.
EZETAP_0000093	Terminal not configured properly. Please contact Ezetap Support.
EZETAP_0000094	No such catalog was found, please check the catalog code.
EZETAP_0000095	Error parsing JSON request.
EZETAP_0000096	Catalog with this code already exists.
EZETAP_0000097	Amount has to be in INR.
EZETAP_0000098	{0} Error : External server responded with failure message - {1}
EZETAP_0000099	Error in configuration of Ezetap adapter. Please contact Ezetap support

EZETAP_0000100	Invalid response from merchant server. Please contact Ezetap support.
EZETAP_0000101	Integration Error.
EZETAP_0000102	Catalog is not enabled for the merchant
EZETAP_0000103	{0} Error : Catalog could not be retrieved from the remote server
EZETAP_0000104	{0} Error : Unable to establish connection with server
EZETAP_0000105	Processing Failed. Refund is not allowed for EMI transactions.
EZETAP_0000106	EMI Term missing from setup.
EZETAP_0000107	Issuer code is invalid or missing from setup.
EZETAP_0000108	Merchant acquisition not setup.
EZETAP_0000109	Acquirer code is invalid or missing from setup.
EZETAP_0000110	Invalid EMI selected. Please try a valid EMI option.
EZETAP_0000111	Processing Failed. Amount entered is less than minimum required by the EMI option selected.
EZETAP_0000112	Processing Failed. We could not find a terminal for the EMI selected. Please contact Ezetap Support.
EZETAP_0000113	Processing Failed. Card issuing bank doesn't support EMI payments with this card. Please choose a different option to pay or make a full payment.
EZETAP_0000114	Processing Failed. EMI is not supported by the merchant.
EZETAP_0000115	Processing Failed. The selected EMI option is inactive.
EZETAP_0000116	File Upload Failed. Please make sure the size of the file does not exceed 1 MB.
EZETAP_0000117	You have a pending Pre auth in the system. Please confirm that pre auth first and then try again.
EZETAP_0000118	Amex card is not supported for payment, please use VISA/Master Card.
EZETAP_0000119	Invalid Value for maximum refund allowed: {0}. Please enter a value greater than -100.
EZETAP_0000120	Processing Failed. Refund is not allowed for the merchant.
EZETAP_0000121	Processing Failed. Amount can not be more than refundable amount. Original Amount: {0} Amount To Refund: {1} Refundable Amount: {2}

EZETAP_0000122	Processing Failed. Transaction can not be refunded in its current status.
EZETAP_0000123	Operation Failed. Multiple Devices found with the serial selected.
EZETAP_0000124	Operation Failed. Labels need to be configured. Please contact Ezetap Support.
EZETAP_0000125	Operation Failed. A terminal matching the given selection could not be found. Please contact Ezetap Support.
EZETAP_0000126	Reversal Failed. Payment reversal is pending.
EZETAP_0000127	Process Data not saved. ref missing for item no. {0}
EZETAP_0000128	Process Data save failed for item no. {0}. Items before this entry could have been saved. Reason: {1}
EZETAP_0000129	Please specify process code. If you are not aware of it, please contact Ezetap Support.
EZETAP_0000130	Operation Failed. New Keys are required by the device. Please pair the device and try again.
EZETAP_0000131	Processing Failed. Please pair the device and try again.
EZETAP_0000132	Processing Failed. Random number not found. Please try again.
EZETAP_0000133	Pin is required for this transaction.
EZETAP_0000134	Pairing Failed. Please try again.
EZETAP_0000135	Pairing failed while trying to exchange keys. Please try again.
EZETAP_0000136	Pairing Failed. Terminals used by Device need to be settled. Please contact Ezetap Support.
EZETAP_0000137	Unable to download Ezetap Service Application. Please contact Ezetap Support.
EZETAP_0000138	Chip Card declined transaction.
EZETAP_0000139	Failed! You need to upgrade to the new Ezetap Chip & PIN enabled device. Please contact Ezetap Support 080-49114999.
EZETAP_0000140	Incorrect old password.
EZETAP_0000141	Failed to find a terminal for device used. Please contact Ezetap Support.
EZETAP_0000142	Device Serial has already been registered with a different Device ID. Please contact Ezetap Support.

EZETAP_0000143	Cache Refresh Failed.
EZETAP_0000144	Txn can not be reversed in its current status.
EZETAP_0000145	Txn can not be confirmed in its current status.
EZETAP_0000146	Merchant Acquisition record not found.
EZETAP_0000147	Merchant Acquisition already exists with this combination.
EZETAP_0000148	Invalid Org Code.
EZETAP_0000149	Ezetap Servers are initializing. Please try after some time.
EZETAP_0000150	Processing Failed. Could not connect to Ezetap Payment Platform. Please try after some time.
EZETAP_0000151	Processing Failed. Invalid terminal passed. Please contact Ezetap Support.
EZETAP_0000152	Processing Failed. Terminal selected not available for merchant.
EZETAP_0000153	Processing Failed. Amount entered is less than minimum required by the terminal.
EZETAP_0000154	Processing Failed. Terminal is inactive. Please contact Ezetap Support.
EZETAP_0000155	Processing Failed. Both EMI and Terminal options can't be selected. Please select only one.
EZETAP_0000156	Card Not Supported.
EZETAP_0000157	Void not allowed For this transaction.
EZETAP_0000158	Cash Back amount has to be greater than 0.
EZETAP_0000159	Process Data information is missing. Please contact Ezetap Support.
EZETAP_0000160	Txn Processing Failed.
EZETAP_0000161	Recurring Process Data not found. Please contact Ezetap Support.
EZETAP_0000162	Transaction amount is less than the allowed limit.
EZETAP_0000163	Cash Back amount greater than configured.
EZETAP_0000164	Processing Failed. Amount entered is more than maximum allowed for the terminal.
EZETAP_0000165	Change not allowed as some terminals are not settled. Please settle terminals before making changes.

EZETAP_0000166	Cash Back not allowed.
EZETAP_0000167	This transaction is not allowed without PIN. Please enter PIN and try again.
EZETAP_0000168	Cash Payment is not enabled for the merchant. Please contact Ezetap Support.
EZETAP_0000169	Cheque Payment is not enabled for the merchant. Please contact Ezetap Support.
EZETAP_0000170	Bank Code, Cheque No. and Cheque Date are mandatory for cheque payment.
EZETAP_0000171	Invalid Date format for Cheque Date. Please pass cheque date in yyyy-MM-dd format.
EZETAP_0000172	Invalid File. Please check whether file format is different from what is expected.
EZETAP_0000173	Invalid no. of headers. Please make sure no. of headers are more than {0} and less than {1}.
EZETAP_0000174	No. of headers and descriptions don't match.
EZETAP_0000175	Duplicate headers found: {0}
EZETAP_0000176	Invalid Start Date: {0}
EZETAP_0000177	Invalid End Date: {0}
EZETAP_0000178	End date occurs before start date.
EZETAP_0000179	Invalid Frequency: {0}
EZETAP_0000180	Invalid Frequency Interval: {0}
EZETAP_0000181	Data Received from device serial {0}. Txn will fail.
EZETAP_0000182	NO DATA RECEIVED FROM DEVICE SERIAL {0}. Txn will fail.

PG Errors

Error Code	Message
EZETAP_1000000	Transaction Approved.
EZETAP_1000001	Payment Failed. Please try again. If the problem persists, please try another card or contact card issuer.

EZETAP_1000002	Payment Failed. Please try again. If the problem persists, please contact Ezetap Support.
EZETAP_1000003	Card Declined. Please try again. If the problem persists, please try another card or contact card issuer.
EZETAP_1000004	Payment Failed. Please verify ID and signature of the card holder.
EZETAP_1000005	Payment Failed. Please try again.
EZETAP_1000006	Partially Approved.
EZETAP_1000007	Invalid Amount. Please verify amount and try again.
EZETAP_1000008	Expired Card / Invalid Expiration Date. Please use a valid card.
EZETAP_1000009	Card Declined. This card can not be used due to security reasons. Please use another card.
EZETAP_1000010	Exceeded PIN attempts. Please try another card.
EZETAP_1000011	Invalid Checking Account. Please try another card or contact card issuer.
EZETAP_1000012	Invalid Savings Account. Please try another card or contact card issuer.
EZETAP_1000013	Invalid PIN. Please try again.
EZETAP_1000014	Amount Exceeds Card Limit. Please use a card with higher limit.
EZETAP_1000015	Card Use Limit Exceeded. Please use another card.
EZETAP_1000016	Settlement Failed. Batch already open.
EZETAP_1000017	Settlement Failed. Bad batch number.
EZETAP_1000018	Key Exchange Failure.
EZETAP_1000019	Invalid Currency. Please use INR.
EZETAP_1000020	Payment Failed. Card does not have enough points.
EZETAP_1000021	Payment Failed. Please try after some time.
EZETAP_1000022	Payment Failed. Please try after 5 minutes.
EZETAP_1000023	Settlement Failed. Total does not match.

EZETAP_1000024	Settlement Failed. Transaction not found.
EZETAP_1000025	Settlement Failed. Batch not found.
EZETAP_1000026	Approved. Ask customer to call card issuer.
EZETAP_1000027	Transaction Failed. Terminal not configured. Please contact Ezetap Support.
EZETAP_1000028	Invalid Merchant Setup. Please contact Ezetap Support.
EZETAP_1000029	Invalid Credit Account. Please contact card issuer.
EZETAP_1000030	Invalid Account. Please contact card issuer.
EZETAP_1000031	Insufficient Funds. Please use another card.
EZETAP_1000032	Cash Limit Exceeded. Please use another card.
EZETAP_1000033	International Card Not Accepted. Please try another card.

Testing the Integration

A detailed testing scenario is crucial and critical step before the roll-out to production, you can test all payment related integration features End-to-End including failure cases, payment gateways errors etc. by using the accompanying amounts on the right in the below table

Amount to be passed	Error
408	Transaction declined. Remove card
410	processing failed. Payment gateway took too long to respond
501	Call Issuer
502	Call Referral
504	Pick Up
505	Do Not Honor
508	Honor with Id
512	Invalid Txn
513	Invalid Amount
514	Invalid Card No

515	No Such Issuer
519	Try After 1 Min
522	Susp Malfunction
523	Trans Fee Error
526	Duplicate Record
531	Declined
533	Expired Card
534	Suspected Card
535	Contact Acquirer
536	Restricted Card
539	No Credit Account
542	Time Out
556	No Card Record
561	Above Amt Limit
585	Batch Not Found
590	Cutoff in Process
591	Host Unavailable
592	Payment Failed, All terminal are busy
596	Err - Invalid Msg
598	Kx Reqd
599	Prepare device is required
666	Payment Gateway takes 1.5 minutes to respond

Best Practice 2: Ezetap recommends testing at least 50% of these scenarios to conclude your UAT

Steps to Go-Live

Once we have confirmed and tested the integration and various scenarios, here are the steps you need to follow for Going-live

- Procure a Production device via the bank
- Inform the Ezetap device once the device has been procured,
- Ezetap team will provide you the Production App Key, just the Production App key in your demo code to the current one
- Change the App mode to Prod, from Demo
- Ezetap will also share the Production Credentials Username and Password, you can login here
- Swipe a Re. 1 transaction to test

Best Practice 3: Ezetap recommends that you perform some test Rs.1 Transactions and verify the transaction flow, portal information etc.

FAQs

1. What if the linux system is not showing the attached device after installing the driver?

Install the 32 bit libraries using the following command, install the driver again.

Command: **sudo apt-get install -y lib32z1.**

2. Can a new request be sent to SDK while processing the request?

No, As we process the request once at time we don't accept new requests and the SDK will throw the error "-1:SDK Busy".

Useful Links

Description	Link
GitHub's Link	https://github.com/ezetap/java-offline-p2p-sdk
Demo Merchant Portal	http://demo.ezetap.com/portal/merchants/
Production Merchant Portal	https://www.ezetap.com/portal/login/
Support email during Integration	integrations@ezetap.com