

FINGPAY SERVICES

API DOCUMENT

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STEP WISE INTEGRATION OF API

IP must be whitelisted at Fingpay end before integration.

Integration of the API needs to be done as per below sequence

- 1) **First API to integrate:** Merchant Onboarding API- To Onboard Merchants
- 2) **Second API to integrate:** EKYC API- To Verify the Merchant And to activate the Merchant
- 3) **Third API to integrate:** 2FA API is a Mandate Process (AEPS-AP-CD)
- 4) **Fourth API to integrate:** All Product API & Supporting API- AEPS (CW-BE), Mini Statement, Aadhaar Pay, Cash Deposit, Micro ATM, Status Check & Call Back API
- 5) **Fourth API to integrate (Mandatory):** 3 Way Recon API- This API is a mandatory API and go live without this API is strictly not allowed

Note:

After integrating these API's, a test transaction needs to be performed in order to check if settlement is generated and amount is settled to the given bank account. After receiving the same client can go live.

Encryption logic is same for all the API's.

MERCHANT ONBOARDING API

V3

URL for Java and .net:

UAT

URL: <https://fpuat.tapits.in/fpaepsweb/api/onboarding/merchant/creation/v2>

PRODUCTION

URL: <https://fingpayap.tapits.in/fpaepsweb/api/onboarding/merchant/creation/v2>

URL for PHP

UAT

<https://fpuat.tapits.in/fpaepsweb/api/onboarding/merchant/php/creation/v2>

PRODUCTION

<https://fingpayap.tapits.in/fpaepsweb/api/onboarding/merchant/php/creation/v2>

HEADERS :

trnTimestamp: In this field timestamp of the transaction must be sent.

hash : Generated JSON must be encrypted using SHA-256 algorithm and converted to BASE64 which is to be sent in hash header

eskey :

- First a session key is generated using AES-128 algorithm of the BC provider
- Session key is Encrypted using public key(**which is provided by Fingpay**) with the algorithm RSA/ECB/PKCS1Padding of BC provider
- Generated encrypted data must be converted to BASE64 which is to be sent in **eskey**.

Body:

- JSON is Encrypted using session key , generated while eskey generation.
- Generated encrypted data must be converted to BASE64 which is to be sent in **body**.

Sample Headers and Body :

trnTimestamp = 29/11/2017 15:24:47

hash = ixV3GdhMyrTm3aacQXRft1C8uL4doDUJBWmSOl1vxc=

eskey=cM1C5gd2ugAgcyDMNAHmW4cNeBHHxOfwZ7HvyNTD6l2MV09CIZVOEMT9uyfHtGLrcoDXD7
V8M+ZeGSivJ4sbedwJvTXr8wAHedfeZoHi4qUMXC8XFaoHrr+qYVc2+trJbGanY2e8pMLrPDOTKrRh2NV
wGBH+Z0VF5cV6aai2nLH4WdTV+EEExy+FTf3B1DzPqybSuP1Upe76VQNLXYQrdbp28nDvewk2dyBgKFH
Cmp26eNtZ0RaH3upbMoqHxPWhCgk/6cjD0Gx73zXVKSv/k1lhB9kD1n8qW77hbLGKqNFZSaABk3Ocfp
rFNY5Xpu53jhn/3E8jISWF080AwWF08RRqBiWucFMPvACWc0Xiic+ei6ZWKOGcfKln1ZWZrPHFJlckOOT
AZOTr47Jk18olrGYp86lBfOT/EC8z3zKPCQn2woryhCWrgYzXtPWQ7EniBLUKRU1TUwkfEkeB/uG9zFL
3NI3ITK0y5ejwk3UDggygv4Y/3GjB1AtXHZT9j7D20CFT/JTUI/J1upu1ADMaH+ndWNKYDj6JH0V2i9jHb7
wWoAnQbkcy7ywFTPX5O/E6oFi0Tb5xOHxxUxFD6sd2gu8gwos6N5ijetFSST2i+5NzVYEDurlCfr7cupcdi
TMjb0Oqrv5ouCVGMA/jw2WcYu0aT3ZlBgpyk=

Body:

ngW07ebihM9cb4M8HeWVBnUohq81wLlwoVbIA7tTdfSCzceNoIDADOAfXaitH8WltONdJXiaUwmKNZ
BCwnwVxM1e2eayJrEY8sNjyUWtVmOxXhefmDcK6/Hch4XwG9+Imzua2WiYQAoFq5+6+B2tL2Lo5d60
SOyIFMjFBrU3szJcvW/8lftpgQENOOi7Z5sURbaXRak4hwqZnl5+piCaxDUgZ5qRJBZ1Xrg0ZcleP7LxEp3Dc
dnYYiDNDXPyCy9sb0Uoda72nFieQluwEE/VFlw04O7WwvFRhuWbMp/sPzPIVYwwwxFt4xo2cbZPVBllZd
2YvTDG1CVCSHGK6NPFOfKVaTfUn+Jh/grBskNB0Gxy0JkvWnxdfyls5eSDiKVfHLiCULDk8PB+kEE05XzaB
t9NSC4EaL983xh512Ox6XF68IY+fSReap5RCGy4q7xLisZRZeKSNj4uZvZ5xceb4JKNYHmyvDCfLJ1KkkGXrT
/s9mo72dSl0mQTYIMkICjy+uUgbG4MYpzNsiNXtK+w/fZOzARYhsKQbyum98Gx9ziHEVwHBkiT16RyhH
wyrXXp5qjom0OKXePr/Weg8ukXbZBS/aFeL42reRQ54CB1lFeM2o930t/aR24roCIMHbOgArBzijqWxO2
1Ha2dpPtOFo5nTC2Vs800ufXQZmzQHt/rvRRrQvzXaf/Nuk8j3G4AHNTGEM+Kv/8sfvKkRmJJAj6A1hnm
4av10Ux9l/XK4OYCWzHY0xST6rE6cnsV2wm/lwGajn0TwSBkj0YLexCZGN7CXgOD5WCMM5sTp77o2k
hvXk58ZO337tjSMHk3HaLRAiqHnZCNxaelpNTGpibNF4BrpBTroZtaKXRQEZ1rEF87W531Uoalrib/Bi0TII
gcE2KLrHA31wcoGU5n6b+uCh+pZ1KXPUcrCySFDhBXuYD/DigbzDuZb2iAjdktee7Ur+JHYQTknKE20/M
c5Gz98uvyZc+X6HpLcKOF7tRtVlsPmdEavDo0raCJyf+7Jw2kZkpahYO64RjBFyxWbDbr38KpirYsKXEXIXfY
2ZEX6jShpIX/qu08Aya2iPzDpzq+CNG0GpiPmRwlGjEOD5xnCoUnOJtTXfqpbAFTAU630T8tKx6KPJNosnl

8qXeZptYEMsVGjJwhgja538ehFXVEtka/Wg6hipJAKh9nRQqhaUpBixDbXK/DvJiMR4Gh5DFqQSK2VLfW
6CcQmTIJ8rVEGniXZsDfW+egRgmMR1UOwtfNevTn2ljYpx2kT+0FNBVniQ4C5r6mLslQ6WulgZPUguQ
WOOmR2d72GxO/TFbw5rRgKDoS7qamGbQsu0YZwgXkHcjm1bgKWXM7D/475gq/++Fh/GKO/c22Hut
DUWi6NJHkYfDBP+lJXeyKksU1uPy8Tut6qjOnczDFryYL4B62nqlY4IWkbjvqJT3Sr7p5jHsFdX6weHSjw86
AwxudnW91OnrbmYi1tNwBoHNKV3NzieKJ+myrZDbEMIsahD1rDYF7kOnub3kJ4SHKXv3mxoUHvnchq
JNCmQhPJ0+Ds+ZGk0sDkGu8vxdFperA8twSBCHs4pdM4DBD61nUk21HUaFaq7rNRfWUa9yKGjow7ws
dKi/GGy2iW9g7JTQmWBZ8elh4QOQFzOvXeJ=(This data is larger than this example given

PARAMETERS TO BE POSTED :

```
private String username;  
  
private String password;  
  
private Date timestamp;  
  
private double latitude;  
  
private double longitude;  
  
private String ipAddress;  
  
private int supermerchantId;  
  
private MerchantModelV1 merchant;
```

Parameters under MerchantModelV1

```
private String merchantLoginId ;  
  
    private String merchantLoginPin ;  
  
    private String firstName ;  
  
    private String lastName ;  
  
    private String middleName;  
  
    private String merchantPhoneNumber ;  
  
    private MerchantAddressV1 merchantAddress ;  
  
    private String companyLegalName ;  
  
    private String dateOfIncorporation;  
  
    private String userType;  
  
    private Integer companyType;
```

```
private String emailId;

private String certificateOfIncorporationImage;

private Kyc kyc;

private SettlementV1 settlementV1;

private String tradeBusinessProof;

private String termsConditionCheck;

private String cancelledChequeImages;

private String physicalVerification;

private String videoKycWithLatLongData;

private MerchantKycAddressDataModel merchantKycAddressData;
```

Parameters under merchantAddressV1

```
private String merchantAddress1;

    private String merchantAddress2;

    private Integer merchantState;

    private String merchantCityName;

    private String merchantDistrictName;

    private String merchantPinCode;
```

Parameters under kyc

```
private String userPan;

    private String aadhaarNumber;

    private String gstinNumber;

    private String companyOrShopPan;

    private String merchantPanImage;

    private String maskedAadharImage;

    private String shopAndPanImage;
```

Parameters under MerchantKycAddressDataModel

```
private String shopAddress;

    private String shopCity;
```



```

private String shopDistrict;

private Integer shopState;

private String shopPincode;

private Double shopLatitude;

private Double shopLongitude;

private String backgroundImageOfShop

```

Parameters under settlement

```

private String  companyBankAccountNumber ;

        private String  bankIfscCode ;

        private String  companyBankName ;

        private String  bankAccountName ;

```

Parameter name	Description	Value (Mandatory/not)
username	Username or loginid of the supermerchant which is shared by fingpayteam,should be registered in the fingpay system.	Supermerchant login id (M)
password	Supermerchant password which is provided by fingpay team	Password which is to be MD5 hash before sending(M)
timestamp	Timestamp of the request initiation	(M)
Latitude	Latitude of the super merchant place	(M)
Longitude	Longitude of the super merchant place	(M)
supermerchantId	Integer id of the supermerchant id provided by fingpay	(M)
ipAddress	Ip address from where the onboarding is happening	(M)
MerchantModelV1	Under this there are merchant params	
1.merchantLoginId	Login id of the merchant who is doing the transactions	Loginid of the merchant whom you want to onboard(M).
2. merchantLoginPin	Merchant password is the pin of merchant	Plain password must be sent(M)
3.firstName	First Name of the merchant whom you want to get onboarded	(M) (Min Character Limit 1 & Max 40) No Space Allowed & Special Character

4.lastName	Last Name of the merchant whom you want to get onboarded	
5.middleName	Middle Name of the merchant whom you want to get onboarded	
6.merchantPhoneNumber	Phone number of the merchant it) (10 Digit Numeric Values)	(M)
7.merchantAddressV1		
7.0.merchantAddress1	Address of the merchant	Address is mandatory (M)
7.1.merchantAddress2	Address of the merchant. (Min char. 11)	
7.2 merchantState	State of the merchant	Pick the states from the url given below https://fingpayap.tapits.in/fpaepsweb/api/onboarding/getstates (M)
7.3.merchantCityName	City name of the merchant	(M)
7.4.merchantDistrictName	District name of the merchant	(M)
7.5.merchantPinCode	Pincode of the merchant	(M)
8.companyLegalName	Legal name of the company	You can send the legal name of the company
9.companyType	Select the merchant shop category and pass MCC Code values in company type	Pick the value from the url given below (M) https://fingpayap.tapits.in/fpaepsweb/api/onboarding/get/companyType/master
10.emailId	Email id of the merchant	
11.certificateOfIncorporationImage	Send either True/False In the field	True/False
12.kyc		
12.1.userPan	PAN of the merchant	(M)
12.2 aadhaarNumber	Masked Aadhaar number of the merchant	Aadhaar number needs to be verified(M)
12.3 gstInNumber	GSTin number of the super merchant	send super merchant gst in number(M)
12.4 companyOrShopPan	Super merchant Pan of the company	(M)
12.5.merchantPanImage	Pan image of the company or shop	
12.6.maskedAadhaarImage	Masked aadhaar image of the merchant	
12.7.shopAndPanImage	Send either True/False In the field	True/False(M)
13.settlementV1		
13.1.companyBankAccountNumber	Bank account number of the merchant	(M)
13.2 bankIfscCode	IFSC code of the bank	(M)
13.3 companyBankName	Bank name of the company	
13.4 bankBranchName	Branch name of the bank	
13.5 bankAccountName	Account name of the bank	

14. tradeBusinessProof	Send either True/False In the field	True/False(M)
15. termsConditionCheck	Send either True/False In the field	True/False(M)
16.cancelledChequeImages	Send either True/False In the field	True/False(M)
17. physicalVerification	Send either True/False In the field	True/False(M)
18.videoKycWithLatLongData	Send either True/False In the field	True/False(M)
19.merchantKycAddressData		
19.1shopAddress	address of the merchant shop	(M)
19.2shopCity	city of the merchant shop	(M)
19.3shopDistrict	District of the merchant shop	(M)
19.4shopState	State of the merchant shop	(M)
19.5shopPincode	Pincode of the merchant shop	(M)
19.6shopLatitude	Latitude of the merchant shop	(M)
19.7shopLongitude	Longitude of the merchant shop	(M)
19.8backgroundImageOfShop	Background image of the shop	

Please send the single request

SAMPLE REQUEST :

Encrypted JSON Payload for following plain sample json is to be sent

```
{
  "username": "FingPay",
  "password": "ef73781effc5774100f87fe2f437a435",
  "ipAddress": "12.121.11.13",
  "latitude": "74.52",
  "longitude": "78.45",
  "supermerchantId": 2,
  "merchant": {
    "merchantLoginId": "demo",
    "merchantLoginPin": "81dc9bdb52d04dc20036dbd8313ed055",
    "firstName": "Jadav",
    "lastName": "yadav",
    "middleName": "",
    "merchantPhoneNumber": "9068456222",
    "merchantAddress": {
      "merchantAddress1": "Etah Chungi ",
      "merchantAddress2": "KamalpurAligarh -202001",
      "merchantState": 9,
      "merchantCityName": "Khair",
      "merchantDistrictName": "hyderabad",
      "merchantPinCode": "523166"
    },
    "companyLegalName": "SvcreditlineItd",
    "userType": "lakshmi",
    "companyType": 2,
    "emailId": "username@domain.in",
    "certificateOfIncorporationImage": "yes",
    "kyc": {
```

```
"userPan": "AFUPY0248K",
"aadhaarNumber": "83875071771",
"gstInNumber": "29GGGGG1314R9Z6",
"companyOrShopPan": "AFUPY0248K",
"merchantPanImage":
"iVBORw0KGgoAAAANSUHEUgAAAOYAAAGrCAYAAABdUFYMAAAAAXNSR0IArs4c6QAAAAARnQU1BAACxjwv8Y
QUAAAAJcEhZcwAAEnQAABJ0Ad5mH3gAAP+ISURBVHhe7P3",
"maskedAadharImage":
"iVBORw0KGgoAAAANSUHEUgAAAOYAAAGrCAYAAABdUFYMAAAAAXNSR0IArs4c6QAAAAARnQU1BAACxjwv8Y
QUAAAAJcEhZcwAAEnQAABJ0Ad5mH3gAAP+ISURBVHhe7P3",
"shopAndPanImage": "yes"
},
"settlementV1": {
"companyBankAccountNumber": "34567893456789",
"bankIfscCode": "SBIN0070695",
"companyBankName": "State Bank of India",
"bankAccountName": "Savings account"
},
"tradeBusinessProof": "True",
"termsConditionCheck": "True",
"cancelledChequeImages": "True",
"physicalVerification": "True",
"vedioKycWithLatLongData": "True",
"merchantKycAddressData": {
"shopAddress": "manikondahyd",
"shopCity": "hyd",
"shopDistrict": "hyd",
"shopState": 9,
"shopPincode": "523166",
"shopLatitude": "09.0",
"shopLongitude": "67.0",
```

```
"backgroundImageOfShop":  
"iVBORw0KGgoAAAANSUgAAAOYAAAGrCAYAAABdUFYMAAAAXNSR0IArs4c6QAAARnQU1BAACxjwv8Y  
QUAAAJcEhZcwAAEnQAABJ0Ad5mH3gAAP+ISURBVHhe7P3",  
}  
}  
}
```

Success Response :

```
{  
  "status": true,  
  "message": "successful",  
  "data": {  
    "merchantStatus": true,  
    "remarks": "Successfully recorded",  
    "superMerchantId": 2,  
    "merchantLoginId": "demo",  
    "errorCodes": null  
  },  
  "statusCode": 10000  
}
```

Failure Response :

```
{  
  "status": false,  
  "message": "Mandatory parameters are missing",  
  "data": {  
    "merchantStatus": false,  
    "remarks": "Mandatory parameters Merchant PhoneNumber is not valid.\n",  
    "superMerchantId": 2,  
  }  
}
```

```
"merchantLoginId": "demo",  
"errorCodes": "5007,"  
},  
"statusCode": 10004  
}
```

URL FOR SIMPLE API WITHOUT ENCRYPTION

<https://fpuat.tapits.in/fpaepsweb/api/onboarding/merchant/simple/creation/v2>

Note: For simple API there are no only hash and trnTimestamp headers and body should be in plain json format

hash

=base64.encode(SHA256(concat(Supermerchantloginid,@,MD5(supermerchantPassword))))

Concatenate the Supermerchantid,"@" symbol and supermerchant password which must be encrypted using MD5 hash, this generated string must be encrypted using SHA-256 algorithm and converted to BASE64 which is to be sent in hash header

****Encryption methods are same as cash withdrawal API. Use different encryptions as mentioned above for different platforms.**

NOTE : Without onboarding the merchants ,you will not be able to do transactions, should send the live user id and password.

Merchant PIN passed at the time of onboarding should match with Pin passed at the time of transactions in order to initiate the transaction.

Error Code: Merchant Onboarding API

Sr. No	error_code	message
1	5001	Mandatory parameters Merchant Login Id is missing. Mandatory parameters Merchant Login Id is Invalid.
2	5002	Mandatory parameters Merchant Login Pin is missing.
3	5003	Mandatory parameters First Name is null or empty string., Mandatory parameters First Name is not valid with given characters.
4	5004	Mandatory parameters Last Name is null or empty string., Mandatory parameters Last Name is not valid with given characters.
5	5005	FirstName and LastName given are same.
6	5006	middle name is not valid with given characters.
7	5007	Merchant Phone Number is null or empty string., Mandatory parameters Merchant phone Number is not valid.
8	5008	Merchant Address is missing.
9	5009	Mandatory parameters Merchant address1 is missing, Given Merchant address1 is not valid.
10	5010	Mandatory parameters Merchant address2 is missing. Given Merchant address2 is not valid.
11	5011	Merchant City is null or empty string, Merchant City name given is improper.
12	5012	Merchant State is null or empty string, Merchant State name not present in state master map .
13	5013	Merchant district is null or empty string, Merchant district name given is improper.
14	5014	Mandatory parameters Merchant pin code is missing., Mandatory parameters Merchant pin code is invalid
15	5015	Mandatory parameters company legal name is missing., Mandatory parameters company legal name is invalid.
16	5016	Mandatory parameters company Type is missing., Mandatory parameters company Type is invalid.
17	5017	email Id is missing., email Id is not valid.
18	5018	CertificateOfIncorporationImage is missing., CertificateOfIncorporationImage is Invalid.
19	5019	Mandatory parameters Kyc is missing.
20	5020	Mandatory parameters Aadhaar Number is missing., Mandatory parameters Aadhaar Number is not valid.
21	5021	GstinNumber is not valid.
22	5022	CompanyOrShopPan is not valid.
23	5023	Mandatory parameters merchant pan image is missing.
24	5024	Mandatory parameters masked aadhar image is missing.
25	5025	User Pan is missing

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

26	5026	Blocked pan. Your not authorized to onboard.
27	5027	Blocked Aadhaar. Your not authorized to onboard.
28	5028	Blocked mobile number. Your not authorized to onboard.
29	5029	Blocked company account number. Your not authorized to onboard.
30	5030	trade business proof is missing., trade business proof is InValid.
31	5031	terms condition check is missing., terms condition check is InValid.
32	5032	cancelled cheque images is missing., cancelled cheque images is InValid.
33	5033	physical verification is missing., physical verification is InValid.
34	5034	VedioKycWithLatLongData is missing., VedioKycWithLatLongData is InValid.
35	5035	MerchantKycAddressData is missing.
36	5036	shop address is missing.,Given shop address is not valid.
37	5037	shop City name is null or empty string.,shop City name given is improper.
38	5038	shop district is null or empty string.,shop district name given is improper.
39	5039	shop State is null or empty string.,shop State name not present in statemaster map .
40	5040	Mandatory parameters shop pin code is missing.,Mandatory parameters shop pin code is invalid.
41	5041	Mandatory parameters back ground image of shop is missing.
42	5042	Bank account number is Invalid.
43	5043	Bank Ifsc Code is Invalid.
44	5044	Company bank account number is Invalid.
45	5045	Company bank name is Invalid.

2. E-KYC API DOCUMENT

Version: 5.0

Date: 20/04/2021

Author: Shruthi

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

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Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

1.SEND OTP

Java:

URL: <https://fpekyc.tapits.in/fpekyc/api/ekyc/merchant/sendotp>

PHP:

URL: <https://fpekyc.tapits.in/fpekyc/api/ekyc/merchant/php/sendotp>

HEADERS :

trnTimestamp: In this field timestamp of the transaction must be sent.

hash : Generated JSON must be encrypted using SHA-256 algorithm and converted to BASE64 which is to be sent in hash header

deviceIMEI : In case of web you need to send the scanner's serial number which is integrated in your system for performing transactions, based on the IMEI will assign the terminal.

eskey :

- First a session key is generated using AES-128 algorithm of the BC provider
- Session key is Encrypted using public key(**which is provided by Fingpay**) with the algorithm RSA/ECB/PKCS1Padding of BC provider
- Generated encrypted data must be converted to BASE64 which is to be sent in **eskey**.

Body:

- JSON is Encrypted using session key , generated while eskey generation.
- Generated encrypted data must be converted to BASE64 which is to be sent in **body**.

Sample Headers and Body :

trnTimestamp = 29/11/2017 15:24:47

hash = ixV3GdhMyrTm3aacQXRft1C8uL4doDUJVBWmSOl1vxc=

deviceIMEI = 352801082418919

eskey=cM1C5gd2ugAgcyDMNAHmW4cNeBHHxOfwZ7HvyNTD6l2MV09ClZVOEMT9uyfHtGLrcoD
XD7V8M+ZeGSivJ4sbedwJvTXr8wAHedfeZoHi4qUMXC8XFaoHrr+qYVc2+trJbGanY2e8pMLrPDOT
KrRh2NVwGBH+Z0VF5cV6aai2nLH4WdTV+EEEXy+FTf3B1DzPqybSuP1Upe76VQNLXYQrdbp28nDv
ewk2dyBgKFHCmp26eNtZ0RaH3upbMoqHxPWWhCgk/6cjD0Gx73zXVKSv/k1lhB9kD1n8qW77hbL
GKqNFZSaABk3OcfprFNY5Xpu53jhn/3E8jISWF080AwWF08RRqBiWucFMPvACWc0Xiic+ei6ZWKO
GcfKin1ZWZrPHFJlckO0TAZOTr47Jk18olrGYp86lBfOT/EC8z3zKPCQn2woryhCWrgYzXtPWQ7Eni
BLUKRU1TUwkfEkeB/uG9zFL3NI3ITK0y5ejwk3UDggygv4Y/3GjB1AtXHZT9j7D20CFT/JTUI/J1upu1
ADMah+ndWNNKYDj6JH0V2i9JHb7wWoAnQbkcy7ywFTPX5O/E6oFi0Tb5xOHxxUx6sd2gu8gwo

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

s6N5ijetFSST2i+5NzVYEDurlCfr7cupcdiTMjb0Oqrv5ouCVGMA/jw2WcYu0aT3ZlBgpyk=

Body:

ngW07ebihM9cb4M8HeWVBnUohq81wLlwoVbIA7tTdfSCzceNoIDADOAfXaitH8WltONdJXiaUw
mKNZBCwnwVxM1e2eayJrEY8sNjyUWtVmOxXhefmDcK6/Hch4XwG9+Imzua2WiYQAoFq5+6+B2
tL2Lo5d60SOyIFMjFBrU3szJcvW/8lftpgQENOOi7Z5sURbaXRak4hwqZnl5+piCaxDUgZ5qRJBZ1Xrg
OZcleP7LxEp3DcdnYYiDNDXPyCy9sb0Uoda72nFieQluwEE/VFlw04O7WwvFRhuWbMp/sPzPIVyw
wxft4xo2cbZPVBllZd2YvTDG1CVCSHGK6NPFOfKVatfUn+Jh/grBskNB0Gxy0JkvWnxdfyls5eSDiKvF
HLiCULdk8PB+kEE05XzaBt9NSC4EaL983xh512Ox6XF68IY+fsReap5rCGy4q7xLisZRZeKSNj4uZvZ5
xceb4JKNYHmyvDCfLJ1KkkGXrT/s9mo72dSI0mQTYIMkICjy+uUgbG4MYpzNsiNXtK+w/fZOzARYhs
KQbyum98Gx9ziHEVwHBkiT16RyhHwyrXXp5qjom0OKXePr/Weg8ukXbZBS/aFeL42reRQ54CB1IF
eM2o930t/aR24roCIMHbOgArBzjqWxO21Ha2dpPtOfO5nTC2Vs800ufXQZmzQHt/rvRRRQvzXaf/
Nuk8j3G4AHNTGEM+Kv/8sfvKkRmJJAj6A1hnm4av10Ux9I/XK4OYCWzHY0xST6rE6cnsV2wm/lwG
ajn0TwSBkj0YLexCZGN7CXgOD5WCMm5sTp77o2khvXk58Z0337tjSMHk3HaLRAiqHnZCNxaelpN
TGpibNF4BrpBTr0ztaKXRQEz1rEF87W531Uoalrib/Bi0TllgcE2KLrHA31wcoGU5n6b+uCk+pZ1KXP
UcrCySFDhBXuYD/DigbzDuZb2iAjdktee7Ur+JHYQTkNKE20/Mc5Gz98uvyZc+X6HpLcKOF7tRtVlsP
mdEavDo0raCJyf+7Jw2kZkpahYO64RjBFyxWbDbr38KpirYsKXEXiXfY2ZEX6jShpIX/qu08Aya2iPzDp
zq+CNG0GpiPmRwlGjEOD5xnCoUnOjTxfqpbAFTAU630T8tKx6KPJNosnI8qXeZptYEMsVGjJwhgja
538ehFXVEtka/Wg6hipJAKh9nRQqhaUpBixDbXK/DvJiMR4Gh5DFqQSK2VLfW6CcQmTIJ8rVEGniX
ZsDfW+egRgmMR1UOwtfNevTn2ljYpx2kT+0FNBNiQ4C5r6mLsIQ6WulgZPUguQWOOmR2d72G
xO/TFbw5rRgKDoS7qamGbQsu0YZwgXkHcj1bgKWXM7D/475gq/++Fh/GKO/c22HutDUWi6NJ
HkYfDBP+lJXeyKksU1uPy8Tut6qjOnczDFryYL4B62nqly4IWkjbvqJT3Sr7p5jHsFdX6weHSJw86Awx
udnW91OnrbmYi1tNwBoHNKV3NzieKJ+myrZDbEMIsahD1rDYF7kOnub3k4SHKXv3mxoUHvnch
qJNCmQhPJ0+Ds+ZGk0sDkGu8vxdFperA8twSBCHs4pdM4DBD61nUk21HUaFaq7rNRfWUa9yKGj
ow7wsdKi/GGy2iW9g7JTQmWBZ8el4QOQFzOvXeJ=(This data is larger than this example given

PARAMETERS TO BE POSTED :

```
private int superMerchantId;  
private String merchantLoginId;  
private String transactionType;// Ekyc – 'EKY' values is fixed  
private String mobileNumber;  
private String aadharNumber;
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
private String panNumber;  
private String matmSerialNumber;  
private double latitude;  
private double longitude;
```

Parameter name	Description	Value(Mandatory/not)
superMerchantId	Integer value of the company provided by company	(M)
merchantLoginId	Username or login id of the merchant which is registered with Fingpay	(M)
transactionType	Type of the transaction , in ekyc case it is EKY	EKY(M)
mobileNumber	Mobile number of the merchant	(M)
aadharNumber	Aadhaar number of the merchant	(M)
panNumber	Pan number of the merchant	(M)
matmSerialNumber	Matm device serial number	
latitude	Latitude of the place where transaction is happening	(M)
longitude	Latitude of the place where transaction is happening	(M)

SAMPLE JSON :

Encrypted JSON Payload for following plain sample JSON is to be sent

```
{  
  "superMerchantId": 2,  
  "merchantLoginId": "keerthik",  
  "transactionType": "EKY",  
  "mobileNumber": "9492071491",  
  "aadharNumber": "748909603695",  
  "panNumber": "BZCPB1312G",  
  "matmSerialNumber": "",  
  "latitude": 17.4442488,  
  "longitude": 79.4808912  
}
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

RESPONSE PARAMETERS :

```
private boolean status;  
private String message;  
private Object data;  
private long statusCode;  
data:
```

```
private Int primaryKeyId;  
private String encodeFPTxnId;
```

Parameter name	Description
primaryKeyId	Primary key id is unique id to identify each request
encodeFPTxnId	Encoded txn value

SAMPLE SUCCESS RESPONSE:

```
{  
  "status" : true,  
  "message" : "Request Completed",  
  "data": {  
    "primaryKeyId" : 12123,  
    "encodeFPTxnId" : "FA1234",  
  },  
  "statusCode" : 10000  
}
```

SAMPLE FAILURE RESPONSE:

```
{  
  "status": false,  
  "message" : "error message",  
  "data": null  
  "statusCode": error status code  
}
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

2. Validate OTP

Java:

URL: <https://fpekyc.tapits.in/fpekyc/api/ekyc/merchant/validateotp>

PHP:

URL: <https://fpekyc.tapits.in/fpekyc/api/ekyc/merchant/php/validateotp>

HEADERS :

trnTimestamp: In this field timestamp of the transaction must be sent.

hash : Generated JSON must be encrypted using SHA-256 algorithm and converted to BASE64 which is to be sent in hash header

deviceIMEI : In case of web you need to send the scanner's serial number which is integrated in your system for performing transactions, based on the IMEI will assign the terminal.

eskey :

- First a session key is generated using AES-128 algorithm of the BC provider
- Session key is Encrypted using public key(**which is provided by Fingpay**) with the algorithm RSA/ECB/PKCS1Padding of BC provider
- Generated encrypted data must be converted to BASE64 which is to be sent in **eskey**.

Body:

- JSON is Encrypted using session key , generated while eskey generation.
- Generated encrypted data must be converted to BASE64 which is to be sent in **body**.

Sample Headers and Body :

trnTimestamp = 29/11/2017 15:24:47

hash = ixV3GdhMyrTm3aacQXRft1C8uL4doDUJVBWmSOl1vxc=

deviceIMEI = 352801082418919

eskey=cM1C5gd2ugAgcyDMNAHmW4cNeBHHxOfwZ7HvyNTD6l2MV09ClZVOEMT9uyfHtGLrcoD
XD7V8M+ZeGSIVj4sbedwJvTXr8wAHedfeZoHi4qUMXC8XFaoHrr+qYVc2+trJbGanY2e8pMLrPDOT
KrRh2NVwGBH+Z0VF5cV6aai2nLH4WdTV+EEXy+FTf3B1DzPqybSuP1Upe76VQNLXYQrdbp28nDv
ewk2dyBgKFHCmp26eNtZ0RaH3upbMoqHxPWWhCgk/6cjD0Gx73zXVKSv/k1lhB9kD1n8qW77hbL
GKqNFZSaABk3OcfprFNY5Xpu53jhn/3E8jISWF080AwWF08RRqBiWucFMPvACWc0Xiic+ei6ZWKO
GcfKin1ZWZrPHFJlckO0TAZOTr47Jk18olrGYp86lBfOT/EC8z3zKPCQn2woryhCWrgYzXtPWQ7Eni
BLUKRU1TUwfkEkeB/uG9zFL3NI3ITK0y5ejwk3UDggygv4Y/3GjB1AtXHZT9j7D20CFT/JTUI/J1upu1

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

ADMaH+ndWKNKYDj6JH0V2i9jHb7wWoAnQbkcy7ywFTPX5O/E6oFi0Tb5xOHxxUxFD6sd2gu8gwo
s6N5ijetFSST2i+5NzVYEDurlCfr7cupcdiTMjb0Oqrv5ouCVGMA/jw2WcYu0aT3ZlBgpyk=

Body:

ngW07ebihM9cb4M8HeWVBnUohq81wLlwoVbIA7tTdfSCzceNoIDADOAfXaitH8WltONdJXiaUw
mKNZBCwnwVxM1e2eayJrEY8sNjyUWtVmOxXhefmDcK6/Hch4XwG9+Imzua2WiYQAoFq5+6+B2
tL2Lo5d60SOyIFMjFBrU3szJcvW/8lftpgQEN0oi7Z5sURbaXRak4hwqZnl5+piCaxDUgZ5qRJBZ1Xrg
0ZcleP7LxEp3DcdnYYiDNDXPyCy9sb0Uoda72nFieQluwEE/VFlw04O7WwvFRhuWbMp/sPzPIVyw
wxft4xo2cbZPVBllZ2YvTDG1CVCSHGK6NPFOfKVATfUn+Jh/grBskNB0Gxy0JkvWnxdfyls5eSDiKVf
HLiCULdk8PB+kEE05XzaBt9NSC4EaL983xh512Ox6XF68IY+fSReap5rCGy4q7xLisZRZeKSNj4uZvZ5
xceb4JKNyHmyvDCfLJ1KkkGXrT/s9mo72dSI0mQTYIMklCjy+uUgbG4MYpzNsiNXtK+w/fZOzARYhs
KQbyum98Gx9ziHEVwHBkiT16RyhHwyrXXp5qjom0OKXePr/Weg8ukXbZBS/aFeL42reRQ54CB1IF
eM2o930t/aR24roCIMHbOgArBzjqWxO21Ha2dpPtOFo5nTC2Vs800ufXQZmzQHt/rvRRrQvzXaf/
Nuk8j3G4AHNTGEM+Kv/8sfvKkRmJJAj6A1hnm4av10Ux9I/XK4OYCWzHY0xST6rE6cnsV2wm/lwG
ajn0TwSBkj0YLexCZGN7CXgOD5WCMm5sTp77o2khvXk58ZO337tjSMHk3HaLRAiqHnZCNxaelpN
TGpibNF4BrpBTr0ztaKXRQEZ1rEF87W531Uoalrib/Bi0TilgcE2KLrHA31wcoGU5n6b+uCk+pZ1KXP
UcrCySFDhBXuYD/DigbzDuZb2iAjdktee7Ur+JHYQTkNKE20/Mc5Gz98uvyZc+X6HpLcKOF7tRtVlsP
mdEavDo0raCjyf+7Jw2kZkpahYO64RjBFyxWbDbr38KpirYsKXEXiXfY2ZEX6jShpIX/qu08Aya2iPzDp
zq+CNG0GpiPmRwlGjEOD5xnCoUnOJtTxfqpbAFTAU630T8tKx6KPJNosnI8qXeZptYEMsVGjJwhgja
538ehFXVEtka/Wg6hipJAKh9nRQqhaUpBixDbXK/DvJiMR4Gh5DFqQSK2VLfW6CcQmTIJ8rVEGniX
ZsDfW+egRgmMR1UOwtfNevTn2ljYpx2kT+0FNBVniQ4C5r6mLsIQ6WulgZPUguQWOomR2d72G
xO/TFbw5rRgKDoS7qamGbQsu0YZwgXkHcjm1bgKWXm7D/475gq/++Fh/GKO/c22HutDUWi6NJ
HkYfDBP+lJXeyKksU1uPy8Tut6qjOnczDFryYL4B62nqly4IWkjbvqJT3Sr7p5jHsFdX6weHSjw86Awx
udnW91OnrbmYi1tNwBoHNKV3NzieKJ+myrZDbEMIsahD1rDYF7kOnub3k4SHKXv3mxoUHvnch
qJNCmQhPJ0+Ds+ZGk0sDkGu8vxdFperA8twSBCHs4pdM4DBD61nUk21HUaFaq7rNRfWUa9yKGj
ow7wsdKi/GGy2iW9g7JTQmWBZ8el4QOQFzOvXeJ=(This data is larger than this example given

SAMPLE JSON :

Encrypted JSON Payload for following plain sample JSON is to be sent

```
{  
  "superMerchantId": 2,
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
"merchantLoginId" : "keerthik" ,  
"otp" : "123456" ,  
"primaryKeyId" : 1234 ,  
"encodeFPTxnId" : "FP123433A" ,  
}
```

PARAMETERS TO BE POSTED :

Request:

```
private int superMerchantId;  
private String merchantLoginId;  
private String otp;  
private int primaryKeyId;  
private String encodeFPTxnId;
```

Parameter name	Description
primaryKeyId	Primary key id is unique id to identify each request
encodeFPTxnId	Encoded txn value
otp	OTP which is sent in the first step of the transaction

RESPONSE PARAMETERS :

```
private boolean status;  
private String message;  
private Object data;  
private long statusCode;  
data:
```

```
private Int primaryKeyId;  
private String encodeFPTxnId;
```

Parameter name	Description
----------------	-------------

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

primarykeyId	Primary key id is unique id to identify each request
encodeFPTxnId	Encoded txn value

SAMPLE SUCCESS RESPONSE:

```
{
  "status" : true,
  "message" : "Request Completed",
  "data": {
    "primaryKeyId" : 12123,
    "encodeFPTxnId" : "FA1234",
  },
  "statusCode" : 10000
}
```

SAMPLE FAILURE RESPONSE:

```
{
  "status": false,
  "message" : "error message",
  "data": null
  "statusCode": error status code
}
```

3.RESEND OTP

Java

URL : <https://fpekyc.tapits.in/fpekyc/api/ekyc/merchant/resendotp>

PHP:

URL : <https://fpekyc.tapits.in/fpekyc/api/ekyc/merchant/php/resendotp>

HEADERS :

trnTimestamp: In this field timestamp of the transaction must be sent.

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

hash : Generated JSON must be encrypted using SHA-256 algorithm and converted to BASE64 which is to be sent in hash header

deviceIMEI : In case of web you need to send the scanner's serial number which is integrated in your system for performing transactions, based on the IMEI will assign the terminal.

eskey :

- First a session key is generated using AES-128 algorithm of the BC provider
- Session key is Encrypted using public key(**which is provided by Fingpay**) with the algorithm RSA/ECB/PKCS1Padding of BC provider
- Generated encrypted data must be converted to BASE64 which is to be sent in **eskey**.

Body:

- JSON is Encrypted using session key , generated while eskey generation.
- Generated encrypted data must be converted to BASE64 which is to be sent in **body**.

Sample Headers and Body :

```
trnTimestamp = 29/11/2017 15:24:47
hash = ixV3GdhMyrTm3aacQXRft1C8uL4doDUJVBWmSOI1vxc=
deviceIMEI = 352801082418919
eskey=cM1C5gd2ugAgcyDMNAHmW4cNeBHHxOfwZ7HvyNTD6l2MV09CIZVOEMT9uyfHtGLrcoD
XD7V8M+ZeGSivJ4sbedwJvTXr8wAHedfeZoHi4qUMXC8XFaoHrr+qYVc2+trJbGanY2e8pMLrPDOT
KrRh2NVwGBH+Z0VF5cV6aai2nLH4WdTV+EEXY+FTf3B1DzPqybSuP1Upe76VQNLXYQrdbp28nDv
ewk2dyBgKFHCmp26eNtZ0RaH3upbMoqHxPWWhCgk/6cjD0Gx73zXVKSv/k1lhB9kD1n8qW77hbL
GKqNFZSaABk3OcfprFNY5Xpu53jhn/3E8jISWF080AwWF08RRqBiWucFMPvACWc0Xiic+ei6ZWKO
GcfKln1ZWZrPHFJlckO0TAZOTr47Jk18olrGYp86lBfOT/EC8z3zKPCQn2woryhCWrgYzXtPWQ7Eni
BLUKRU1TUwfkEkeB/uG9zFL3NI3lTK0y5ejwk3UDggygv4Y/3GjB1AtXHZT9j7D20CFT/JTUI/J1upu1
ADMaH+ndWKNYDj6JH0V2i9jHb7wWoAnQbkcy7ywFTPX5O/E6oFi0Tb5xOHxxUxFD6sd2gu8gwo
s6N5ijetFSST2i+5NzVYEDurlCfr7cupcdiTMjb0Oqrv5ouCVGMA/jw2WcYu0aT3ZlBgpyk=
```

Body:

```
ngW07ebihM9cb4M8HeWVBnUohq81wLIwoVbIA7tTdfSCzceNoIDADOAfXaitH8WItONdJXiaUw
mKNZBCwnwVxm1e2eayJrEY8sNjyUWtVmOxXhefmDcK6/Hch4XwG9+Imzua2WiYQAoFq5+6+B2
tL2Lo5d60SOyIFMjFBrU3szJcvW/8lftpgQENOOi7Z5sURbaXRak4hwqZnl5+piCaxDUgZ5qRJBZ1Xrg
0ZcleP7LxEp3DcdnYYiDNDXPyCy9sb0Uoda72nFieQluwEE/VFlw04O7WwvFRhuWbMp/sPzPIVyw
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
wxFt4xo2cbZPVBllZd2YvTDG1CVCSHGK6NPFOfKVATfUn+Jh/grBskNB0Gxy0JkvWnxdfyls5eSDiKVf
HLiCULDk8PB+kEE05XzaBt9NSC4EaL983xh512Ox6XF68IY+fSReap5rCGy4q7xLisZRZeKSNj4uZvZ5
xceb4JknYHmyvDCfLJ1KkkGXrT/s9mo72dSI0mQTYIMkICjy+uUgbG4MYpzNsiNXtK+w/fZOzARYhs
KQbyum98Gx9ziHEVwHBkiT16RyhHwyrXXp5qjom0OKXePr/Weg8ukXbZBS/aFeL42reRQ54CB1IF
eM2o930t/aR24roCIMHbOgArBzjqWxO21Ha2dpPtOFo5nTC2Vs800ufXQZmzQHt/rvRRrQvzXaf/
Nuk8j3G4AHNTGEM+Kv/8sfvKkRmJJAj6A1hnm4av10Ux9I/XK4OYCWzHY0xST6rE6cnsV2wm/
```

SAMPLE JSON :

Encrypted JSON Payload for following plain sample JSON is to be sent

```
{
  "superMerchantId": 2,
  "merchantLoginId" : "keerthik" ,
  "primaryKeyId" : 1234 ,
  "encodeFPTxnId" : "FP123433A" ,
}
```

PARAMETERS TO BE POSTED :

Request:

```
private int superMerchantId;
private String merchantLoginId;
private int primaryKeyId;
private String encodeFPTxnId;
```

Parameter name	Description
primaryKeyId	Primary key id is unique id to identify each request
encodeFPTxnId	Encoded txn value

RESPONSE PARAMETERS :

```
private boolean status;
private String message;
private Object data;
private long statusCode;
data:
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
private Int primaryKeyId;  
private String encodeFPTxnId;
```

Parameter name	Description
primaryKeyId	Primary key id is unique id to identify each request
encodeFPTxnId	Encoded txn value

SAMPLE SUCCESS RESPONSE:

```
{  
  "status" : true,  
  "message" : "Request Completed",  
  "data": {  
    "primaryKeyId" : 12123,  
    "encodeFPTxnId" : "FA1234",  
  },  
  "statusCode" : 10000  
}
```

SAMPLE FAILURE RESPONSE:

```
{  
  "status": false,  
  "message" : "error message",  
  "data": null  
  "statusCode": error status code  
}
```

4.BIOMETRIC EKYC REQUEST:

Java:

```
URL : https://fpekyc.tapits.in/fpekyc/api/ekyc/merchant/biometric
```

PHP:

```
URL : https://fpekyc.tapits.in/fpekyc/api/ekyc/merchant/php/biometric
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

HEADERS :

trnTimestamp: In this field timestamp of the transaction must be sent.

hash : Generated JSON must be encrypted using SHA-256 algorithm and converted to BASE64 which is to be sent in hash header

deviceIMEI : In case of web you need to send the scanner's serial number which is integrated in your system for performing transactions, based on the IMEI will assign the terminal.

eskey :

- First a session key is generated using AES-128 algorithm of the BC provider
- Session key is Encrypted using public key(**which is provided by Fingpay**) with the algorithm RSA/ECB/PKCS1Padding of BC provider
- Generated encrypted data must be converted to BASE64 which is to be sent in **eskey**.

Body:

- JSON is Encrypted using session key , generated while eskey generation.
- Generated encrypted data must be converted to BASE64 which is to be sent in **body**.

Sample Headers and Body :

```
trnTimestamp = 29/11/2017 15:24:47
hash = ixV3GdhMyrTm3aacQXRft1C8uL4doDUJVBWmSOl1vxc=
deviceIMEI = 352801082418919
eskey=cM1C5gd2ugAgcyDMNAHmW4cNeBHHxOfwZ7HvyNTD6l2MV09ClZVOEMT9uyfHtGLrcoD
XD7V8M+ZeGSivJ4sbedwJvTXr8wAHedfeZoHi4qUMXC8XFaoHrr+qYVc2+trJbGanY2e8pMLrPDOT
KrRh2NVwGBH+Z0VF5cV6aai2nLH4WdTV+EEXy+FTf3B1DzPqybSuP1Upe76VQNLXYQrdbp28nDv
ewk2dyBgKFHCmp26eNtZ0RaH3upbMoqHxPWWhCgk/6cjD0Gx73zXVKSv/k1lhB9kD1n8qW77hbL
GKqNFZSaABk3OcfprFNY5Xpu53jhn/3E8jISWF080AwWF08RRqBiWucFMPvACWc0Xiic+ei6ZWKO
GcfKln1ZWZrPHFJlckO0TAZOTr47Jk18olrGYp86lBfOT/EC8z3zKPCQn2woryhCWrgyZxXtPWQ7Eni
BLUKRU1TUwkeEkeB/uG9zFL3NI3lTK0y5ejwk3UDggygv4Y/3GjB1AtXHZT9j7D20CFT/JTUI/J1upu1
ADMaH+ndWKNKYDj6JH0V2i9jHb7wWoAnQbkcy7ywFTPX5O/E6oFi0Tb5xOHxxUx6d6sd2gu8gwo
s6N5ijetFSST2i+5NzVYEDurlCfr7cupcdiTMjb0Oqrv5ouCVGMA/jw2WcYu0aT3ZlBgpyk=
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

Body:

```
ngW07ebihM9cb4M8HeWVBnUohq81wLlwoVbIA7tTdfSCzceNoIDADOAfXaitH8WltONdJXiaUw
mKNZBCwnwVxM1e2eayJrEY8sNjyUWtVmOxXhefmDcK6/Hch4XwG9+Imzua2WiYQAoFq5+6+B2
tL2Lo5d60SOyIFMjFBrU3szJcvW/8lftpgQENOOi7Z5sURbaXRak4hwqZnl5+piCaxDUgZ5qRJBZ1Xrg
OZcleP7LxEp3DcdnYYiDNDXPyCy9sb0Uoda72nFieQluwEE/VFlw04O7WwvFRhuWbMp/sPzPIVyw
wxft4xo2cbZPVBllZd2YvTDG1CVCSHGK6NPFOfKVATfUn+Jh/grBskNB0Gxy0JkvWnxdfyIs5eSDiKVf
HLiCULdk8PB+kEE05XzaBt9NSC4EaL983xh512Ox6XF68IY+fSReap5rCGy4q7xLisZRZeKSNj4uZvZ5
xceb4JknYHmyvDCfLJ1KkkGXrT/s9mo72dSI0mQTYIMkICjy+uUgbG4MYpzNsiNXtK+w/fZOzARYhs
KQbyum98Gx9ziHEVwHBkiT16RyhHwyrXXp5qjom0OKXePr/Weg8ukXbZBS/aFeL42reRQ54CB1IF
eM2o930t/aR24roCIMHbOgArBzijqWxO21Ha2dpPtOFo5nTC2Vs800ufXQZmzQHt/rvRRrQvzXaf/
Nuk8j3G4AHNTGEM+Kv/8sfvKkRmJJAj6A1hnm4av10Ux9I/XK4OYCWzHY0xST6rE6cnsV2wm/
```

PARAMETERS TO BE POSTED :

```
private P2CardnumberORUID cardnumberORUID;
private String requestRemarks;
private CaptureResponse captureResponse;
private String merchantLoginId;
private int superMerchantId;
private Int primaryKeyId;
private String encodeFPTxnId;
```

cardnumberORUID

```
private String adhaarNumber;
private int indicatorforUID;
private String nationalBankIdentificationNumber;
```

captureResponse(Under capture response below are the parameters)

```
private String errCode;
private String errInfo;
private String fCount;
private String fType;
private String iCount;
private String iType;
private String pCount;
private String pType;
private String nmPoints;
private String qScore;
private String dpID;
private String rdsID;
```


Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
private String rdsVer;  
private String dc;  
private String mi;  
private String mc;  
private String ci;  
private String sessionKey;  
private String hmac;  
private String PidDatatype;  
private String Piddata;
```

SAMPLE JSON :

Encrypted JSON Payload for following plain sample JSON is to be sent

```
{  
  "superMerchantId": 2,  
  "merchantLoginId": "keerthik",  
  "primaryKeyId": 40,  
  "encodeFPTxnId": "EKYKF1564176120321131641652A",  
  "requestRemarks": "test",  
  "cardnumberORUID": {  
    "nationalBankIdentificationNumber": null,  
    "indicatorforUID": "0",  
    "adhaarNumber": "748909603695",  
  },  
  "captureResponse": {  
    "errCode": "0",  
    "errInfo": "Capture Success",  
    "fCount": "2",  
    "fType": "0",  
    "iCount": "0",  
    "iType": null,  
    "pCount": "0",  
    "pType": "0",  
    "nmPoints": "32,32",  
    "qScore": "69,69",  
    "dpID": "MANTRA.MSIPL",  
    "rdsID": "MANTRA.AND.001",  
    "rdsVer": "1.0.4",  
    "dc": "855e031a-204c-4544-b2ef-8821b53ed39b",  
    "mi": "MFS100",  
    "mc":  
    "MIIEGjCCAwKgAwIBAgIGAXgCQftfMA0GCSqGSIb3DQEBCwUAMIHqMSowKAYDVQQDEyFEUyBNYW50c  
mEgU29mdGVjaCBjbmRpYSBQdnQgTHRkIDcxQzBBBgNVBDMTOklgMjAzIFNoYXBhdGggSGV4YSBvcHBvc
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
210ZSBHdWphcmFOIEhpZ2ggQ291cnQgUyBHIEhpZ2h3YXkxEjAQBgNVBAKTCUFobWVkyYWJhZDEQMA4GA
1UECBMHR3VqYXJhdDEdMBsGA1UECXMUVGVjaG5pY2F5IERlcGFydG1lbnQxJTAjBgNVBAoTHE1hbnRyYS
BTb2Z0ZWNoIEluZGlhIFB2dCBMdGQxXzAJBgNVBAYTAklOMB4XDITixMDMwNTEExNDQ0N1oXDTIxMDQw
NDEExNTk0MFowgbAxJDAiBgkqhkiG9w0BCQEWFXN1cHBvcnRabWVudHJhdGVjLmNvbTELMakGA1UEBh
MCSU4xEDA0BgNVBAgTB0dVSksFSQVQxEjAQBgNVBAcTCUFITUVEQUJBRDEOMAwGA1UEChMFTVNJUEw
xHjAcBgNVBAstFUJpb21ldHJpYyBNYW51ZmFjdHVyZTEIMCMGA1UEAxMCTWFudHJhIFNvZnRlY2ggSW5k
aWEgUHZ0IEExOZDCCASlWdQYJKoZlhcNAQEBBQADggEPADCCAQoCggEBALtwSL3bOCBDV5QGd9zd4shrr
pb44KUEU22oN52XGWiRVqPNoY8IRBEbMAJaOT83ldgarqYINp01TeLGxoeERQTrSirWNXn7NXejYxMvtQ\
/d0ygu56BQjEaqd29ZQ8vTyMne8VKaomdCkMyYA3psoV22GfwiHzGtbzGVuHHsr6+OsaqVHOa04Oc
DYKZZhaGUGZmDKFfkZvDNXuTeAt6Rrhis1zRrLkbbhq1dsV3tEFx3UoCSLfv4ELnnCSvG8IQ0V5Q4ZiiymAxeE
q8xeV4NtVeq3KP8AzkonuzPimdIRIN8yoPmO5FAIKSPVB8NtSk27qRq8seVs8pwhGmK4cCAwEAATANB
gkqhkiG9w0BAQsFAAOCAQEAAoJSGfUZYXJGNbB7LBJJ3FsiPNuABHK8KH8FMvblwGZcOyonXvFUoHqEqjg
o5vTXpT4+8XNZbZFOtVny7VulBj6THRSpS2zbz0jbqX9acELRrFn7UIRuFiFWoM2YtobdOD6ug96+loC7GGK
k+T26FVxxyDGdRfsGoWiva12fw59E0vwTsfwW7VXUICV5DYQIjFgipu9YX3aJfJrkH1gRcao7KBNQCHUp
96uEbwYIHU+rrfR42yx3w+YxBD5VN85uc6O33Zj7XUzxWpohOXYK9WtOOtyt06ZWNsgq07SgnW0w7Y9
C+fFBPcgtVHulsM75tFhzBijq8MtCCO3A==",
"ci": "20221021",
"sessionKey":
"JT5LbLaDo2C5neOixMh7tp35ipBEXSl82iHwSynUOn5RsTFqeHksM7B3v0mokCTmt8uAXdlx+fdns44vgWt
b+ciZ068kjrACSLZUg3T93dBP+oThiRADQatt3PoG32Q7nDe1lh8ZDUF9IENYt+1CXa4hR+sUdL7ftZCpDchA3
jLHR6+KwVw7Hf2lW9c9XCdgq+5XpA22X8ERY7DoUpHTnXbsGRI91jlfPTUVY35aV0jRJTIT9rvNfJDAaEYu
DEqPr2hBZBK1LrVqd8b9bZjClxb+Ry5cQnFn5gmbFoxPV8tVYV/hxYJgVXjp8lhVVDwfbHYDDLf9Ug6n4eq49
yFGeg==",
"hmac": "1ZgmHrKxpdKoRV2Wcs1L4BNN4L1ASNhlhtpG2aGFMBQB8VwSS3KEgKiWa90BRkd0",
"PidDatatype": "X",
"Piddata":
"MjAyMS0wMy0xMIQxMD0zOD0zNi3cU8eW7JawEh8JzHwSpvYvZmE2hJF9Z0xcUXONslswOEZE7pC9tUy
eAkc+oycAt2Lidni3VfRLbwJf5T90GhQlv93E7SdsJCSXhElhGA2AQBYEca0HgpbyaPw6lmSFCKUbpHP7EugFlw
JOU3UbAbOVruO8Xp62yE5B+TMzdTM46KhhSxur1s3+y3dHpAQBUcISz1AM8yh58ul0tbXlsv0Bwkz5nb5Lu
11F4xL99aTLf7Wqwp1VU+7Njk7RJPYJ5EkaGPTthwMPTap7SsiqM/cbv0FgsmolpnYFvpf9uRxCTqDosh32t
v3LBwwl7hYwzme0ZBKHDWRKv3CjX33j2nzWmpBenKmvFPD/Nb68UkVfGbk/EUJQ2G27rcV4f5FaScCib
Ng6DvqrdL2agmCMZclCraHpgzYLRjPUWdHHp4R5Z2S/iE/VN9lu+e0NUODvkV5kNAPyBIDvByeneL48cfX
knstR0w5Y81wa+Ag2zyU1YLLGJJa9PI2AIs8lxCiaQicW2PaUkMzGeVinBMGG33Z3X4YC0s9+IKPnKWgwkDN
OoGhQ4bmsNaKpG3k8KxZemCSAFmkS7O7MwaWM6D/Mfugc2uUx2iSckvL9YHyi3gQlrj2WVaUnxXCE04
lf6vYq1FCG40xbUC1UHNiyrdbbwaCSadNAeL2AAkv3NbXZg4+hrB5PdOPMkocqfu9UCC4AfjRnwFQlld23lg
n7QxblA4MAfbEA1BuBRUawlfANJPauqJOE+mqjVoMvJ2DIIYIO7NzsS2pDBeeCgRPcM5dbY1V4avhCkAk3
SP9aV4Da34vTfVQH74gyQEam3N0MviVq2MYdJ71vl7DCz/mO12Gf0he+Jfo7rTu4Wejv2xxIEhQnuCW7u
Nd+WphoX25VbrrVD+9BgoueFyS98qXOo24OCBko4+ZhAVX7d1xM1vqG0+t28ofjiR6ZqzhB28SZ4azV2k0
Wlw4coHV0YnETv+SNOVU7jQUtpHZiw0nM0IKD0k4xNzmH7QfrRU7ROcIDwqSPE8oL5TTZnu+gdy9r58ljS
6o484JyhwYAAjPVJ6KRHWPI4V4XWHZF36aoPFaGUwwhDoVRLJ1z6tUTW4mK5J+g93JELBsVM6VIAJZTC
WCyrboNuSDnfM5fpCqYy3L8PeVZx3IOjE1Erd4w=="
}
}
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

Parameter name	Description	Value(Mandatory/not)
cardnumberORUID		
1.adhaarNumber	The Adhaar Number of Customer who is doing the transaction and it requires to be authenticated using an algorithm “ VerhoeffAlgorithm”	In case of virtual id the adhaar number by default it should be 999999999999(12 9's) constant value.otherwise it should be adhaar number of customer(M)
2.indicatorforUID	Values are defined by bank	It is constant(value is '0')in case of adhaar payment, in case of virtual id please send the value as '2'(M)
3.nationalBankIdentificationNumber	This is the selected bank by Customer for performing the transaction.	
<u>requestRemarks</u>	If customer or merchant wants to send some remarks	
captureResponse	This response we receive it from the scanner dependent RD SERVICE , for any further information please refer the Scanner Dependent RD service documentation. These details will vary based on staging and production.	Should not change anything in capture response should send as it is.
<u>merchantLoginId</u>	Username or login id of the merchant which is registered with Fingpay	(M)
<u>superMerchantId</u>	Supermerchant id of the company	(M)which is shared by fingpay
primaryKeyId	Primary key which is sent in the first step of the transaction	(M)
encodeFPTxnId	Fingpay Transaction id which is sent in the first step of the transaction	(M)

RESPONSE PARAMETERS :

```
private boolean status;
private String message;
private Object data;
private long statusCode;
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

SAMPLE SUCCESS RESPONSE:

```
{
  "status": true,
  "message" : "EKYC Completed Successfully", "data": null
  "statusCode": 10000
}
```

SAMPLE FAILURE RESPONSE:

```
{
  "status": false,
  "message" : "Error message",
  "data": null
  "statusCode": 10004
}
```

5. ENCRYPTION METHODS FOR JAVA

Generating Hash

```
public byte[] generateSha256Hash(byte[] message) {

    Security.addProvider(new org.bouncycastle.jce.provider.BouncyCastleProvider());

    String algorithm = "SHA-256";

    String SECURITY_PROVIDER = "BC";

    byte[] hash = null;

    MessageDigest digest;

    try {

        digest = MessageDigest.getInstance(algorithm, SECURITY_PROVIDER);

        digest.reset();

        hash = digest.digest(message);

    } catch (Exception e) {
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
        e.printStackTrace();
    }
    return hash;
}
```

Generating Session Key

```
private static final String JCE_PROVIDER = "BC";

private static final int SYMMETRIC_KEY_SIZE = 128;

static {
    Security.addProvider(new BouncyCastleProvider());
}

public static byte[] generateSessionKey() throws NoSuchAlgorithmException, NoSuchProviderException
{
    KeyGenerator kgen = KeyGenerator.getInstance("AES", JCE_PROVIDER);

    kgen.init(SYMMETRIC_KEY_SIZE);

    //SecretKey key = kgen.generateKey();

    return kgen.generateKey().getEncoded();
}
```

Encrypt Using Session Key

```
public static String encryptUsingSessionKey(byte[] skey, byte[] data) throws
InvalidCipherTextException {
    PaddedBufferedBlockCipher cipher = new PaddedBufferedBlockCipher(new AESEngine(),
new PKCS7Padding());

    cipher.init(true, new KeyParameter(skey));

    int outputSize = cipher.getOutputSize(data.length);

    byte[] tempOP = new byte[outputSize];

    int processLen = cipher.processBytes(data, 0, data.length, tempOP, 0);
}
```

```
        int outputLen = cipher.doFinal(tempOP, processLen);  
        byte[] result = new byte[processLen + outputLen];  
        System.arraycopy(tempOP, 0, result, 0, result.length);  
        return Base64.encode(result).replace("\r\n", "");  
    }
```

Encrypt Using Public Key

```
public static String encryptUsingPublicKey(byte[] message){  
    byte[] ciphertextBytes = null;  
    try {  
        // The source of randomness  
        SecureRandom secureRandom = new SecureRandom();  
        Security.addProvider(new org.bouncycastle.jce.provider.BouncyCastleProvider());  
        // Obtain a RSA Cipher Object  
        Cipher cipher = Cipher.getInstance("RSA/ECB/PKCS1Padding", "BC");  
        // Loading certificate file  
        String certFile = "public certificate file path";  
        InputStream inStream = new FileInputStream(certFile);  
        CertificateFactory cf = CertificateFactory.getInstance("X.509");  
        X509Certificate cert =(X509Certificate)cf.generateCertificate(inStream);  
        inStream.close();  
        // Read the public key from certificate file  
        RSAPublicKey pubkey = (RSAPublicKey) cert.getPublicKey();  
        // Initialize the cipher for encryption  
        cipher.init(Cipher.ENCRYPT_MODE, pubkey, secureRandom);  
        // Encrypt the message  
        ciphertextBytes = cipher.doFinal(message);  
    }
```

```
        return Base64.encode(ciphertextBytes).replace("\r\n", "");
    } catch ( IOException e ){
        System.out.println( "IOException:" + e );
        e.printStackTrace();
    } catch ( CertificateException e ){
        System.out.println( "CertificateException:" + e );
        e.printStackTrace();
    } catch ( NoSuchAlgorithmException e ){
        System.out.println( "NoSuchAlgorithmException:" + e );
        e.printStackTrace();
    } catch ( Exception e ) {
        System.out.println( "Exception:" + e );
        e.printStackTrace();
    }
    return null;
}
```

6. XML PID OPTIONS FOR EKYC

```
"<PidOptions ver=\"1.0\"><Opts env=\"P\" fCount=\"1\" fType=\"1\" iCount=\"0\" format=\"0\"
pidVer=\"2.0\" timeout=\"15000\" wadh=\"E0jzJ/P8UopUHAieZn8CKqS4WPMi5ZSYXgfnlfkWjrc=\"
posh=\"UNKNOWN\" /></PidOptions>"
```

Note: Above PID option must be sent to RD service to invoke the scanner and capture the fingerprint.

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

7.EKYC Status Check API

URL: <https://fpekyc.tapits.in/fpekyc/api/ekyc/status/check>

HEADERS :

trnTimestamp : It is used to verify timestamp of the device.

hash : Should send the hash generated by using below method.

Generated json model+security key provided by fingpay for the merchant id+timestamp of the current transaction

Concatenate above mentioned value and generate a hash using SHA-256 algorithm.

Base64 encoding must be done after generating hash.

Encryption method sample code is provided in the document at the end.

Body : Generated plain json is sent in the body.

Sample Headers and Body :

```
trnTimestamp = 29/11/2017 15:24:47  
hash = ixV3GdhMyrTm3aacQXRft1C8uL4doDUJVBWmSOl1vxc=
```

Body:

```
{  
  "merchantLoginId": "keerthi",  
  "superMerchantId": 2  
}
```

PARAMETERS TO BE POSTED :

```
private int superMerchantId;  
private String merchantLoginId;
```

Parameter name	Description	Value(Mandatory/not)
superMerchantId	Integer value of the company provided by company	(M)
merchantLoginId	Username or login id of the merchant which is registered with Fingpay	(M)

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

SAMPLE JSON :

```
{  
  "superMerchantId": 2,  
  "merchantLoginId": "keerthik",  
}
```

RESPONSE PARAMETERS :

```
private boolean status;  
private String message;  
private Object data;  
private long statusCode;
```

SAMPLE SUCCESS RESPONSE:

```
{  
  "status": true,  
  "message": "Ekyc Done Successfully",  
  "data": null,  
  "statusCode": 10000  
}
```

SAMPLE FAILURE RESPONSE:

```
{  
  "status": false,  
  "message": "Ekyc Not Yet Done. Merchant didn't respond after OTP Sent Successfully",  
  "data": null,  
  "statusCode": 10016  
}
```

PRODUCT API DOCUMENT

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

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AEPS CASH WITHDRAWAL API

Version: 1.20

Date: 29/04/2020

Author: Shruthi P

API FOR CASH WITHDRAWAL

For java and .net:

URL: <https://fingpayap.tapits.in/fpaepsservice/api/cashWithdrawal/merchant/withdrawal>

For php:

<https://fingpayap.tapits.in/fpaepsservice/api/cashWithdrawal/merchant/php/withdrawal>

HEADERS :

trnTimestamp: In this field timestamp of the transaction must be sent.

hash : Generated JSON must be encrypted using SHA-256 algorithm and converted to BASE64 which is to be sent in hash header

deviceIMEI : In case of web you need to send the scanner's serial number which is integrated in your system for performing transactions, based on the IMEI will assign the terminal.

eskey :

- First a session key is generated using AES-128 algorithm of the BC provider
- Session key is Encrypted using public key(**which is provided by Fingpay**) with the algorithm RSA/ECB/PKCS1Padding of BC provider
- Generated encrypted data must be converted to BASE64 which is to be sent in **eskey**.

Body:

- JSON is Encrypted using session key , generated while eskey generation.
- Generated encrypted data must be converted to BASE64 which is to be sent in **body**.

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

Sample Headers and Body :

trnTimestamp = 29/11/2017 15:24:47

hash = ixV3GdhMyrTm3aacQXRft1C8uL4doDUJVBWmSOl1vxc=

deviceIMEI = 352801082418919

eskey=cM1C5gd2ugAgcyDMNAHmW4cNeBHHxOfwZ7HvyNTD6l2MV09CIZVOEMT9uyfHtGLrco
DXD7V8M+ZeGSivJ4sbedwJvTXr8wAHedfeZoHi4qUMXC8XFaoHrr+qYVc2+trJbGanY2e8pMLrPD
oTKrRh2NVwGBH+Z0VF5cV6aai2nLH4WdTV+EEXy+FTf3B1DzPqybSuP1Upe76VQNLXYQrdbp28n
Dvewk2dyBgKFHCmp26eNtZ0RaH3upbMoqHxPWhCgk/6cjD0Gx73zXVKSv/k1hB9kD1n8qW77h
bLGKqNFZSaABk3OcfprFNY5Xpu53jhn/3E8jISWF080AwWF08RRqBiWucFMPvACWc0Xiic+ei6ZW
KOGcfKln1ZWZrPHfJlckO0TAZOTr47Jk18olrGyP86lBfOT/EC8z3zKPCQn2woryhCWrgYzXtPWQ7
EniBLUKRU1TUwkfEkeB/uG9zFL3NI3lTK0y5ejwk3UDggygv4Y/3GjB1AtXHZT9j7D20CFT/JTUI/J1u
pu1ADMaH+ndWNKYDj6JH0V2i9jHb7wWoAnQbkcy7ywFTPX5O/E6oFi0Tb5xOHxxUx6d6sd2gu8
gwos6N5ijetFSST2i+5NzVYEDurlCfr7cupcdiTMjb0Oqrv5ouCVGMA/jw2WcYu0aT3ZlBgyk=

Body:

ngW07ebihM9cb4M8HeWVBnUohq81wLlwoVbIA7tTdfSCzceNoIDADOAfXaitH8WltONdJXiaUw
mKNZBCwnwVxm1e2eayJrEY8sNjyUWtVmOxXhefmDcK6/Hch4XwG9+Imzua2WiYQAoFq5+6+B2
tL2Lo5d60SOyIFMjFBrU3szJcvW/8lftpgQENOOi7Z5sURbaXRak4hwqZnl5+piCaxDUGZ5qRJBZ1Xrg
OZcleP7LxEp3DcdnYYiDNDXPyCy9sb0Uoda72nFieQluwEE/VFlw04O7WwvFRhuWbMp/sPzPIVyw
wxft4xo2cbZPVBllZ2YvTDG1CVCSHGK6NPFOfKVatfUn+Jh/grBskNB0Gxy0JkvWnxdfyIs5eSDiKvF
HLiCULdK8PB+kEE05XzaBt9NSC4EaL983xh512Ox6XF68IY+fSReap5rCGy4q7xLisZRZeKSNj4uZvZ5
xceb4JknYHmyvDCfLJ1KkkGXrT/s9mo72dSI0mQTYIMkICjy+uUgbG4MYpzNsiNxtK+w/fZOzARYhs
KQbyum98Gx9ziHEVwHBkiT16RyhHwyrXXp5qjom0OKXePr/Weg8ukXbZBS/aFeL42reRQ54CB1IF
eM2o930t/aR24roCIMHbOgArBzjqWxO21Ha2dpPtOfO5nTC2Vs800ufXQZmzQHt/rvRRrQvzXaf/
Nuk8j3G4AHNTGEM+Kv/8sfvKkRmJJAj6A1hnm4av10Ux9I/XK4OYCWzHY0xST6rE6cnsV2wm/lwG
ajnoTwSBkj0YLexCZGN7CXgOD5WCMM5sTp77o2khvXk58ZO337tjSMHk3HaLRAiqHnZCNxaelpN
TGpibNF4BrpBTr0ztaKXRQEZ1rEF87W531Uoalrib/Bi0TIlgcE2KLrHA31wcoGU5n6b+uCk+pZ1KXP
UcrCySFDhBXuYD/DigbzDuZb2iAjdktEE7Ur+JHYQTkNKE20/Mc5Gz98uvyZc+X6HpLcKOF7tRtVIsP
mdEavDo0raCJyf+7Jw2kZkpahYO64RjBFyxWbDbr38KpirYsKXEXiXfy2ZEX6jShpIX/qu08Aya2iPzDp
zq+CNGOGpiPmRwlGjEOD5xnCoUnOJtXfqpbaFTAU630T8tKx6KPJNosnI8qXeZptYEMsVGjJwhgja
538ehFXVEtka/Wg6hipJAKh9nRQqhaUpBixDbXK/DvJiMR4Gh5DFqQSK2VLfW6CcQmTIJ8rVEGniX
ZsDfW+egRgmMR1UOwtfNevTn2ljYpx2kT+0FNBVniQ4C5r6mLsIQ6WulGZPUguQWOOmR2d72G
xO/TFbw5rRgKDoS7qamGbQsu0YZwgXkHcj1bgKWXM7D/475gq/++Fh/GKO/c22HutDUWi6NJ
HkYfDBP+lJXeyKksU1uPy8Tut6qjOnczDFryYL4B62nqly4IWkjbvqJT3Sr7p5jHsFdX6weHSjw86AwX

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

udnW91OnrbmYi1tNwBoHNKV3NzieKJ+myrZDbEMIsahD1rDYF7kOnub3kJ4SHKXv3mxoUHvnch
qJNCmQhPJ0+Ds+ZGk0sDkGu8vxdFperA8twSBCHs4pdM4DBD61nUk21HUaFaq7rNRfWUa9yKGj
ow7wsdKi/GGy2iW9g7JTQmWBZ8elh4QOQFzOvXeJ=(This data is larger than this example given

PARAMETERS TO BE POSTED :

```
private P2CardnumberORUID cardnumberORUID;  
private String mobileNumber;  
private String paymentType;  
private String timestamp;  
private String transactionType;  
private double latitude;  
private double longitude;  
private String requestRemarks;  
private String deviceTransactionId;  
private CaptureResponse captureResponse;  
private String languageCode;  
private double transactionAmount;  
private String merchantTranId;(For cash withdrawal)  
private String merchantTransactionId(For balance enquiry)  
private String merchantUserName;  
private String merchantPin;  
private String superMerchantId;
```

cardnumberORUID(Under cardnumber or uid there are 4 other parameters)

```
private String adhaarNumber;  
private int indicatorforUID;  
private String nationalBankIdentificationNumber;  
private String virtualId;(only if you are sending virtual id)
```

captureResponse(Under capture response below are the parameters)

```
private String errCode;  
private String errInfo;  
private String fCount;  
private String fType;  
private String iCount;  
private String iType;  
private String pCount;  
private String pType;  
private String nmPoints;
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
private String qScore;  
private String dpID;  
private String rdsID;  
private String rdsVer;  
private String dc;  
private String mi;  
private String mc;  
private String ci;  
private String sessionKey;  
private String hmac;  
private String PidDatatype;  
private String Piddata;
```

(M) defines that that is mandatory field.

Parameter name	Description	Value(Mandatory/not)
cardnumberORUID		
1.adhaarNumber	The Adhaar Number of Customer who is doing the transaction and it requires to be authenticated using an algorithm “VerhoeffAlgorithm”	In case of virtual id the adhaar number by default it should be 999999999999(12 9’s) constant value.otherwise it should be adhaar number of customer(M)
2.indicatorforUID	Values are defined by bank	It is constant(value is '0')in case of adhaar payment, in case of virtual id please send the value as '2'(M)
3.nationalBankIdentificationNumber	This is the selected bank by Customer for performing the transaction.	The IIN list can be fetched from (ie, merchant bank details URL AEPS- https://fingpayap.tapits.in/fpaepsservice/api/bankdata/bank/details

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

		Adhaar pay https://fingpayap.tapits.in/fpaepsservice/api/bankdata/bank/aadharpay (M)
4. virtualId	Virtual id of the customer and should be verified with verhoeff algorithm	Virtual id of the customer it should be 16 digit value
mobileNumber	Mobile number of the customer	
paymentType	Unique code for different type of transactions	"B" (Constant for every transaction in aeps)(M)
transactionType	Type of the transaction	BE-Balance enquiry(M) CW-Cashwithdrawal(M) M-Adhaarpay(M)
Latitude	Latitude of the place where transaction is happening	(M)
Longitude	Longitude of the place where transaction is happening	(M)
<u>requestRemarks</u>	If customer or merchant wants to send some remarks	
captureResponse	This response we receive it from the scanner dependent RD SERVICE , for any further information please refer the Scanner Dependent RD service documentation. These details will vary based on staging and production.	Should not change anything in capture response should send as it is.
transactionAmount	Amount of the transaction entered by customer or merchant	Amount of the transaction
languageCode	Every language is defined with a code.	en is for english(M)
subMerchantId	Submerchant id is used when user is using only single merchant id and pin, in place of sub merchant id customer needs to send the merchant loginid of their company.	SubMerchantid should not be passed
MerchantTranId (For cashwithdrawal)	Client reference transaction id to check the transaction status. You must generate a unique merchantTransactionid every time while initiating a transaction.	
Timestamp	Timestamp of the transaction	(M)

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

<u>merchantTransactionId</u> (For balance enquiry)	This is your reference transaction id for you to check the transaction status. You must generate a unique merchantTxnId every time you are initiating a transaction.	(M)
<u>merchantUserName</u>	merchant login id of the merchant which is registered with Fingpay	(M)
<u>merchantPin</u>	Same Pin of the merchant passed at the time of onboardng.	Password must be MD5 hashed(M)
<u>superMerchantId</u>	Supermerchant id of the company	(M)which is shared by fingpay

SAMPLE JSON :

Encrypted JSON Payload for following plain sample JSON is to be sent

```
{
  "merchantTranId": "20171006100425",

  "captureResponse": {
    "PidDatatype": "X",
    "Piddata":
    "MjAxNy0xMC0wNlQxMDowNTowN3yUurFGz3Je+v4tjj64SRJwfxB5x5sayPZRqOOUX/EL4vzWh6
    R2XsObiuJNTqI2p8upDf7/teQ1LQCJKI8v3AlkIWsxOXOlncSVsSV2KRudCz0eKgPRxAh13stb3ZSXhk
    ynkZl/qocKOR9BLHlhvgeCWg0cf/GTmgMiJL3KzSM7RRcW0zPkkcp2tT4X+7fqXMu1p6XSqmAC6U
    Pofw1KusKSavufd9CegyUNkK8X2iDUMkPt7DyZKSvEdfN8csOjHgqeFUCVUI40uSoMGsSJGH38qd
    M8Q3MNPYtqTuObuU9bFQSD0TerXptDmeJMjNX0+F9lI3p40b11riPUR4I7EwtuFg/JG/NBWeOJfI6
    Jexz0onK8YYs4eqq550f/WEVgh1AyyV32bsf8zVGKqhmLBWcvlVFdYaaDW+IKCOI7yreHCig3TBe+z
    bV06Ecsze9xdH5cy1o0gHRB2mAzLir+EyqaIn4aXEQ0dm2pwUjICKanSOVrYP2A6J7+bncxUMeZRI
    qB30aLNdrDLOsGNgzrRM7aRRnLEX+aGsMQjKnpo9ZehWnVIXI3x2aMfwLXJ+QpCAeIHsd3Q5Aik1
    ZLnFhRHxSP/qbAnfpelnMRz+AeKGDdbUuGdfJGzsfUhmzn5IstIjFJ0hliQrIIJdGyPL6+pJnKew+OifnP
    Nqi79nF/cAk7WKJr+yAhzPOYu4gsb+tx3d/Izkn+UiXaUpzEikBTfJ+VJ9rG1d+IJTZlmzYrDxOhkDY7Z
    WB9YSLtTkcaZAnc2IqRvSi+FXmXm/4vsvYUPLrw+rmFRwqQtzMSThEC3lxWZQXlxyA0N5EGujMoG
    EZIAle6uqfG6RhguDgVJqCbR4BoVIOOYcQipoS7wKMMyQdtfhVORKotV4x7hH1bXyyf7eekocfpSzs
    RUVzSU+3YAUi89neOdaHMcL9jPGncG9AKtL8hVr0wF7iwl+f9OdIh1ubUHKO+29xrCizELa21wdVm
    mKfLlJVU2YEjFmFDu4Ozl6eTEPTQLaysrJHSSu/DHAdWXg4FHTL+j5RaRIba41bbUOR+9caWz5bDOi
    p+vsSUNoGVUC6XBNYgiFy9Kj6Dy1B1zizGEDqd/DkSRONk1ISqOmWnTsUfWX9CwokI5Ho1bqodK
    ZrA1Ng/ozNcpVMNLxVagi3PWztEqbVjAQydGbBJjXaQ6c4HcQ2D5XqtumI4uZUt8d6XOR2W58mZ
    9cWk17gCfoT0M3kn8zIbprPTNaOfFvFcR4wOox1dwj4Q1I/k29ktpVwEMLGVytr1jB+zysbE+IKnRb
    4/b9PYSQXxURFpyyESZtszM3xwyBBCBgIWspNeysT1xM/KA\u003d\u003d",
  }
}
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
"ci": "20191230",
"dc": "83017feb-b271-460b-92e8-6e12a3a0189e",
"dplD": "PRECISION.PB",
"errCode": "0",
"errInfo": "Image Capture Success",
"fCount": "1",
"fType": "0",
"hmac": "9ZqjrXUjxGTSQsngxUHDpBYqBhOBNARldRKM rHCq7c+yImkLOxMkSQBWmihMPrx3",
"iCount": "0",
"mc":
"MIIEBDCCAuygAwIBAgIlfc0if0pbK5gwDQYJKoZIhvcNAQELBQAwdgxNzA1BgNVBAMTLkRTIFBy
ZWNpc2lvbiBCaW9tZXRYaWMgSW5kaWEgUHJpdmF0ZSBMaW1pdGVkIDExIzAhBgNVBDMTGjlyI
EhhYmlidWxsYWggUm9hZCBUIE5hZ2FyMRAwDgYDVQQJEwdDaGVubmFpMRIwEAYDVQQQEwIU
YW1pbG5hZHUxETAPBgNVBAsTCFNVZnR3YXJIMTIwMAYDVQQKEylQcmVjaXNpb24gQmlvbWV0
cmllEluZGlhIFByaXZhdGUgUGltXRIZDELMakGA1UEBhMCSU4wHhcNMTcxMDA1MDkzNDU2W
hcNMTcxMTA0MDkzNDU2WjBuMTIwMAYDVQQKDClQcmVjaXNpb24gQmlvbWV0cmllEluZGlhI
FByaXZhdGUgUGltXRIZDESMBAGA1UECwwJQmlvbWV0cmllMRAwDgYDVQQQHDAAdSEVOTkFJ
MRIwEAYDVQQDDAIQcmVjaXNpb24wggeEiMA0GCSqGSIb3DQEBAQUAA4IBDwAwggEKAoIBAQC
OGiylA1TyPN3tUU+wx/s4hAT6OHhpJS+61dz3k4ihXIBTgmWJs5NddO4HjpT8FI3z0SQn6aykOMzH
gBpiznj2sgv9iioKzGntqZo0LJdBNJ2997cf7mNIEeMaZXdQhMKQU7Xff9pDT074U/ygJ7OtXqK1jW
db+OhAY0V0sTTXFSiTSuk2YziL3MFWS1aHILU5N7I6h9CqyztoiGwn5d/1rbTk3/KdrllwziYUBZZ9CK
8PCc/oiIIEBD9oDg/CK2H+KkpKChMsXzOv0B9KvsW12iWvgrLhPYHtU+ni7465EVvYPCsYOxev1qQ
qs4B2GvECxo6kyQLqgjx4wlcGLHx5AgMBAAGjOzA5MAkGA1UdEwQCMAAwCwYDVR0PBAQDAg
GGMB8GA1UdIwQYMBaAFLU1sKRXC/kwcet03DIXvSifcyhnMA0GCSqGSIb3DQEBCwUAA4IBAQB
FsnoA2UtugIE+kKwY3GdUlKv6bj0oyhbaHFwi8ewR/WI1abdertApefLmk0Aa+5PFya+KaZCWkZIDK
ORlJ1J624yXS+Yh3NnbWOieBKfeax31h6peytMgd85adqxhiEowYTHWJ/PkSku+AFGieMlLtZDlcy/C
Vvs5l4CcHvjLsrhdowwOUli4v1OS9zKaRgwp/bzhP0ZuDw7JjaqzFIKwwbi+6cs3HLPvTBAGeED5Oe
wFsTxaZnJa0Skqgoi0VQYlurRf50AOG3/bP0Osh6MWylQZRluNI3A7jxz3sDqsBW+welq4Qj8A5d97
/7ctQNKe6/PGVpNop3W2dgJS9Fut",
"mi": "PB400",
"nmPoints": "46",
"pCount": "0",
"pType": "0",
"qScore": "100",
"rdsID": "PRECISION.AND.101",
"rdsVer": "1.1.0",
"sessionKey":
"M1++JGFa/Vp4szTGOFK0G3NNsVqGo0ffD4xnBf5QZO8TKO02ap9eWN6ZpTcXrkM+VlyJ0DZkQf
CcrJlCAlh49Mw9a6wcipIJ0IS+wGN6szA1LH85c7Ciem/HNVGW7GH9u21cfSpnEmXIBKtfd5IULTnO
VPF7PfufgFCXC3rSsX8zWOogBEZmKP6eiyw3+gqRb10NyKn90qJGLioBcMaNPt32r5kW2ppne07A
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
TQLuWZqLdhzVX1tHimCTjm5NchQIAFjrjBKWVVGdEIZ44VJEeyTa+A6J/Fp4n/8whidnYob+XKQ8/
PvEsu6oSXRwiL1N7QGP8RP48+S57mzlWw\u003d\u003d"
},

"cardnumberORUID": {
  "adhaarNumber": "123443211234",
  "indicatorforUID": 0,
  "nationalBankIdentificationNumber": "600334"
},

"languageCode": "en",
"latitude": 13.0641367,
"longitude": 80.2480973,
"mobileNumber": "9952396587",
"paymentType": "B",
"requestRemarks": "TN3000CA0006530",
"timestamp": "06/10/2017 10:05:24",
"transactionAmount": 1.0,
"transactionType": "CW",
"merchantUserName": "sai",
"merchantPin": "81DC9BDB52D04DC20036DBD8313ED055",
"subMerchantId": "SUB1234",
"superMerchantId": "2",
}
```

RESPONSE PARAMETERS :

```
private boolean status;
private String message;
private Object data;
private long statusCode;
```

data :

```
private String terminalId;
private String requestTransactionTime;// dd/MM/yyyy HH:mm:ss
private double transactionAmount;
private String transactionStatus;
private double balanceAmount;
private String bankRRN;
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
private String transactionType;  
private String fpTransactionId;  
private String merchantTxnId;
```

Parameter name	Description
terminalId	Terminal assigned while performing a transaction
requestTransactionTime	Requested timestamp of the transaction
transactionAmount	Amount entered by the customer
transactionStatus	Status of the transaction either success or false
balanceAmount	Balance amount of the customer in his account which we receive in response from the bank
bankRRN	Unique id generated by bank which we will receive in the response from bank
transactionType	Transaction type sent by client
fpTransactionId	Transaction id generated by Fingpay
merchantTxnId	Merchant transaction id sent by client
errorCode	Error code received from bank in response in case of failure
errorMessage	Error message will be fetched from the table

SAMPLE SUCCESS RESPONSE:

```
{  
  "status": true,  
  "message": "Request Completed",  
  "data": {  
    "terminalId": "FA012123",  
    "requestTransactionTime": "01/01/2018 23:59:59",  
    "transactionAmount": 101,  
    "transactionStatus": "SUCCESS",  
    "balanceAmount": 200 ,  
    "bankRRN": "765765656857" ,  
    "transactionType": "CW",  
    "FingpayTransactionId": "CW00010291117175529",
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
"merchantTxnId":"123221",
"responseCode":"00"
},
"statusCode": 10000
}
```

NOTE: Should consider the transaction success only when you receive bank RRN and response code as "00"

SAMPLE FAILURE RESPONSE:

```
{
  "status": false,
  "message": "Fingerprint did not matched with Aadhaar, please try another finger",
  "data": {
    "terminalId": "FA274530",
    "requestTransactionTime": "01/05/2020 00:04:32",
    "transactionAmount": 590.0,
    "transactionStatus": "failed",
    "balanceAmount": 0.0,
    "bankRRN": "012200836920",
    "transactionType": "CW",
    "fpTransactionId": "CWBD0491833010520000431984I",
    "merchantTxnId": "1588271670690",
    "errorCode": "U3",
    "errorMessage": "Fingerprint did not matched with Aadhaar, please try another finger",
    "merchantTransactionId": null,
    "responseCode": "U3"
  },
  "statusCode": 10004
}
```

Note: Merchant PIN passed at the time of transaction should match with Pin passed at the time of onboarding in order to initiate the transaction.

SubMerchantid should not be passed

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

1.a AEPS CASH WITHDRAWAL STATUS CHECK API:

URL:

<https://fingpayap.tapits.in/fpaepsweb/api/auth/merchantInfo/statusCheckV2/merchantLoginId/cashWithdrawal/v2>

Request object:

```
private String merchantTranId ;  
  
private String hash;  
  
private String merchantLoginId;  
  
private String merchantPassword;  
  
private int superMerchantId;  
  
private String superMerchantPassword;
```

Parameter name	Description	Value of the parameter
merchantTranId	This is your reference transaction id for you to check the transaction status. You must generate a unique merchantTxnId every time you are initiating a transaction.	It can be anything which is unique for every transaction(integer and alphabet) (M)
merchantLoginId	Login id of the merchant who is doing the transactions and already registered in the Fingpay system	Loginid of the merchant whose transactions you want to status check.(M)

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

merchantpassword	Merchant password is the pin of merchant	It should be md5 hashed and used in generation of hash which is provided by fingpay team.(not mandatory)
superMerchantId	Integer id of the supermerchant	It is provided by fingpay team(M)
superMerchantPassword	Super merchant password is the password of supermerchant	It should be md5 hashed and used in generation of hash which is provided by fingpay team.

Hash generation logic:

```
hash=base64.encode(SHA256(concat(Merchantransactionid,+,merchantloginid,+,Supermerc  
hantLoginid
```

- Concatenate the merchantransactionid,"+" symbol and merchantloginid,"+" symbol and supermerchant loginid generated string must be converted to lower case and encrypted using SHA-256 algorithm and converted to BASE64 which is to be sent in hash

Sample hash string:

Merchant transaction id+ Merchant login id+ Supermerchant login id

Example: "271832+fingpay1234 +fingpayd"

NOTE: Merchant transaction id should be in the same case/format as passed at the time of transaction. Other fields must be in lower case.

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

Sample Request

```
{"merchantLoginId":"FINGPAY1234","merchantPassword":"e6e061838856bf47e1de730719fb2609","superMerchantId":2,"superMerchantPassword":"796c3ee556ac31f3754a38cfd15b8044","merchantTranId":"123456","hash":"oeFNf527cE911LaCzS9wiYBo/7E5C7QsvwHqrAykpyU="}
```

Response Object:

```
private boolean apiStatus;  
  
private String apiStatusMessage;  
  
private Object data;  
  
private long apiStatusCode;
```

data:

```
private String fingpayTransactionId ;  
  
private String stan ;  
  
private String bankRRN ;  
  
private String transactionTime;  
  
private String merchantTranId ;  
  
private boolean transactionStatus;  
  
private Double transactionAmount;  
  
private String transactionStatusCode;  
  
private String transactionStatusMessage;  
  
private String remarks;  
  
private double balanceAmount;  
  
private String aadhaarNumber;  
  
private double latitude;
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
private double longitude;  
private String mobileNumber;  
private String deviceIMEI;  
private String bankName;
```

Parameter name	Description
remarks	Remarks if anything sent while doing transaction will be posted back
TransactionTime	Requested timestamp of the transaction
transactionAmount	Amount entered by the customer
transactionStatusCode	Status of the transaction either success or false
bankRRN	Unique id generated by bank which we will receive in the response from bank
stan	Unique id of the transaction generated by fingpay
fingpayTransactionId	Transaction id generated by Fingpay
merchantTranId	Merchant transaction id sent by client
Transaction statusMessage	Error message corresponding to the error codes are sent
TransactionStatusCode	Depending on the transaction error codes will be sent
balanceAmount	Balance amount of the customer in his account which we receive in response from the bank(You should format it last two digits are paise
Aadhaar number	Aadhaar number of the customer
latitude	Latitude where the transaction initiated
longitude	Longitude where the transaction initiated
Mobile number	Mobile number of the customer
deviceIMEI	IMEI of the device where transaction initiated

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

bankName	Customer bank name for the transaction
-----------------	--

Sample Success Response

```
{
  "apiStatus": true,
  "apiStatusMessage": "Request Completed",
  "data": [
    {
      "fingpayTransactionId": "CWBT0188562290320175721697I",
      "stan": "206608",
      "bankRRN": "008917949303",
      "transactionTime": "29-Mar-2020 17:57:00",
      "merchantTranId": "271832",
      "transactionStatus": true,
      "transactionAmount": 200,
      "transactionStatusCode": "00",
      "transactionStatusMessage": "Success",
      "remarks": null,
      "balanceAmount": 950,
      "aadhaarNumber": "xxxxxxxx8545",
      "latitude": 27.71967971,
      "longitude": 79.65111144,
      "mobileNumber": "9198544958",
      "deviceIMEI": "869090047367116",
      "bankName": "Punjab National Bank"
    }
  ],
  "apiStatusCode": 10000
}
```

Sample Failure Response :

```
{
  "apiStatus": false,
  "apiStatusMessage": "No data available for the requested data.",
  "data": null,
  "apiStatusCode": 0
}
```

```
}
```

*** API will return "transactionStatusCode": "FP009" for "Transaction Response pending" when there is no response for the particular where you need to do status check of the transaction again**

1.b AEPS CASH WITHDRAWAL CALL BACK API (if transaction API is used no call back API is required)

URL: To be given by the partner.

For every transaction there will be two callbacks one is initiation callback and one is status callback.

1.In initiation call back some fields are not posted in the callback as the transaction is not posted to bank yet, in the transaction status field in initiation callback will send "I" which means initiated.

2.In status callback all the fields are posted back,including terminal id,bank rrn and in the transaction status field will send "s" if the transaction is success,"f" if the transaction is failure.

We post the below parameters to the client provided url,

- Ip address from which the transaction is initiated is posted back.
- IMEI from where the transaction is initiated is posted back

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

- Others parameters are explained above in the cashwithdrawal api.

When it is success:

Initiation callback

```
{  
  "ipaddress":"223.189.160.192",  
  "amount":2700.0,  
  "transactionStatus":"I",  
  "merchantRefNo":"1020220190717082009",  
  "fpTransactionId":"CWB670117071908210018",  
  "aadhaarNumber":"xxxxxxx0210",  
  "typeOfTransaction":"CW",  
  "latitude":29.1481242,  
  "longitude":74.3781476,  
  "mobile":"9928779877",  
  "errorMessage":"","  
  "bankRRN":null,  
  "merchantName": "Fingpay Technology Private limited",  
  "terminalID":null,  
  "bankName":"Oriental Bank of Commerce",  
  "requestedTimestamp":"17/07/2019 08:21:18",  
  "merchantID":Fingpaym",  
  "deviceIMEI":"861454043441994"  
}
```

Success Status callback

```
{  
  "ipaddress":"157.42.162.61",  
  "amount":5000.0,  
  "transactionStatus":"S",  
  "merchantRefNo":"19717876810D898",  
  "fpTransactionId":"CWB194717071908070019",  
  "aadhaarNumber":"xxxxxxx3114",  
  "typeOfTransaction":"CW",  
  "latitude":25.9389863,  
  "longitude":85.3690081,  
  "mobile":"9006634006",  
  "errorMessage":"","  
  "bankRRN":873736345620,  
  "merchantName":"Bharat sharma",  
  "terminalID":null,  
  "bankName":"Bank of India",  
  "requestedTimestamp":"17/07/2019 08:07:19",  
  "merchantID":"8210827255",  
  "deviceIMEI":"359053095810608"  
},
```

Response Code : 200

When it is failure:

Initiaton callback

```
{  
  
  "ipaddress":"223.189.160.192",  
  
  "amount":2700.0,  
  
  "transactionStatus":"I",  
  
  "merchantRefNo":"1020220190717082009",  
  
  "fpTransactionId":"CWB670117071908210018",  
  
  "aadhaarNumber":"xxxxxxx0210",  
  
  "typeOfTransaction":"CW",  
  
  "latitude":29.1481242,  
  
  "longitude":74.3781476,  
  
  "mobile":"9928779877",  
  
  "errorMessage":"",  
  
  "bankRRN":null,  
  
  "merchantName":"Rupenet Technology Solutions Private limited",  
  
  "terminalID":null,  
  
  "bankName":"Oriental Bank of Commerce",  
  
  "requestedTimestamp":"17/07/2019 08:21:18",  
  
  "merchantID":"rupenetm",  
  
  "deviceIMEI":"861454043441994"  
}
```

Failure callback

```
{  
  "ipaddress":"157.42.162.61",  
  "amount":5000.0,  
  "transactionStatus":"F",  
  "merchantRefNo":"19717876810D898",  
  "fpTransactionId":"CWB194717071908070019",  
  "aadhaarNumber":"xxxxxxx3114",  
  "typeOfTransaction":"CW",  
  "latitude":25.9389863,  
  "longitude":85.3690081,  
  "mobile":"9006634006",  
  "errorMessage":"Fingerprint did not match",  
  "bankRRN":873736345621,  
  "merchantName":"Bharat sharma",  
  "terminalID":null,  
  "bankName":"Bank of India",  
  "requestedTimestamp":"17/07/2019 08:07:19",  
  "merchantID":"8210827255",  
  "deviceIMEI":"359053095810608"  
},  
Response Code : 200  
}
```


2.API FOR BALANCE INQUIRY

For java and .net

URL: <https://fingpayap.tapits.in/fpaepsservice/api/balanceInquiry/merchant/getBalance>

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

For PHP

URL: <https://fingpayap.tapits.in/fpaepsservice/api/balanceInquiry/merchant/php/getBalance>

HEADERS :

trnTimestamp: In this field timestamp of the transaction must be sent.

hash : Generated JSON must be encrypted using SHA-256 algorithm and converted to BASE64 which is to be sent in hash header

deviceIMEI : In case of web you need to send the scanner's serial number which is integrated in your system for performing transactions, based on the IMEI will assign the terminal.

eskey :

- First a session key is generated using AES-128 algorithm of the BC provider
- Session key is Encrypted using public key(**which is provided by Fingpay**) with the algorithm RSA/ECB/PKCS1Padding of BC provider
- Generated encrypted data must be converted to BASE64 which is to be sent in **eskey**.

Body:

- JSON is Encrypted using session key , generated while eskey generation.
- Generated encrypted data must be converted to BASE64 which is to be sent in **body**.

Sample Headers and Body :

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

trnTimestamp = 29/11/2017 15:24:47

hash = ixV3GdhMyrTm3aacQXRft1C8uL4doDUJVBWmSOI1vxc=

deviceIMEI = 352801082418919

eskey=cM1C5gd2ugAgcyDMNAHmW4cNeBHHxOfwZ7HvyNTD6l2MV09CIZVOEMT9uyfHtGLrco
DXD7V8M+ZeGSivJ4sbedwJvTxr8wAHedfeZoHi4qUMXC8XFaoHrr+qYVc2+trJbGanY2e8pMLrPD
oTKrRh2NVwGBH+Z0VF5cV6aai2nLH4WdTV+EEYy+FTf3B1DzPqybSuP1Upe76VQNLXYQrdbp28n
Dvewk2dyBgKFHCmp26eNtZ0RaH3upbMoqHxPWWhCgk/6cjD0Gx73zXVKsv/k1hB9kD1n8qW77h
bLGKqNFZSaABk3OcfprFNY5Xpu53jhn/3E8jISWF080AwWF08RRqBiWucFMPvACWc0Xiic+ei6ZW
KOGcfKIn1ZWZrPHfJlckO0TAZOTr47Jk18olrGYp86lBfOT/EC8z3zKPCQn2woryhCWrgYzXtPWQ7
EniBLUKRU1TUwkfEkeB/uG9zFL3NI3ITK0y5ejwk3UDggygv4Y/3GjB1AtXHZT9j7D20CFT/JTUI/J1u
pu1ADMaH+ndWNKYDj6JH0V2i9jHb7wWoAnQbkcy7ywFTPX5O/E6oFi0Tb5xOHxxUxFD6sd2gu8
gwos6N5ijetFSST2i+5NzVYEDurICfr7cupcdiTMjb0Oqrv5ouCVGMA/jw2WcYu0aT3ZlBgyk=

Body:

ngW07ebihM9cb4M8HeWVBnUohq81wLlwoVbIA7tTdfSCzceNoIDADOAfXaitH8WltONDJXiaUw
mKNZBCwnwVxm1e2eayJrEY8sNjyUWtVmOxXhefmDcK6/Hch4XwG9+Imzua2WiYQAofq5+6+B2
tL2Lo5d60SOyIFMjFBrU3szJcvW/8lftpgQENOOi7Z5sURbaXRak4hwqZnl5+piCaxDUgZ5qRJBZ1Xrg
OZcleP7LxEp3DcdnYYiDNDXPyCy9sb0Uoda72nFieQluwEE/VFlw04O7WwvFRhuWbMp/sPzPIVyw
wxFt4xo2cbZPVBllZd2YvTDG1CVCShGK6NPFOfKVatfUn+Jh/grBskNB0Gxy0JkvWnxdfyls5eSDiKvf
HLiCULDk8PB+kEE05XzaBt9NSC4EaL983xh512Ox6XF68IY+fSReap5rCGy4q7xLisZRZeKSNj4uZvZ5
xceb4JKNyHmyvDCfLJ1KkkGXrT/s9mo72dSI0mQTYIMkICjy+uUgbG4MYpzNsiNXtK+w/fZOzARYhs
KQbyum98Gx9ziHEVwHBkiT16RyhHwyrXXp5qjom0OKXePr/Weg8ukXbZBS/aFeL42reRQ54CB1IF
eM2o930t/aR24roCIMHbOgArBzijQWxO21Ha2dpPtOfO5nTC2Vs800ufXQZmzQHt/rvRRRQvzXaf/
Nuk8j3G4AHNTGEM+Kv/8sfvKkRmJJAj6A1hnm4av10Ux9I/XK4OYCWzHY0xST6rE6cnsV2wm/lwG
ajnoTWsBkj0YLexCZGN7CXgOD5WCMMS5Tp77o2khvXk58Z0337tjSMHk3HaLRAiqHnZCNxaelpN
TGpibNF4BrpBTr0ztaKXRQEz1rEF87W531Uoalrib/BI0TllgcE2KLrHA31wcoGU5n6b+uCk+pZ1KXP
UcrCySFDhBXuYD/DigbzDuZb2iAjdktee7Ur+JHYQTkNKE20/Mc5Gz98uvyZc+X6HpLcKOF7tRtVlsP
mdEavDo0raCJyf+7Jw2kZkpahYO64RjBFyxWbDbr38KpirYsKXEXiXfy2ZEX6jShpIX/qu08Aya2iPzDp
zq+CNG0GpiPmRwlGjEOD5xnCoUnOJtTXfqpbaFTAU630T8tKx6KPJNosnI8qXeZptYEMsVGjJwhgja
538ehFXVEtka/Wg6hipJAKh9nRQqhaUpBixDbXK/DvJiMR4Gh5DFqQSK2VLfW6CcQmTIJ8rVEGniX
ZsDfW+egRgmMR1UOwtfNevTn2ljYpx2kT+0FNBNiQ4C5r6mLsIQ6WulgZPUguQWOOMR2d72G
xO/TFbw5rRgKDoS7qamGbQsu0YZwgXkHcjm1bgKWXM7D/475gq/++Fh/GKO/c22HutDUWi6NJ
HkYfDBP+lJXeyKksU1uPy8Tut6qjOnczDFryYL4B62nqly4IWkjbvqJT3Sr7p5jHsFdX6weHSjw86Awx
udnW91OnrbmYi1tNwBoHNKV3NzieKJ+myrZDbEMIsahD1rDYF7kOnub3kJ4SHKXv3mxoUHvnch

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

qJNCmQhPJ0+Ds+ZGk0sDkGu8vxdFperA8twSBCHs4pdM4DBD61nUk21HUaFaq7rNRfWUa9yKGjow7wsdKi/GGy2iW9g7JTQmWBZ8elh4QOQFzOvXeJ=(This data is larger than this example given

PARAMETERS TO BE POSTED :

```
private P2CardnumberORUID cardnumberORUID;
private String mobileNumber;
private String paymentType;
private String timestamp;
private String transactionType;
private double latitude;
private double longitude;
private String requestRemarks;
private String deviceTransactionId;
private CaptureResponse captureResponse;
private String languageCode;
private String merchantTranId;(For cash withdrawal)
private String merchantTransactionId(For balance enquiry)
private String merchantUserName;
private String merchantPin;
private String subMerchantId;
private string superMerchantId;
```

cardnumberORUID(Under cardnumber or uid there are 4 other parameters)

```
private String adhaarNumber;
private int indicatorforUID;
private String nationalBankIdentificationNumber;
private String virtualId;(only if you are sending virtual id)
```

captureResponse(Under capture response below are the parameters)

```
private String errCode;
private String errInfo;
private String fCount;
private String fType;
private String iCount;
private String iType;
private String pCount;
private String pType;
private String nmPoints;
private String qScore;
private String dpID;
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
private String rdsID;  
private String rdsVer;  
private String dc;  
private String mi;  
private String mc;  
private String ci;  
private String sessionKey;  
private String hmac;  
private String PidDatatype;  
private String Piddata;
```

Explanation of the parameters is same as above description of each parameters as cash withdrawal API.

SAMPLE REQUEST :

Encrypted JSON Payload for following plain sample JSON is to be sent

```
{  
  "merchantTransactionId": "20171006100425",  
  
  "captureResponse": {  
    "PidDatatype": "X",  
    "Piddata":  
    "MjAxNy0xMC0wNlQxMDowNTowN3yUurFGz3Je+v4tjj64SRJwfxB5x5sayPZRqOOUX/EL4vzWh6  
R2XsObiujNTq12p8upDf7/teQ1LQCJKl8v3AlkIWsxOXOlncSvsSV2KRudCz0eKgPRxAh13stb3ZSXhk  
ynkZl/qocKOR9BLHlHvgeCWg0cf/GTmgMiJL3KzSM7RRcW0zPkkcp2tT4X+7fqXMu1p6XSqmAC6U  
Pofw1KusKSavufd9CegyUNkK8X2iDUMkPt7DyZKSvEDfN8csOjHgqeFUCVUI40uSoMGsSJGH38qd  
M8Q3MNPYtqTuObuU9bFQsd0TerXptDmeJMjNX0+F9Il3p40bl1riPUR4I7EwtuFg/JG/NBWeOJfl6  
Jexz0onK8YYs4eeqq550f/WEVgh1AyyV32bsf8zVGKhqmLBWcvlVFdYaaDW+IKCOI7yreHCig3TBe+z  
bV06Ecsze9xdH5cy1o0gHRB2mAzLir+EyqaIn4aXEQ0dm2pwUjICKanSOVrYP2A6J7+bnxUMeZRI  
qB30aLNdrDLOsGNgrRM7aRRnLEX+aGsMQjKnpo9ZehWnVIXl3x2aMfwLXJ+QpCAelHSd3Q5Aik1  
ZLnFhRHxSP/qbAnfpelnMRz+AeKGDdbUuGdfJGzsfUhmzn5IstIjFJ0hliQrllJdGyPL6+pJnKew+OifnP  
Nqi79nF/cAk7WKJr+yAhzPOYu4gsb+tx3d/lzkn+UiXaUpzEikBTfJ+VJ9rG1d+IJTZlmzYrDxOhkDY7Z  
WB9YSLtTkcaZAnc2lqRvSi+FXmXm/4vsyYUPLrw+rmFRwqQtzMSThEC3lxWZQXlxyA0N5EGujMoG  
EZIAle6uqfG6RhguDgVJqCbR4BoVlOOYcQipoS7wKMyQdtfhVORKotV4x7hH1bXyyf7eekocfpSzsU  
RUVzSU+3YAUl89neOdaHMcL9jPGncG9AKtL8hVr0wF7iwl+f9OdIh1ubUHkO+29xrCizELa21wdVm  
mKfLlJVU2YEjFmFDu4Ozl6eTEPTQLaysrJHSSu/DHadWXg4FHTL+j5RaRIba41bbUOR+9caWz5bDOi  
p+vsSUNoGVUC6XBNYgiFy9Kj6Dy1B1zizGEDqd/DkSRONk1lSqOmWnTsUfWX9Cwokl5Ho1bqodK  
ZrA1Ng/ozNcpVMNLxVagi3PWztEqbVjAQydGbBJjXaQ6c4HcQ2D5Xqtuml4uZUt8d6XOR2W58mZ  
9cWk17gCfoT0M3kn8zlbprPTnAoFfvFcR4wOox1dwj4Q1ll/k29ktpVwEMLGVytr1jB+zysbE+IKnRb  
4/b9PYSQXxURFpyyESZtszM3xwyBBCBgIWspNeysT1xM/KA\u003d\u003d",  
  }
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
"ci": "20191230",
"dc": "83017feb-b271-460b-92e8-6e12a3a0189e",
"dplD": "PRECISION.PB",
"errCode": "0",
"errInfo": "Image Capture Success",
"fCount": "1",
"fType": "0",
"hmac": "9ZqjrXUjxGTSQsngxUHDpBYqBhOBNARldRKM rHCq7c+yImkLOxMkSQBWmihMPrx3",
"iCount": "0",
"mc":
"MIIEBDCCAuygAwIBAgIlfc0if0pbK5gwDQYJKoZIhvcNAQELBQAwdgxNzA1BgNVBAMTLkRTIFBy
ZWNpc2lvbiBCaW9tZXRYaWMgSW5kaWEgUHJpdmF0ZSBMaW1pdGVkIDExIzAhBgNVBDMTGjlyI
EhhYmlidWxsYWggUm9hZCBUIE5hZ2FyMRAwDgYDVQQJEwdDaGVubmFpMRIwEAYDVQQQEwIU
YW1pbG5hZHUxETAPBgNVBAsTCFNVZnR3YXJIMTIwMAYDVQQKEylQcmVjaXNpb24gQmIvbWV0
cmIjIEluZGlhIFByaXZhdGUgTGltXRIZDELMakGA1UEBhMCSU4wHhcNMTcxMDA1MDkzNDU2W
hcNMTcxMTA0MDkzNDU2WjBuMTIwMAYDVQQKDClQcmVjaXNpb24gQmIvbWV0cmIjIEluZGlhI
FByaXZhdGUgTGltXRIZDESMBAGA1UECwwJQmIvbWV0cmIjMRAwDgYDVQQQHDAAdSEVOTkFJ
MRIwEAYDVQQDDAIQcmVjaXNpb24wggeEiMA0GCSqGSIb3DQEBAQUAA4IBDwAwggEKAoIBAQC
OGiylA1TyPN3tUU+wx/s4hAT6OHhpJS+61dz3k4ihXIBTgmWJs5NddO4HjpT8FI3z0SQn6aykOMzH
gBpiznj2sgv9iioKzGntqZo0LJdBNJ2997cf7mNIEEmaZXdQhMKQU7Xff9pDT074U/ygJ7OtXqK1jW
db+OhAY0V0sTTXFSiTSuk2YziL3MFWS1aHILU5N7I6h9CqyztoiGwn5d/1rbTk3/KdrllwziYUBZZ9CK
8PCc/oiIIEBD9oDg/CK2H+KkpKChMsXzOv0B9KvsW12iWvgrLhPYHtU+ni7465EVvYPCsYOxev1qQ
qs4B2GvECxo6kyQLqgjx4wlcGLHx5AgMBAAGjOzA5MAkGA1UdEwQCMAAwCwYDVROpBAQDAg
GGMB8GA1UdIwQYMBaAFLU1sKRXC/kwcet03DIXvSifcyhnMA0GCSqGSIb3DQEBCwUAA4IBAQB
FsnoA2UtugIE+kKwY3GdUlKv6bj0oyhbaHFwi8ewR/WI1abdertApefLmk0Aa+5PFya+KaZCWkZIDK
ORlJ1J624yXS+Yh3NnbWOieBKfeax31h6peytMgd85adqxhiEowYTHWJ/PkSku+AFGieMlLtZDlcy/C
Vvs5l4CcHvjLsrhdowwOUli4v1OS9zKaRgwp/bzhP0ZuDw7JjaqzFIKwwbi+6cs3HLPvTBAGeED5Oe
wFsTxaZnJa0Skqgoi0VQYlurRf50AOG3/bP0Osh6MWylQZRluNI3A7jxz3sDqsBW+welq4Qj8A5d97
/7ctQNKe6/PGVpNop3W2dgJS9Fut",
"mi": "PB400",
"nmPoints": "46",
"pCount": "0",
"pType": "0",
"qScore": "100",
"rdsID": "PRECISION.AND.101",
"rdsVer": "1.1.0",
"sessionKey":
"M1++JGFa/Vp4szTGOFK0G3NNsVqGo0ffD4xnBf5QZO8TKO02ap9eWN6ZpTcXrkM+VlyJ0DZkQf
CcrJlcAlh49Mw9a6wcipIJ0IS+wGN6szA1LH85c7Ciem/HNVGW7GH9u21cfSpnEmXIBKtfd5IULTnO
VPF7PfufgFCXC3rSsX8zWOogBEZmKP6eiyw3+gqRb10NyKn90qJGLioBcMaNpt32r5kW2ppne07A
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
TQLuWZqLdhzVX1tHimCTjm5NchQIAFjrjBKWVVGdEIZ44VJEeyTa+A6J/Fp4n/8whidnYob+XKQ8/PvEsu6oSXRwiL1N7QGP8RP48+S57mzlwlw\u003d\u003d"
```

```
},
```

```
"cardnumberORUID": {  
  "adhaarNumber": "123443211234",  
  "indicatorforUID": 0,  
  "nationalBankIdentificationNumber": "607152"  
},
```

```
"languageCode": "en",  
"latitude": 13.0641367,  
"longitude": 80.2480973,  
"mobileNumber": "9952396587",  
"paymentType": "B",  
"requestRemarks": "TN3000CA0006530",  
"timestamp": "06/10/2017 10:05:24",  
"transactionType": "BE",  
"merchantUserName": "sai",  
"merchantPin": "81DC9BDB52D04DC20036DBD8313ED055",  
"subMerchantId": "SUB1234",  
"superMerchantId": "2"  
}
```

RESPONSE PARAMETERS :

```
private boolean status;  
private String message;  
private Object data;  
private long statusCode;
```

data :

```
private String terminalId;  
private String requestTransactionTime;// dd/MM/yyyy HH:mm:ss  
private double transactionAmount;  
private String transactionStatus;  
private double balanceAmount;  
private String bankRRN;  
private String transactionType;  
private String fpTransactionId;  
private String merchantTxnId;
```

Explanation of the parameters is same as above description of each parameters as cash withdrawal API.

SAMPLE RESPONSE:

```
{
  "status": true,
  "message": "Request Completed",
  "data": {
    "terminalId": "FA012123",
    "requestTransactionTime": "01/01/2018 23:59:59",
    "transactionAmount": 101,
    "transactionStatus": "SUCCESS",
    "balanceAmount": 200,
    "bankRRN": "765765656857",
    "transactionType": "BE",
    "FingpayTransactionId": "BE00010291117175529",
    "responseCode": "00",
    "merchantTxnId": "123221"
  },
  "statusCode": 10000
}
```

NOTE: Should consider the transaction success only when you receive bankRRN and response code as "00"

SAMPLE FAILURE RESPONSE:

```
{
  "status": false,
  "message": "Fingerprint did not matched with Aadhaar, please try another finger",
  "data": {
    "terminalId": "FA274530",
    "requestTransactionTime": "01/05/2020 00:04:32",
    "transactionAmount": 590.0,
    "transactionStatus": "failed",
    "balanceAmount": 0.0,
    "bankRRN": "012200836920",
    "transactionType": "BE",
    "fpTransactionId": "BEBD0491833010520000431984I",
    "merchantTxnId": "1588271670690",
    "errorCode": "U3",
    "errorMessage": "Fingerprint did not matched with Aadhaar, please try another finger",
  }
}
```



```
"merchantTransactionId": null,  
"responseCode": "U3"  
,  
"statusCode": 10004  
}  
}
```

AEPS MINI STATEMENT API DOCUMENT

IP must be whitelisted at Fingpay end before integration and this IP should not be white listed by another provider (shared IP across customers is not allowed)

3.API FOR MINI STATEMENT

For java and .net:

URL: <https://fingpayap.tapits.in/fpaepsservice/api/miniStatement/merchant/statement>

For php:

URL : <https://fingpayap.tapits.in/fpaepsservice/api/miniStatement/merchant/php/statement>

HEADERS :

trnTimestamp: In this field timestamp of the transaction must be sent.

hash : Generated JSON must be encrypted using SHA-256 algorithm and converted to BASE64 which is to be sent in hash header

deviceIMEI : In case of web you need to send the scanner's serial number which is integrated in your system for performing transactions, based on the IMEI will assign the terminal.

eskey :

- First a session key is generated using AES-128 algorithm of the BC provider
- Session key is Encrypted using public key(**which is provided by Fingpay**) with the algorithm RSA/ECB/PKCS1Padding of BC provider
- Generated encrypted data must be converted to BASE64 which is to be sent in **eskey**.

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

Body:

- JSON is Encrypted using session key , generated while eskey generation.
- Generated encrypted data must be converted to BASE64 which is to be sent in **body**.

Sample Headers and Body :

trnTimestamp = 29/11/2017 15:24:47

hash = ixV3GdhMyrTm3aacQXRft1C8uL4doDUJVBWmSOI1vxc=

deviceIMEI = 352801082418919

eskey=cM1C5gd2ugAgcyDMNAHmW4cNeBHHxOfwZ7HvyNTD6l2MV09ClZVOEMT9uyfHtGLrcoDXD7V8M+ZeGSivJ4sbedwJvTXr8wAHedfeZoHi4qUMXC8XFaoHrr+qYVc2+trJbGanY2e8pMLrPD oTKrRh2NVwGBH+Z0VF5cV6aai2nLH4WdTV+EEYy+FTf3B1DzPqybSuP1Upe76VQNLXYQrdbp28nDvewk2dyBgKFHCmp26eNtZ0RaH3upbMoqHxPWhCgk/6cjD0Gx73zXVKSv/k1lhB9kD1n8qW77h bLGKqNfZSaABk3OcfprFNY5Xpu53jhn/3E8jISWF080AwWF08RRqBiWucFMPvACWc0Xiic+ei6ZW KOGcfKIn1ZWZrPHfJlckO0TAZOTr47Jk18olrGYp86lBfOT/EC8z3zKPCQn2woryhCWrgYzXtPWQ7 EniBLUKRU1TUwkfEkeB/uG9zFL3NI3ITK0y5ejwk3UDggygv4Y/3GjB1AtXHZT9j7D20CFT/JTUI/J1u pu1ADMaH+ndWNKYDj6JH0V2i9jHb7wWoAnQbkcy7ywFTPX5O/E6oFi0Tb5xOHxxUxFD6sd2gu8 gwos6N5ijetFSST2i+5NzVYEDurICfr7cupcdiTMjb0Oqrv5ouCVGMA/jw2WcYu0aT3ZlBgpyk=

Body:

ngW07ebihM9cb4M8HeWVBnUohq81wLlwoVbIA7tTdfSCzceNoIDADOAfXaitH8WltONdJXiaUw mKNZBCwnwVxm1e2eayJrEY8sNjyUWtVmOxXhefmDcK6/Hch4XwG9+Imzua2WiYQAofq5+6+B2 tL2Lo5d60SOyIFMjFBrU3szJcvW/8lftpgQENooi7Z5sURbaXRak4hwqZnl5+piCaxDUgZ5qRJBZ1Xrg OZcleP7LxEp3DcdnYYIDNDXPyCy9sb0Uoda72nFieQluwEE/VFlw04O7WwvFRhuWbMp/sPzPIVyw wxFt4xo2cbZPVBllZd2YvTDG1CVCShGK6NPFOfKVatfUn+Jh/grBskNB0Gxy0JkvWnxdfyls5eSDiKVf HLiCULDk8PB+kEE05XzaBt9NSC4EaL983xh512Ox6XF68IY+fSReap5rCGy4q7xLisZRZeKSNj4uZvZ5 xceb4JKNyHmyvDCfLJ1KkkGXrT/s9mo72dSI0mQTYIMkICjy+uUgbG4MYpzNsiNXtK+w/fZOzARYhs KQbyum98Gx9ziHEVwHBkiT16RyhHwyrXXp5qjom0OKXePr/Weg8ukXbZBS/aFeL42reRQ54CB1IF eM2o930t/aR24roCIMHbOgArBzijQWxO21Ha2dpPtOfFo5nTC2Vs800ufXQZmzQHt/rvRRRQvzXaf/ Nuk8j3G4AHNTGEM+Kv/8sfvKkRmJJAj6A1hnm4av10Ux9I/XK4OYCWzHY0xST6rE6cnsV2wm/lwG ajn0TwSBkj0YLexCZGN7CXgOD5WCMM5sTp77o2khvXk58ZO337tjSMHk3HaLRAiqHnZCNxaelpN TGpibNF4BrpBTr0ztaKXRQEz1rEF87W531Uoalrib/BI0TIlgcE2KLrHA31wcoGU5n6b+uCk+pZ1KXP

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

UcrCySFDhBXuYD/DigbzDuZb2iAjdktee7Ur+JHYQTkNKE20/Mc5Gz98uvyZc+X6HpLcKOF7tRtVlsPmdEavDo0raCJyf+7Jw2kZkpahYO64RjBFyxWbDbr38KpirYsKXEXiXfy2ZEX6jShpIX/qu08Aya2iPzDpzq+CNG0GpiPmRwlGjEOD5xnCoUnOJtTXfqpAFTAU630T8tKx6KPJNosnI8qXeZptYEMsVGjJwhgja538ehFXVEtka/Wg6hipJAKh9nRQqhaUpBixDbXK/DvJiMR4Gh5DFqQSK2VLfW6CcQmTIJ8rVEGniXZsDfW+egRgmMR1UOwtfNevTn2ljYpx2kT+0FNBNiQ4C5r6mLsIQ6WulgZPUguQWOOmR2d72GxO/TFbw5rRgKDoS7qamGbQsu0YZwgXkHcj1bgKWXM7D/475gq/++Fh/GKO/c22HutDUWi6NJHkYfDBP+lJXeyKksU1uPy8Tut6qjOnczDFryYL4B62nqly4IWkbjvqJT3Sr7p5jHsFdX6weHSjw86AwxudnW91OnrbmYi1tNwBoHNKV3NzieKJ+myrZDbEMIsahD1rDYF7kOnub3kJ4SHKXv3mxoUHVnchqJNCmQhPJ0+Ds+ZGk0sDkGu8vxdFperA8twSBCHs4pdM4DBD61nUk21HUAfaq7rNRFWUa9yKGjow7wsdKi/GGy2iW9g7JTQmWBZ8elh4QOQFzOvXeJ=(This data is larger than this example given

PARAMETERS TO BE POSTED :

```
private P2CardnumberORUID cardnumberORUID;
private String mobileNumber;
private String paymentType;
private String timestamp;
private String transactionType;
private double latitude;
private double longitude;
private String requestRemarks;
private String deviceTransactionId;
private CaptureResponse captureResponse;
private String languageCode;
private String merchantTranId;
private String merchantUserName;
private String merchantPin;
private String subMerchantId;
```

cardnumberORUID(Under cardnumber or uid there are 4 other parameters)

```
private String adhaarNumber;
private int indicatorforUID;
private String nationalBankIdentificationNumber;
private String virtualId;(only if you are sending virtual id)
```

captureResponse(Under capture response below are the parameters)

```
private String errCode;
private String errInfo;
private String fCount;
private String fType;
private String iCount;
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
private String iType;  
private String pCount;  
private String pType;  
private String nmPoints;  
private String qScore;  
private String dpID;  
private String rdsID;  
private String rdsVer;  
private String dc;  
private String mi;  
private String mc;  
private String ci;  
private String sessionKey;  
private String hmac;  
private String PidDatatype;  
private String Piddata;
```

(M) defines that that is mandatory field.

Parameter name	Description	Value(Mandatory/not)
cardnumberORUID		
1.adhaarNumber	The Adhaar Number of Customer who is doing the transaction and it requires to be authenticated using an algorithm “VerhoeffAlgorithm”	In case of virtual id the adhaar number by default it should be 999999999999(12 9's) constant value.otherwise it should be adhaar number of customer(M)
2.indicatorforUID	Values are defined by bank	It is constant(value is '0')in case of adhaar payment, in case of virtual id please send the value as '2'(M)
3.nationalBankIdentificationNumber	This is the selected bank by Customer for performing the transaction.	The IIN list can be fetched from (ie, merchant bank details URL AEPS- https://fingpayap.tapits.in/fpaepsservice/api/ban

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

		kdata/bank/details Adhaar pay https://fingpayap.tapits.in/fpaepsservice/api/bankdata/bank/adhaarpay (M)
4. VirtualId	Virtual id of the customer and should be verified with verhoeff algorithm	Virtual id of the customer it should be 16 digit value
5.mobileNumber	Mobile number of the customer	
6.paymentType	Unique code for different type of transactions	"B" (Constant for every transaction in aeps)(M)
7.transactionType	Type of the transaction	MS-Ministament
8.Latitude	Latitude of the place where transaction is happening	(M)
9.Longitude	Longitude of the place where transaction is happening	(M)
<u>10.requestRemarks</u>	If customer or merchant wants to send some remarks	
11.captureResponse	This response we receive it from the scanner dependent RD SERVICE , for any further information please refer the Scanner Dependent RD service documentation. These details will vary based on staging and production.	Should not change anything in capture response should send as it is.
12.languageCode	Every language is defined with a code.	en is for English(M)
13.subMerchantId	Submerchant id is used when user is using only single merchant id and pin, in place of sub merchant id customer needs to send the merchant loginid of their company.	SubMerchantid should not be passed
14.MerchantTranId	Client reference transaction id to check the transaction status. You must generate a unique merchantTransactionid every time while initiating a transaction.	
15.Timestamp	Timestamp of the transaction	(M)
<u>16.merchantUserName</u>	Merchant Login id of the merchant which is registered with Fingpay	(M)
<u>17.merchantPin</u>	Pin of the merchant who is onboarded.	Password must be MD5

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

	hashed(M)
--	-----------

SAMPLE JSON :

Encrypted JSON Payload for following plain sample JSON is to be sent

```
{
  "merchantTranId": "20171006100425",

  "captureResponse": {
    "PidDatatype": "X",
    "Piddata":
      "MjAxNy0xMC0wNlQxMDowNTowN3yUurFGz3Je+v4tjj64SRJwfxB5x5sayPZRqOOUX/EL4vzWh6
      R2XsObiuJNTq12p8upDf7/teQ1LQCJKl8v3AlklWsXOXOlncSvsSV2KRudCz0eKgPRxAh13stb3ZSXhk
      ynkZl/qocKOr9BLHlhvgeCWg0cf/GTmgMiJL3KzSM7RRcw0zPkkcp2tT4X+7fqXMu1p6XSqmAC6U
      Pofw1KusKSavufd9CegyUNkK8X2iDUMkPt7DyZKSvEDfN8csOjHgqeFUCVUI40uSoMGsSJGH38qd
      M8Q3MNPYtqTuObuU9bFQSD0TerXptDmeJMjNX0+F9lI3p40bl1riPUR4I7EwtuFg/JG/NBWeOJfI6
      Jexz0onK8YYs4eqq550f/WEVgh1AyyV32bsf8zVGKhqmLBWcvlVfDYaaDW+IKCOI7yreHCig3TBe+z
      bV06Ecsze9xdH5cy1o0gHRB2mAzLir+EyqaIn4aXEQ0dm2pwUjICKanSOVrYP2A6J7+bnxUMeZRI
      qB30aLNdrDLOsGNgrRM7aRRnlEX+aGsMQjKnp09ZehWnVIXl3x2aMfwLXJ+QpCAeIHsd3Q5Aik1
      ZLnFhRHxSp/qbAnfpelnMRz+AeKGDdbUuGdfJGzsfUhmzn5IstIjFJ0hliQrllJdGyPL6+pJnKew+OifnP
      Nqi79nF/cAk7WKJr+yAhzPOYu4gsb+tx3d/lzkn+UiXaUpzEikBTfJ+VJ9rG1d+IJTZlmzYrDxOhkDY7Z
      WB9YSLtTkcaZAnc2lqRvSi+FXmXm/4vSYUPLrw+rmFRwqQtzMSThEC3lxWZQXlxyA0N5EGujMoG
      EZIAle6uqfG6RhguDgVJqCbR4BoVlOOYcQipoS7wKMyQdtfhVORkotV4x7hH1bXyyf7eekocfpSzsU
      RUVzSU+3YAUl89neOdaHMcL9jPGncG9AKtL8hVr0wF7iwl+f9OdIh1ubUHkO+29xrCizELa21wdVm
      mKfLlJVU2YEjFmFDu4Ozl6eTEPTQLaysrJHSSu/DHadWXg4FHTL+j5RaRlba41bbUOR+9caWz5bDOi
      p+vsSUNoGVUC6XBNYgiFy9Kj6Dy1B1zizGEDqd/DkSRONk1lSqOmWnTsUfWX9Cwokl5Ho1bqodK
      ZrA1Ng/ozNcpVMNLxVagi3PWztEqbVjAQydGbBJjXaQ6c4HcQ2D5XqtumI4uZUt8d6XOR2W58mZ
      9cWk17gCfoTOM3kn8zlbprPTnAoFfvFcR4wOox1dwj4Q1ll/k29ktpVwEMLGVytr1jB+zysbE+IKnRb
      4/b9PYSQXxURFpyyESZtszM3xwyBBCBgIWspNeysT1xM/KA\u003d\u003d",
    "ci": "20191230",
    "dc": "83017feb-b271-460b-92e8-6e12a3a0189e",
    "dpID": "PRECISION.PB",
    "errCode": "0",
    "errInfo": "Image Capture Success",
    "fCount": "1",
    "fType": "0",
    "hmac": "9ZqjrXUjxGTSQsxgUHDpBYqBhOBNARldRKMrrHCq7c+yImlkLOxMkSQBWmihMPrx3",
    "iCount": "0",
    "mc":
      "MIIEBDCCAuygAwIBAgIlfc0if0pbK5gwDQYJKoZIhvcNAQELBQAwdgxnZA1BgNVBAMTLkRTIFBy
      ZWNpc2lvbiBCaW9tZXRYaWMgSW5kaWEgUHJpdmF0ZSBMaW1pdGVkIDExZAhBgNVBDMTGjlyI
      EhhymlidWxsYWggUm9hZCBUIE5hZ2FyMRAwDgYDVQQJEwdDaGVubmFpMRIwEAYDVQQIEWlU
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
YW1pbG5hZHUXETAPBgNVBAsTCFNVZnR3YXJIMTlwMAYDVQQKEylQcmVjaXNpb24gQmlvbWV0cmllEluZGhlIFByaXZhdGUgTGltZXRIZDELMAGGA1UEBhMCSU4wHhcNMTcxMDA1MDkzNDU2WjBuMTlwMAYDVQQKDClQcmVjaXNpb24gQmlvbWV0cmllEluZGhlIFByaXZhdGUgTGltZXRIZDESMBAGA1UECwwJQmlvbWV0cmllMRAwDgYDVQQHDAAdSEVOTkFJMRIwEAYDVQQDDAIQcmVjaXNpb24wgGgEiMA0GCSqGSIb3DQEBAQUAA4IBDwAwggEKAoIBAQC  
OGiylA1TyPN3tUU+wx/s4hAT6OHhpJS+61dz3k4ihXIBTgmWJs5NddO4HjpT8FI3z0SQn6aykOMzH  
gBpiznj2sgv9iiokzGntqZo0LJdBNJ2997cf7mNIEeMaZXdQhMKQU7XFf9pDT074U/ygJ7OtXqK1jW  
db+OhAY0V0sTTXFSiTSUK2YziL3MFWs1aHILU5N7I6h9CqyztoiGwn5d/1rbTk3/KdrllwziYUBZZ9CK  
8PCc/oiJIEBD9oDg/CK2H+KkpKChMsXzOv0B9KvsW12iWvgrLhPYHtU+ni7465EVvYPCsYOxev1qQ  
qs4B2GVEcXo6kyQLqgjx4wlcGLHx5AgMBAAGjOzA5MAkGA1UdEwQCMAAwCwYDVR0PBAQDAg  
GGMB8GA1UdIwQYMBaAFLU1sKRXC/kwcet03DIXvSifcyhnMA0GCSqGSIb3DQEBCwUAA4IBAQB  
FsnoA2UtugIE+kKwY3GdUIKv6bj0oyhbaHFwi8ewR/WI1abdertApefLmk0Aa+5PFya+KaZCWkZIDK  
ORIJ1J624yXS+Yh3NnbWOieBKfeax31h6peytMgd85adqxhiEowYTHWJ/PkSku+AFGieMlLtzDlcy/C  
Vvs5I4CcHvjLsrhdowwOULi4v1OS9zKaRgwp/bzhP0ZuDw7JjaqzFIKwwbi+6cs3HLPvTBAGeED5Oe  
wFsTxaZnJa0Skqgoi0VQYlurRf50AOG3/bP0Osh6MWylQZRluNI3A7jxz3sDqsBW+welq4Qj8A5d97  
/7ctQNKe6/PGVpNop3W2dgJS9FUt",  
  "mi": "PB400",  
  "nmPoints": "46",  
  "pCount": "0",  
  "pType": "0",  
  "qScore": "100",  
  "rdsID": "PRECISION.AND.101",  
  "rdsVer": "1.1.0",  
  "sessionKey":  
  "M1++JGFa/Vp4szTGOFK0G3NNsVqGo0ffD4xnBf5QZO8TKO02ap9eWN6ZpTcXrkM+VlyJ0DZkQf  
CcrJlAlh49Mw9a6wcipIJ0IS+wGN6szA1LH85c7Ciem/HNVGW7GH9u21cfSpnEmXIBKtfd5IULTnO  
VPF7PfufgFCXC3rSsX8zWOogbEZmKP6eiyw3+gqRb10NyKn90qJGLioBcMaNpt32r5kW2ppne07A  
TQLuWZqLdhzVX1tHimCTjm5NchQIAFjrjBKWVVGdEIZ44VJEeyTa+A6J/Fp4n/8whidnYob+XKQ8/  
PvEsu6oSXRwiL1N7QGP8RP48+S57mzlWwLw\u003d\u003d",  
},  
  
  "cardnumberORUID": {  
    "aadhaarNumber": "123443211234",  
    "indicatorforUID": 0,  
    "nationalBankIdentificationNumber": "607152"  
  },  
  
  "languageCode": "en",  
  "latitude": 13.0641367,  
  "longitude": 80.2480973,  
  "mobileNumber": "9952396587",
```


Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
"paymentType": "B",  
"requestRemarks": "TN3000CA0006530",  
"timestamp": "06/10/2017 10:05:24",  
"transactionType": "MS",  
"merchantUserName": "sai",  
"merchantPin": "81DC9BDB52D04DC20036DBD8313ED055",  
"subMerchantId": "SUB1234"  
}
```

RESPONSE PARAMETERS :

```
private boolean status;  
private String message;  
private Object data;  
private long statusCode;
```

data :

```
private String terminalId;  
private String requestTransactionTime;// dd/MM/yyyy HH:mm:ss  
private String transactionStatus;  
private double balanceAmount;  
private String bankRRN;  
private String transactionType;  
private String fpTransactionId;  
private String merchantTxnId;  
private List<MiniStatementStructureModel> miniStatementStructureModel;  
private List<String> miniOffusStatementStructureModel;  
private boolean miniOffusFlag;(If It is true read minioffusstructuremodel,if false read  
ministatement structure model)
```

Ministatement structure model:

```
private String date;  
private String txnType;  
private String amount;  
private String narration;
```

Parameter name	Description
terminalId	Terminal assigned while performing a transaction
requestTransactionTime	Requested timestamp of the transaction

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

transactionAmount	Amount entered by the customer
transactionStatus	Status of the transaction either success or false
balanceAmount	Balance amount of the customer in his account which we receive in response from the bank
bankRRN	Unique id generated by bank which we will receive in the response from bank
transactionType	Transaction type sent by client
fpTransactionId	Transaction id generated by Fingpay
merchantTxnId	Merchant transaction id sent by client
errorCode	Error code received from bank in response in case of failure
errorMessage	Error message will be fetched from the table
date	Transaction date of the one of the transaction of account holder
txnType	Transaction type of one of the transaction of account holder
amount	Transaction amount of one of the transaction of account holder
narration	Narration of the transaction of the account holder

SAMPLE RESPONSE:

```
{
  "status": true,
  "message": "Request Completed",
  "data": {
    "terminalId": "FA049053",
    "requestTransactionTime": "03/01/2020 16:56:53",
    "transactionStatus": "successful",
    "balanceAmount": 995.88,
    "bankRRN": "000316273914",
    "transactionType": "MS",
    "fpTransactionId": "000316273914",
    "merchantTxnId": null,
    "errorCode": null,
    "errorMessage": null,
    "miniStatementStructureModel": [
      {
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
"date": "31/12/2019",
"txnType": "Cr",
"amount": "    1.00",
"narration": " INF/INFT/021841"
},
{
  "date": "31/12/2019",
  "txnType": "Cr",
  "amount": "    1.00",
  "narration": " INF/INFT/021841"
},
{
  "date": "31/12/2019",
  "txnType": "Cr",
  "amount": "    8.00",
  "narration": " 018301587093:ln"
},
{
  "date": "30/12/2019",
  "txnType": "Dr",
  "amount": "    1.00",
  "narration": " AEP/XFR DR/30-1"
},
{
  "date": "30/12/2019",
  "txnType": "Dr",
  "amount": "    1.00",
  "narration": " AEP/XFR DR/30-1"
},
{
  "date": "30/12/2019",
  "txnType": "Dr",
  "amount": "    1.00",
  "narration": " AEP/XFR DR/30-1"
},
{
  "date": "26/12/2019",
  "txnType": "Dr",
  "amount": "    1.00",
```

```
{
  "narration": " AEP/XFR DR/26-1"
},
{
  "date": "26/12/2019",
  "txnType": "Dr",
  "amount": "    1.00",
  "narration": " AEP/XFR DR/26-1"
},
{
  "date": "13/12/2019",
  "txnType": "Cr",
  "amount": "    1.00",
  "narration": " INF/INFT/021791"
}
],
},
"statusCode": 10000
}
```

AADHAAR PAY API DOCUMENT

API DOCUMENT

4.API FOR ADHAAR PAY

For java and .net

URL: <https://fingpayap.tapits.in/fpaepsservice/api/aadhaarPay/merchant/pay>

For PHP:

URL: <https://fingpayap.tapits.in/fpaepsservice/api/aadhaarPay/merchant/php/pay>

HEADERS :

trnTimestamp: In this field timestamp of the transaction must be sent.

hash : Generated JSON must be encrypted using SHA-256 algorithm and converted to BASE64 which is to be sent in hash header

deviceIMEI : In case of web you need to send the scanner's serial number which is integrated in your system for performing transactions, based on the IMEI will assign the terminal.

eskey :

- First a session key is generated using AES-128 algorithm of the BC provider
- Session key is Encrypted using public key(**which is provided by Fingpay**) with the algorithm RSA/ECB/PKCS1Padding of BC provider
- Generated encrypted data must be converted to BASE64 which is to be sent in **eskey**.

Body:

- JSON is Encrypted using session key , generated while eskey generation.
- Generated encrypted data must be converted to BASE64 which is to be sent in **body**.

Sample Headers and Body :

```
trnTimestamp = 29/11/2017 15:24:47
hash = ixV3GdhMyrTm3aacQXRft1C8uL4doDUJVBWmSOI1vxc=
deviceIMEI = 352801082418919
eskey=cM1C5gd2ugAgcyDMNAHmW4cNeBHHxOfwZ7HvyNTD6l2MV09CIZVOEMT9uyfHtGLrco
DXD7V8M+ZeGSivJ4sbedwJvTXr8wAHedfeZoHi4qUMXC8XFaoHrr+qYVc2+trJbGanY2e8pMLrPD
oTKrRh2NVwGBH+Z0VF5cV6aai2nLH4WdTV+EEYy+FTf3B1DzPqybSuP1Upe76VQNLXYQrdbp28n
Dvewk2dyBgKFHCmp26eNtZ0RaH3upbMoqHxPWhCgk/6cjD0Gx73zXVKSv/k1hB9kD1n8qW77h
bLGKqNFZSaABk3OcfprFNY5Xpu53jhn/3E8jISWF080AwWF08RRqBiWucFMPvACWc0Xiic+ei6ZW
KOGcfKIn1ZWZrPHFJlckO0TAZOTr47Jk18olrGYp86lBfOT/EC8z3zKPCQn2woryhCWrgYzXtPWQ7
EniBLUKRU1TUwkfEkeB/uG9zFL3NI3lTK0y5ejwk3UDggygv4Y/3GjB1AtXHZT9j7D20CFT/JTUI/J1u
pu1ADMaH+ndWNKYDj6JH0V2i9jHb7wWoAnQbkcy7ywFTPX5O/E6oFi0Tb5xOHxxUxFD6sd2gu8
gwos6N5ijetFSST2i+5NzVYEDurICfr7cupcdiTMjb0Oqrv5ouCVGMA/jw2WcYu0aT3ZlBgyk=
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

Body:

ngW07ebihM9cb4M8HeWVBnUohq81wLlwoVbIA7tTdfSCzceNoIDADOAfXaitH8WltONdJXiaUw
mKNZBCwnwVxM1e2eayJrEY8sNjyUWtVmOxXhefmDcK6/Hch4XwG9+Imzua2WiYQAoFq5+6+B2
tL2Lo5d60SOyIFMjFBrU3szJcvW/8lftpgQENOOi7Z5sURbaXRak4hwwqZnl5+piCaxDUgZ5qRJBZ1Xrg
OZcleP7LxEp3DcdnYYiDNDXPYCy9sb0Uoda72nFieQluwEE/VFlw04O7WwvFRhuWbMp/sPzPIVyw
wxft4xo2cbZPVBllZd2YvTDG1CVCSHGK6NPFOfKVatfUn+Jh/grBskNB0Gxy0JkvWnxdfyIs5eSDiKVf
HLiCULdk8PB+kEE05XzaBt9NSC4EaL983xh512Ox6XF68IY+fSReap5rCGy4q7xLisZRZeKSNj4uZvZ5
xceb4JKNYHmyvDCfLJ1KkkGXrT/s9mo72dSI0mQTYIMkICjy+uUgbG4MYpzNsiNXtK+w/fZOzARYhs
KQbyum98Gx9ziHEVwHBkiT16RyhHwyrXXp5qjom0OKXePr/Weg8ukXbZBS/aFeL42reRQ54CB1IF
eM2o930t/aR24roCIMHbOgArBzjqWxO21Ha2dpPtOfO5nTC2Vs800ufXQZmzQHt/rvRRrQvzXaf/
Nuk8j3G4AHNTGEM+Kv/8sfvKkRmJJAj6A1hnm4av10Ux9I/XK4OYCWzHY0xST6rE6cnsV2wm/lwG
ajn0TwSBkj0YLexCZGN7CXgOD5WCMm5sTp77o2khvXk58ZO337tjSMHk3HaLRAiqHnZCNxaelpN
TGpibNF4BrpBTr0ztaKXRQEZ1rEF87W531Uoalrib/Bi0TllgcE2KLrHA31wcoGU5n6b+uCk+pZ1KXP
UcrCySFDhBXuYD/DigbzDuZb2iAjdktEE7Ur+JHYQTkNKE20/Mc5Gz98uvyZc+X6HpLcKOF7tRtVIsP
mdEavDo0raCJyf+7Jw2kZkpahYO64RjBFyxWbDbr38KpirYsKXEXiXfy2ZEX6jShpIX/qu08Aya2iPzDp
zq+CNG0GpiPmRwlGjEOD5xnCoUnOjTxfqpbAFTAU630T8tKx6KPJNosnI8qXeZptYEMsVGjJwhgja
538ehFXVEtka/Wg6hipJAKh9nRQqhaUpBixDbXK/DvJiMR4Gh5DFqQSK2VLfW6CcQmTIJ8rVEGniX
ZsDfW+egRgmMR1UOwtfNevTn2ljYpx2kT+0FNBVniQ4C5r6mLsIQ6WulgZPUguQWOOmR2d72G
xO/TFbw5rRgKDoS7qamGbQsu0YZwgXkHcjm1bgKWXM7D/475gq/++Fh/GKO/c22HutDUWi6NJ
HkYfDBP+lJXeyKksU1uPy8Tut6qjOnczDFryYL4B62nqly4IWkbjvqJT3Sr7p5jHsFdX6weHSjw86Awx
udnW91OnrbmYi1tNwBoHNKV3NzieKJ+myrZDbEMIsahD1rDYF7kOnub3k4SHKXv3mxoUHvnch
qJNCmQhPJ0+Ds+ZGk0sDkGu8vxdFperA8twSBCHs4pdM4DBD61nUk21HUaFaq7rNRfWUa9yKGj
ow7wsdKi/GGy2iW9g7JTQmWBZ8elh4QOQFzOvXeJ=(This data is larger than this example give

PARAMETERS TO BE POSTED :

```
private P2CardnumberORUID cardnumberORUID;  
private String mobileNumber;  
private String paymentType;  
private String timestamp;  
private String transactionType;  
private double latitude;  
private double longitude;  
private String requestRemarks;  
private String deviceTransactionId;  
private CaptureResponse captureResponse;  
private String languageCode;  
private double transactionAmount;  
private String merchantTransactionId;
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
private String merchantUserName;  
private String merchantPin;  
private String subMerchantId;  
private String superMerchantId;
```

cardnumberORUID(Under cardnumber or uid there are 4 other parameters)

```
private String adhaarNumber;  
private int indicatorforUID;  
private String nationalBankIdentificationNumber;  
private String virtualId;(only if you are sending virtual id)
```

captureResponse(Under capture response below are the parameters)

```
private String errCode;  
private String errInfo;  
private String fCount;  
private String fType;  
private String iCount;  
private String iType;  
private String pCount;  
private String pType;  
private String nmPoints;  
private String qScore;  
private String dpID;  
private String rdsID;  
private String rdsVer;  
private String dc;  
private String mi;  
private String mc;  
private String ci;  
private String sessionKey;  
private String hmac;  
private String PidDatatype;  
private String Piddata;
```

Explanation of the parameters is same as above description of each parameters as cash withdrawal API.

SAMPLE REQUEST :

Encrypted JSON Payload for following plain sample JSON is to be sent

```
{
```


Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
"merchantTranId": "20171006100425",

"captureResponse": {
  "PidDatatype": "X",
  "Piddata":
"MjAxNy0xMC0wNlQxMDowNTowN3yUurFGz3Je+v4tjj64SRJwfxB5x5sayPZRqOOUX/EL4vzWh6
R2XsObiujNTqI2p8upDf7/teQ1LQCJKI8v3AlkiWsXOXOlnCSvsSV2KRudCz0eKgPRxAh13stb3ZSXhk
ynkZl/qocKOR9BLHlhvgeCWg0cf/GTmgMiJL3KzSM7RRCw0zPkkcp2tT4X+7fqXMu1p6XSqmAC6U
Pofw1KusKSavufd9CegyUNkK8X2iDUMkPt7DyZKSvEDfN8csOjHgqeFUCVUI40uSoMGsSJGH38qd
M8Q3MNPYtqTuObuU9bFQSD0TerXptDmeMJN0+F9I3p40bl1riPUR4I7EwtuFg/JG/NBWeOJfI6
Jexz0onK8YYs4eqq550f/WEVgh1AyyV32bsf8zVGKhqmLBWcvlVfDYaaDW+IKCOI7yreHCig3TBe+z
bV06Ecsze9xdH5cy1o0gHRB2mAzLir+Eyqaln4aXEQ0dm2pwUjICKanSOVrYP2A6J7+bncxUMeZRI
qB30aLNdrDLOsGNgrRM7aRRnlEX+aGsMQjKnpo9ZehWnVIXl3x2aMfwLXJ+QpCAelHSd3Q5Aik1
ZLnFhRHxSp/qbAnfpelnMRz+AeKGDdbUuGdfJGzsfUhmzn5IstIjFJ0hliQrIIJdGyPL6+pJnKew+OifnP
Nqi79nF/cAk7WKJr+yAhzPOYU4gsb+tx3d/lzkn+UiXaUpzEikBTfJ+VJ9rG1d+IJTlzmzYrDxOhkDY7Z
WB9YSLtTkcaZAnc2IqRvSi+FXmXm/4vsyYUPLrw+rmFRwqQtzMSThEC3lxWZQXlxyA0N5EGujMoG
EZIAle6uqfG6RhguDgVJqCbR4BoVIOOYcQipoS7wKMyQdtfhVORkotV4x7hH1bXyyf7eekocfpSzsU
RUVzSU+3YAUi89neOдахMcL9jPGncG9AKtL8hVr0wF7iwl+f9OdIh1ubUHKO+29xrCizELa21wdVm
mKfLIjVU2YEjFmFDu4Ozl6eTEPTQLaysrJHSSu/DHadWXg4FHTL+j5RaRIba41bbUOR+9caWz5bDOi
p+vsSUNoGVUC6XBNYgiFy9Kj6Dy1B1zizGEDqd/DkSRONk1ISqOmWnTsUfWX9CwokI5Ho1bqodK
ZrA1Ng/ozNcpVMNLxVagi3PWztEqbVjAQydGbBJjXaQ6c4HcQ2D5Xqtuml4uZUt8d6XOR2W58mZ
9cWk17gCfoT0M3kn8zlbprPTNaOfFvFcR4wOox1dwj4Q1I/k29ktpVwEMLGVytR1jB+zysbE+IKnRb
4/b9PYSQXxURFpyyESZtszM3xwyBBCBgIWspNeysT1xM/KA\u003d\u003d",
  "ci": "20191230",
  "dc": "83017feb-b271-460b-92e8-6e12a3a0189e",
  "dpID": "PRECISION.PB",
  "errCode": "0",
  "errInfo": "Image Capture Success",
  "fCount": "1",
  "fType": "0",
  "hmac": "9ZqjrXUjxGTSQsXgUHDpBYqBhOBNARldRKMrrHCq7c+yImkLOxMkSQBWmihMPrx3",
  "iCount": "0",
  "mc":
"MIIEBDCCAuygAwIBAgIIfc0if0pbK5gwDQYJKoZIhvcNAQELBQAwdgxnZa1BgNVBAMTLkRTIFBy
ZWNpc2lvbiBCaW9tZXRYaWMgSW5kaWEgUHJpdmF0ZSBMaW1pdGVkIDExIzAhBgNVBDMTGjlyI
EhhYmlidWxsYWggUm9hZCBUIE5hZ2FyMRAwDgYDVQQJEwdDaGVubmFpMRIwEAYDVQQIEwIU
YW1pbG5hZHUxETAPBgNVBAsTCFNVZnR3YXJIMTIwMAYDVQQKEylQcmVjaXNpb24gQmlvbWV0
cmllEluZGhIFByaXZhdGUtTGltZXRIZDELMAGGA1UEBhMCSU4wHhcNMTcxMDA1MDkzNDU2W
hcNMTcxMTA0MDkzNDU2WjBuMTIwMAYDVQQKDClQcmVjaXNpb24gQmlvbWV0cmllEluZGhIF
BByaXZhdGUtTGltZXRIZDESMBAGA1UECwwJQmlvbWV0cmllMRAwDgYDVQQQHDAAdSEVOTkFJ
MRIwEAYDVQQDDAIQcmVjaXNpb24wggiMA0GCSqGSIb3DQEBAQUAA4IBDwAwggEKAoIBAQC
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
OGiylA1TyPN3tUU+wx/s4hAT6OHhpJS+61dz3k4ihXIBTgmWJs5NddO4HjpT8FI3z0SQn6aykOMzH
gBpiznj2sgv9iiozkzGntqZo0LJdBNJ2997cf7mNIEeMaZXdQhMKQU7Xff9pDT074U/ygJ7OtXqK1jW
db+OhAY0V0sTTXFSiTSUK2YziL3MFWS1aHILU5N7I6h9CqyztoiGwn5d/1rbTk3/KdrllwziYUBZZ9CK
8PCc/oiJIEBD9oDg/CK2H+KkpKChMsXzOv0B9KvsW12iWvgrLhPYHtU+ni7465EVvYPCsYOxev1qQ
qs4B2GvECxo6kyQLqgjx4wlcGLHx5AgMBAAGjOzA5MAkGA1UdEwQCMAAwCwYDVR0PBAQDAg
GGMB8GA1UdIwQYMBaAFLU1sKRXC/kwcet03DIXvSifcyhnMA0GCSqGSIb3DQEBCwUAA4IBAQB
FsnoA2UtugIE+kKwY3GdUIKv6bj0oyhbaHFwi8ewR/WI1abdertApefLmk0Aa+5PFya+KaZCWkZIDK
ORlJ1J624yXS+Yh3NnbWOieBKfeax31h6peytMgd85adqxhiEowYTHWJ/PkSku+AFGieMlLtZDlcy/C
Vvs5l4CcHvjLsrhdowwOUli4v1OS9zKaRgwp/bzhP0ZuDw7JjaqzFIKwwbi+6cs3HLPvTBAGeED5Oe
wFsTxaZnJa0Skqgoi0VQYlurRf50AOG3/bP0Osh6MWylQZRluNI3A7jxz3sDqsBW+welq4Qj8A5d97
/7ctQNKe6/PGVpNop3W2dgJS9Fut",
  "mi": "PB400",
  "nmPoints": "46",
  "pCount": "0",
  "pType": "0",
  "qScore": "100",
  "rdsID": "PRECISION.AND.101",
  "rdsVer": "1.1.0",
  "sessionKey":
  "M1++JGFa/Vp4szTGOFK0G3NNsVqGo0ffD4xnBf5QZO8TKO02ap9eWN6ZpTcXrkM+VlyJ0DZkQf
  CcrjlcAlh49Mw9a6wcipIJ0IS+wGN6szA1LH85c7Ciem/HNVGW7GH9u21cfSpnEmXlBKtfd5IULTnO
  VPF7PfufgFCXC3rSsX8zWOogbEZmKP6eiyw3+gqRb10NyKn90qJGLioBcMaNPt32r5kW2ppne07A
  TQLuWZqLdhzVX1tHimCTjm5NchQIAFjrjBKWxVGdEIZ44VJEeyTa+A6J/Fp4n/8whidnYob+XKQ8/
  PvEsu6oSXRwiL1N7QGP8RP48+S57mzlwlwLw\u003d\u003d"
},

  "cardnumberORUID": {
    "adhaarNumber": "123443211234",
    "indicatorforUID": 0,
    "nationalBankIdentificationNumber": "607152"
  },

  "languageCode": "en",
  "latitude": 13.0641367,
  "longitude": 80.2480973,
  "mobileNumber": "9952396587",
  "paymentType": "B",
  "requestRemarks": "TN3000CA0006530",
  "timestamp": "06/10/2017 10:05:24",
  "transactionAmount": 1.0,
  "transactionType": "M",
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
"merchantUserName": "sai",
"merchantPin": "81DC9BDB52D04DC20036DBD8313ED055",
"subMerchantId": "SUB1234",
"superMerchantId": "2"
}
```

RESPONSE PARAMETERS :

```
private boolean status;
private String message;
private Object data;
private long statusCode;
```

data :

```
private String terminalId;
private String requestTransactionTime;// dd/MM/yyyy HH:mm:ss
private double transactionAmount;
private String transactionStatus;
private double balanceAmount;
private String bankRRN;
private String transactionType;
private String fpTransactionId;
private String merchantTxnId;
```

Explanation of the parameters is same as above description of each parameters as cash withdrawal API.

SAMPLE RESPONSE:

```
{
  "status": true,
  "message": "Request Completed",
  "data": {
    "terminalId": "FA012123",
    "requestTransactionTime": "01/01/2018 23:59:59",
    "transactionAmount": 101,
    "transactionStatus": "SUCCESS",
    "balanceAmount": 200,
    "bankRRN": "765765656857",
    "transactionType": "M",
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
"FingpayTransactionId": "MB00010291117175529",
"merchantTxnId": "123221"
"responseCode": "00",
},
"statusCode": 10000
}
```

NOTE: Should consider the transaction success only when you receive bank RRN and response code as "00"

SAMPLE FAILURE RESPONSE:

```
{
  "status": false,
  "message": "Fingerprint did not matched with Aadhaar, please try another finger",
  "data": {
    "terminalId": "FA274530",
    "requestTransactionTime": "01/05/2020 00:04:32",
    "transactionAmount": 590.0,
    "transactionStatus": "failed",
    "balanceAmount": 0.0,
    "bankRRN": "012200836920",
    "transactionType": "M",
    "fpTransactionId": "MBD0491833010520000431984I",
    "merchantTxnId": "1588271670690",
    "errorCode": "U3",
    "errorMessage": "Fingerprint did not matched with Aadhaar, please try another finger",
    "merchantTransactionId": null,
    "responseCode": "U3"
  },
  "statusCode": 10004
}
```

4. ENCRYPTION METHODS FOR JAVA

Generating Hash

```
public byte[] generateSha256Hash(byte[] message) {
    Security.addProvider(new org.bouncycastle.jce.provider.BouncyCastleProvider());
    String algorithm = "SHA-256";
```

```
String SECURITY_PROVIDER = "BC";

byte[] hash = null;
MessageDigest digest;
try {
    digest = MessageDigest.getInstance(algorithm, SECURITY_PROVIDER);
    digest.reset();
    hash = digest.digest(message);
} catch (Exception e) {
    e.printStackTrace();
}

return hash;
}
```

Generating Session Key

```
private static final String JCE_PROVIDER = "BC";

private static final int SYMMETRIC_KEY_SIZE = 128;

static {
    Security.addProvider(new BouncyCastleProvider());
}

public static byte[] generateSessionKey() throws NoSuchAlgorithmException, NoSuchProviderException
{
    KeyGenerator kgen = KeyGenerator.getInstance("AES", JCE_PROVIDER);
    kgen.init(SYMMETRIC_KEY_SIZE);
    //SecretKey key = kgen.generateKey();
    return kgen.generateKey().getEncoded();
}
```

Encrypt Using Session Key

```
public static String encryptUsingSessionKey(byte[] skey, byte[] data) throws
InvalidCipherTextException {

    PaddedBufferedBlockCipher cipher = new PaddedBufferedBlockCipher(new AESEngine(),
new PKCS7Padding());

    cipher.init(true, new KeyParameter(skey));

    int outputSize = cipher.getOutputSize(data.length);

    byte[] tempOP = new byte[outputSize];

    int processLen = cipher.processBytes(data, 0, data.length, tempOP, 0);

    int outputLen = cipher.doFinal(tempOP, processLen);

    byte[] result = new byte[processLen + outputLen];

    System.arraycopy(tempOP, 0, result, 0, result.length);

    return Base64.encode(result).replace("\r\n", "");

}
```

Encrypt Using Public Key

```
public static String encryptUsingPublicKey(byte[] message){

    byte[] ciphertextBytes = null;

    try {

        // The source of randomness

        SecureRandom secureRandom = new SecureRandom();

        Security.addProvider(new org.bouncycastle.jce.provider.BouncyCastleProvider());

        // Obtain a RSA Cipher Object

        Cipher cipher = Cipher.getInstance("RSA/ECB/PKCS1Padding", "BC");

        // Loading certificate file

        String certFile = "public certificate file path";

        InputStream inStream = new FileInputStream(certFile);

    }
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
CertificateFactory cf = CertificateFactory.getInstance("X.509");
X509Certificate cert =(X509Certificate)cf.generateCertificate(inStream);
inStream.close();

// Read the public key from certificate file
RSAPublicKey pubkey = (RSAPublicKey) cert.getPublicKey();

// Initialize the cipher for encryption
cipher.init(Cipher.ENCRYPT_MODE, pubkey, secureRandom);

// Encrypt the message
ciphertextBytes = cipher.doFinal(message);

return Base64.encode(ciphertextBytes).replace("\r\n", "");
}catch( IOException e ){

    System.out.println( "IOException:" + e );
    e.printStackTrace();
}catch( CertificateException e ){

    System.out.println( "CertificateException:" + e );
    e.printStackTrace();
}catch( NoSuchAlgorithmException e ){

    System.out.println( "NoSuchAlgorithmException:" + e );
    e.printStackTrace();
} catch (Exception e) {

    System.out.println( "Exception:" + e );
    e.printStackTrace();
}

return null;
}
```

5. ENCRYPTION FOR .net:

Generating Hash

```
public string GenerateSha256Hash(byte[] message)
{
    try
    {
        IDigest digest = new Sha256Digest();
        digest.Reset();
        byte[] buffer = new byte[digest.GetDigestSize()];
        digest.BlockUpdate(message, 0, message.Length);
        digest.DoFinal(buffer, 0);

        return Convert.ToBase64String(buffer);
    }
    catch (Exception ex)
    {
        throw new Exception(ex.ToString());
    }
}

public string EncryptUsingPublicKey(byte[] data)
{
    try
```


Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
{
    IBufferedCipher cipher = CipherUtilities.GetCipher(ASYMMETRIC_ALGO);
    cipher.Init(true, this.publicKey);
    return Convert.ToBase64String(cipher.DoFinal(data));
}
catch (Exception ex)
{
    throw new Exception(ex.ToString());
}
}

public string EncryptUsingSessionKey(byte[] skey, byte[] data)
{
    try
    {
        PaddedBufferedBlockCipher cipher = new PaddedBufferedBlockCipher(new AesEngine());

        cipher.Init(true, new KeyParameter(skey));
        byte[] sourceArray = new byte[cipher.GetOutputSize(data.Length)];
        int num2 = cipher.ProcessBytes(data, 0, data.Length, sourceArray, 0);
        int num3 = cipher.DoFinal(sourceArray, num2);
        byte[] destinationArray = new byte[num2 + num3];
        Array.Copy(sourceArray, 0, destinationArray, 0, destinationArray.Length);
    }
}
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
        return Convert.ToBase64String(destinationArray);
    }

    catch (Exception ex)
    {
        throw new Exception(ex.ToString());
    }
}

//Method to posting data to server

public async Task<HttpResponseMessage> CashWithdrawalAsync(CashWithdrawalModel
model,Dictionary<string, string> dictionary)
{
    string json = Converter.JsonSerializer(model);// JsonConvert.SerializeObject(model);

    string url = "fpaepsservice/api/cashWithdrawal/merchant/withdrawal";

    var client = new HttpClient();

    client.DefaultRequestHeaders.TryAddWithoutValidation(Constants.TransactionTimestamp,
dictionary[Constants.TransactionTimestamp]);

    client.DefaultRequestHeaders.TryAddWithoutValidation(Constants.Hash,
dictionary[Constants.Hash]);

    client.DefaultRequestHeaders.TryAddWithoutValidation(Constants.DeviceIMEI,
dictionary[Constants.DeviceIMEI]);
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
client.DefaultRequestHeaders.TryAddWithoutValidation(Constants.Eskey,
dictionary[Constants.Eskey]);

var response = await _apiManagerService.PostAsync(AppSettings.AepsBaseUrl, url,
dictionary[Constants.EncryptedJson], client);

return response;
}
```

5. ENCRYPTION FOR PHP:

Generating Hash

```
function bank_detail()
{
$curl = curl_init();
curl_setopt_array($curl, array(
CURLOPT_URL => 'https://fingpayap.tapits.in/fpaepsservice/api/bankdata/bank/details/',
CURLOPT_RETURNTRANSFER => true,
CURLOPT_SSL_VERIFYPEER => true,
CURLOPT_SSL_VERIFYHOST => 2,
CURLOPT_TIMEOUT => 30,
CURLOPT_HTTP_VERSION => CURL_HTTP_VERSION_1_1,    ));
$result = curl_exec($curl);
$array = json_decode($result, true);
return $array;
}

/*Request of Cash withdrawal*/
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
function requestwithdrawal($json)
{
$post = json_decode($json);

$method="POST";

$key = "";

$mt_rand = array(0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15);

foreach ($mt_rand as $chr)
{
    $key .= chr($chr);
}

$iv = '06f2f04cc530364f';

$ciphertext_raw = openssl_encrypt(json_encode($post), 'AES-128-CBC', $key,
$options=OPENSSL_RAW_DATA, $iv);

$request = base64_encode($ciphertext_raw);

$fp=fopen("fingpay_public_production.cer","r");

$pub_key_string=fread($fp,8192);    fclose($fp);
openssl_public_encrypt($key,$crypttext,$pub_key_string);

$header = [
    'Content-Type: text/xml',
    'trnTimestamp:'.date('d/m/Y H:i:s'),
    'hash:'.base64_encode(hash("sha256",json_encode($post), True)),
    'deviceIMEI:'.J9:H5:4D:9D:0Q',
    'eskey:'.base64_encode($crypttext)
];

$curl = curl_init();

curl_setopt_array($curl, array(

CURLOPT_URL => 'https://fingpayap.tapits.in/fpaepsservice/api/aadhaarPay/merchant/php/pay',
CURLOPT_RETURNTRANSFER => true,

CURLOPT_SSL_VERIFYPEER => true,    CURLOPT_SSL_VERIFYHOST => 2,

CURLOPT_TIMEOUT => 30,
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
CURLOPT_HTTP_VERSION => CURL_HTTP_VERSION_1_1,

CURLOPT_CUSTOMREQUEST => $method,

CURLOPT_POSTFIELDS => $request,

CURLOPT_HTTPHEADER => $header

));

$result = curl_exec($curl);

$array = json_decode($result, true);

return $array;

}

function cashwithdrawal($request) {

$response = str_replace("&lt;","<",str_replace("&gt;",">",$request['data']));

$xml = new SimpleXMLElement($response);

$keyci = $xml->Skey['ci'];

$headerarray = json_decode(json_encode((array)$xml), TRUE);

$json = '{
    "captureResponse": {
        "PidDatatype": "X",
        "Piddata": "'. $headerarray['Data'].'",
        "ci": "'. $keyci.'",
        "dc": "'. $headerarray['DeviceInfo']['@attributes']['dc'].'",
        "dpID": "'. $headerarray['DeviceInfo']['@attributes']['dpID'].'",
        "errCode": "'. $headerarray['Resp']['@attributes']['errCode'].'",
        "errInfo": "'. $headerarray['Resp']['@attributes']['errInfo'].'",
        "fCount": "'. $headerarray['Resp']['@attributes']['fCount'].'",
        "fType": "'. $headerarray['Resp']['@attributes']['fType'].'"
    }
}
```

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```
"hmac": "".$headerarray['Hmac'].",
"iCount": "0",
"mc": "".$headerarray['DeviceInfo']['@attributes']['mc'].",
"mi": "".$headerarray['DeviceInfo']['@attributes']['mi'].",
"nmPoints": "".$headerarray['Resp']['@attributes']['nmPoints'].",
"pCount": "0",
"pType": "0"
"qScore": "".$headerarray['Resp']['@attributes']['qScore'].",
"rdsID": "".$headerarray['DeviceInfo']['@attributes']['rdsId'].",
"rdsVer": "".$headerarray['DeviceInfo']['@attributes']['rdsVer'].",
"sessionKey": "".$headerarray['Skey'].
},
"cardnumberORUID":
{
"
"indicatorforUID": "0",
"nationalBankIdentificationNumber": "".$request['nationalbankidentification'].      },
"merchantTranId": "".$request['merchantTranId'].",
"languageCode": "en",
"latitude": "".$request['latitude'].",
"longitude": "".$request['longitude'].",
"mobileNumber": "".$request['mobilenumber'].",
"paymentType": "B",
"requestRemarks": "".$request['requestremarks'].",
```

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```
"timestamp": " ".$request['timestamp'].",  
"transactionAmount": " ".$request['transcationamount'].",  
  
"transactionType": "CW",  
  
"merchantUserName": "sai",  
  
"merchantPin": "81DC9BDB52D04DC20036DBD8313ED055",  
"subMerchantId": " ".$request['submerchantid'].",  
  
    };  
  
    $return = json_decode($this->withdrawalhit($json),true);  
  
    if(!empty($return)){  
  
        return $return;  
  
    }else{        return false;  
}  
  
}
```

4.a) AADHAAR PAY STATUS CHECK

STATUS CHECK API:

URL:

<https://fingpayap.tapits.in/fpaepsweb//api/auth/merchantInfo/statusCheckV3/aadhaarPay/merchantLoginId>

Request object:

```
private String merchantTranId ;  
  
private String hash;  
  
private String merchantLoginId;  
  
private String merchantPassword;  
  
private int superMerchantId;  
  
private String superMerchantPassword;
```

Parameter name	Description	Value of the parameter
merchantTranId	This is your reference transaction id for you to check the transaction status. You must generate a unique merchantTxnId every time you are initiating a transaction.	It can be anything which is unique for every transaction(integer and alphabet)(M)
merchantLoginId	Login id of the merchant who is doing the transactions and already registered in the Fingpay system	Loginid of the merchant whose transactions you want to status check.(M)
merchantpassword	Merchant password is the pin of merchant	It should be md5 hashed and used in generation of hash which is provided by fingpay team.(not mandatory)
superMerchantId	Integer id of the supermerchant	It is provided by fingpay team(m)
superMerchantPassword	Super merchant password is the password of supermerchant	It should be md5 hashed and used in generation of hash which is provided by

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

		fingpay team.
--	--	---------------

Hash generation logic:

```
hash=base64.encode(SHA256(concat(Merchanttransactionid,+,merchantloginid,+,Supermerc  
hantloginid)))
```

- Concatenate the merchanttransactionid,"+" symbol and merchant id,"+" symbol and supermerchant id generated string must be converted to lower case and encrypted using SHA-256 algorithm and converted to BASE64 which is to be sent in hash

Sample hash string:

Merchant transaction id+ Merchant login id+ Supermerchant login id

Example: "271832+fingpay1234 +fingpayd"

NOTE: Merchant transaction id should be in the same case/format as passed at the time of transaction. Other fields must be in lower case.

Sample Request

```
{"merchantLoginId":"FINGPAY1234","merchantPassword":"e6e061838856bf47e1de730  
719fb2609","superMerchantId":2,"superMerchantPassword":"796c3ee556ac31f3754a3  
8cfd15b8044","merchantTranId":"123456","hash":"oeFNf527cE911LaCzS9wiYBo/7E5C7  
QsvwHqrAykpyU="}
```

Response Object:

```
private boolean apiStatus;  
  
private String apiStatusMessage;  
  
private Object data;
```

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```
private long apiStatusCode;
```

data:

```
private String fingpayTransactionId ;
```

```
private String stan ;
```

```
private String bankRRN ;
```

```
private String transactionTime;
```

```
private String merchantTranId ;
```

```
private boolean transactionStatus;
```

```
private Double transactionAmount;
```

```
private String transactionStatusCode;
```

```
private String transactionStatusMessage;
```

```
private String remarks;
```

```
private double balanceAmount;
```

```
private String aadhaarNumber;
```

```
private double latitude;
```

```
private double longitude;
```

```
private String mobileNumber;
```

```
private String deviceIMEI;
```

```
private String bankName;
```

Parameter name	Description
remarks	Remarks if anything sent while doing transaction will be posted back
TransactionTime	Requested timestamp of the transaction
transactionAmount	Amount entered by the customer
transactionStatusCode	Status of the transaction either success or false

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

bankRRN	Unique id generated by bank which we will receive in the response from bank
stan	Unique id of the transaction generated by fingpay
fingpayTransactionId	Transaction id generated by Fingpay
merchantTranId	Merchant transaction id sent by client
Transaction statusMessage	Error message corresponding to the error codes are sent
TransactionStatusCode	Depending on the transaction error codes will be sent
balanceAmount	Balance amount of the customer in his account which we receive in response from the bank(You should format it last two digits are paise)
Aadhaar number	Aadhaar number of the customer
latitude	Latitude where the transaction initiated
longitude	Longitude where the transaction initiated
Mobile number	Mobile number of the customer
deviceIMEI	IMEI of the device where transaction initiated
bankName	Customer bank name for the transaction

Sample Success Response

```
{
  "apiStatus": true,
  "apiStatusMessage": "Request Completed",
  "data": [
    {
      "fingpayTransactionId": "CWBT0188562290320175721697I",
      "stan": "206608",
      "bankRRN": "008917949303",
      "transactionTime": "29-Mar-2020 17:57:00",
      "merchantTranId": "271832",
      "transactionStatus": true,
      "transactionAmount": 200,
      "transactionStatusCode": "00",
      "transactionStatusMessage": "Success",
      "remarks": null,
      "balanceAmount": 950,
      "aadhaarNumber": "xxxxxxxx8545",
      "latitude": 27.71967971,
      "longitude": 79.65111144,
    }
  ]
}
```

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```
{
  "mobileNumber": "9198544958",
  "deviceIMEI": "869090047367116",
  "bankName": "Punjab National Bank"
},
{
  "apiStatusCode": 10000
}
```

Sample Failure Response :

```
{
  "apiStatus": false,
  "apiStatusMessage": "No data available for the requested data.",
  "data": null,
  "apiStatusCode": 0
}
```

*** API will return "transactionStatusCode": "FP009" for "Transaction Response pending" when there is no response for the particular where you need to do status check of the transaction again**

5.Important Checklist for Integration

- Normally transaction response is sent within 10 seconds. In case of issues or delays at NPCI or Issuer, the transaction time may get extended upto 245 seconds. Please ensure you do not time out the transaction before 180 seconds. In case you do not get any response or wish to check the status of a transaction, you must implement Status Check API. Status check is done through the unique reference id that is “Merchant Transaction Id”.
- The timeout for the transaction should be 180 seconds, as you will get the response for sure after 180 seconds
- Aadhaar number must be validated using an algorithm.
- Amount validation must be done (Max amount 10,000).
- IIN list must be updated daily and you should use the bank list provided by Fingpay (URL is provided above.)
- If you are supporting virtual id please follow above mentioned procedure.
- Location of the transaction must be sent and it should be accurate.
- Please pass device imei in header – and it should be the mobile device’s imei. In case you are using a Web App on PC, you must pass serial number of biometric scanner
- In case of transactions done through Mobile App, Fingpay will post callbacks to your server for which you need to provide call back API, Whitelist the ip of Fingpay server. For callback API details, please check page number 37 in this document(**This callbacks are only for mobile applications as you don’t receive the response to your server, you will receive response in the mobile app directly**)
- Value of the parameter merchantid, you must pass the merchantlogin id which is already registered in the Fingpay system, otherwise your transaction will not be processed.
- Onboarding of the merchant can be done through API provided by Fingpay
- If the platform of your application is java or .net you can use above encryption methods and urls, if php please use second urls as mentioned above.
- As per Aadhaar guidelines, you must never store Aadhaar number or pid anywhere in your system including log files

- You must check and stop sending duplicate transactions from your end. Duplicate transactions may include duplicate merchant transaction id, duplicate pid data, or even duplicate request.
- You must use Aadhaar Pay for payments for either merchandise or services but not use Cash Withdrawal API
- Cash Withdrawal API returns Balance of customer's account in case of success. Please use this to avoid calling Balance Inquiry unnecessarily.
- Submerchant id should not be passed for new integration.
- Should consider transaction as success only when you get bank rrn and response code as "00"
- Security key and public certificate are not same
- **Merchant PIN passed at the time of onboarding should match with Pin passed at the time of transactions in order to initiate the transaction.**

AEPS CASH DEPOSIT

API DOCUMENT

Version:1.1

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IP must be whitelisted at Fingpay end before integration and this IP should not be white listed by another provider (shared IP across customers is not allowed)

1.API FOR CASH DEPOSIT- AADHAAR BASED (JAVA and PHP)

<https://fingpayap.tapits.in/fpaepsservice/api/CashDeposit/merchant/deposit>

<https://fingpayap.tapits.in/fpaepsservice/api/CashDeposit/merchant/php/deposit>

HEADERS :

trnTimestamp: In this field timestamp of the transaction must be sent. Format of the timestamp should be dd/MM/yyyyHH:mm:ss

hash : Generated JSON and also security key(**which is provided by fingpay**) must be encrypted using SHA-256 algorithm and converted to BASE64 which is to be sent in hash header

hash=SHA256(JSON+securitykey) // + means string concatenation

deviceIMEI : In case of web you need to send the scanner's serial number which is integrated in your system for performing transactions, based on the IMEI will assign the terminal.

eskey :

- First a session key is generated using AES-128 algorithm of the BC provider
- Session key is Encrypted using public key(**which is provided by Fingpay**) with the algorithm RSA/ECB/PKCS1Padding of BC provider
- Generated encrypted data must be converted to BASE64 which is to be sent in **eskey**.

superMerchantId: Should send the id of the supermerchant of the merchant which is passed during the transaction which is provided by Fingpay

Body:

- JSON is Encrypted using session key , generated while eskey generation.
- Generated encrypted data must be converted to BASE64 which is to be sent in **body**.

Sample Headers and Body :

```
trnTimestamp = 29/11/2017 15:24:47
hash = ixV3GdhMyrTm3aacQXRft1C8uL4doDUJVBWmSOl1vxc=
deviceIMEI = 352801082418919
eskey=cM1C5gd2ugAgcyDMNAHmW4cNeBHHxOfwZ7HvyNTD6l2MV09ClZVOEMT9uyfHtGLrco
DXD7V8M+ZeGSivJ4sbedwJvTXr8wAHedfeZoHi4qUMXC8XFaoHrr+qYVc2+trJbGanY2e8pMLrPD
oTKrRh2NVwGBH+Z0VF5cV6aai2nLH4WdTV+EEXy+FTf3B1DzPqybSuP1Upe76VQNLXYQrdbp28n
Dvewk2dyBgKFHCmp26eNtZ0RaH3upbMoqHxPWhCgk/6cjD0Gx73zXVKSv/k1hB9kD1n8qW77h
bLGKqNFZSaABk3OcprFNY5Xpu53jhn/3E8jISWF080AwWF08RRqBiWucFMPvACWc0Xiic+ei6ZW
KOGcfKIn1ZWZrPHfJlckO0TAZOTr47Jk18oIrGYp86lBfOT/EC8z3zKPCQn2woryhCWrgYzXtPWQ7
EniBLUKRU1TUwkeB/uG9zFL3NI3ITK0y5ejwk3UDggygv4Y/3GjB1AtXHZT9j7D20CFT/JTUI/J1u
pu1ADMaH+ndWNKYDj6JH0V2i9jHb7wWoAnQbkcy7ywFTPX5O/E6oFi0Tb5xOHxxUxFD6sd2gu8
gwos6N5ijetFSST2i+5NzVYEDurLCfr7cupcdiTMjb0Oqrv5ouCVGMA/jw2WcYu0aT3ZlBgpyk=
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

superMerchantId=2

Body:

ngW07ebihM9cb4M8HeWVBnUohq81wLlwoVbIA7tTdfSCzceNoIDADOAfXaitH8WltONdJXiaUw
mKNZBCwnwVxM1e2eayJrEY8sNjyUWtVmOxXhefmDcK6/Hch4XwG9+Imzua2WiYQAoFq5+6+B2
tL2Lo5d60SOyIFMjFBrU3szJcvW/8lftpgQENOOi7Z5sURbaXRak4hwqZnl5+piCaxDUgZ5qRJBZ1Xrg
OZcleP7LxEp3DcdnYYiDNDXPyCy9sb0Uoda72nFieQluwEE/VFlw04O7WwvFRhuWbMp/sPzPIVyw
wxft4xo2cbZPVBllZd2YvTDG1CVCSHGK6NPFOfKVatFUn+Jh/grBskNB0Gxy0JkvWnxdfyIs5eSDiKVf
HLiCULdk8PB+kEE05XzaBt9NSC4EaL983xh512Ox6XF68IY+fSReap5rCGy4q7xLisZRZeKSNj4uZvZ5
xceb4JknYHmyvDCfLJ1KkkGXrT/s9mo72dSI0mQTYIMkICjy+uUgbG4MYpzNsiNXtK+w/fZOzARYhs
KQbyum98Gx9ziHEVwHBkiT16RyhHwyrXXp5qjom0OKXePr/Weg8ukXbZBS/aFeL42reRQ54CB1IF
eM2o930t/aR24roCIMHbOgArBzijqWxO21Ha2dpPtOfO5nTC2Vs800ufXQZmzQHt/rvRRrQvzXaf/
Nuk8j3G4AHNTGEM+Kv/8sfvKkRmJJAj6A1hnm4av10Ux9I/XK4OYCWzHY0xST6rE6cnsV2wm/lwG
ajn0TwSBkj0YLexCZGN7CXgOD5WCMM5sTp77o2khvXk58ZO337tjSMHk3HaLRAiqHnZCNxaelpN
TGpibNF4BrpBTr0ztaKXRQEZ1rEF87W531Uoalrib/Bi0TilgcE2KLrHA31wcoGU5n6b+uCk+pZ1KXP
UcrCySFDhBXuYD/DigbzDuZb2iAjdktEE7Ur+JHYQTkNKE20/Mc5Gz98uvyZc+X6HpLcKOF7tRtVIsP
mdEavDo0raCJyf+7Jw2kZkpahYO64RjBFyxWbDbr38KpirYsKXEXiXfy2ZEX6jShpIX/qu08Aya2iPzDp
zq+CNG0GpiPmRwlGjEOD5xnCoUnOjTxfqpbAFTAU630T8tKx6KPJNosnI8qXeZptYEMsVGjJwhgja
538ehFXVEtka/Wg6hipJAKh9nRQqhaUpBixDbXK/DvJiMR4Gh5DFqQSK2VLfW6CcQmTIJ8rVEGniX
ZsDfW+egRgmMR1UOwtfNevTn2ljYpx2kT+0FNBVniQ4C5r6mLsIQ6WulgZPUguQWOOmR2d72G
xO/TFbw5rRgKDoS7qamGbQsu0YZwgXkHcj1bgKWXM7D/475gq/++Fh/GKO/c22HutDUWi6NJ
HkYfDBP+lJxeyKksU1uPy8Tut6qjOnczDFryYL4B62nqly4IWkbjvqJT3Sr7p5jHsFdX6weHSjw86Awx
udnW91OnrbmYi1tNwBoHNKV3NzieKJ+myrZDbEMIsahD1rDYF7kOnub3KJ4SHKXv3mxoUHvnch
qJNCmQhPJ0+Ds+ZGk0sDkGu8vxdFperA8twSBCHs4pdM4DBD61nUk21HUaFaq7rNRfWUa9yKGj
ow7wsdKi/GGy2iW9g7JTQmWBZ8el4QOQFzOvXeJ=(This data is larger than this example given

PARAMETERS TO BE POSTED :

```
private P2CardnumberORUID cardnumberORUID;  
private String mobileNumber;  
private String paymentType;  
private String timestamp;  
private String transactionType;  
private double latitude;  
private double longitude;
```

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```
private String requestRemarks;  
private String deviceTransactionId;  
private CaptureResponse captureResponse;  
private String languageCode;  
private double transactionAmount;  
private String merchantTranId;  
private String merchantUserName;  
private String merchantPin;  
private String subMerchantId;
```

cardnumberORUID(Under cardnumber or uid there are 4 other parameters)

```
private String adhaarNumber;  
private int indicatorforUID;  
private String nationalBankIdentificationNumber;  
private String virtualId;(only if you are sending virtual id)
```

captureResponse(Under capture response below are the parameters)

```
private String errCode;  
private String errInfo;  
private String fCount;  
private String fType;  
private String iCount;  
private String iType;  
private String pCount;  
private String pType;  
private String nmPoints;  
private String qScore;  
private String dpID;  
private String rdsID;  
private String rdsVer;  
private String dc;  
private String mi;  
private String mc;  
private String ci;  
private String sessionKey;  
private String hmac;  
private String PidDatatype;  
private String Piddata;
```

(M) defines that that is mandatory field.

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Parameter name	Description	Value(Mandatory/not)
cardnumberORUID		
1.adhaarNumber	The Adhaar Number of Customer who is doing the transaction and it requires to be authenticated using an algorithm“ VerhoeffAlgorithm”	In case of virtual id the adhaar number by default it should be 999999999999(12 9's) constant value.otherwise it should be adhaar number of customer(M)
2.indicatorforUID	Values are defined by bank	It is constant(value is '0')in case of adhaar payment, in case of virtual id please send the value as '2'(M)
3.nationalBankIdentificationNumber	This is the selected bank by Customer forperforming the transaction.	The IIN list can be fetched from (ie, merchant bank details URL AEPS- https://fingpayap.tapits.in/fpaepsservice/api/bankdata/bank/details
4. virtualId	Virtual id of the customer and should be verified with verhoeff algorithm	Virtual id of the customer it should be 16 didgit value
5.mobileNumber	Mobile number of the customer	
6.paymentType	Unique code for different type of transactions	"B" (Constant for every transaction in aeps)(M)
7.transactionType	Type of the transaction	CD-cash deposit(M)
8.Latitude	Latitude of the place where transaction is happening	(M)
9.Longitude	Longitude of the place where transaction is happening	(M)
10.requestRemarks	If customer or merchant wants to send some remarks	
11.captureResponse	This response we receive it from the	Should not change

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	scanner dependent RDSERVICE , for any further information please refer the Scanner Dependent RD service documentation. These details will vary based on staging and production.	anything in capture response should send as it is.
12.transactionAmount	Amount of the transaction entered by customer or merchant	Amount of the transaction
13.languageCode	Every language is defined with a code.	en is for english(M)
14.subMerchantId	Submerchant id is used when user is using only single merchant id and pin, in place of sub merchant id customer needs to send the merchant loginid of their company.	SubMerchantid should not be passed
15.MerchantTranId	Client reference transaction id to check the transaction status. You must generate a unique merchantTransactionid every time while initiating a transaction.	(M)
16.Timestamp	Timestamp of the transaction	(M)
17.merchantUserName	Username of the merchant which is registered under Fingpay as a merchant	(M)
18.merchantPin	Pin of the merchant who is onboarded.	Password must be MD5 hashed(M)

SAMPLE JSON :

EncryptedJSON Payload for following plain sample JSON is to be sent

```
{
  "merchantTranId": "20171006100425",

  "captureResponse": {
    "PidDatatype": "X",
    "Piddata":
    "MjAxNy0xMC0wNlQxMDowNTowN3yUurFGz3Je+v4tjj64SRJwfxB5x5sayPZRqOOUX/EL4vzWh6
    R2XsObiujNTq12p8upDf7/teQ1LQCJKI8v3AlkiWsXOXOlncSvsSV2KRudCz0eKgPRxAh13stb3ZSXhk
    ynkZl/qocKOr9BLHlhvgeCWg0cf/GTmgMiJL3KzSM7RRCw0zPkkcp2tT4X+7fqXMu1p6XSqmAC6U
    Pofw1KusKSavufd9CegyUNkK8X2iDUMkPt7DyZKSvEDfN8csOjHgqeFUCVUI40uSoMGsSJGH38qd
    M8Q3MNPYtqTuObuU9bFQSD0TerXptDmeJMjNX0+F9lI3p40bl1riPUR4I7EwtuFg/JG/NBWeOJfI6
    Jexz0onK8YYs4eqq550f/WEVgh1AyyV32bsf8zVGKhqmLBWcvIVFdYaaDW+IKCOI7yreHCig3TBe+z
    bV06Ecsze9xdH5cy1o0gHRB2mAzLir+EyqaIn4aXEQ0dm2pwUjICKanSOVrYP2A6J7+bncxUMeZRI
    qB30aLNdrDLOsGNgrRM7aRRnlEX+aGsMQjKnpo9ZehWnVIXI3x2aMfwLXJ+QpCAelHSd3Q5Aik1
```

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```
ZLnFhRHxSP/qbAnfpelnMRz+AeKGDdbUuGdfJGzsfUhmzn5IstIjFJ0hliQrIIJdGyPL6+pJnKew+OifnP
Nqi79nF/cAk7WKJr+yAhzPOYU4gsb+tx3d/lzkn+UiXaUpzEikBTfJ+VJ9rG1d+IJTZlmzYrDxOhkDY7Z
WB9YSLtTkcaZAnc2IqRvSi+FXmXm/4vsyYUPLrw+rmFRwqQtzMSThEC3lxWZQXlxyA0N5EGujMoG
EZIAle6uqfG6RhguDgVJqCbR4BoVIOOYcQipoS7wKMyQdtfhVORkotV4x7hH1bXyyf7eekocfpSzsu
RUVzSU+3YAUi89neOдахMcL9jPGncG9AKtL8hVr0wF7iwl+f9OdIh1ubUHkO+29xrCizELa21wdVm
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4/b9PYSQXxURFpyyESZtszM3xwyBBCBgIWspNeysT1xM/KA\u003d\u003d",
"ci": "20191230",
"dc": "83017feb-b271-460b-92e8-6e12a3a0189e",
"dplD": "PRECISION.PB",
"errCode": "0",
"errInfo": "Image Capture Success",
"fCount": "1",
"fType": "0",
"hmac": "9ZqjrXUjxGTSQsxgUHDpBYqBhOBNARldRKMrrHCq7c+yImkLOxMkSQBWmihMPrx3",
"iCount": "0",
"mc":
"MIIEBDCCAuygAwIBAgIIfc0if0pbK5gwDQYJKoZIhvcNAQELBQAwdgxNzA1BgNVBAMTLkRTIFBy
ZWNpc2lvbiBCaW9tZXRYaWMgSW5kaWEgUHJpdmF0ZSBMaW1pdGVkIDExZAhBgNVBDMTGjlyI
EhhYmlidWxsYWggUm9hZCBUIE5hZ2FyMRAwDgYDVQQJEwdDaGVubmFpMRIwEAYDVQQIEwlu
YW1pbG5hZHUxETAPBgNVBASATCFNvZnR3YXJIMTIwMAYDVQQKEylQcmVjaXNpb24gQmlvbWV0
cmlljEluZGlhIFByaXZhdGUgTGltXRIZDELMAGGA1UEBhMCSU4wHhcNMTCxMDA1MDkzNDU2W
hcNMTCxMTA0MDkzNDU2WjBuMTIwMAYDVQQKDClQcmVjaXNpb24gQmlvbWV0cmlljEluZGlhI
FByaXZhdGUgTGltXRIZDESMBAGA1UECwwJQmlvbWV0cmlljMRIwDgYDVQQHDAdDSEVOTkFJ
MRIwEAYDVQQDDAIQcmVjaXNpb24wggiMA0GCSqGSIb3DQEBAQUAA4IBDwAwggEKAoIBAQC
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ORlJ1J624yXS+Yh3NnbWOieBKfeax31h6peytMgd85adqxhiEowYTHWJ/PkSku+AFGieMlItzDIcy/C
Vvs5l4CcHvjLsrhdowwOUli4v1OS9zKaRgwp/bzhP0ZuDw7JjaqzFIKwwbi+6cs3HLPvTBAGeED5Oe
wFsTxaZnJa0Skqgoi0VQYlurRf50AOG3/bP0Osh6MWylQZRluNI3A7jxz3sDqsBW+welq4Qj8A5d97
/7ctQNKe6/PGVpNop3W2dgJS9FUt",
"mi": "PB400",
"nmPoints": "46",
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
"pCount": "0",
"pType": "0",
"qScore": "100",
"rdsID": "PRECISION.AND.101",
"rdsVer": "1.1.0",
"sessionKey":
"M1++JGFa/Vp4szTGOFK0G3NNsVqGo0ffD4xnBf5QZO8TKO02ap9eWN6ZpTcXrkM+VlyJ0DZkQf
CcrJlcAlh49Mw9a6wciplJ0IS+wGN6szA1LH85c7Ciem/HNVGW7GH9u21cfSpnEmXIBKtfd5IULTnO
VPF7PfufgFCXC3rSsX8zWOogbEZmKP6eiw3+gqRb10NyKn90qJGLioBcMaNPt32r5kW2ppne07A
TQLuWZqLdhzVX1tHimCTjm5NchQIAFjrjBKWVVGdEIZ44VJEeyTa+A6J/Fp4n/8whidnYob+XKQ8/
PvEsu6oSXRwiL1N7QGP8RP48+S57mzlwlw\003d\003d"
},

"cardnumberORUID": {
  "adhaarNumber": "123443211234",
  "indicatorforUID": 0,
  "nationalBankIdentificationNumber": "607152"
},

"languageCode": "en",
"latitude": 13.0641367,
"longitude": 80.2480973,
"mobileNumber": "9952396587",
"paymentType": "B",
"requestRemarks": "TN3000CA0006530",
"timestamp": "06/10/2017 10:05:24",
"transactionAmount": 1.0,
"transactionType": "CD",
"merchantUserName": "sai",
"merchantPin": "81DC9BDB52D04DC20036DBD8313ED055",
"subMerchantId": "SUB1234"
}
```

RESPONSE PARAMETERS :

```
private boolean status;
private String message;
private Object data;
private long statusCode;
```


Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

data :

```
private String terminalId;  
private String requestTransactionTime;// dd/MM/yyyyHH:mm:ss  
private double transactionAmount;  
private String transactionStatus;  
private double balanceAmount;  
private String bankRRN;  
private String transactionType;  
private String fpTransactionId;  
private String merchantTxnId;
```

Parameter name	Description
terminalId	Terminal assigned while performing a transaction
requestTransactionTime	Requested timestamp of the transaction
transactionAmount	Amount entered by the customer
transactionStatus	Status of the transaction either success or false
balanceAmount	Balance amount of the customer in his account which we receive in response from the bank
bankRRN	Unique id generated by bank which we will receive in the response from bank
transactionType	Transaction type sent by client
fpTransactionId	Transaction id generated by Fingpay
merchantTxnId	Merchant transaction id sent by client
errorCode	Error code received from bank in response in case of failure
errorMessage	Error message will be fetched from the table

SAMPLE RESPONSE:

```
{  
  "status": true,  
  "message": "Request Completed",  
  "data": {  
    "terminalId": "FA012123",
```


Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
"requestTransactionTime": "01/01/2018 23:59:59",
"transactionAmount": 101,
"transactionStatus": "SUCCESS",
"balanceAmount":200 ,
"bankRRN":"765765656857" ,
"transactionType": "CD",
"FingpayTransactionId": "CD00010291117175529",
"merchantTxnId":"123221"
},
"statusCode": 10000
}
```

In case of failure transaction error code and error message will also be sent.

1a) ENCRYPTION METHODS FOR JAVA

Generating Hash

```
public byte[] generateSha256Hash(byte[] message) {
    Security.addProvider(new
org.bouncycastle.jce.provider.BouncyCastleProvider());
    String algorithm = "SHA-256";
    String SECURITY_PROVIDER = "BC";

    byte[] hash = null;
    MessageDigest digest;
    try {
        digest = MessageDigest.getInstance(algorithm, SECURITY_PROVIDER);
        digest.reset();
        hash = digest.digest(message);
    } catch (Exception e) {
        e.printStackTrace();
    }
    return hash;
}
```

Generating Session Key

```
private static final String JCE_PROVIDER = "BC";
private static final int SYMMETRIC_KEY_SIZE = 128;
```

```
static {
Security.addProvider(new BouncyCastleProvider());
}
public static byte[] generateSessionKey() throws NoSuchAlgorithmException,
NoSuchProviderException {
    KeyGenerator kgen = KeyGenerator.getInstance("AES", JCE_PROVIDER);
    kgen.init(SYMMETRIC_KEY_SIZE);
    //SecretKey key = kgen.generateKey();
    return kgen.generateKey().getEncoded();
}
```

Encrypt Using Session Key

```
public static String encryptUsingSessionKey(byte[] skey, byte[] data) throws
InvalidCipherTextException {
    PaddedBufferedBlockCipher cipher = new PaddedBufferedBlockCipher(new
AESEngine(), new PKCS7Padding());
    cipher.init(true, new KeyParameter(skey));
    int outputSize = cipher.getOutputSize(data.length);
    byte[] tempOP = new byte[outputSize];
    int processLen = cipher.processBytes(data, 0, data.length, tempOP, 0);
    int outputLen = cipher.doFinal(tempOP, processLen);
    byte[] result = new byte[processLen + outputLen];
    System.arraycopy(tempOP, 0, result, 0, result.length);
    return Base64.encode(result).replace("\r\n", "");
}
```

Encrypt Using Public Key

```
public static String encryptUsingPublicKey(byte[] message){
    byte[] ciphertextBytes = null;
    try {
        // The source of randomness
        SecureRandom secureRandom = new SecureRandom();
        Security.addProvider(new org.bouncycastle.jce.provider.BouncyCastleProvider());
        // Obtain a RSA Cipher Object
        Cipher cipher = Cipher.getInstance("RSA/ECB/PKCS1Padding","BC");
        // Loading certificate file
        String certFile = "public certificate file path";
        InputStream inStream = new FileInputStream(certFile);
        CertificateFactory cf = CertificateFactory.getInstance("X.509");
        X509Certificate cert =(X509Certificate)cf.generateCertificate(inStream);
    }
}
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
inStream.close();
    // Read the public key from certificate file
    RSAPublicKey pubkey = (RSAPublicKey) cert.getPublicKey();
    // Initialize the cipher for encryption
    cipher.init(Cipher.ENCRYPT_MODE, pubkey, secureRandom);
    // Encrypt the message
    ciphertextBytes = cipher.doFinal(message);
    return Base64.encode(ciphertextBytes).replace("\r\n", "");
} catch (IOException e) {
    System.out.println( "IOException:" + e );
    e.printStackTrace();
} catch ( CertificateException e ) {
    System.out.println( "CertificateException:" + e );
    e.printStackTrace();
} catch ( NoSuchAlgorithmException e ) {
    System.out.println( "NoSuchAlgorithmException:" + e );
    e.printStackTrace();
    } catch (Exception e) {
    System.out.println( "Exception:" + e );
    e.printStackTrace();
    }
    return null;
}
```

1c.API FOR CASH DEPOSIT ACKNOWLEDGEMENT(JAVA and PHP)

URL:<https://fingpayap.tapits.in/fpaepsservice/api/CashDeposit/merchant/deposit/acknowledgment>

Body:

private String rrn;

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
private String merchantTransactionId;  
  
private Boolean acknowledgementStatus;  
  
private String fingpayTransactionId;  
  
private String responseCode;
```

Sample json:

```
{"merchantTransactionId":"123456789","fingpayTransactionId":"CDBP016606412  
0320130242863I","acknowledgementStatus":true,"rrn":"123456789","responseC  
ode":"00"}
```

Parameter name	Description
merchantTransactionId	Client reference transaction id to check the transaction status. You must generate a unique merchantTransactionid every time while initiating a transaction.
fingpayTransactionId	Transaction id generated by Fingpay
acknowledgementStatus	Boolean value(If True the transaction is successfully updated at clients end,if false the transaction is not updated)
rrn	Unique id generated by bank which we will receive in the response from bank
responseCode	Error code received from bank in response in case of failure

Response

```
{  
  
  "status": true,  
  
  "message": "successful",  
}
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
"data": null,  
"statusCode": 10000  
}
```

If there is no data available below is the response

```
{  
  "status": false,  
  "message": "No data available for the requested data.",  
  "data": null,  
  "statusCode": 10002  
}
```

1d.STATUS CHECK: STATUS CHECK FOR AADHAAR BASED CASH DEPOSIT:

URL:

<https://fingpayap.tapits.in/fpaepsweb/api/auth/merchantInfo/statusCheckV2/merchantLoginId/cashDeposit>

Request object:

```
private String merchantTranId ;
```

```
private String hash;
```

```
private String merchantLoginId;
```

Parameter name	Description	Value of the parameter
merchantTranId	This is your reference transaction id for you to check the transaction status. You must generate a unique merchantTxnId every time you are initiating a transaction.	It can be anything which is unique for every transaction(integer and alphabet)
merchantLoginId	Login id of the merchant who is doing the transactions and already registered in the Fingpay system	Loginid of the merchant whose transactions you want to status check.
merchantpassword	Merchant password is the pin of merchant	It should be md5 hashed and used in generation of hash which is provided by fingpay team.

Hash generation logic:

```
hash =base64.encode(SHA256(concat(Merchanttransactionid,+,MD5(merchantPassword))))
```

- Concatenate the merchanttransactionid,"+" symbol and merchant password which must be encrypted using MD5 hash, this generated string must be encrypted using SHA-256 algorithm and converted to BASE64 which is to be sent in hash

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

Sample Request

```
{  
  "merchantLoginId": "Fingpay",  
  "merchantTranId": "636838180887166778",  
  "hash": "taLwRln+bF9q+T9NFFipFbxKAusdOOWM1lhJ6KMmC10=",  
}
```

Response Object:

```
private boolean apiStatus;  
private String apiStatusMessage;  
private Object data;  
private long apiStatusCode;
```

data:

```
private String fingpayTransactionId ;  
private String stan ;  
private String bankRRN ;  
private String transactionTime;  
private String merchantTranId ;  
private boolean transactionStatus;  
private Double transactionAmount;  
private String transactionStatusCode;  
private String transactionStatusMessage;  
private String remarks;  
private double balanceAmount;
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
private String aadhaarNumber;  
  
private double latitude;  
  
private double longitude;  
  
private String mobileNumber;  
  
private String deviceIMEI;  
  
private String bankName;
```

Parameter name	Description
remarks	Remarks if anything sent while doing transaction will be posted back
TransactionTime	Requested timestamp of the transaction
transactionAmount	Amount entered by the customer
transactionStatusCode	Status of the transaction either success or false
bankRRN	Unique id generated by bank which we will receive in the response from bank
stan	Unique id of the transaction generated by fingpay
fingpayTransactionId	Transaction id generated by Fingpay
merchantTranId	Merchant transaction id sent by client
Transaction statusMessage	Error message corresponding to the error codes are sent
TransactionStatusCode	Depending on the transaction error codes will be sent
balanceAmount	Balance amount of the customer in his account which we receive in response from the bank(You should format it last two digits are paise
Aadhaar number	Aadhaar number of the customer
latitude	Latitude where the transaction initiated

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

longitude	Longitude where the transaction initiated
Mobile number	Mobile number of the customer
deviceIMEI	IMEI of the device where transaction initiated
bankName	Customer bank name for the transaction

Sample Success Response

```
{
  "apiStatus": true,
  "apiStatusMessage": "Request Completed",
  "data": [
    {
      "fingpayTransactionId": "CDB141217091916190021",
      "stan": "109983",
      "bankRRN": "926016231481",
      "transactionTime": "17-Sep-2019 16:19:00",
      "merchantTranId": "1851501043",
      "transactionStatus": true,
      "transactionAmount": 10000,
      "transactionStatusCode": "00",
      "transactionStatusMessage": "Success",
      "remarks": null,
      "balanceAmount": 409000,
      "aadhaarNumber": "xxxxxxxx8869",
      "latitude": 18.5229312,
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
"longitude": 73.62478080000001,  
"mobileNumber": "9130460773",  
"deviceIMEI": "000016461462456",  
"bankName": "Union Bank of India"  
}  
],  
"apiStatusCode": 10000  
}
```

Sample Failure Response :

```
{  
  "apiStatus": false,  
  "apiStatusMessage": "No data available for the requested data.",  
  "data": null,  
  "apiStatusCode": 0  
}
```

*** API will return "transactionStatusCode": "FP009" for "Transaction Response pending" when there is no response for the particular where you need to do status check of the transaction again**

IP must be whitelisted at Fingpay end before integration and this IP should not be white listed by another provider (shared IP across customers is not allowed)

2.API FOR CASH DEPOSIT WITH OTP(JAVA and PHP)

i. API FOR GENERATE OTP

PHP

URL : <https://fingpayap.tapits.in/fpaepsservice/api/CashDeposit/merchant/php/generate/otp>

Java

URL : <https://fingpayap.tapits.in/fpaepsservice/api/CashDeposit/merchant/generate/otp>

HEADERS :

trnTimestamp: In this field timestamp of the transaction must be sent. Format of the timestamp should be dd/MM/yyyyHH:mm:ss

hash :Generated JSON and also security key(**which is provided by fingpay**) must be encrypted using SHA-256 algorithm and converted to BASE64 which is to be sent in hash header

hash=SHA256(JSON+securitykey) // + means string concatenation

deviceIMEI : In case of web you need to send the scanner's serial number which is integrated in your system for performing transactions, based on the IMEI will assign the terminal.

eskey :

- First a session key is generated using AES-128 algorithm of the BC provider
- Session key is Encrypted using public key(**which is provided by Fingpay**) with the algorithm RSA/ECB/PKCS1Padding of BC provider
- Generated encrypted data must be converted to BASE64 which is to be sent in **eskey**.

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

Body:

- JSON is Encrypted using session key , generated while eskey generation.
- Generated encrypted data must be converted to BASE64 which is to be sent in **body**.

M means mandatory

PARAMETERS TO BE POSTED :

```
private int superMerchantId ;//M
private String merchantUserName; //M
private String merchantPin; //M
private String subMerchantId; //O
private String secretKey; //M
private String mobileNumber; //M
private String iin; //M
private String transactionType;// cash deposit with otp - CDO//M
private double latitude; //M
private double longitude; //M
private String requestRemarks; //O
private String merchantTranId; //M
private String accountNumber; //M
private double amount; //M
private String fingpayTransactionId;// value "" in the 1st leg
private String otp;// value "" in the 1st leg
private int cdPkId; //value '0' in the 1st leg
private String paymentType;//B-bank      M
```

RESPONSE PARAMETERS :

```
private boolean status;
private String message;
private Object data;
private long statusCode;
```

data :

```
private String fingpayTransactionId;
private Integer cdPkId;
private String bankRrn;
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
private String fpRrn;  
private String stan;  
private String merchantTranId;  
private String responseCode;  
private String responseMessage;  
private String accountNumber;  
private String mobileNumber;  
private String beneficiaryName; //O  
private String transactionTimestamp;
```

Sample Request:

```
{  
  "superMerchantId": "1",  
  "merchantUserName": "Fingpay",  
  "merchantPin": "81dc9bdb52d04dc20036dbd8313ed055",  
  "subMerchantId": "S503015",  
  "secretKey": "94ae27ecceb2e41dc01216c7b858421dbded02a19ac4e8c7fc8cf6dc14236eff",  
  "mobileNumber": "9560620395",  
  "iin": "508534",  
  "transactionType": "CDO",  
  "latitude": "28.6119669",  
  "longitude": "77.4275416",  
  "requestRemarks": "Cash Deposit from this:9560620395",  
  "merchantTranId": "124411588",  
  "accountNumber": "100501512871",  
  "amount": "1",  
  "fingpayTransactionId": "",  
  "otp": "",  
  "cdPkId": "0",  
  "paymentType": "B"  
}
```

Sample Response:

```
{  
  "status": true,  
  "message": "Message successfully sent to the entered mobile number.",  
  "data": {  
    "fingpayTransactionId": "CDOBA0000001070720224315449A",  
    "cdPkId": 6391,  
    "bankRrn": "018922375143",  
    "fpRrn": "018922806391",  
    "stan": "806391",  
    "merchantTranId": "124411588",
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
{
  "responseCode": "00",
  "responseMessage": "Message successfully sent to the entered mobile number.",
  "accountNumber": "100501512871",
  "mobileNumber": "9560620395",
  "beneficiaryName": null,
  "transactionTimestamp": "Tue Jul 07 22:43:15 IST 2020"
},
{
  "statusCode": 10000
}
```

ii. API FOR VALIDATE OTP & FETCH BENEFICIARY DETAILS

PHP

URL : <https://fingpayap.tapits.in/fpaepsservice/api/CashDeposit/merchant/php/validate/otp>

Java

URL : <https://fingpayap.tapits.in/fpaepsservice/api/CashDeposit/merchant/validate/otp>

HEADERS :

trnTimestamp: In this field timestamp of the transaction must be sent. Format of the timestamp should be dd/MM/yyyyHH:mm:ss

hash : Generated JSON and also security key(**which is provided by fingpay**) must be encrypted using SHA-256 algorithm and converted to BASE64 which is to be sent in hash header

hash=SHA256(JSON+securitykey) // + means string concatenation

deviceIMEI : In case of web you need to send the scanner's serial number which is integrated in your system for performing transactions, based on the IMEI will assign the terminal.

eskey :

- First a session key is generated using AES-128 algorithm of the BC provider
- Session key is Encrypted using public key(**which is provided by Fingpay**) with the algorithm RSA/ECB/PKCS1Padding of BC provider

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

- Generated encrypted data must be converted to BASE64 which is to be sent in **eskey**.

Body:

- JSON is Encrypted using session key , generated while eskey generation.
- Generated encrypted data must be converted to BASE64 which is to be sent in **body**.

M means mandatory

PARAMETERS TO BE POSTED :

```
private int superMerchantId ;//M
private String merchantUserName; //M
private String merchantPin; //M
private String subMerchantId; //O
private String secretKey; //M

private String mobileNumber; //M
private String iin; //M
private String transactionType;// cash deposit with otp - CDO//M
private double latitude; //M
private double longitude; //M
private String requestRemarks; //O
private String merchantTranId; //M
private String accountNumber; //M
private double amount; //M
private String fingpayTransactionId;// M
private String otp;// M
private int cdPkId; //M
private String paymentType;//B-bank
```

RESPONSE PARAMETERS :

```
private boolean status;
private String message;
private Object data;
private long statusCode;
```

Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

data :

```
private String fingpayTransactionId;  
private Integer cdPkId;  
private String bankRrn;  
private String fpRrn;  
private String stan;  
private String merchantTranId;  
private String responseCode;  
private String responseMessage;  
private String accountNumber;  
private String mobileNumber;  
private String beneficiaryName; //M  
private String transactionTimestamp;
```

Sample Request:

```
{  
  "superMerchantId": "1",  
  "merchantUserName": "rs604365",  
  "merchantPin": "81dc9bdb52d04dc20036dbd8313ed055",  
  "subMerchantId": "S503015",  
  "secretKey": "94ae27ecceb2e41dc01216c7b858421dbded02a19ac4e8c7fc8cf6dc14236eff",  
  "mobileNumber": "9560620395",  
  "iin": "508534",  
  "transactionType": "CDO",  
  "latitude": "28.6119669",  
  "longitude": "77.4275416",  
  "requestRemarks": "Cash In Amount Rs.1 By XXXXXXXX2871",  
  "merchantTranId": "124411588",  
  "accountNumber": "100501512871",  
  "amount": "1",  
  "fingpayTransactionId": "CDOBA0000001070720224315449A",  
  "otp": "829050",  
  "cdPkId": "6391",  
  "paymentType": "B"  
}
```

Sample Response:

```
{  
  "status": true,  
  "message": "Request Completed",  
  "data": {
```


Fingpay API - Cash Withdrawal, Balance Inquiry, Aadhaar Pay, Cash Deposit, EKYC, 3 Way Recon

```
{
  "fingpayTransactionId": "CDOBA0000001070720224315449A",
  "cdPkId": 6391,
  "bankRrn": "018922375143",
  "fpRrn": "018922806391",
  "stan": "806391",
  "merchantTranId": "124411588",
  "responseCode": "00",
  "responseMessage": "Beneficiary data fetched successfully.",
  "accountNumber": "100501512871",
  "mobileNumber": "9560620395",
  "beneficiaryName": "VIVEK KUMAR KUSHWAHA",
  "transactionTimestamp": "Tue Jul 07 22:43:34 IST 2020"
},
{
  "statusCode": 10000
}
```

iii. API FOR DO TRANSACTION

PHP

URL : <https://fingpayap.tapits.in/fpaepsservice/api/CashDeposit/merchant/php/transaction>

Java

URL : <https://fingpayap.tapits.in/fpaepsservice/api/CashDeposit/merchant/transaction>

HEADERS :

trnTimestamp: In this field timestamp of the transaction must be sent. Format of the timestamp should be dd/MM/yyyyHH:mm:ss

hash : Generated JSON and also security key(**which is provided by fingpay**) must be encrypted using SHA-256 algorithm and converted to BASE64 which is to be sent in hash header

hash=SHA256(JSON+securitykey) // + means string concatenation

deviceIMEI : In case of web you need to send the scanner's serial number which is integrated in your system for performing transactions, based on the IMEI will assign the terminal.

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eskey :

- First a session key is generated using AES-128 algorithm of the BC provider
- Session key is Encrypted using public key(**which is provided by Fingpay**) with the algorithm RSA/ECB/PKCS1Padding of BC provider
- Generated encrypted data must be converted to BASE64 which is to be sent in **eskey**.

Body:

- JSON is Encrypted using session key , generated while eskey generation.
- Generated encrypted data must be converted to BASE64 which is to be sent in **body**.

M means mandatory

PARAMETERS TO BE POSTED :

```
privateintsuperMerchantId ;//M
private String merchantUserName; //M
private String merchantPin; //M
private String secretKey; //M
private String mobileNumber; //M
private String iin; //M
private String transactionType;// cash deposit with otp - CDO//M
privatedouble latitude; //M
privatedouble longitude; //M
private String requestRemarks; //O
private String merchantTranId; //M
private String accountNumber; //M
privatedouble amount; //M
private String fingpayTransactionId;// M
private String otp;// M
privateintcdPkId; //M
private String paymentType;//B-bank      M
```

RESPONSE PARAMETERS :

```
private boolean status;
```

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```
private String message;  
private Object data;  
private long statusCode;
```

data :

```
private String fingpayTransactionId;  
private Integer cdPkId;  
private String bankRrn;  
private String fpRrn;  
private String stan;  
private String merchantTranId;  
private String responseCode;  
private String responseMessage;  
private String accountNumber;  
private String mobileNumber;  
private String beneficiaryName; //M  
private String transactionTimestamp;
```

Sample Request:

```
{  
  "superMerchantId": "1",  
  "merchantUserName": "rs604365",  
  "merchantPin": "81dc9bdb52d04dc20036dbd8313ed055",  
  "subMerchantId": "S503015",  
  "secretKey": "94ae27ecceb2e41dc01216c7b858421dbded02a19ac4e8c7fc8cf6dc14236eff",  
  "mobileNumber": "9560620395",  
  "iin": "508534",  
  "transactionType": "CDO",  
  "latitude": "28.6119669",  
  "longitude": "77.4275416",  
  "requestRemarks": "Cash In Amount Rs.1 By XXXXXXXX2871",  
  "merchantTranId": "124411588",  
  "accountNumber": "100501512871",  
  "amount": "1",  
  "fingpayTransactionId": "CDOBA0000001070720224315449A",  
  "otp": "1234",  
  "cdPkId": "6391",  
  "paymentType": "B"  
}
```

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Sample Response:

```
{
  "status": true,
  "message": "Request Completed",
  "data": {
    "fingpayTransactionId": "CDOBA0000001070720224315449A",
    "cdPkId": 6391,
    "bankRrn": "018922375143",
    "fpRrn": "018922806391",
    "stan": "806391",
    "merchantTranId": "124411588",
    "responseCode": "00",
    "responseMessage": "Transaction successfully completed.",
    "accountNumber": "100501512871",
    "mobileNumber": "9560620395",
    "beneficiaryName": null,
    "transactionTimestamp": "Tue Jul 07 22:43:40 IST 2020"
  },
  "statusCode": 10000
}
```

NOTE: You will receive pkid and Fingpay transaction id in the response of first leg, so you need send those same values in all API requests of particular transaction

2b.API FOR CASH DEPOSIT WITHOTP ACKNOWLEDGEMENT(JAVA and PHP)

URL:<https://fingpayap.tapits.in/fpaepsservice//api/CashDeposit/otp/merchant/acknowledgement>

Body:

```
private String rrn;

    private String merchantTransactionId;

    private Boolean acknowledgementStatus;

    private String fingpayTransactionId;

    private String responseCode;
```

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Sample json:

```
{
  "merchantTransactionId": "123456789",
  "fingpayTransactionId": "CDBP0166064120320130242863I",
  "acknowledgementStatus": true,
  "rrn": "123456789",
  "responseCode": "00"
}
```

Parameter name	Description
merchantTransactionId	Client reference transaction id to check the transaction status. You must generate a unique merchantTransactionid every time while initiating a transaction.
fingpayTransactionId	Transaction id generated by Fingpay
acknowledgementStatus	Boolean value(If True the transaction is successfully updated at clients end,if false the transaction is not updated)
rrn	Unique id generated by bank which we will receive in the response from bank
responseCode	Error code received from bank in response in case of failure

Response

```
{
  "status": true,
  "message": "successful",
  "data": null,
  "statusCode": 10000
}
```

If there is no data available below is the response

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```
{
  "status": false,
  "message": "No data available for the requested data.",
  "data": null,
  "statusCode": 10002
}
```

2c. STATUS CHECK API FOR CASHDEPOSIT WITH OTP:

URL:

<https://fingpayap.tapits.in/fpaepsweb/api/auth/merchantInfo/statusCheck/cashDepositWithOtp>

Request object:

```
private String merchantTranId ;

private String hash;

private String merchantLoginId;

private String merchantPassword;

private int superMerchantId;

private String superMerchantPassword;
```

Parameter name	Description	Value of the parameter
merchantTranId	This is your reference transaction id for you to check the transaction status. You must generate a unique merchantTxnId every time you are initiating a transaction.	It can be anything which is unique for every transaction(integer and alphabet) (M)
merchantLoginId	Login id of the merchant who is doing the transactions and already registered in the Fingpay system	Loginid of the merchant whose transactions you want to status check.(M)
merchantpassword	Merchant password is the pin of merchant	It should be md5 hashed and used in generation of hash which is provided by

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		fingpay team.(not mandatory)
superMerchantId	Integer id of the supermerchant	It is provided by fingpay team(M)
superMerchantPassword	Super merchant password is the password of supermerchant	It should be md5 hashed and used in generation of hash which is provided by fingpay team.

Hash generation logic:

```
hash=base64.encode(SHA256(concat(Merchanttransactionid,+,merchantloginid,+,SupermerchantLoginid
```

- Concatenate the merchanttransactionid,"+" symbol and merchantloginid,"+" symbol and supermerchant loginid generated string must be converted to lower case and encrypted using SHA-256 algorithm and converted to BASE64 which is to be sent in hash header

Sample hash string:

"271832+fingpay1234 +fingpayd" **NOTE:string must be in all lower case**

Sample Request

```
{"merchantLoginId":"FINGPAY1234","merchantPassword":"e6e061838856bf47e1de730719fb2609","superMerchantId":2,"superMerchantPassword":"796c3ee556ac31f3754a38cfd15b8044","merchantTranId":"123456","hash":"oeFNf527cE911LaCzS9wiYBo/7E5C7QsvwHqrAykpyU="}
```

Response Object:

```
private boolean apiStatus;  
  
private String apiStatusMessage;  
  
private Object data;
```

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```
private long apiStatusCode;
```

data:

```
private String fingpayTransactionId ;
```

```
private String stan ;
```

```
private String bankRRN ;
```

```
private String transactionTime;
```

```
private String merchantTranId ;
```

```
private boolean transactionStatus;
```

```
private Double transactionAmount;
```

```
private String transactionStatusCode;
```

```
private String transactionStatusMessage;
```

```
private String remarks;
```

```
private double balanceAmount;
```

```
private String aadhaarNumber;
```

```
private double latitude;
```

```
private double longitude;
```

```
private String mobileNumber;
```

```
private String deviceIMEI;
```

```
private String bankName;
```

Parameter name	Description
remarks	Remarks if anything sent while doing transaction will be posted back
TransactionTime	Requested timestamp of the transaction

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transactionAmount	Amount entered by the customer
transactionStatusCode	Status of the transaction either success or false
bankRRN	Unique id generated by bank which we will receive in the response from bank
stan	Unique id of the transaction generated by fingpay
fingpayTransactionId	Transaction id generated by Fingpay
merchantTranId	Merchant transaction id sent by client
Transaction statusMessage	Error message corresponding to the error codes are sent
TransactionStatusCode	Depending on the transaction error codes will be sent
balanceAmount	Balance amount of the customer in his account which we receive in response from the bank(You should format it last two digits are paise
Aadhaar number	Aadhaar number of the customer
latitude	Latitude where the transaction initiated
longitude	Longitude where the transaction initiated
Mobile number	Mobile number of the customer
deviceIMEI	IMEI of the device where transaction initiated
bankName	Customer bank name for the transaction

Sample Success Response

```
{
  "apiStatus": true,
  "apiStatusMessage": "Request Completed",
  "data": [
    {
      "fingpayTransactionId": "CWBT0188562290320175721697I",
      "stan": "206608",
      "bankRRN": "008917949303",
      "transactionTime": "29-Mar-2020 17:57:00",
      "merchantTranId": "271832",

```

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```
{
  "transactionStatus": true,
  "transactionAmount": 200,
  "transactionStatusCode": "00",
  "transactionStatusMessage": "Success",
  "remarks": null,
  "balanceAmount": 950,
  "aadhaarNumber": "xxxxxxxx8545",
  "latitude": 27.71967971,
  "longitude": 79.65111144,
  "mobileNumber": "9198544958",
  "deviceIMEI": "869090047367116",
  "bankName": "Punjab National Bank"
},
"apiStatusCode": 10000
}
```

Sample Response When last step of the transaction is not Initiated:

```
{
  "apiStatus": true,
  "apiStatusMessage": "Request Completed",
  "data": [
    {
      "fingpayTransactionId": "CDOBB1227972081020124700609I",
      "stan": "862443",
      "bankRRN": null,
      "transactionTime": null,
      "merchantTranId": "1166776891",
      "transactionStatus": false,
      "transactionAmount": 10000,
      "transactionStatusCode": "FP044",
      "transactionStatusMessage": "Cash deposit OTP transaction initiation incomplete.",
      "remarks": null,
      "balanceAmount": 0,
      "aadhaarNumber": null,
      "latitude": 23.9252575,
      "longitude": 91.8773248,
      "mobileNumber": "8787790147",
      "deviceIMEI": "S749734",
      "bankName": "ICICI Bank"
    }
  ],
  "apiStatusCode": 10000
}
```

* API will return "transactionStatusCode": "FP009" for "Transaction Response pending" when there is no response for the particular where you need to do status check of the transaction again

*Status code in the response is the status of the last step of the transaction

2.Important Checklist for Integration.

- Normally transaction response is sent within 10 seconds. In case of issues or delays at NPCI or Issuer, the transaction time may get extended upto 245 seconds. Please ensure you do not time out the transaction before 180 seconds. In case you do not get any response or wish to check the status of a transaction, you must implement Status Check API. Status check is done through the unique reference id that is "Merchant Transaction Id". For status check API, please check in this document.
- The timeout for the transaction should be 180 seconds, as you will get the response for sure after 180 seconds
- Aadhaar number must be validated using an algorithm.
- Amount validation must be done (Max amount 10,000).
- IIN list must be updated daily and you should use the bank list provided by Fingpay (URL is provided above.)
- If you are supporting virtual id please follow above mentioned procedure.
- Location of the transaction must be sent and it should be accurate.
- Please pass device imei in header – and it should be the mobile device's imei. In case you are using a Web App on PC, you must pass serial number of biometric scanner
- In case of transactions done through Mobile App, Fingpay will post callbacks to your server for which you need to provide call back API, Whitelist the ip of Fingpay server. For callback API details, please check in this document(**This callbacks are only for mobile applications as you don't receive the response to your server,you will receive response in the mobile app directly**)
- Value of the parameter merchantid, you must pass the merchantlogin id which is already registered in the Fingpay system, otherwise your transaction will not be processed.
- Onboarding of the merchant can be done through API provided by Fingpay
- As per Aadhaar guidelines, you must never store Aadhaar number or pid anywhere in your system including log files

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- You must check and stop sending duplicate transactions from your end. Duplicate transactions may include duplicate merchant transaction id, duplicate pid data, or even duplicate request.
- Merchant id and merchant pin is provided by fingpay.
- ~~Should consider transaction as success only when you get bank rrn and response code as "00"~~
- Should send the acknowledgement for every transaction.
- **Should make the transaction success if you the transaction is timeout and also in case of 00,91,52,08 response code.**
- **The transaction is deemed success, once initiated (post OTP validation and bene confirmation), unless with an explicit failure code (other than timeout or 91 / 52 / 08)**

AEPS THREE WAY RECON API

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IMPORTANT POINTERS

- 3Way Recon API is a Mandatory API
- All the testing and fine-tuning have to be done on this link and not the production/Live version.
- **Kindly note DO NOT USE THE production/live link unless a go-ahead is given from our tech.**
- If in case test transactions happen on the live credentials, we shall not be liable for any monetary damages.
- Kindly make sure that the response passed for the successful transaction should be "00". And for the failed transaction mentioned it as "Failed".
- Note that any transaction without a response other than "00" will be considered as failed and will be reversed to the customer.

API FOR THREWAY RECON UAT

API

UAT URL: https://fpuat.tapits.in/fpcollectservice_uat/api/threeway/aggregators

Production – [\(Will Provide on Mail after UAT Confirmation- Share UAT Log on Mail for Confirmation\)](#)

Kindly note DO NOT USE THE production/live link unless a go-ahead is given from our tech.

HEADERS :

txnDate: date of the transaction

hash : Should send the hash generated by using below method.

hash=requestbody+supermerchantLoginId+secretKey

Concatenate above mentioned value and generate a hash using SHA-256 algorithm.

Base64 encoding must be done after generating hash.

Encryption method sample code is provided in the document at the end.

Secret key is provided by Fingpay team

superMerchantLoginId: Login id of supermerchant which is provided by Fingpay team

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superMerchantId: super merchant id which is provided by Fingpay team

Body : Generated plain json is sent in the body.

Sample headers:

```
txnDate = 29/11/2017 15:24:47
hash = 2ne47rpTCzXUtUn0kysY8spqEXlldFjFZtGRnEor6d4=
superMerchantLoginId= Fingpay
superMerchantid = 2
```

Sample Body format

```
[
{
  "merchantTransactionId": "123456",
  "fingpayTransactionId": "fingpay1",
  "transactionRrn": "92837928347",
  "responseCode": "00",
  "transactionDate": "28-04-2020",
  "serviceType": "CW"
},
{
  "merchantTransactionId": "71235612",
  "fingpayTransactionId": "fingpay2",
  "transactionRrn": "8127361872",
  "responseCode": "U3",
  "transactionDate": "28-04-2020",
  "serviceType": "M"
}
]
```


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Parameter name	Description	Value(Mandatory/not)
serviceType	Type of the transaction	CW-Cashwithdrawal(M) M-Adhaarpay(M)
merchantTransactionid	This is your reference transaction id for you to check the transaction status. You must generate a unique merchantTxnId every time you are initiating a transaction.	
Date	Timestamp of the transaction	
transactionRrn	Unique id generated by bank which we will receive in the response	Sent in the response by fingpay team
fingpayTransactionId	Transaction id generated by Fingpay	Sent in the response by fingpay team
responseCode	Error code received from bank in response in case of failure	Sent in the response by fingpay team

Success Response:

```
{
  "apiStatus": true,
  "apiStatusMessage": "Request Completed",
  "data": [
    {
      "merchantTransactionId": "1",
      "fingpayTransactionId": "fing1",
      "transactionRrn": "123rrn",
      "responseCode": "00",
      "referenceId": "35050520181634",
      "transactionDate": "28-04-2020",
      "serviceType": "CW"
    }
  ],
}
```

```
{
  "merchantTransactionId": "2",
  "fingpayTransactionId": "fing2",
  "transactionRrn": "133rrn",
  "responseCode": "00",
  "referenceId": "35050520181634",
  "transactionDate": "28-04-2020",
  "serviceType": "AP"
},
"apiStatusCode": 0
}
```

Note: Only 10000 transactions can be posted in one request if there are more than 10000 transactions please do it in multiple requests

In case of success transactions, you need to send the status code as '00' and bank RRN (If other responses are sent that will lead to reconciliation issues, in case of failure- need to send the response code you get from fingpay like U3

RD Service – PID OPTIONS

RD services must supports FMR+FIR in single transaction.

The Below steps will help customers to integrate this feature in their aggregator applications.

Pre-requisites:

1. Install latest Windows RD service from Mantra's download portal or android RD service from Google Play store.
2. Follow the integration steps mentioned in further sections.

RD related Integration/Changes at consumer application level:

To capture FMR and FIR both in single capture request from RD service, the value of element "fType" to be set as 2 under xml which is submitted to RD service during capture call. The definition and value of fType is as under: ▪ fType = "0" → will capture FMR only ▪ fType = "1" → will capture FIR only ▪ fType = "2" → will capture FMR and FIR both

Please refer fType element in below xml structure:

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The change needs to be done at aggregators

fType should be 2

Please refer fType element in below <PidOptions> xml structure:

```
<PidOptions ver="" env="">
```

```
<Opts fCount="" fType="2" iCount="" iType="" pCount="" pType="" format=""  
pidVer="" timeout=""
```

```
otp="" wadh="" posh="" />
```

```
<Demo> Demographic Attributes as specified in authentication API </Demo>
```

```
<CustOpts>
```

```
<Param name="" value="" />
```

```
</CustOpts>
```

```
</PidOptions>
```