

Paylance

# ACH+RCC API Reference

v1

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# Overview

## Endpoints

- The Payliance API accepts HTTP POST requests in either JSON or XML format.
  - JSON Content-Type: application/json
  - XML Content-Type: text/xml
- HTTP Request Method: POST
- The Payliance API has two Endpoint URLs:
  - Staging API Endpoint: <https://staging.api.payliance.com/<request path>>
  - Production API Endpoint: <https://api.payliance.com/<request path>>

## Authentication

The Payliance API authentication uses a Bearer Authentication header.

Authorization: Bearer <SecretKey>

An Authentication key will be provided for each configured merchant location. Separate keys will be provided for Staging and Production environments.

## Whitelisting

- The Staging API Endpoint uses geofencing to restrict access to the United States and Canada. To access the Staging endpoint from locations outside the United States or Canada, contact your Sales or Implementations representative to whitelist your IP address.
- The Production API Endpoint uses IP address whitelisting to restrict access. Contact your Sales or Implementations representative to whitelist your IP address prior to your production go-live.
- Attempting to access the API from a restricted location will result in a HTTP 403 (Forbidden) response.

# Payment Transactions

The Payliance API supports requests for ACH, RCC and RTP transactions.

## Functions

Function	Description	Request Path
Debit	Submit a transaction to debit a customer's bank account. Can be processed as an ACH or RCC transaction.	api/v1/echeck/debit
Credit	Submit a transaction to credit a customer's bank account. Can be processed as an ACH or RTP transaction.	api/v1/echeck/credit
Void	Invalidate a pending transaction so that it will not be processed.	api/v1/echeck/void
Refund	Create a refund (credit) transaction for a debit that has been processed.	api/v1/echeck/refund
Retrieve	Retrieve details for a previously submitted debit, credit or refund transaction.	api/v1/echeck/retrieve
QueryInstitution	Submit a bank routing number to return RTP eligibility.	api/v1/echeck/queryinstitution
QueryPrefundedBalance	Returns the current day prefunded account activity.	api/v1/echeck/queryprefundedbalance
QueryReturns	Retrieve all transactions that have received returns in a specified date range.	api/v1/echeck/queryreturns
QuerySettlements	Retrieve all transactions that have settled in a specified date range.	api/v1/echeck/querysettlements

## DEBIT and CREDIT:

The Debit and Credit functions have the same request and response formats.

Request Method	Description	API
Debit	Submit a transaction to debit a customer's bank account.	api/v1/echeck/debit
Credit	Submit a transaction to credit a customer's bank account.	api/v1/echeck/credit

## DEBIT and CREDIT Request

Parameter	Description	Format
UniqueTranId	<b>Required</b> Merchant-defined unique transaction reference.	String, up to 50 characters.
Routing	<b>Required</b> Customer's bank routing number.	Numeric string, 9 digits.
AccountNumber	<b>Required</b> Customer's bank account number.	Numeric string, 3-17 digits.
CheckNumber	<b>Required if SEC is ARC, BOC, ICL, POP, or RCK.</b> Otherwise, optional. Customer's check number.	Numeric string, up to 16 digits.
CheckAmount	<b>Required.</b> Dollar amount of the transaction.  This is the total amount to be debited from or credited to the customer's account.  For Pre-Note transactions submit 0.	Decimal.  Do not include currency symbols or commas.
SecCode	<b>Required.</b> Used to specify the type of the transaction.  Valid values for SecCode are: <b>ACH:</b> ARC, BOC, CCD, POP, PPD, RCK, TEL, WEB <b>RCC/RDC:</b> IC2, ICL <b>RTP:</b> RTP	String, 3 characters.  See Reference: SEC Codes
AccountType	<b>Required.</b> Indicates the type of the bank account being debited or credited.  Valid AccountType values are: Personal Checking, Personal Saving, Business Checking, Business Saving.	String, up to 35 characters.

	For POP transactions, AccountType must be Personal Checking or Personal Saving.	
LastName	<p><b>Required</b> if SEC is CCD, PPD, RCK, TEL, WEB, RTP, IC2 or ICL*. Optional if SEC is ARC, BOC, or POP.</p> <p>*If AccountType is Business Checking or Business Saving, either LastName or CompanyName is required.</p> <p>Last name associated with customer's bank account.</p>	String, 2 to 50 characters.
FirstName	<p><b>Required</b> if SEC is IC2 <b>Required</b> if SEC is RTP and AccountType is Personal Checking or Personal Saving. Otherwise, optional.</p> <p>First name associated with customer's bank account.</p>	String, up to 50 characters.
CompanyName	<p><b>If</b> AccountType is Business Checking or Saving either LastName or CompanyName is required.</p> <p>Company name associated with customer's bank account</p>	String, 2 to 50 characters.
Address1	<p><b>Required</b> if SEC is ARC, BOC, POP, or RCK. Otherwise, optional.</p> <p>Customer's billing street address.</p>	String, up to 50 characters.
Address2	Line 2 of customer's billing street address.	String, up to 50 characters.
City	<p><b>Required</b> if SEC is IC2 or POP. Otherwise, optional.</p> <p>Customer's billing address city.</p>	String, up to 30 characters.
State	<p><b>Required</b> if SEC is IC2 or POP. Otherwise, optional.</p> <p>Customer's billing address state code.</p>	<p>String, 2-letter USPS state code.</p> <p>Example: OH <a href="#">USPS State Codes</a></p>
Zip	<p><b>Required</b> if SEC is IC2. Otherwise, optional.</p> <p>Customer's billing zip code.</p>	<p>String, 5-digit, 9-digit. #####, #####, or #####-####</p>
Phone	Phone number associated with the customer's bank account.	Numeric string, 10 digits.

CheckDate	The date the merchant received payment authorization from the customer.	Datetime. mm-dd-yyyy or yyyy-mm-dd
Opt1	Merchant-defined additional information related to the transaction.	String, up to 100 characters.
Opt2	Merchant-defined additional information related to the transaction.	String, up to 100 characters.
Opt3	Merchant-defined additional information related to the transaction.	String, up to 100 characters.
Opt4	Dynamic memo field for RCC transactions.	String, up to 100 characters.
Opt5	Merchant-defined additional information related to the transaction.	String, up to 100 characters.
Opt6	Merchant-defined additional information related to the transaction.	String, up to 100 characters.
OriginalTranId	Original transaction identifier.	String, up to 50 characters.
MicrData	<b>Required</b> if SEC is BOC or ICL. Otherwise, optional.  Micr line from physical check.	String, 30 characters.  Example: :123456789:3604<5555222061<
WebType	<b>Required</b> if SEC is WEB. Otherwise, optional.  Indicates whether the transaction is a single or recurring payment.	String, one letter.  Must be S or R.
OrigSecCode	<b>Required</b> if SEC is RCK. Otherwise, optional.  Used to indicate if the transaction is a representment.	String, 3 characters.  See Reference: SEC Codes
ImageF	<b>Required</b> if SEC is BOC or ICL. Otherwise, optional.  Represents the front image of the physical check.	String, Base64.
ImageB	<b>Required</b> if SEC is BOC or ICL. Otherwise, optional.  Represents the back image of the physical check.	String, Base64.
customDescriptor	Merchant-defined description to help the consumer recognize the transaction. If not specified, the default bank description from the merchant's configuration is used.	String, up to 10 characters.

	<i>Note: Additional merchant configuration is required to be able to specify custom descriptors.</i>	
IsSameDay	<p>Used to indicate whether to process an ACH transaction in the same day processing window.</p> <p><i>Note: Additional merchant configuration is required for same day processing and same day transaction pricing may apply.</i></p>	Boolean.
FutureDate	<p>Used to indicate a future effective date for a transaction.</p> <p>Transaction will be held and sent to bank to be effective on the FutureDate provided. Sending a date in the past will cause the transaction to be processed as if a future date was not sent.</p> <p><i>Note: Additional merchant configuration is required for future date processing and future date transaction pricing may apply.</i></p>	<p>Datetime, up to 30 days in the future.</p> <p>mm-dd-yyyy or yyyy-mm-dd</p>
MicroEntry	<p>Used to indicate whether the transaction should be formatted according to the Nacha standard for a micro-entry transaction.</p> <p>Transactions with amount between 0 and 1 and MicroEntry set to true will use "ACCTVERIFY" in the company entry description field.</p> <p><i>Note: Additional merchant configuration is required for micro entry formatting.</i></p>	Boolean.
ConvenienceFee	<p>Used to indicate whether to process the transaction with a convenience fee.</p> <p><i>Note: Additional merchant configuration is required for convenience fee processing.</i></p>	Boolean.
ConvenienceFeeAmount	Used to specify the dollar amount for the convenience fee. Overrides merchant default convenience fee settings.	<p>Decimal.</p> <p>Do not include currency symbols or commas.</p>



#### DEBIT and CREDIT Response

Parameter	Description	Format
AuthorizationId	Transaction authorization code assigned by Payliance.	Numeric string.
ValidationCode	Code indicating whether the transaction validated successfully.  1 – Transaction validated and will be sent to the bank. All other codes indicate an invalidation error or an RTP decline. The “message” parameter will return more information on the reason for the error.	Numeric string, 1-3 digits.
successful	True if the transaction validated or False if the transaction invalidated.  If False is returned, the transaction will not be processed.	Boolean.
message	Descriptive error message corresponding to the “ValidationCode” parameter. Empty if ValidationCode is 1.	String.

## VOID:

Use the VOID function to cancel a validated debit or credit transaction that has not been sent to the bank for processing. VOID can be used the day the transaction is submitted up until the merchant's bank cutoff time. VOID is not applicable for RTP transactions.

### Void Request

Endpoint: `api/v1/echeck/void`

Parameter	Description	Format
AuthorizationId	<p>The authorization code assigned by Payliance for the original Debit or Credit transaction.</p> <p>The AuthorizationId is provided in the response of the Debit and Credit functions.</p>	Numeric string.

### Void Response

Parameter	Description	Format
successful	<p>True if the transaction was successfully voided and will not be sent to the bank.</p> <p>If False is returned, see the response message for more information indicating why the transaction could not be voided.</p>	Boolean.
message	Descriptive error message if the transaction could not be voided. Empty if void was successful.	String.

## REFUND:

Use the REFUND function to issue a refund for a prior debit transaction that has been sent to the bank for processing. REFUND will create a credit transaction for the original debit transaction amount, routing and account number. The REFUND function cannot be used to reverse credit transactions. REFUND is not applicable for RTP transactions.

### Refund Request

Endpoint: `api/v1/echeck/refund`

Parameter	Description	Format
AuthorizationId	The authorization code assigned by Payliance for the original Debit transaction.  The AuthorizationId is provided in the response of the Debit function.	Numeric string.

### Refund Response

Parameter	Description	Format
AuthorizationId	Authorization code assigned by Payliance for the refund transaction.	Numeric string.
successful	True if the refund was created successfully.  If False is returned, the refund was not issued. See the response message for more information.	Boolean.
message	Descriptive error message including the validation code if the transaction could not be refunded. Message contains the text "Validation Code 1" if refund was successful.	String.

## RETRIEVE:

Use the RETRIEVE function to return the transaction details for a prior Debit, Credit or Refund transaction.

### Retrieve Request

Endpoint: `api/v1/echeck/retrieve`

Parameter	Description	Format
UniqueTranId	Merchant-defined unique transaction reference from the Debit or Credit transaction.  A RETRIEVE request must include either UniqueTranId or AuthorizationId.	String, up to 50 characters.
AuthorizationId	The authorization code assigned by Payliance for the transaction.  The AuthorizationId is provided in the response of the Debit, Credit and Refund functions.	Numeric string.
IncludeRiskManagementResults	Indicator to return the Risk Management status of the transaction.  <i>Note: Additional merchant configuration is required for risk management and risk management transaction pricing may apply.</i>	Boolean.

### Retrieve Response

Parameter	Description	Format
AuthorizationId	Authorization code assigned by Payliance for the transaction.	Numeric string.
Status	Status of the transaction.	Integer.  0 – Not found 1 – Invalidated 2 – Pending 4 – Sent to bank 8 – Returned 16 – Settled 24 – Settled then Returned (Late Return) 32 – Voided
ReturnCode	Returns a NACHA Return code if a return has been received from the bank for the	String.  Example: R02

	transaction. NULL if a return has not been received.	
Routing	Customer's routing number submitted in the original transaction request.	Numeric string, 9 digits.
AccountNumber	Last four digits of the customer's account number submitted in the original transaction request.	String. Includes asterisks and the last 4 digits of the account number.
Amount	Amount submitted in the original transaction request.	Decimal.
FirstName	First Name submitted in the original transaction request.	String.
LastName	Last Name submitted in the original transaction request.	String.
RiskManagementResult	Returns NULL if IncludeRiskManagementResult was sent as FALSE in request. Returns sub-elements Type and Description if IncludeRiskMangementResult was sent as TRUE in request.	String.
TypeId	Numeric value representing the Risk Management Result received.	Integer. 0 – Declined 1 – Accepted
Description	Description of the Risk Management Result received.	String. "Accepted" "Declined"
TranCode	TranCode submitted in the original transaction request. Indicates if the transaction is a Debit or Credit.	String.
UniqueTranId	UniqueTranId submitted in the original transaction request.	String.
ConvenienceFee	The amount of the convenience fee applied to the transaction.	Decimal.
successful	True if the requested transaction data was found and returned.	Boolean.
message	Returns "Not found" if the requested transaction cannot be retrieved.	String.

## QUERY INSTITUTION:

The Query Institution function identifies the institution associated with a bank routing number and whether that institution supports ACH and RTP processing.

### Query Institution Request

Endpoint: `api/v1/echeck/queryinstitution`

Request institution information including eligibility for ACH and RTP processing for a specified bank routing number.

Parameter	Description	Format
routing	<b>Required</b> Customer's bank routing number.	Numeric string, 9 digits.

### RTP Query Institution Response

Parameter	Description	Format
bank	The name of the financial institution associated with the routing number.	String.
achEligible	Indicates whether the institution is a participant in the Fed ACH network.	Boolean.
rtpEligible	Indicates whether the routing number is enabled for TCH real time payments.	Boolean.
successful	Indicates whether the request was submitted successfully.	Boolean.
message	Descriptive error message when successful is false.  Note: A routing number that is correctly formatted but not eligible for ACH or RTP will return the message: "This institution potentially eligible for RCC only."	String.

#### QUERY PREFUNDED BALANCE:

The prefunded balance query does not require inputs in the request and returns the current day's prefunded account activity up to the time of the request.

#### Query Prefunded Balance Request

Endpoint: `api/v1/echeck/queryprefundedbalance`

Request current day prefunded account activity.

#### Query Prefunded Balance Response

Parameter	Description	Format
client	The client Id and client name associated with the prefunded account.	String.
beginningBalance	The balance of the prefunded account recorded at the beginning of the current day.	Decimal.
adjustments		
type	The type of adjustment to the prefunded account balance.	String. <a href="#">Adjustment Type Values</a>
amount	The amount of the adjustments of this type since the beginning of day balance was recorded.	Decimal.
currentBalance	The balance of the prefunded account at the time of this request.	Decimal.
successful	Indicates whether the query request was submitted successfully.	Boolean.
message	Provides a descriptive error message if successful is false.	String.

## QUERY RETURNS:

The Query Returns function retrieves return details for transactions that received a bank return during the specified date range. It is recommended to set the Start and End date request parameters to query only one day at a time. Query Returns is not applicable for RTP transactions.

**Warning:** Returns are finalized by 11 am EST. Querying the current day prior to 11 am EST could cause returned transactions to be missed.

In the Production environment, results are paged with a maximum 1000 results returned per page. In the Staging environment, results are paged with a maximum 20 results returned per page.

### Query Returns Request

Endpoint: `api/v1/echeck/queryreturns`

Parameter	Description	Format
Start	<b>Required.</b>  Request bank returns for the period beginning with this date.	DateTime. mm-dd-yyyy hh:mm:ss  If not provided, time is defaulted to 00:00.
End	<b>Required.</b>  Request returns for the period ending with this date.	DateTime. mm-dd-yyyy hh:mm:ss  If not provided, time is defaulted to 00:00.  To query for a single day, set the start and end dates to the same month, day, year and set the end date time to 23:59. Alternately, set the end date to one day greater than the start date and use 00:00 for both start and end time.
Pageld	Pass the value "PAGED" in Pageld to get the first page of data. Then pass the Pageld value returned in the response to get the next page of data.  If Pageld is omitted from the request or not populated, all result data will be returned up to the maximum response size.	String.



## Query Returns Response

Parameter	Description	Format
Returns	NULL if request is not successful. Empty [ ] if no returns were found in the period. Contains sets of transaction data for each return in the period.	
AuthorizationId	Authorization code assigned by Payliance when the transaction was submitted.	Numeric string.
MerchantId	Payliance Id for the merchant.	String.
DateReturned	Date the return was received from the bank.	DateTime.
UniqueTranId	UniqueTranId submitted in the original transaction request.	String.
Routing	Customer's routing number submitted in the original transaction request.	Numeric string, 9 digits.
AccountNumber	Last four digits of the customer's account number submitted in the original transaction request.	String. Includes asterisks and the last 4 digits of the account number.
CheckNumber	Check number submitted in the original transaction request.	String.
Name	First Name and Last Name submitted in the original transaction request.	String.
Amount	Amount submitted in the original transaction request.	Decimal.
ReturnAmount	Amount of the return received from the bank.  NOC reason codes will have 0 for the ReturnAmount.	Decimal.
TranStatus	Numeric value indicating the status of the transaction.	Integer.  1 – Original transaction was settled to the merchant's bank account and will be debited for the return amount on the next business day. 2 – Original transaction was pending deposit when returned. Funds will not be settled to merchant's bank account. 3 – Return is a Notification of Change (NOC) and for information only.
ReturnReason	NACHA Return Reason Code.	String.  Example: R02

Addenda	Description corresponding to the return reason code. In the case of a NOC return, Addenda will include the corrected value.	String.
ConvenienceFee	The amount of the convenience fee applied to the transaction.	Decimal.
Pageld	If a Pageld is returned, there are additional pages of data in the result set. If a Pageld is not returned, the result set is complete. The Pageld can be unique and should not be stored for reuse.	String.
successful	True if the request was executed successfully. False if an error occurred.	Boolean.
message	In the case of an error, provides additional information on the reason for the error.	String.

## QUERY SETTLEMENTS:

The Query Settlements function retrieves transaction details for transactions where the settlement date is within the specified date range. For RTP transactions, the settlement date is the date the transaction was approved. It is recommended to set the Start and End date request parameters to query only one day at a time.

**Note:** There are two options for querying settlements. Setting ExcludeReturnedItems to False will return all transactions with settlement date in the specified range, regardless of whether a return has been received for the item. Setting ExcludeReturnedItems to True will only retrieve transactions where the settlement date is in the specified range and a return has not been received from the bank at the time of the query.

**Warning:** Settlements are finalized during end of day processing. Querying the current day prior to end of day processing could cause settled transactions to be missed.

In the Production environment, results are paged with a maximum 1000 results returned per page. In the Staging environment, results are paged with a maximum 20 results returned per page.

## Query Settlements Request

Endpoint: `api/v1/echeck/querysettlements`

Parameter	Description	Format
Start	<b>Required.</b>  Request transactions where the settlement date is within the period beginning with this date.	DateTime. mm-dd-yyyy hh:mm:ss  If not provided, time is defaulted to 00:00.
End	<b>Required.</b>  Request transactions where the settlement date is within the period ending with this date.	DateTime. mm-dd-yyyy hh:mm:ss  If not provided, time is defaulted to 00:00.  To query for a single day, set the start and end dates to the same month, day, year and set the end date time to 23:59. Alternately, set the end date to one day greater than the start date and use 00:00 for the start and end time.
ExcludeReturnedItems	True will retrieve only transactions that settled during the date range requested. Transactions that were scheduled to settle but received bank returns will not be retrieved.  False will retrieve settled and returned transactions where the transaction's settlement date is within the date range requested.	Boolean.
Pageld	Pass the value "PAGED" in Pageld to get the first page of data. Then pass the Pageld value returned in the response to get the next page of data.  If Pageld is omitted from the request or not populated, all result data will be returned up to the maximum response size.	String.

## Query Settlements Response

Parameter	Description	Format
Settlements	Null if request is not successful. Empty [ ] if no settlements were found in the period. Contains sets of transaction data for each settled transaction in the period.	
AuthorizationId	Authorization code assigned by Payliance when the transaction was submitted.	Numeric string.
MerchantId	Payliance Id for the merchant.	String.
SettleDate	Date the transaction settled.	DateTime.
UniqueTranId	UniqueTranId submitted in the original transaction request.	String.
Routing	Customer's routing number submitted in the original transaction request.	Numeric string, 9 digits.
AccountNumber	Last four digits of the customer's account number submitted in the original transaction request.	String. Includes asterisks and the last 4 digits of the account number.
CheckNumber	Check number submitted in the original transaction request.	String.
Name	First Name and Last Name submitted in the original transaction request.	String.
Amount	Amount submitted in the original transaction request.	Decimal.
ConvenienceFee	The amount of the convenience fee applied to the transaction.	Decimal.
Pageld	If a Pageld is returned, there are additional pages of data in the result set. If a Pageld is not returned, the result set is complete. The Pageld can be unique and should not be stored for reuse.	String.
successful	Indicates whether the query request was submitted successfully.	Boolean.
message	Provides a descriptive error message if successful is false.	String.

## Reference

### Standard Entry Class (SEC) Codes

Code	Description
PPD	Pearranged Payment and Deposit Entry
CCD	Corporate Credit or Debit Entry
WEB	Internet-Initiated / Mobile Entry
TEL	Telephone-Initiated Entry
POP	Point-of-Purchase Entry
ARC	Accounts Receivable Entry
BOC	Back Office Conversion Entry
RCK	Re-presented Check Entry
ICL	Image Cash Letter
IC2	Remotely Created Check
RTP	Real Time Payment

### RTP Network Decline Errors

ValidationCode	Message
124	Account closed
125	Account invalid
126	Account blocked
127	Transaction not allowed on account
128	Deceased customer
129	Amount not approved
130	Duplicate
131	Missing or invalid data
132	Account suspended
133	Declined by network
134	Network error, not supported
135	Network error, status unknown
136	Network error, transaction failed
137	Network error, contact support

## Prefunded Adjustment Type Values

Adjustment Type Value	Description
TRANSACTIONS	The sum of validated transactions that reduce the prefunded account balance.
BANKWIRE	A bank wire received from the merchant adding funds to the prefunded account balance. When multiple bank wires were received, each will be listed individually.
MANUAL	Manual adjustments performed to the prefunded account balance. Manual adjustments will be listed individually.
VOIDS	The sum of voided transactions resulting in a credit to the prefunded account balance.

## RTP Test Data

**Routing:** Routing number must be in the RTP Participant list. Use the QueryInstitution API function to verify whether a routing number is eligible for RTP.

**Account Numbers:**

Account Number	RTP Result
100000000	Approved (1 – Validated)
111111112	125 – Account invalid
111111113	127 – Transaction not allowed on account
111111114	126 – Account blocked
111111115	124 – Account closed
111111117	129 – Amount not approved
111111120	137 – Network error, contact support
111111121	128 – Deceased customer