



## HTTP POST API for Merchants

Payment Status Tracking API

Version 2.0

### Introduction

The Payment Status Tracking Commands detailed in this API give Merchants an automation platform for querying the status of electronic check payments submitted by the Merchant through the ACHQ Gateway.

The purpose of this document is to explain how to query for payment status updates. It also presents the concepts necessary for understanding what data will be returned, when status tracking queries should be executed, and what the query response data should mean to your software application. Please read each section carefully

### An Overview of Electronic Check Processing

Electronic checks, also referred to as ACH (Automated Clearing House) transactions, are check transactions processed electronically through the Federal Reserve. Merchants may utilize the ACH system to initiate electronic check payments to and from their customers, employees, vendors, etc.

Unlike credit cards, electronic check transactions cannot be instantly verified and approved. This is due to the rules that govern the United States Federal Reserve and the autonomous nature of each bank. The banking industry is working to make all forms of check processing and authorization occur in real-time, but due to political, economic, and consumer protection issues, that technology is still years away from widespread implementation.

What has been implemented instead is a system that still provides authorization, but over a period of days instead of seconds. There are several reasons for the slowness of the process, but the bottom line is that the process has been made logistically slow on purpose to protect bank account owners from fraud and error.

Instead of being sent between banks in real-time, all electronic check transactions are batched and sent between banks overnight through the Federal Reserve on banking business days only. A bank can take up to four business days to indicate if a transaction is rejected (Returned) and why. If no response is received within that time frame, the transaction is considered approved (Cleared).

Please note that although banks are expected to respond with a Return within the four business day time frame, there are some exceptions to this rule because of laws that protect the customer. If a Return is received after a check payment has been Cleared and funds have been settled to the merchant's account, the Return transaction is classified as a Charge Back because funds will need to be "charged back" from the merchant's account and returned to the customer's bank.

### Events and Transaction Status

When tracking the status an electronic check transaction, it is important to understand that there are specific events that occur that progressively determine the current status of a transaction. This means, for example, that when a transaction is submitted for authorization or when a bank indicates that a transaction has been rejected, the current status of the transaction will change because of this event.

The following chart shows every possible event that can affect the current status of an electronic check payment:

### [Transaction Events and Resulting Status Values](#)

Potential Events	Event Name	Resulting Status
Transaction Created	Created	Scheduled
Transaction Cancelled	Cancelled	Cancelled
Transaction Submitted to Federal Reserve	Submitted	In-Process
Transaction Approved	Cleared	Cleared
Transaction Failed Verification	Rejected	Failed Verification
Transaction Rejected for Non-Sufficient Funds	Returned-NSF	Returned-NSF
Transaction Rejected for Administrative Reasons	Returned-Other	Returned-Other
Transaction Disputed or Rejected After Approval	Charged Back	Charged Back
Transaction Placed On-Hold by Merchant	Held by Merchant	Merchant Hold
Transaction Placed On-Hold by Processor	Held by Processor	Processor Hold

This chart will be a useful reference later for knowing the potential status values that can be returned by the ACHQ Gateway in response to a status query.

## Scheduling Status Tracking Queries

Please remember that a status tracking query does not provide the current status for all payments during every query. Instead, it reports only payments which have had a status change that occurred on the *TrackingDate* specified in the query. Running a status tracking query each day keeps your system current on the status of every transaction.

The ACHQ system receives batched return notifications from various banks every few hours throughout the day. Returns may be received from our banks all the way up until midnight (12:00 AM) Eastern Standard Time.

At a minimum, you will want to query the ACHQ Gateway sometime after 12:00 AM EST each day with the *TrackingDate* set to the previous day. This will ensure that your software has received all status changes for a given day.

If you want your software to reflect payment status updates sooner than the next day, you are welcome to submit multiple status tracking queries throughout each day with the *TrackingDate* set to that day's date. However, we suggest setting the frequency of your status queries no more than every 4 to 6 hours each day. New payment status updates will rarely occur more frequently than that.

## Logging and Error Handling

As with every scenario where two system exchange information, there may be times when a status tracking update does not occur properly. Reasons for this might include an execution failure in your software application, a dropped connection, some other communication error over the Internet or a problem within the ACHQ Gateway.

Since it is critical for your customers to know when their payments return or settle into their bank account, incorporating some form of logging and error handling into your status update process will help you know when a problem has occurred so that you can implement the necessary protocols to resubmit a new status tracking query to capture the missed information.

## Overview of the Command Process

Integrating this API into your software application is not difficult. The following is an overview of the major components of this task:

- **Submitting a Gateway Command** – You must create a script or program that submits a command packet over the Internet using the secured HTTPS protocol. The rules for constructing the HTTPS command are defined in the next section of this document titled *General Implementation Rules and Specifications*.
- **Transaction Packet Validation** – The ACHQ Payment Gateway parses the command packet for missing data, invalid field values, security violations, etc.
- **Response Processing** - The ACHQ Payment Gateway will return a comma-delimited response after it receives and processes the command. The exact format and meaning of the text response will be based on the command issued as defined in the next section of this document titled *General Implementation Rules and Specifications*.

## General Implementation Rules and Specifications

1. **Command Definition and Rules** – The following table defines all data elements that are required when submitting a status tracking query command

Field Name	Usage	Field Value Format Constraints
MerchantID	Required	Provided by your Account Manager
Merchant_GateID	Required	Provided by your Account Manager
Merchant_GateKey	Required	Provided by your Account Manager
Command	Required	Set to <i>ECheckReports.StatusTrackingQuery</i>
CommandVersion	Required	Set to <b>2.0</b> to enforce this API documentation revision.
TrackingDate	Required	The date for which you want to retrieve status update information. Accepted formats (MM/DD/YYYY or MMDDYYYY)

2. **Submitting a Gateway Command** – To submit a gateway command to ACHQ, use either HTTP POST or GET to transmit the necessary command fields to the following secure URL:

<https://www.speedchex.com/datalinks/transact.aspx>

If using HTTP GET, please make sure that all data values have been encoded to be URL-safe.

3. **Response Data Processing** – In response to this status tracking query command, the ACHQ gateway will send a comma-delimited list of all payment transaction status changes that occurred on the *TrackingDate* specified in the query. Each payment status change will be on a separate line and each line will contain data conforming to the following field specifications:

Return Field	Value Format Constraints	Max Length
Transact_ReferenceID	The unique ID returned when this payment was originally submitted using the <i>Echeck.ProcessPayment</i> command through the ACHQ gateway.	50
Merchant_ReferenceID	The unique ID your software assigned to this payment when the payment transaction was originally submitted using the <i>Echeck.ProcessPayment</i> command through the ACHQ gateway.	50
Event Name	The event that occurred to this payment on the specified Tracking Date. The possible values are defined in the chart titled <b>Transaction Events and Resulting Status Values</b> earlier in this document.	20
Event Date/Time	The date & time (CST) when this event occurred. Format: MM/DD/YYYY HH:MM:SS (24-hour military time)	19
Resulting Status	The status of this payment resulting from the event that occurred. The possible values are defined in the chart titled <b>Transaction Events and Resulting Status Values</b> earlier in this document.	20
Return Code	A 3 letter code assigned to the transaction only if the <i>Resulting Status</i> value is 'Returned' or 'Charged Back'.	3
Return Explanation	The explanation for the return. Please refer to <b>Appendix A – Possible Return Codes</b> for a list of all possible return codes and their explanations.	255
Verification Status	Returns one of following responses: <b>POS</b> – Account found in good standing <b>NEG</b> – Account is invalid or has negative status <b>UNK</b> – Bank not participating / Account status unknown <b>ERR</b> – Account could not be verified due to system error  Verification response fields will only contain data if the merchant is signed up for the ACHQ bank account verification service and the payment was verified using ACHQ Express Verify when it was first submitted.	3
Verification Code	Please see <b>Appendix B – Express Verify Response Codes</b> for all possible values for this field.	3
Verification Description	Please see <b>Appendix B – Express Verify Response Codes</b> for all possible values for this field.	100

**Important Note:** A status tracking query may return no status changes (an empty result). To alleviate any confusion about whether or not the query was successful, a status tracking query with no results will produce a single comma-delimited line where the first field contains the words “No Data Found” and the rest of the command-delimited fields will be empty. The result for an empty status tracking query result will look like this:

No Data Found,,,,,,,,,
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## Appendix A – Possible Return Codes

Return Code	Explanation	Source
I00	Previously Received R02, R03, R04, or R20 on this Account	Internal
I01	Invalid Amount	Internal
I02	Transaction Still Pending	Internal
I03	Check Represented Maximum Times	Internal
I04	Max Check Amount Exceeded	Internal
I05	Max Fee Exceeded	Internal
I06	Invalid Date	Internal
I07	Transaction Too Old	Internal
I08	Invalid Routing Number	Internal
I09	Duplicate in Batch	Internal
I10	Duplicate from Other Customer	Internal
I11	Fee Rejected for Invalid Check	Internal
I12	Duplicate in POS Batch	Internal
I13	VOIDED POS Transaction	Internal
I14	Invalid Account Number	Internal
I15	Invalid Check Number	Internal
I16	Missing Amount	Internal
I17	Invalidated per Request	Internal
I18	Item PAID	Internal
I19	Reserved	Internal
I20	Item Refunded	Internal
I24	Previously Received R02, R03, R04, or R20 on this Account (RCK)	Internal
I25	Previously Received R02, R03, R04, or R20 on this Account (EFT)	Internal
I26	EFT Received within Window	Internal
I27	EFT Too old	Internal
I28	Void Transaction Successful	Internal
I29	Void Could Not Be Matched	Internal
I30	POS Batch Duplicated (re-processed)	Internal
I31	LOCKBOX AMT OVER 5000	Internal
I40	Internal Return Code	Internal
I41	DRAFT Batch Rejected	Internal
R01	Insufficient Funds	NACHA
R02	Account Closed	NACHA
R03	No Account, Unable to Locate Account	NACHA
R04	Invalid Account Number	NACHA
R06	Returned per ODFI's Request	NACHA
R07	Authorization Revoked by Customer	NACHA
R08	Payment Stopped	NACHA
R09	Uncollected Funds	NACHA
R10	Customer Advises not Authorized	NACHA
R11	Check Truncation Entry Return	NACHA
R12	Branch Sold to Another DFI	NACHA
R13	RDFI not qualified to participate	NACHA
R14	Representative Payee Deceased or Unable to Continue in that Capacity	NACHA
R15	Account Holder Deceased	NACHA

## Appendix A – Possible Return Codes (continued)

Return Code	Explanation	Source
R16	Account Frozen	NACHA
R17	File Record Edit Criteria	NACHA
R18	Improper Effective Entry Date	NACHA
R19	Amount Field Error	NACHA
R20	Non-Transaction Account	NACHA
R21	Invalid Company Identification	NACHA
R22	Invalid Individual ID Number (CIE-MTE)	NACHA
R23	Credit Entry Refused by Receiver	NACHA
R24	Duplicate Entry	NACHA
R25	Addenda Error	NACHA
R26	Mandatory Field Error	NACHA
R27	Trace Number Error	NACHA
R28	Routing Number Check Digit Error	NACHA
R29	Corporate Customer Advises Not Authorized	NACHA
R30	RDFI Not Participant in Check Truncation Program	NACHA
R31	Permissible Return Entry (CCD and CTX only)	NACHA
R32	RDFI Non-Settlement	NACHA
R33	Return of XCK Entry	NACHA
R34	Limited Participation DFI	NACHA
R35	Return of Improper Debit Entry (CIE)	NACHA
R36	Return of Improper Credit Entry (RCK)	NACHA
R37	Source Document Presented for Payment	NACHA
R40	Return of ENR Entry by Federal Government Agency (ENR only)	NACHA
R41	Invalid Transaction Code (ENR only)	NACHA
R42	Routing Number/Check Digit Error (ENR only)	NACHA
R43	Invalid DFI Account Number (ENR only)	NACHA
R44	Invalid Individual ID Number/Identification Number (ENR only)	NACHA
R45	Invalid Individual Name/Company Name (ENR only)	NACHA
R46	Invalid Representative Payee Indicator (ENR only)	NACHA
R47	Duplicate Enrollment (ENR only)	NACHA
R50	State Law Affecting RCK Acceptance	NACHA
R51	The Amount of the RCK Entry was not Accurately Obtained from the Item	NACHA
R52	Stop Payment on Item (adjustment entries)	NACHA
R53	Item and ACH Entry Presented for Payment	NACHA
R61	Misrouted Return	NACHA
R62	Incorrect Trace Number	NACHA
R63	Incorrect Dollar Amount	NACHA
R64	Incorrect Individual Identification	NACHA
R65	Incorrect Transaction Code	NACHA
R66	Incorrect Company Identification	NACHA
R67	Duplicate Return	NACHA
R68	Untimely Return	NACHA
R69	Multiple Errors	NACHA
R70	Permissible Return Entry Not Accepted	NACHA

## Appendix A – Possible Return Codes (continued)

<b>Return Code</b>	<b>Explanation</b>	<b>Source</b>
R71	Misrouted Dishonored Return	NACHA
R72	Untimely Dishonored Return	NACHA
R73	Timely Original Return	NACHA
R74	Corrected Return	NACHA
R80	Cross-Border Payment Coding Error	NACHA
R81	Non-Participant in Cross-Border Program	NACHA
R82	Invalid Foreign Receiving DFI Identification	NACHA
R83	Foreign Receiving DFI Unable to Settle	NACHA
R84	Entry Not Processed by OGO	NACHA
RET	Paper Draft Return	Internal
S01	Invalid ABA Number	Internal
S02	Blocked ABA/Account Number	Internal
S10	Invalid Account Number	Internal

## Appendix B – Express Verify Response Codes

Bank accounts that are found and in good standing are approved with a POS (positive) result status. Accounts that do not exist or are in a negative standing at their bank are rejected with a NEG (negative) result status. If a bank account is from a bank that is not part of the *Express Verify* network or the bank is not reporting information about the bank account, the transaction is approved with an UNK (unknown) result status.

The following table shows all possible responses from the *Express Verify* system:

Status	Code	Description
ERR	E01	EXPRESS VERIFY SERVICE NOT ACTIVATED
NEG	P00	ACCT NOT LOCATED
NEG	P01	ACCOUNT CLOSED
NEG	P03	NO DEBITS
NEG	P04	NO CHECKS
NEG	P05	NSF
NEG	P06	UNCOLLECTED FUNDS
NEG	P12	ISSUER DECLINED
UNK	P40	NO INFO
NEG	P41	NEGATIVE INFO
UNK	P50	NON PARTICIPANT
POS	P70	VALIDATED
POS	P72	VALIDATED AMOUNT
NEG	V02	ACCOUNT NOT APPROVED
NEG	V10	INVALID ROUTING NUMBER
UNK	V90	PREAUTH VENDOR UNAVAILABLE
UNK	V91	PREAUTH VENDOR ERROR