



Aggre Pay

Aggregating Payments Worldwide

PAYMENT GATEWAY

APIs for integration

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1. OVERVIEW

This document describes the steps for technical integration process between merchant website / application and Aggrepay.

Through Aggrepay, your customers can make electronic payments through various payment modes such as:

- Credit cards
- Debit cards
- Net banking
- EMI
- Cash Cards/Wallets
- Mobile/web invoicing
- Integrated NEFT/RTGS
- Bank deposits
- Standing instruction on cards
- Customer account debit

Aggrepay also offers you a business UI (<https://biz.aggrepaypayments.com>) where you have access to all your prior transaction/payment details, settlement details, analytics, etc.

You can also use this UI to create invoices singly or in bulk, set reminders, recurring billing, and many more features.

Through this interface, you can also cancel past invoices (and in some cases, past transactions), manage your payables, vendor payments, set split ratios for vendor payments, process refunds, etc. This online interface can be accessed through <https://biz.aggrepaypayments.com>.

2. PAYMENT REQUEST API

When you integrate with Aggrepay, the customer will be re-directed from your merchant website to the Aggrepay payment page. After completion of the transaction, Aggrepay will direct the customer back to the merchant website

2.1. Steps for Integration

- Initially your transaction limit would be set to a fixed amount (such as Rs. 2.34) and the said limit will be increased after a few successful test transactions.
- You need to submit a **POST REQUEST** to our server, at the below mentioned URL
<https://biz.aggrepaypayments.com/v2/paymentrequest>

Note: hash is a mandatory parameter. If your hash is not properly calculated or does not match for whatever reason, we will not be able to process the payment. The usage of hash is explained in subsequent sections.

- When you call this API, the customer is necessarily re-directed to Aggrepay's payment page. After the customer makes the payment through Aggrepay (entering his card details or netbanking details etc.), we direct the customer back to your merchant site.

Note: If you need the customer to enter credit card details on your (merchant) website and would NOT want us to redirect to the Aggrepay page, we can get that done, provided you are PCI-DSS certified. If you are not certified and would like to get certified, let us know. We will guide you appropriately on how to get it done.

- We recommend that you check the hash at your end again, after we send back the response to you. This is essential to prevent user data tampering fraud.
- Transaction ID and order ID:
 - When you submit your transaction request to Aggrepay, you need to submit an order ID as part of the request. This order ID can be used by you as a universal reference number for all transaction requests submitted by you.
 - When your customer clicks the "Pay" button on the payment page, a unique transaction ID is assigned to the transaction.
 - Order ID acts as a "merchant reference number". We strongly recommend that you maintain uniqueness of your order IDs, to avoid confusion and conflicts while retrieving transaction details subsequently.

2.2. Parameters to be POSTed in Payment Request

URL: <https://biz.aggrepaypayments.com/v2/paymentrequest>

Parameter Name	Description	Data type	Optional / Mandatory
api_key	Aggrepay would assign a unique 40-digit merchant key to you. This key is exclusive to your business/login account. If you have multiple login accounts, there will necessarily be one different api_key per login account that is assigned to you.	varchar(40)	mandatory
order_id	This is your (merchant) reference number. It must be unique for every transaction. We do perform a validation at our end and do not allow duplicate order_ids for the same merchant.	varchar(30)	mandatory
mode	This is the payment mode (TEST or LIVE are valid values)	varchar(4)	optional
amount	This is the payment amount.	decimal(15,2)	mandatory
currency	This is the 3-digit currency code (INR)	varchar(3)	mandatory
description	Brief description of product or service that the customer is being charged for.	varchar(255)	mandatory
name	Name of customer.	varchar(255)	mandatory
email	Customer email address.	varchar(255)	mandatory
phone	Customer phone number	varchar(30)	mandatory
address_line_1	Customer address	varchar(255)	optional
address_line_2	Customer address 2	varchar(255)	optional
city	Customer city	varchar(255)	mandatory
state	Customer State	varchar(255)	optional
country	Customer country	varchar(100)	mandatory
zip_code	Customer zip code	varchar(20)	mandatory
timeout_duration	Timeout duration (in seconds)	varchar(10)	optional
udf1	User defined field	varchar(255)	optional
udf2	User defined field 2	varchar(255)	optional
udf3	User defined field 3	varchar(255)	optional
udf4	User defined field 4	varchar(255)	optional
udf5	User defined field 5	varchar(255)	optional
return_url	Return URL success - Aggrepay will make a POST request to this URL after successful transaction, with a set of parameters, which you can process as you want to.	varchar(255)	mandatory

return_url_failure	Return URL failure - Aggrepay will make a POST request to this URL after a FAILED transaction, with a set of parameters, which you can process as you want to.	varchar(255)	optional
return_url_cancel	Return URL success - Aggrepay will make a POST request to this URL in case of transaction cancellation, with a set of parameters, which you can process as you want to.	varchar(255)	optional
percent_tdr_by_user	Percent of tdr amount paid by user (optional) (max value:100)	decimal(5,2)	optional
flatfee_tdr_by_user	fixed fee paid by user(Optional)	decimal(10,2)	optional
show_convenience_fee	Controls whether the convenience fee amount (for surcharge merchants) is displayed to the customer (on the payment page) or not	varchar(1)	optional
split_enforce_strict	Controls whether payment is required to be split before settlement. By default it is set to 'n', If this is set to 'y' then settlement will be on HOLD until splitsettlement api is called to provide split information.	varchar(1)	optional
payment_options	<p>payment options to be displayed such credit card (cc), net banking (nb), wallet (w), ATM card (atm) and debit card with pin (dp). Tabs will be displayed by order in which values are sent.</p> <p>Values accepted are: cc,nb,w,atm,upi,dp (comma separated string), sequence of values will also determine the tab sequence on payment page.</p>	varchar(50)	optional
payment_page_display_text	This text will be displayed below the logo on payment page.	varchar(100)	optional
hash	<p>You need to compute a hash of all your parameters and pass that hash to Aggrepay, for details about calculating hash refer Appendix 2.</p> <p>Note: the SALT will be provided by Aggrepay separately. NEVER PASS SALT IN A FORM, DO NOT STORE SALT IN ANDROID APP APK or IPHONE APP package</p>	varchar(255)	mandatory

2.3. Response Parameters returned

Parameter name	Description
transaction_id	A unique ID that can be used to trace the transaction uniquely within Aggrepay. Transaction IDs are alphanumeric. An example transaction ID is HDVISC1299876438
payment_mode	This tells the payment mode used by customer - example: "credit card", "debit card", "netbanking", etc.
payment_channel	This tells the payment channel used by customer - example: "Visa", "HDFC Bank", "Paytm", etc.
payment_datetime	Date and Time of this payment in "YYYY-MM-DD HH:MM:SS" format
response_code	Status of the transaction (return code). 0 signifies successful transaction. Non-zero values signify error. Response Code returned is documented in Appendix 4
response_message	The response message associated with the transaction.
error_desc	The detailed error description, if any
order_id	The same order_id that was originally posted by the merchant in the request.
amount	The same original amount that was sent by the merchant in the transaction request. In case of customer surcharge model this will be the amount paid by customer **.
currency	This is the 3digit currency code (INR), it will be same value that was originally sent by merchant.
description	The same description that was originally sent by the merchant in the transaction request.
name	The same value that was originally sent by merchant
email	The same value that was originally sent by merchant
phone	The same value that was originally sent by merchant
address_line_1	The same value that was originally sent by merchant
address_line_2	The same value that was originally sent by merchant
city	The same value that was originally sent by merchant
tate	The same value that was originally sent by merchant
country	The same value that was originally sent by merchant
zip_code	The same value that was originally sent by merchant
udf1	The same value that was originally sent by merchant
udf2	The same value that was originally sent by merchant
udf3	The same value that was originally sent by merchant
udf4	The same value that was originally sent by merchant
udf5	The same value that was originally sent by merchant
tdr_amount	This is the TDR charged on the transaction **
tax_on_tdr_amount	This is the Tax (GST) charged on the TDR Amount **
amount_orig	This is the amount requested by merchant **. Typically, this will be same as the amount field, but in case of customer surcharge model this will be a different value.
cardmasked	Masked card number which was used to make the transaction **. For example, 437748*****0069
hash	Aggrepay calculates the hash using the same algorithm which was outlined earlier. Hence, the merchant needs to check whether this returned hash matches the calculated hash.

**** Note:** This parameter will be returned as part of the response **only** if the merchant's account has been enabled for the same. Please speak to your Aggrepay relationship manager if you would like this information to be returned to you.

Note: Consider, a failed response sent from Aggrepay server to your server via a user's browser and user chares the response code to Success, even though transaction is failed it will now show Success on your website. To make sure the transaction response is same as what Aggrepay server sent please check the hash before considering the transaction response success or failure.

Note: Format of transaction ID is as follows: vHDVISC1299876438". The 3rd to 6th digits (both inclusive) in the transaction ID signify the "bankcode". This information is sufficient to obtain the payment method and payment channel. A list of bankcodes and corresponding payment mode/channel is available in Appendix 3 of this document.

List of Response codes returned

Error numeric code	Error code	Error description
0	SUCCESS	Transaction successful
1000	FAILED	Transaction failed
1005	INVALID-AUTHENTICATION	Invalid authentication at bank
1006	WAITING-BANK-RESPONSE	Waiting for the response from bank
1007	INVALID-INPUT-REQUEST	Invalid input in the request message
1008	TRANSACTION-TAMPERED	Transaction tampered
1011	AUTHORIZATION-REFUSED	Authorization refused
1012	INVALID-CARD	Invalid Card/Member Name data
1013	INVALID-EXPIRY-DATE	Invalid expiry date
1014	DENIED-BY-RISK	Transaction denied by risk
1016	INVALID-AMOUNT-LIMIT	Total Amount limit set for the terminal for transactions has been crossed
1027	INVALID-TRANSACTION	Invalid transaction
1028	TRANSACTION-NOT-FOUND	Transaction not found
1030	TRANSACTION-INCOMPLETE	Transaction incomplete
1040	INVALID-CVV	Invalid Card Verification Code
1042	FAILED-NO-RESPONSE	Transaction failed as there was no response from bank
1043	TRANSACTION-CANCELLED	Transaction cancelled
1051	ACQUIRER-ERROR	Error occurred at the bank end
1052	INVALID-EMAIL	Invalid Email ID
1053	INVALID-PHONE	Invalid phone number
9999	UNKNOWN-ERROR	Unknown error occurred
997		These are unhandled errors coming from banks directly, errors coming here will eventually be categorized in one of the above error codes or into a new error code. If you are handling error individually then make sure to have a catch all.

3. PAYMENT STATUS API

Aggrepay provides an API which you can use to check the status of any prior transaction. You can use this to reconcile transactions. We strongly recommend that you make it a practice to use this for every transaction that was made. This serves two purposes:

- The response might not reach you due to network issues or other problems such as user clicking refresh button on their browser, etc.
- This also protects against any tampering, since you have a second fallback check here.

Aggrepay offers a sophisticated API wherein you can apply "filters" on the resultset you want to retrieve. You can search our system by the transaction ID, or the order ID, or even by parameters such as date range, customer phone number, etc. You can also pass in various combinations of these parameters to get the resultset of your choice.

Note: Your designated server IP will need to be whitelisted by Aggrepay for this API to work. If you receive errors such as "Unauthorized" while accessing this API, please contact your Aggrepay relationship manager to get this fixed.

URL: <https://biz.aggrepaypayments.com/v2/paymentstatus>

3.1. Parameters to be POSTed

Parameter Name	Description	Data type	Optional / Mandatory
api_key	Aggrepay would assign a unique 40-digit merchant key to you. This key is exclusive to your business/login account. If you have multiple login accounts, there will necessarily be one different api_key per login account that is assigned to you.	varchar(40)	Mandatory
order_id	This is your (merchant) reference number which you submitted while making the original transaction. You can send multiple order ids in this field as comma (,) separated list	varchar(30)	Optional
transaction_id	This is the transaction ID generated by Aggrepay for the given transaction	varchar(30)	Optional
bank_code	This is the 4-letter bankcode which denotes the payment mode/channel of the payment.	varchar(4)	Optional
response_code	The numeric response code returned by Aggrepay during the original transaction	number(4)	Optional

customer_phone	Phone number of the customer, as provided during the original paymentrequest API	varchar(30)	Optional
customer_email	Email address of the customer, as provided during the original paymentrequest API	varchar(255)	Optional
customer_name	Name of the customer, as provided during the original paymentrequest API	varchar(255)	Optional
date_from	Start date of date range to retrieve transactions, in YYYY-MM-DD or YYYY-MM-DD HH:MM:SS format	varchar(10)	Optional
date_to	End date of date range to retrieve transactions, in YYYY-MM-DD or YYYY-MM-DD HH:MM:SS format	varchar(10)	Optional
hash	You need to compute a hash of all your parameters and pass that hash to Aggrepay, for details about calculating hash refer Appendix 2. Note: the SALT will be provided by Aggrepay separately. NEVER PASS SALT IN A FORM, DO NOT STORE SALT IN ANDROID APP APK or IPHONE APP package	varchar(255)	Mandatory

3.2. Response Parameters

On successful call to this API you will receive JSON response. You can read the JSON response and process it at your end. A few sample responses for given requests are provided below:

In case of success,

```
{
  "data": [
    {
      "transaction_id": "SFSBIN2783912661",
      "bank_code": "SBIN",
      "payment_mode": "Netbanking",
      "payment_channel": "State Bank of India",
      "payment_datetime": "2018-06-13 16:44:03",
      "response_code": 1000,
      "response_message": "FAILED",
      "authorization_staus": null,
      "order_id": "427641",
      "amount": "27.36",
      "amount_orig": "2.00",
    }
  ]
}
```

```

    "tdr_amount": 21.49,
    "tax_on_tdr_amount": 3.87,
    "description": "Web Payment for 433487",
    "error_desc": "FAILED",
    "customer_phone": "9900990099",
    "customer_name": "sharathkumar hegde",
    "customer_email": "sharathkumar@example.com"
  },
  {
    "transaction_id": "HDVISC4291974106",
    "bank_code": "VISC",
    "payment_mode": "Credit Card",
    "payment_channel": "Visa",
    "payment_datetime": "2018-06-13 16:45:39",
    "response_code": 0,
    "response_message": "SUCCESS",
    "authorization_staus": "captured",
    "order_id": "427643",
    "amount": "1.93",
    "amount_orig": "1.90",
    "tdr_amount": 0.03,
    "tax_on_tdr_amount": 0,
    "description": "Web Payment for 433489",
    "error_desc": null,
    "customer_phone": "9900990099",
    "customer_name": "sharathkumar hegde",
    "customer_email": "sharathkumar@example.com"
  }
],
"hash":
"30FAAD865191B4064576F063177F0A4692C3DBBBF35D1A20463EAA449269C4715FD13528EA069B3A8
D5C25C62637ED825C297C2337CDC1CFB7FCD0D60DCFEB9D"
}

```

In case of error,

```

{
  "error": {
    "code": 1001,
    "message": "The api key field is incorrect"
  }
}

```

In case there is no record present in our system for the combination of input, following error is returned

```
{  
  "error": {  
    "code": 1050,  
    "message": "No data record found for the given input"  
  }  
}
```

In case there is no transaction id in our system for the order_id, merchant_order_id or transaction_id, following error is returned

```
{  
  "error": {  
    "code": 1028,  
    "message": "No Transaction found"  
  }  
}
```

4. Refunds API

Aggrepay provides a refund API which merchants can use to programmatically issue refunds instead of clicking the "refund" button in the Aggrepay UI. This API can be invoked on any prior successful transaction. The transaction which is being refunded should be in either "paid" or "settled" state, or in "refunded" state (in case of partial amount refunds). Refunds can be either for the full amount paid by the customer, or any part of it.

The API needs a valid transaction ID as input.

Note: processing of refunds is subject to availability of funds in subsequent settlement cycles. This API will return a failure response in case sufficient funds are not available to process the refund.

4.1. Refund request API

URL: <https://biz.aggrepaypayments.com/v2/refundrequest>

Request Parameters:

Parameter Name	Description	Data type	Optional / Mandatory
api_key	Aggrepay would assign a unique 40-digit merchant key to you. This key is exclusive to your business/login account. If you have multiple login accounts, there will necessarily be one different api_key per login account that is assigned to you.	varchar(40)	Mandatory
transaction_id	The unique alphanumeric transaction ID generated by Aggrepay for a prior transaction.	varchar(30)	Mandatory
merchant_refund_id	This is your (merchant) refund reference number. It must be unique for every refund request. If a refund request is sent with same merchant_refund_id we return the response of the previously successful refund request. Warning: If you are NOT using this field then be careful, as each requests will be treated new refund request. Thus it is recommended to use this field.	varchar(30)	Optional
merchant_order_id	This is your (merchant) reference number which you submitted while	varchar(30)	Optional

	making the original transaction. Note that if this value does not match with related transaction_id field then you will get error. In typical cases do not send this field.		
amount	The amount which needs to be refunded. This needs to be less than or equal to the transaction amount.	decimal(10,2)	Mandatory
description	Description of the refund. Usually the reason for issuing refund, as specified by merchant.	varchar(500)	Mandatory
hash	You need to compute a hash of all your parameters and pass that hash to Aggrepay, for details about calculating hash refer Appendix 2. Note: the SALT will be provided by Aggrepay separately. NEVER PASS SALT IN A FORM, DO NOT STORE SALT IN ANDROID APP APK or IPHONE APP package	varchar(255)	Mandatory

Response Parameters:

The output is a JSON which contains the error(s), if any, in validation, or a simple success message which confirms that the refund request has been accepted and will be processed during subsequent settlement cycle.

If the request is successfully processed response you will get a “data” block, and in case of failure you will see “error” block, you will not get “data” key in case of error.

In case of success, **NOTE:** that *refund_reference_no* is returned by the bank and it can be null in case refunds are not initiate by bank immediately, but is done at end of the day.

```
{
  "data": {
    "transaction_id": "HDVISC7472820193",
    "refund_id": 4351,
    "refund_reference_no": null
    "merchant_refund_id": 76783_R_1,
    "merchant_order_id": 76783,
```

```
}  
}
```

In case of error,

```
{  
  "error": {  
    "code": 1039,  
    "message": "The refund amount is greater than transaction amount"  
  }  
}
```


5. SPLIT API

5.1. SPLIT SETTLEMENT API

5.1.1. Split transaction before settlement API

URL: <https://biz.aggrepaypayments.com/v2/splitsettlementrequest>

Request Parameters:

Parameter Name	Description	Data type	Optional / Mandatory
api_key	The unique key provided to the merchant	varchar(40)	Mandatory
order_id	The order id of the transaction		Mandatory
split_info	The json format data can contain vendor_code and vendor_percent or vendor_code and vendor_amount, see the json structure below.	json	Mandatory
hash	You need to compute a hash of all your parameters and pass that hash to Aggrepay, for details about calculating hash refer Appendix 2. Note: the SALT will be provided by Aggrepay separately. NEVER PASS SALT IN A FORM, DO NOT STORE SALT IN ANDROID APP APK or IPHONE APP package hash = strtoupper(hash('sha512', salt api_key order_id split_info))	varchar(255)	Mandatory

The split_info parameter will be in json format as shown below:

```
{
  "vendors": [
    {
      "vendor_code": "2VEN449",
      "split_amount_percentage": "80"
    },
    {
      "vendor_code": "XYZ123",
      "split_amount_fixed": "11"
    }
  ]
}
```

```
    ]  
  }
```

Response Parameters:

The response will be in json format as show below:

In case of success,

```
{  
  "data": {  
    "message": "The split settlement request is successful."  
  }  
}
```

In case of total split percentage or amount exceeds 100% or total settlement amount

```
{  
  "error": {  
    "code": 1024,  
    "message": "Sum of split amount should be less than or equal  
to settlement amount."  
  }  
}
```

In case of vendor code invalid or not approved

```
{  
  "error": {  
    "code": 1007,  
    "message": "One or more Codes is either not added or not  
approved."  
  }  
}
```

6. VENDOR API

6.1. Add Vendor API

URL: <https://biz.aggrepaypayments.com/v1/addvendor>

This API allows the merchant to register new vendors with the Aggrepay system. These vendors can also be added manually from the Aggrepay dashboard.

When a vendor is added, it is "non-approved" by default. Aggrepay will approve the vendors separately. This is for security purposes.

Parameter Name	Description	Data type	Optional / Mandatory
api_key	Aggrepay would assign a unique 40-digit merchant key to you. This key is exclusive to your business/login account. If you have multiple login accounts, there will necessarily be one different api_key per login account that is assigned to you.	varchar(40)	mandatory
vendor_code	This is the vendor code that you wish to add in the Aggrepay system. This has to be unique. Alphanumeric values are permitted here.	varchar(30)	mandatory
vendor_name	A descriptive name to identify the vendor.	varchar(100)	mandatory
vendor_contact_email	Email address where the vendor can be contacted. Has to be a valid email address.	varchar(200)	mandatory
vendor_contact_num	Phone number where the vendor can be contacted.	varchar(10)	mandatory
vendor_contact_address	Address where the vendor can be reached. Optional.	varchar(300)	optional
account_name	Account holder name (of the vendor bank account)	varchar(300)	mandatory
account_number	Account number of the vendor.	varchar(50)	mandatory
ifsc_code	IFSC code of the vendor's bank.	varchar(50)	mandatory
bank_name	Bank name of the vendor's bank.	varchar(200)	optional
bank_branch	Bank branch of the vendor's bank.	varchar(300)	Optional
vendor_pan	PAN number of the vendor	varchar(10)	Optional
description_1	Vendor description 1	varchar(200)	Optional
description_2	Vendor description 2	varchar(200)	Optional
hash	You need to compute a hash of all your parameters and pass that hash to Aggrepay, for details about calculating hash refer Appendix 2.	varchar(200)	mandatory

	<p>Note: the SALT will be provided by Aggrepay separately. NEVER PASS SALT IN A FORM, DO NOT STORE SALT IN ANDROID APP APK or IPHONE APP package</p> <p>Please ensure that the concatenated string (upon which the hash will be computed) is computed based on columns in alphabetical order. Please include only those columns in your hash calculation which you are actually passing to us. For example, if you are not passing vendor_contact_address do not include that in hash calculation.</p>	
--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

Note: This API will return error if the vendor already exists in the system AND is active. If an inactive/disapproved vendor exists, this API will update the details for that vendor code.

The response will be in json format as show below:

In case of success,

```
{
  "data": {
    "message": "Vendor added successfully"
  }
}
```

In case vendor already exists

```
{
  "error": {
    "code": 1024,
    "message": "Vendor code already exists"
  }
}
```

6.2. Modify Vendor API

URL: <https://biz.aggrepaypayments.com/v1/modifyvendor>

Pre-existing vendors in the system can be modified using this API. This API works on approved as well as non-approved vendors. However, any modification to a pre-existing active vendor will immediately disapprove that vendor, automatically. If the vendor that is being modified does not exist, the API will return an error and will NOT automatically add the vendor.

Parameter Name	Description	Data type	Optional/ Mandatory
api_key	Aggrepay would assign a unique 40-digit merchant key to you. This key is exclusive to your business/login account. If you have multiple login accounts, there will necessarily be one different api_key per login account that is assigned to you.	varchar(40)	mandatory
vendor_code	This is the vendor code that you wish to modify in the Aggrepay system. This value must already exist in the system, failing which Aggrepay will return an error.	varchar(30)	mandatory
vendor_name	A descriptive name to identify the vendor.	varchar(100)	optional
vendor_contact_email	Email address where the vendor can be contacted. Has to be a valid email address.	varchar(200)	optional
vendor_contact_num	Phone number where the vendor can be contacted.	varchar(10)	Optional
vendor_contact_address	Address where the vendor can be reached. Optional.	varchar(300)	Optional
account_name	Account holder name (of the vendor bank account)	varchar(300)	Optional
account_number	Account number of the vendor.	varchar(50)	Optional
ifsc_code	IFSC code of the vendor's bank.	varchar(50)	Optional
bank_name	Bank name of the vendor's bank.	varchar(200)	Optional
bank_branch	Bank branch of the vendor's bank.	varchar(300)	Optional
vendor_pan	PAN number of the vendor	varchar(10)	Optional
description_1	Vendor description 1	varchar(200)	Optional
description_2	Vendor description 2	varchar(200)	Optional
hash	<p>You need to compute a hash of all your parameters and pass that hash to Aggrepay, for details about calculating hash refer Appendix 2.</p> <p>Note: the SALT will be provided by Aggrepay separately. NEVER PASS SALT IN A FORM, DO NOT STORE SALT IN ANDROID APP APK or IPHONE APP package</p> <p>Please ensure that the concatenated string (upon which the hash will be computed) is computed based on columns in alphabetical order. Please include only those columns in your hash calculation which you are actually passing to us. For example, if you are not passing vendor_contact_address do not include that in hash calculation.</p>	varchar(200)	mandatory

The response will be in json format as show below:

In case of success,

```
{
  "data": {
    "message": "Vendor updated successfully"
  }
}
```

6.3. Delete Vendor API

URL: <https://biz.aggrepaypayments.com/v1/deletevendor>

This API can be used to delete a pre-existing vendor from the Aggrepay system. Subsequent to deletion, there can be no further split payments to this vendor. Importantly, deletion of a vendor will NOT impact pending payouts to the vendor. Any pending settlements will still occur

Parameter Name	Description	Data type	Optional/Mandatory
api_key	Aggrepay would assign a unique 40-digit merchant key to you. This key is exclusive to your business/login account. If you have multiple login accounts, there will necessarily be one different api_key per login account that is assigned to you.	varchar(40)	mandatory
vendor_code	This is the vendor code that you wish to delete from the Aggrepay system. This value must already exist in the system, failing which Aggrepay will return an error.	varchar(30)	mandatory
hash	You need to compute a hash of all your parameters and pass that hash to Aggrepay, for details about calculating hash refer Appendix 2. Note: the SALT will be provided by Aggrepay separately. NEVER PASS SALT IN A FORM, DO NOT STORE SALT IN ANDROID APP APK or IPHONE APP package hash = toUpper (sha512 (SALT api_key vendor_code))	varchar(40)	mandatory

This API can be used to delete a pre-existing vendor from the Aggrepay system. Subsequent to deletion, there can be no further split payments to this vendor. Importantly, deletion of a vendor will NOT impact pending payouts to the vendor. Any pending settlements will still occur

The response will be in json format as show below:

In case of success,

```
{
  "data": {
    "message": "Vendor deleted successfully"
  }
}
```

```
}
```

6.4. Get Vendor API

URL: <https://biz.aggrepaypayments.com/v1/vendorstatus>

This API can be used to delete a pre-existing vendor from the Aggrepay system. Subsequent to deletion, there can be no further split payments to this vendor. Importantly, deletion of a vendor will NOT impact pending payouts to the vendor. Any pending settlements will still occur

Parameter Name	Description	Data type	Optional/Mandatory
api_key	Aggrepay would assign a unique 40-digit merchant key to you. This key is exclusive to your business/login account. If you have multiple login accounts, there will necessarily be one different api_key per login account that is assigned to you.	varchar(40)	mandatory
vendor_code	This is the vendor code that you wish to retrieve from the Aggrepay system. This value must already exist in the system, failing which Aggrepay will return an error.	varchar(30)	mandatory
hash	You need to compute a hash of all your parameters and pass that hash to Aggrepay, for details about calculating hash refer Appendix 2. Note: the SALT will be provided by Aggrepay separately. NEVER PASS SALT IN A FORM, DO NOT STORE SALT IN ANDROID APP APK or IPHONE APP package hash = toUpper (sha512 (SALT api_key vendor_code))	varchar(40)	mandatory

This API can be used to get details of a pre-existing vendor from the Aggrepay system.

The response will be in json format as show below:

In case of success,

```
{  
  "data": {  
    "vendor_code": "SOA",  
    "vendor_name": "Sharath Kumar",  
    "vendor_contact_email": "sharathkumar@example.com",  
    "vendor_contact_num": "9900990099",  
    "vendor_contact_address": "Bangalore",  
    "vendor_pan": "ARSPH1234Q",  
    "vendor_approved": "n",  
    "vendor_split_percentage": null,  
    "vendor_split_amount": null,  
  }  
}
```

```
    "account_name": "Sharath",  
    "account_number": "1234567",  
    "ifsc_code": "UTIB0000003",  
    "bank_name": "HDFC",  
    "bank_branch": "Gandhinagar",  
    "bank_approved": "n"  
  }  
}
```


7. SETTLEMENT APIs

7.1. Get Settlements API

URL: <https://biz.aggrepaypayments.com/v2/getsettlements>

This API allows a merchant to programmatically access the status of any of his past settlements and other pertinent information pertaining to a prior settlement. If this API returns a blank `bank_reference_number`, it means the amount is not yet settled. If the API returns no data, it means that the system has not calculated settlements yet, you would need to re-check after 12:30 AM.

Please note that this API will not provide any information for failed transactions since by definition, there can be no settlement for a failed transaction. To obtain information about failed transactions, use the payment status API described in an earlier section.

7.1.1. Parameters to be POSTed in Request

Parameter Name	Description	Data type	Optional / Mandatory
api_key	Aggrepay would assign a unique 40-digit merchant key to you. This key is exclusive to your business/login account. If you have multiple login accounts, there will necessarily be one different api_key per login account that is assigned to you.	varchar(40)	Mandatory
bank_reference	The bank reference number of the actual NEFT/IMPS/RTGS transaction performed by Aggrepay to the merchant's current account	varchar(100)	Optional
date_from	The start date from which you need to retrieve settlement information. This needs to be passed in YYYY-MM-DD format.	varchar(10)	Optional
date_to	The end date at which you need to retrieve settlement information. This needs to be passed in YYYY-MM-DD format.	varchar(10)	Optional
completed	Whether settlement is completed or not. Pass in 'y' or 'n' here.	varchar(1)	Optional
settlement_id	The unique numeric settlement ID assigned to each settlement	number(20)	Optional
hash	You need to compute a hash of all your parameters and pass that hash to Aggrepay, for details about calculating hash refer Appendix 2. Note: the SALT will be provided by Aggrepay separately. NEVER PASS SALT IN A FORM, DO NOT STORE SALT IN ANDROID APP APK or IPHONE APP package.	varchar(255)	Mandatory

This API returns a JSON in the following format:

```
{
  "data": [
    {
      "settlement_id": 10075,
      "bank_reference": "710061536126",
      "payout_amount": "2.06",
      "completed": "y",
      "account_name": "Tester Sharma",
      "account_number": "50100012341231",
      "ifsc_code": "HDFC0000002",
      "bank_name": "HDFC BANK",
      "bank_branch": "CMH RD, INDIRA NAGAR BRANCH",
      "settlement_datetime": "2017-02-20 16:31:28",
      "sale_amount": "3.00",
      "chargeback_amount": "0.00",
      "refund_amount": "0.00"
    }
  ],
  "hash":
  "684CDA22F7A429D68281444A8F6809A5FEFEA7A055258984E129554AC359C956E58E36B67A4EB9F948
  1E616888E722DDB95A81EFBED4416B24F19E3126077F5E"
}
```

In case there is no record found in the system for the combination of input parameter, following error is returned

```
{
  "error": {
    "code": 404,
    "message": "No record found"
  }
}
```

7.2. Set Settlement Details API

URL: <https://biz.aggregpaypayments.com/v2/getsettlementdetails>

This API allows a merchant to programmatically access the status of any of his past **settlement details** (transaction level settlements).

Please note that this API will not provide any information for failed transactions since by definition, there can be no settlement for a failed transaction. To obtain information about failed transactions, use the payment status API described in an earlier section.

7.2.1. Parameters to be POSTed in Request

Parameter Name	Description	Data type	Optional / Mandatory
api_key	Aggrepay would assign a unique 40-digit merchant key to you. This key is exclusive to your business/login account. If you have multiple login accounts, there will necessarily be one different api_key per login account that is assigned to you.	varchar(40)	mandatory
order_id	Order ID passed by the merchant during the original payment transaction request	varchar(30)	optional
transaction_id	Transaction ID assigned by Aggrepay for this successful transaction	varchar(30)	optional
bank_code	Bank code signifying payment mode and channel	varchar(4)	optional
customer_phone	Phone number of customer as provided during the original paymentrequest API call	varchar(30)	optional
customer_email	Email ID of customer as provided during the original paymentrequest API call	varchar(255)	optional
customer_name	Name of customer as provided during the original paymentrequest API call	varchar(255)	optional
date_from	The start date from which you need to retrieve settlement detail information. This needs to be passed in YYYY-MM-DD format.	varchar(10)	optional
date_to	The end date at which you need to retrieve settlement detail information. This needs to be passed in YYYY-MM-DD format.	varchar(10)	optional
completed	Whether settlement is completed or not. Pass in 'y' or 'n' here.	varchar(1)	optional
settlement_id	The unique numeric settlement ID assigned to each settlement	number(20)	optional
hash	You need to compute a hash of all your parameters and pass that hash to Aggrepay, for details about calculating hash refer Appendix 2. Note: the SALT will be provided by Aggrepay separately. NEVER PASS SALT IN A FORM, DO NOT STORE SALT IN ANDROID APP APK or IPHONE APP package.	varchar(255)	mandatory

This API returns a JSON in the following format:

```
{
  "data": [
    {
```

```

    "transaction_id": "HDMASC2746901262",
    "order_id": "225495",
    "settlement_id": 27837,
    "bank_reference": "710061536126",
    "settlement_datetime": null,
    "customer_name": "Tester",
    "customer_email": "tester@example.com",
    "customer_phone": "8050603774",
    "completed": "y",
    "description": "Settlement for Rs. 2.06 paid through transaction ID HDMASC2746901262 on 2017-
09-28 13:36:19 for merchant hotel booking",
    "gross_transaction_amount": "2.06",
    "payment_mode": "Credit Card",
    "payment_channel": "Master",
    "applicable_tdr_percent": "3.00",
    "applicable_tdr_fixed_fee": "0.00",
    "percent_tdr_paid_by_merchant": "0",
    "tdr_amount": "0.06",
    "tax_on_tdr_amount": "0.00",
    "amount_reimbursed": "2.00"
  }
],
"hash":
"D2EFF4776D973DA46563DA0F80139B84AFED77C58496A34DD0D653272A0EE1E5D09F4C94AD439451
2B16341A5A44906B4B10FF5B6AA1F03DE98A164B39881C4E"
}

```

In case there is no record found in the system for the combination of input parameter, following error is returned

```

{
  "error": {
    "code": 404,
    "message": "No record found"
  }
}

```

8. CHALLAN PAYMENT API

8.1. Request challan payment API

URL: <https://biz.aggrepaypayments.com/v1/requestchallan>

This API allows the merchant to create a link which can be sent to customers by email and/or SMS. This link allows the customer to make easy payments without data entry hassles.

On clicking this link, the customer is taken directly to a confirmation page where he can verify his details (email ID, name and amount), and on confirmation, he is taken to the payment page.

Parameter Name	Description	Data type	Optional/Mandatory
api_key	Aggrepay would assign a unique 40-digit merchant key to you. This key is exclusive to your business/login account. If you have multiple login accounts, there will necessarily be one different api_key per login account that is assigned to you.	varchar(40)	mandatory
name	Name of the person whom the invoice is addressed to.	varchar(100)	Mandatory
mobile	Phone number of the person whom the invoice is addressed to.	varchar(10)	mandatory
email	Email ID of the person whom the invoice is addressed to.	varchar(100)	mandatory
amount	Amount which the user needs to pay.	decimal(15,2)	mandatory
purpose	Purpose of payment - this should be a descriptive string which clearly tells the user what he is paying for.	varchar(100)	mandatory
hash	You need to compute a hash of all your parameters and pass that hash to Aggrepay, for details about calculating hash refer Appendix 2. Note: the SALT will be provided by Aggrepay separately. NEVER PASS SALT IN A FORM, DO NOT STORE SALT IN ANDROID APP APK or IPHONE APP package.	varchar(40)	mandatory

8.2. Request challan payment API url

URL: <https://biz.aggrepaypayments.com/v1/generatechallanurl>

This API allows the merchant to create a url which can be sent to customers by email and/or SMS. This url allows the customer to make easy payments without data entry hassles.

On clicking above url, the customer is taken directly to a confirmation page where he can verify his details (email ID, name and amount), and on confirmation, he is taken to the payment page.

Request parameters are as following:

Parameter Name	Description	Data type	Optional/Mandatory
api_key	Aggrepay would assign a unique 40-digit merchant key to you. This key is exclusive to your business/login account. If you have multiple login accounts, there will necessarily be one different api_key per login account that is assigned to you.	varchar(40)	mandatory
name	Name of the person whom the invoice is addressed to.	varchar(100)	Mandatory
mobile	Phone number of the person whom the invoice is addressed to.	varchar(10)	mandatory
email	Email ID of the person whom the invoice is addressed to.	varchar(100)	mandatory
amount	Amount which the user needs to pay.	decimal(15,2)	mandatory
purpose	Purpose of payment - this should be a descriptive string which clearly tells the user what he is paying for.	varchar(100)	mandatory
hash	You need to compute a hash of all your parameters and pass that hash to Aggrepay, using the following mechanism: toUpper (sha512 (SALT amount api_key email mobile name purpose)) Note: the SALT will be provided by Aggrepay separately. Please ensure that the concatenated string (upon which the hash will be computed) is in alphabetical order. Note: NEVER PASS SALT IN A FORM	varchar(40)	Mandatory

Response from this API will be in JSON format:

On successful call to this API you will receive JSON response in following format.

```
{
  "data": {
    "url": "http://biz.localhost.com/challan/b39b0596-73c4-4b7e-b63d-bbc13361e044",
    "uuid": "b39b0596-73c4-4b7e-b63d-bbc13361e044",
    "tnp_id": 81600
  }
}
```

data - successful response will have "data" tag.

url - this is the url what can be distributes as suitable.

uuid - this is the unique identifier for this request.

tnp_id - this is another unique identifier that can be used for getting the transaction details using paymentStatusById API.

On failure json response is as following:

```
{
  "error": {
    "code": 221,
    "message": "GEN-UNAUTHORIZED - The api key field is incorrect"
  }
}
```

error - erred response will have "error" tag.

code - this is error category code

message - this is more descriptive error tag and error message.

List of error codes and corresponding messages:

Code	Message
221	GEN-UNAUTHORIZED The api key field is incorrect The hash key field is invalid
998	GEN-INVALID-PARAMS The name field is required. The email field is required. The mobile field is required. The amount field is required. The purpose field is required. The hash field is required.

9. Server to Server Call Back (Web hooks)

9.1. Server to server response on Payment

To get server to server response, add callback URL in parameter named "Payment Callback URL" in settings tab of the <http://biz.aggrepaypayments.com> dashboard. If this is not found contact Aggrepay to set this up for you.

Whenever there is a successful payment done by your customer apart from receiving success or failure message on customers' browser, following response parameters are also posted to the mentioned callback URL.

These are very same response that we send as response to **paymentrequest** API.

Parameter name	Description
transaction_id	A unique ID that can be used to trace the transaction uniquely within Aggrepay. Transaction IDs are alphanumeric.
payment_method	This tells the payment method used by customer - example: "credit card", "debit card", "netbanking", etc.
payment_datetime	Date and Time of this payment in "YYYY-MM-DD HH:MM:SS" format
response_code	Status of the transaction (return code). 0 signifies successful transaction. Non-zero values signify error.
response_message	Can have a value of "success" or "failure". Order
order_id	The same order_id that was originally posted by the merchant in the request.
amount	The same original amount that was sent by the merchant in the transaction request.
currency	This is the 3digit currency code (INR), it will be same value that was originally sent by merchant.
description	The same description that was originally sent by the merchant in the transaction request.
name	The same value that was originally sent by merchant
email	The same value that was originally sent by merchant
phone	The same value that was originally sent by merchant
address_line_1	The same value that was originally sent by merchant
address_line_2	The same value that was originally sent by merchant
city	The same value that was originally sent by merchant
state	The same value that was originally sent by merchant
country	The same value that was originally sent by merchant
zip_code	The same value that was originally sent by merchant
udf1	The same value that was originally sent by merchant
udf2	The same value that was originally sent by merchant
udf3	The same value that was originally sent by merchant
udf4	The same value that was originally sent by merchant
udf5	The same value that was originally sent by merchant
hash	Aggrepay calculates the hash using the same algorithm which was outlined earlier. Hence, the merchant needs to check whether this returned hash matches the calculated hash.

9.2. Server to server response on Settlement

To get server to server response, add callback URL in parameter named "Settlement Callback URL" in settings tab of the <http://biz.aggrepaypayments.com> dashboard. If this is not found contact Aggrepay to set this up for you.

Whenever there is a successful settlement done by Aggrepay to your bank account apart from receiving success or failure email message, following response parameters are also posted to the mentioned callback URL.

These are very same response that we send as response to **getsettlements** API.

Parameter name	Description
settlement_id	Settlement Id for this aggregated settlement
bank_reference	Bank reference Number
payout_amount	Aggregated Amount paid to merchant
completed	Settlement is completed or not, 'y' or 'n'
account_name	Account Holders Name to which the Amount is settled
account_number	Account Number to which the Amount is settled
ifsc_code	IFSC Code of the branch to which Account Number belongs
bank_name	Bank name to which Account Number belongs
settlement_datetime	Date of settlement
sale_amount	Total sale amount for the transactions included in this aggregated settlement
chargeback_amount	Amount deducted from the sale amount for chargeback adjustment
refund_amount	Amount deducted from the sale amount for refunds adjustment.

10. Saved Card Token API.

10.1. Parameters to be POSTed in the Request

URL: <https://biz.aggrepaypayments.com/v2/getsavedcardtokens>

This API is used to get saved card details of the customer for particular merchant.

Request parameters are as following:

Parameter Name	Description	Data type	Optional/Mandatory
api_key	Aggrepay would assign a unique 40-digit merchant key to you. This key is exclusive to your business/login account. If you have multiple login accounts, there will necessarily be one different api_key per login account that is assigned to you.	varchar(40)	mandatory
phone	Phone number of the person in whose name the card details are stored	varchar(10)	mandatory
email	Email ID of the person in whose name the card details are stored	varchar(100)	mandatory
hash	You need to compute a hash of all your parameters and pass that hash to Aggrepay, for details about calculating hash refer Appendix 2. Note: the SALT will be provided by Aggrepay separately. NEVER PASS SALT IN A FORM, DO NOT STORE SALT IN ANDROID APP APK or IPHONE APP package hash = toUpper (sha512 (SALT api_key email phone))	varchar(40)	mandatory

Response from this API will be in JSON format:

On successful call to this API you will receive JSON response in following format.

```
{
  "data": [
    {
      "session_id": "58e620a7a1abc6.97930154",
      "token": "b8dd4590-6b7c-4013-9067-e5a25bc6d812",
      "card_number": "528945*****3787"
    },
    {
      "session_id": "58e620a7a1abc6.97930154",
      "token": "7169e21f-beae-4449-b365-41be1dc5630e",
      "card_number": "607432*****6800"
    }
  ]
},
```

```
"hash" :  
"C2933D730B00D4F1AAC6FFF1BCDFB1648522AAEDD09E9634919B4501E4CAF873E4448  
B063E6D2D5C238243272E37E494A455CD14A8461F04FFB0CC257E6E1C2A"  
}
```

data - successful response will have "data" tag.

session_id - this is the session_id which has to be sent while using tokenized payment request api.

token - this is the unique identifier for this particular card details.

card_number - this is the saved card number in masked form

On failure json response is as following:

```
{  
  "error": {  
    "code": 404,  
    "message": "No saved card details found"  
  }  
}
```

error - erred response will have "error" tag.

code - this is error category code

message - this is more descriptive error tag and error message.

11. Tokenized Payment Request

11.1. Parameters to be POSTed in Transaction Request

URL: <https://biz.aggrepaypayments.com/v1/tokenizedpaymentrequest>

Parameter Name	Description	Data type	Optional / Mandatory
api_key	Aggrepay would assign a unique 40-digit merchant key to you. This key is exclusive to your business/login account. If you have multiple login accounts, there will necessarily be one different api_key per login account that is assigned to you.	varchar(40)	mandatory
order_id	This is your (merchant) reference number. It must be unique for every transaction. We do perform a validation at our end and do not allow duplicate order_ids for the same merchant.	varchar(255)	mandatory
mode	This is the payment mode (TEST or LIVE are valid values)	varchar(4)	optional
amount	This is the payment amount.	decimal(15,2)	mandatory
currency	This is the 3digit currency code (INR)	varchar(3)	mandatory
description	Brief description of product or service that the customer is being charged for.	varchar(500)	mandatory
name	Name of customer.	varchar(100)	mandatory
email	Customer email address.	varchar(100)	mandatory
phone	Customer phone number	varchar(50)	mandatory
address_line_1	Customer address	varchar(100)	optional
address_line_2	Customer address 2	varchar(100)	optional
city	Customer city	varchar(50)	mandatory
state	Customer State	varchar(50)	optional
country	Customer country has to be IND	varchar(50)	mandatory
country	Customer country has to be IND	varchar(50)	mandatory
zip_code	Customer zip code	varchar(20)	mandatory
udf1	User defined field	varchar(300)	optional
udf2	User defined field 2		
udf3	User defined field 3		
udf4	User defined field 4		
udf5	User defined field 5		
session_id	Session ID	Varchar(255)	mandatory
token	Unique token provided by Aggrepay	Varchar(40)	mandatory
cvv	Card verification code	Varchar(4)	mandatory

return_url	Return URL success - Aggrepay will make a POST request to this URL after successful transaction, with a set of parameters, which you can process as you want to.		
hash	You need to compute a hash of all your parameters and pass that hash to Aggrepay, for details about calculating hash refer Appendix 2. Note: the SALT will be provided by Aggrepay separately. NEVER PASS SALT IN A FORM, DO NOT STORE SALT IN ANDROID APP APK or IPHONE APP package.		

Here is a sample HTML page that you can use to test the API before actually doing the integration:

```
<html>

<head> </head>

<body>
  <form action="https://biz.aggrepaypayments.com/v1/paymentrequest"
name="payment" method="POST">
    <input type="hidden" value="f141a2b3c-12ab-41s0-bd4e-
de123456d4ff" name="api_key"/>
    <input type="hidden"
value="http://www.yoursite.com/payment_return_url" name="return_url"/>
    <input type="hidden" value="TEST" name="mode"/>
    <input type="hidden" value="00568" name="order_id"/>
    <input type="hidden" value="100" name="amount"/>
    <input type="hidden" value="INR" name="currency"/>
    <input type="hidden" value="Some details about the
transaction" name="description"/>
    <input type="hidden" value="karmendra" name="name"/>
    <input type="hidden" value="your_email_id@example.com"
name="email"/>
    <input type="hidden" value="9900990099" name="phone"/>
    <input type="hidden" value="245. 2nd Main"
name="address_line_1"/>
    <input type="hidden" value="RT Nagar" name="address_line_2"/>
    <input type="hidden" value="Bengaluru" name="city"/>
    <input type="hidden" value="Karnataka" name="state"/>
    <input type="hidden" value="560037" name="zip_code"/>
    <input type="hidden" value="India" name="country"/>
    <input type="hidden" value="" name="udf1"/>
    <input type="hidden" value="" name="udf2"/>
    <input type="hidden" value="" name="udf3"/>
    <input type="hidden" value="" name="udf4"/>
    <input type="hidden" value="" name="udf5"/>
    <input type="hidden" value="12345" name="session_id"/>
    <input type="hidden" value="abcdefef.987563" name="token"/>
    <input type="hidden" value="123" name="cvv"/>
  </form>
</body>
</html>
```

```
    <input type="hidden" value="" name="hash"/>
    <button style="color: #fff; background-color: #5cb85c;border-
color: #4cae4c;display: inline-block; padding: 6px 12px; border: 1px
solid transparent;"> SUBMIT </button>
  </form>
</body>

</html>
```

11.2. Response Parameters

Please refer [section 2.3](#) for the response parameters posted by Aggrepay.

12. SEAMLESS PAYMENT REQUEST API

In case you perform the normal payment integration process as outlined earlier in the document, the customer will necessarily be redirected to the Aggrepay payment page wherein he will be required to enter his card details or select the appropriate bank/payment instrument (such as wallets etc.) with which he would like to make the payment.

If you would like your customer to perform the bank selection and/or enter his card information on your site, without using the Aggrepay payment page, this can be achieved using the seamless payment request API. Aggrepay would provide you a list of appropriate bankcodes which you would be required to pass along with the payment request. These bankcodes are available in Appendix 3 of this document.

Please note that in order to use our seamless payment request API you would need to be PCI-DSS compliant. For more information on PCI compliance, or if you would like us to assist you in your PCI compliance efforts, please contact your Aggrepay relationship manager.

12.1. Steps for Integration

- You need to submit a POST REQUEST to our server, at the below mentioned URL <https://biz.northakross.in/v2/paymentseamlessrequest>
- Note: hash is a mandatory parameter. If your hash is not properly calculated or does not match for whatever reason, we will not be able to process the payment. The usage of hash is explained in subsequent sections.
- When you submit your transaction request to Aggrepay, we assign a transaction ID to you.
- The customer is automatically redirected to the appropriate bank or 3D-secure page, as the case may be.
- After the customer pays the entire amount using one or more payment instruments, he is redirected back to the merchant site.
- We recommend that you check the hash at your end again, after we send back the response to you. This is essential to prevent user data tampering fraud.

12.2. Parameters to be POSTed in Seamless Payment Request

URL: <https://biz.aggrepaypayments.com/v2/paymentseamlessrequest>

Parameter Name	Description	Data type	Optional / Mandatory
api_key	Aggrepay would assign a unique 40-digit merchant key to you. This key is exclusive to your business/login account. If you have multiple login accounts, there will necessarily be one different api_key per login account that is assigned to you.	varchar(40)	Mandatory
order_id	This is your (merchant) reference number. It must be unique for every transaction.	Varchar(40)	Mandatory

mode	This is the payment mode (TEST or LIVE are valid values). Defaults to LIVE.	Varchar(4)	Optional
amount	This is the payment amount.	Decimal(15,2)	Mandatory
currency	This is the 3digit currency code (INR)	Varchar(3)	Mandatory
description	Brief description of product or service that the customer is being charged for.	Varchar(500)	Mandatory
name	Name of customer.	Varchar(100)	Mandatory
email	Customer email address.	Varchar(100)	Mandatory
phone	Customer phone number	Varchar(50)	Mandatory
address_line_1	Customer address	Varchar(100)	Optional
address_line_2	Customer address 2	Varchar(100)	Optional
city	Customer city	Varchar(50)	Mandatory
state	Customer State	Varchar(50)	Optional
country	Customer country has to be IND	Varchar(50)	Mandatory
zip_code	Customer zip code	Varchar(20)	Mandatory
udf1	User defined field 1	Varchar(300)	Optional
udf2	User defined field 2	Varchar(300)	Optional
udf3	User defined field 3	Varchar(300)	Optional
udf4	User defined field 4	Varchar(300)	Optional
udf5	User defined field 5	Varchar(300)	Optional
bank_code	Bank code identifies the payment mode and channel.	Varchar(20)	Mandatory
card_number	Card number (11 to 19 digits)	Varchar(19)	Conditional
expiry_date	Expiry date in mm/yyyy format	Varchar(7)	Conditional
card_holder_name	Card holder name	Varchar(30)	Conditional
cvv	CVV/CVC	Varchar(4)	Conditional
return_url	Return URL success - Aggrepay will make a POST request to this URL after successful transaction, with a set of parameters, which you can process as you want to.	Varchar(300)	Mandatory
return_url_failure	Return URL failure - Aggrepay will make a POST request to this URL after failed transaction, with a set of parameters, which you can process as you want to. Defaults to return_url.	Varchar(300)	Optional
return_url_cancel	Return URL cancel - Aggrepay will make a POST request to this URL after user-cancelled transaction, with a set of parameters, which you can process as you want to.	Varchar(300)	Optional
hash	You need to compute a hash of all your parameters and pass that hash to Aggrepay, for details about calculating hash refer Appendix 2. Note: the SALT will be provided by Aggrepay separately. NEVER PASS SALT IN A FORM, DO NOT STORE SALT IN ANDROID APP APK or IPHONE APP package.	Varchar(200)	Mandatory

12.3. Response Parameters

Response sent after complete amount is paid. This is a server to browser response

Parameter name	Description
transaction_id	A unique ID that can be used to trace the transaction uniquely within Aggrepay. Transaction IDs are alphanumeric.
payment_mode	This tells the payment mode used by customer - example: "credit card", "debit card", "netbanking", etc.
Payment_channel	The actual payment channel - for example Visa, Master, Diners, HDFC Bank, MobiKwik, etc.
payment_datetime	Date and Time of this payment in "YYYY-MM-DD HH:MM:SS" format
response_code	Status of the transaction (return code). 0 signifies successful transaction. Non-zero values signify error.
response_message	Can have a value of "Transaction Successful" or "Transaction Failed" or "Transaction Cancelled".
error_desc	Failure reason (if transaction is failed)
order_id	The same order_id that was originally posted by the merchant in the request.
amount	The same original amount that was sent by the merchant in the transaction request.
currency	This is the 3digit currency code (INR), it will be same value that was originally sent by merchant.
description	The same description that was originally sent by the merchant in the transaction request.
name	The same value that was originally sent by merchant
email	The same value that was originally sent by merchant
phone	The same value that was originally sent by merchant
address_line_1	The same value that was originally sent by merchant
address_line_2	The same value that was originally sent by merchant
city	The same value that was originally sent by merchant
state	The same value that was originally sent by merchant
country	The same value that was originally sent by merchant
zip_code	The same value that was originally sent by merchant
udf1	The same value that was originally sent by merchant
udf2	The same value that was originally sent by merchant
udf3	The same value that was originally sent by merchant
udf4	The same value that was originally sent by merchant
udf5	The same value that was originally sent by merchant
cardmasked	The card number used by customer for making payment. This will NOT BE SENT by default, and is sent only in case the merchant has been explicitly approved to receive this information. Else this is always sent as null.
hash	Aggrepay calculates the hash using the same algorithm which was outlined earlier. Hence, the merchant needs to check whether this returned hash matches the calculated hash.

13. Appendix 1 - Hash calculation guide

13.1. How to Calculate Hash on API request

To calculate hash, you will need the salt provided by Aggrepay.

Hashing generation algorithm

Following are the steps to calculate hash.

1. Create a | (pipe) delimited string called hash_data with first value as the salt.
2. Now sort the post fields based on their keys and create a | delimited string, for the fields with values.
3. Hash the hash_data string using SHA512 hashing algorithm and save the hash in secure_hash string
4. Convert the secure_hash string to upper case

Example PHP code to generate hash

```
/**
 * @param array $parameters
 * @param string $salt
 * @param string $hashing_method
 * @return null|string
 */
function generateHashKey($parameters, $salt, $hashing_method = 'sha512')
{
    $secure_hash = null;
    ksort($parameters);
    $hash_data = $salt;
    foreach ($parameters as $key => $value) {
        if (strlen($value) > 0) {
            $hash_data .= '|' . trim($value);
        }
    }

    if (strlen($hash_data) > 0) {
        $secure_hash = strtoupper(hash($hashing_method, $hash_data));
    }

    return $secure_hash;
}
```

13.2. How to check the response Hash

It is important to make sure the response received from Aggrepay is genuine, and to do so you will need to do a hash check on your server on receiving the response.

Every response received has a field called hash. Sometimes it is null, which means it is not important to check hash for the response, but if there is a hash present please perform hash check as described below and make sure integrity of the response received from Aggrepay APIs.

To check hash, you will need the salt provided by Aggrepay.

Hash checking algorithm

Example PHP code to check hash

```
/**
 * @param string $salt
 * @param array $response_array
 * @return bool
 */
function responseHashCheck($salt, $response_array)
{
    /* If hash field is null no need to check hash for such response */
    if (is_null($response_array['hash'])) {
        return true;
    }

    $response_hash = $response_array['hash'];
    unset($response_array['hash']);

    /* Now we have response json without the hash */
    $calculated_hash = hashCalculate($salt, $response_array);

    return ($response_hash == $calculated_hash) ? true : false;
}

/**
 * @param string $salt
 * @param array $input
 * @return string
 */
function hashCalculate($salt, $input)
{
    /* Columns used for hash calculation, Donot add or remove values from $hash_columns
    array */
    $hash_columns = array_keys($input);
    /*Sort the array before hashing*/
    sort($hash_columns);

    /*Create a | (pipe) separated string of all the $input values which are available
    in $hash_columns*/
    $hash_data = $salt;
    foreach ($hash_columns as $column) {
        if (isset($input[$column])) {
            if (strlen($input[$column]) > 0) {
                $hash_data .= '|' . trim($input[$column]);
            }
        }
    }
    $hash = strtoupper(hash("sha512", $hash_data));
}
```

```
    return $hash;
}
```

Example PHP code to check hash if response is JSON

```
/**
 * @param $salt
 * @param $response_json
 * @return bool
 */
function responseHashCheck($salt, $response_array)
{
    /* If hash field is null no need to check hash for such response */
    if (is_null($response_array['hash'])) {
        return true;
    }

    $response_hash = $response_array['hash'];
    unset($response_array['hash']);
    $response_json = json_encode($response_array);

    /* Now we have response json without the hash */
    $calculated_hash = hashCalculate($salt, $response_json);

    return ($response_hash == $calculated_hash) ? true : false;
}

/**
 * @param $salt
 * @param $input_json
 * @return string
 */
function hashCalculate($salt, $input_json)
{
    /* Prepend salt with input json and calculate the hash using SHA512 */
    $hash_data = $salt . $input_json;
    $hash = strtoupper(hash('sha512', $hash_data));

    return $hash;
}
```

14. Appendix 3 - List of bank codes

Bankcode	Payment Mode	Payment Channel	Description
VISC	Credit Card	Visa	Visa Credit Card
MASC	Credit Card	Master	Master Credit Card
DINC	Credit Card	Diners	Diners Credit Card
AMXC	Credit Card	Amex	American Express Credit Card
VISD	Debit Card	Visa	Visa Debit Card
MASD	Debit Card	Master	Master Debit Card
MAED	Debit Card	Maestro (non-SBI)	Maestro Debit Card (non-SBI)
MSED	Debit Card	Maestro (SBI)	Maestro Debit Card (SBI)
RUPD	Debit Card	Rupay	Rupay Debit Card
VICC	Commercial Credit Card	Visa	Visa Commercial Credit Card
MACC	Commercial Credit Card	Master	Master Commercial Credit Card
UPIU	UPI	UPI	Unified Payments Interface
VICI	International Credit Card	Visa	Visa International Credit Card
MACI	International Credit Card	Master	Master International Credit Card
ALLN	Netbanking	Allahabad Bank	Allahabad Bank NetBanking
ADBN	Netbanking	Andhra Bank	Andhra Bank
ADBM	Netbanking	Andhra Bank - Corporate	Andhra Bank - Corporate
AXIN	Netbanking	AXIS Bank	AXIS Bank NetBanking
BDNN	Netbanking	Bandhan bank	Bandhan Bank
BBKN	Netbanking	Bank of Bahrain and Kuwait	Bank of Bahrain and Kuwait
BBRM	Netbanking	Bank of Baroda - Corporate	Bank of Baroda Corporate Banking
BBRN	Netbanking	Bank of Baroda - Retail	Bank of Baroda Retail Banking
BOIN	Netbanking	Bank of India	Bank of India
BOMN	Netbanking	Bank of Maharashtra	Bank of Maharashtra
BCBN	Netbanking	Bassein Catholic Bank	Bassein Catholic Bank
BMBN	Netbanking	Bharatiya Mahila Bank	Bharatiya Mahila Bank
CANN	Netbanking	Canara Bank	Canara Bank
CSBN	Netbanking	Catholic Syrian Bank	Catholic Syrian Bank
CBIN	Netbanking	Central Bank Of India	Central Bank Of India
CITN	Netbanking	Citi Bank NetBanking	Citi Bank NetBanking
CUBN	Netbanking	City Union Bank	City Union Bank
CRPN	Netbanking	Corporation Bank	Corporation Bank

COSN	Netbanking	Cosmos Bank	Cosmos Bank
DBSN	Netbanking	DBS Bank	DBS Bank
DCBM	Netbanking	DCB Bank - Corporate	DCB Bank - Corporate Netbanking
DENN	Netbanking	Dena Bank	Dena Bank
DSHN	Netbanking	Deutsche Bank	Deutsche Bank
DCBN	Netbanking	Development Credit Bank	Development Credit Bank
DHNM	Netbanking	Dhanlakshmi Bank - Corporate Net Banking	Dhanalakshmi Bank - corporate
DHNN	Netbanking	Dhanlakshmi Bank	Dhanalakshmi Bank
FEDN	Netbanking	Federal Bank	Federal Bank
HDFN	Netbanking	HDFC Bank	HDFC Bank
ICIN	Netbanking	ICICI Bank	ICICI Netbanking
IDFN	Netbanking	IDFC Bank	IDFC Bank
ININ	Netbanking	Indian Bank	Indian Bank
IOBN	Netbanking	Indian Overseas Bank	Indian Overseas Bank
INDN	Netbanking	IndusInd Bank	IndusInd Bank
IDBN	Netbanking	IDBI	Industrial Development Bank of India
INGN	Netbanking	ING Vysya Bank	ING Vysya Bank
JAKN	Netbanking	Jammu and Kashmir Bank	Jammu and Kashmir Bank
JSBN	Netbanking	Janata Sahakari Bank	Janata Sahakari Bank
KJBN	Netbanking	Kalyan Janata Sahakari Bank	Kalyan Janata Sahakari Bank
KRKN	Netbanking	Karnataka Bank	Karnataka Bank
KRVN	Netbanking	Karur Vysya - Retail	Karur Vysya
KRVM	Netbanking	Karur Vysya - Corporate	Karur Vysya - Corporate Netbanking
KKBN	Netbanking	Kotak Mahindra Bank	Kotak Mahindra Bank
LVBN	Netbanking	Laxmi Vilas Bank	Laxmi Vilas Bank - Retail
LVBM	Netbanking	Laxmi Vilas Bank - Corporate	Laxmi Vilas Bank - Corporate
MSBN	Netbanking	The Mehsana Urban Co Op Bank Ltd	The Mehsana Urban Co Op Bank Ltd.
NKBN	Netbanking	NKGSB Bank	NKGSB Bank
OBCN	Netbanking	Oriental Bank of Commerce	Oriental Bank of Commerce
PMCN	Netbanking	Punjab & Maharashtra Coop Bank	Punjab & Maharashtra Coop Bank
PSBN	Netbanking	Punjab & Sind Bank	Punjab & Sind Bank
PNBN	Netbanking	Punjab National Bank - Retail	Punjab National Bank - Retail Banking
PNBM	Netbanking	Punjab National Bank - Corporate	Punjab National Bank-Corporate
RTNN	Netbanking	RBL Bank Limited	RBL Bank Limited
RTNM	Netbanking	RBL Bank Limited- Corporate Net Banking	RBL Bank Limited- Corporate Net Banking
SRSN	Netbanking	Saraswat Bank	Saraswat Bank
SVCN	Netbanking	Shamrao Vitthal Co-operative Bank	Shamrao Vitthal Co-operative Bank

SVCM	Netbanking	Shamrao Vitthal Co-operative Bank - Corporate	Shamrao Vitthal Co-operative Bank - Corporate
SOIN	Netbanking	South Indian Bank	South Indian Bank
SCBN	Netbanking	Standard Chartered Bank	Standard Chartered Bank
SBJN	Netbanking	State Bank of Bikaner and Jaipur	State Bank of Bikaner and Jaipur
SBHN	Netbanking	State Bank of Hyderabad	State Bank of Hyderabad
SBIN	Netbanking	State Bank of India	State Bank of India
SBMN	Netbanking	State Bank of Mysore	State Bank of Mysore
SBPN	Netbanking	State Bank of Patiala	State Bank of Patiala
SBTN	Netbanking	State Bank of Travancore	State Bank of Travancore
SYDN	Netbanking	Syndicate Bank	Syndicate Bank
TMBN	Netbanking	Tamilnad Mercantile Bank Ltd.	Tamilnad Mercantile Bank Ltd.
TSCN	Netbanking	Tamilnadu State Coop Bank	Tamilnadu State Coop Bank
TJSN	Netbanking	TJSB Bank	TJSB Bank
UCON	Netbanking	UCO Bank	UCO Bank
UBIM	Netbanking	Union Bank of India - Corporate	Union Bank - Corporate Netbanking
UBIN	Netbanking	Union Bank of India - Retail	Union Bank of India
UNIN	Netbanking	United Bank Of India	United Bank Of India
VIJN	Netbanking	Vijaya Bank	Vijaya Bank
YESN	Netbanking	Yes Bank	Yes Bank
ESFN	Netbanking	Equitas Bank	Equitas Small Finance Bank Limited
PNYN	Netbanking	PNB YUVA Bank	PNB YUVA Bank
KCCN	Netbanking	The Kalupur Commercial Cooperative Bank Limited	The Kalupur Commercial Cooperative Bank Limited
AIRN	Netbanking	Airtel Payment Bank	Airtel Payment Bank
BHAN	Netbanking	Bharat Bank	Bharat Bank
NBLN	Netbanking	Nainital Bank	Nainital Bank
PTMW	Wallet	Paytm	Paytm wallet
MBKW	Wallet	Mobikwik	Mobikwik Wallet
OXIW	Wallet	Oxigen	Oxigen Wallet
MRPW	Wallet	mRupee	mRupee Wallet
JIOW	Wallet	Reliance JioMoney	Reliance Jio Money wallet
TMWW	Wallet	The Mobile Wallet	The Mobile Wallet
PYCW	Wallet	Paycash	Paycash wallet
OLAW	Wallet	Ola Money	Ola Money Wallet
JNCW	Wallet	Jana Cash	Jana Cash
ATLW	Wallet	Airtel Money	Airtel Money
PNBW	Wallet	PNB Wallet	PNB Wallet
FRCW	Wallet	FreeCharge	FreeCharge Wallet

EZCW	Wallet	ezeClick	ezeClick Wallet
VDFW	Wallet	mPesa Wallet	mPesa - Vodafone Wallet
SBIW	Wallet	SBI Buddy	SBI Buddy
AMPW	Wallet	Amazon Pay	Amazon Pay
ITZH	Cash Card	ITZ Cash Card	ITZ Cash card
ICSH	Cash Card	Icash Card	Icash card
BOIA	ATM Card	Bank of India	Bank of India ATM Card
PNBA	ATM Card	Punjab National Bank	Punjab National Bank ATM Card
BOBA	ATM Card	Bank of Baroda	Bank of Baroda ATM Card
BMBA	ATM Card	Bharatiya Mahila Bank	Bharatiya Mahila Bank ATM Card
BOMA	ATM Card	Bank of Maharashtra	Bank of Maharashtra ATM Card
CANA	ATM Card	Canara Bank	Canara Bank ATM Card
INDA	ATM Card	IndusInd Bank	IndusInd Bank ATM Card
IDFA	ATM Card	IDFC	IDFC ATM Card
IOBA	ATM Card	Indian Overseas Bank	Indian Overseas Bank ATM Card
KGBA	ATM Card	Kerala Gramin Bank	Kerala Gramin Bank ATM Card
LVBA	ATM Card	Laxmi Vilas Bank	Laxmi Vilas Bank ATM Card
PKGA	ATM Card	Pragathi Krishna Gramin Bank	Pragathi Krishna Gramin Bank ATM Card
RSCA	ATM Card	Rajasthan State Coop Bank	Rajasthan State Coop Bank ATM Card
SMCA	ATM Card	Shivalik Mercantile Co-Op Bank Limited	Shivalik Mercantile Co-Op Bank Limited ATM Card
UBIA	ATM Card	Union Bank of India	Union Bank of India ATM Card
IOBP	Debit Pin	Indian Overseas Bank	Indian Overseas Bank Debit Pin Card
SYDP	Debit Pin	Syndicate Bank	Syndicate Bank Debit Pin Card
AXIP	Debit Pin	AXIS Bank	AXIS Bank Debit Pin Card
ADBP	Debit Pin	Andhra Bank	Andhra Bank Debit Pin Card
UCOP	Debit Pin	UCO Bank	UCO Bank Debit Pin Card
SUBP	Debit Pin	Suryodaya Bank	Suryodaya Bank Debit Pin Card
ICIP	Debit Pin	ICICI Bank	ICICI Bank Debit Pin Card

15. Appendix 4 - List of error codes

error numeric code	error code	error description
0	SUCCESS	Transaction successful
1000	FAILED	Transaction failed
1001	INVALID-API-KEY	The api key field is incorrect
1002	INVALID-LIVE-MODE-ACCESS	The live mode access is not allowed
1003	INVALID-ORDER-ID-FIELD	The order id field should to be unique
1004	ORDER-ID-FIELD-NOT-FOUND	The order id field is not found
1005	INVALID-AUTHENTICATION	Invalid authentication at bank
1006	WAITING-BANK-RESPONSE	Waiting for the response from bank
1007	INVALID-INPUT-REQUEST	Invalid input in the request message
1008	TRANSACTION-TAMPERED	Transaction tampered
1009	DECLINED-BY-BANK	Bank Declined Transaction
1010	INVALID-AMOUNT	Amount cannot be less than 1
1011	AUTHORIZATION-REFUSED	Authorization refused
1012	INVALID-CARD	Invalid Card/Member Name data
1013	INVALID-EXPIRY-DATE	Invalid expiry date
1014	DENIED-BY-RISK	Transaction denied by risk
1015	INSUFFICIENT-FUND	Insufficient Fund
1016	INVALID-AMOUNT-LIMIT	Total Amount limit set for the terminal for transactions has been crossed
1017	INVALID-TRANSACTION-LIMIT	Total transaction limit set for the terminal has been crossed
1018	INVALID-DEBIT-AMOUNT-LIMIT	Maximum debit amount limit set for the terminal for a day has been crossed
1019	INVALID-CREDIT-AMOUNT-LIMIT	Maximum credit amount limit set for the terminal for a day has been crossed
1020	MAXIMUM-DEBIT-AMOUNT-CROSS	Maximum debit amount set for per card for rolling 24 hrs has been crossed
1021	MAXIMUM-CREDIT-AMOUNT-CROSS	Maximum credit amount set for per card for rolling 24 hrs has been crossed
1022	MAXIMUM-TRANSACTION-CROSS	Maximum transaction set for per card for rolling 24 hrs has been crossed
1023	HASH-MISMATCH	Hash Mismatch
1024	INVALID-PARAMS	Invalid parameters
1025	INVALID-BANK-CODE	Invalid bank code
1026	INVALID-MERCHANT	Merchant is not active
1027	INVALID-TRANSACTION	Invalid transaction
1028	TRANSACTION-NOT-FOUND	Transaction not found

1029	TRANSACTION-TERMINATED	Transaction terminated
1030	TRANSACTION-INCOMPLETE	Transaction incomplete
1031	AUTO-REFUNDED	Transaction auto refunded
1032	REFUNDED	Transaction refunded
1033	SINGLE-TRANSACTION-LOWER-LIMIT-CROSS	The amount provided is less than transaction lower limit
1034	SINGLE-TRANSACTION-UPPER-LIMIT-CROSS	The amount provided is more than transaction upper limit
1035	TRANSACTION-DAILY-LIMIT-CROSS	The daily transaction limit is exceeded for the merchant
1036	TRANSACTION-MONTHLY-LIMIT-CROSS	The monthly transaction limit is exceeded for the merchant
1037	DAILY-TRANSACTION-NUMBER-CROSS	The daily transaction number is exceeded for the merchant
1038	MONTHLY-TRANSACTION-NUMBER-CROSS	The monthly transaction number is exceeded for the merchant
1039	INVALID-REFUND-AMOUNT	The refund amount is greater than transaction amount
1040	INVALID-CVV	Invalid Card Verification Code
1041	AUTO-REFUNDED-TNP	Transaction is auto refunded by TnP
1042	FAILED-NO-RESPONSE	Transaction failed as there was no response from bank
1043	TRANSACTION-CANCELLED	Transaction cancelled
1044	UNAUTHORIZED	Unauthorized
1045	FORBIDDEN	Forbidden Access
1046	TRANSACTION-ALREADY-CAPTURED	Transaction already captured
1047	AUTHORIZED	Transaction authorized
1048	CAPTURED	Transaction captured
1049	VOIDED	Transaction voided
1050	NO-RECORD-FOUND	No data record found for the given input
1051	ACQUIRER-ERROR	Error occurred at the bank end
1052	INVALID-EMAIL	Invalid Email ID
1053	INVALID-PHONE	Invalid phone number
9999	UNKNOWN-ERROR	Unknown error occurred
997		These are unhandled errors coming from banks directly, errors coming here will eventually be categorized in one of the above error codes or into a new error code. If you are handling error individually then make sure to have a catch all.

16. Appendix 5 – Currency Codes

Currency	Currency Code
INR	Indian Rupee
USD	United States Dollar
EUR	Euro
SGD	Singapore Dollar
HKD	Hong Kong Dollar
GBP	British Pound
CAD	Canadian Dollar
AUD	Australian Dollar
AED	Arab Emirates Dinar

