



API Integration Guide

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Table of Contents

- Actum Processing API Integration Guide..... 4**
 - Overview4
 - Server Information.....4
 - API Connection.....4
 - 1.1 Submitting Transactions4
 - 1.1.1 Idempotence to Prevent Unintended Duplicate Transactions7
 - 1.2 Validation Errors7
 - 1.3 Decline Codes9
 - 1.4 Returned Variables for Immediate Response10
 - 1.4.1 Sample Responses.....10
 - 1.3 Refunding Transactions.....12
 - 1.4 Revoking Transactions13
 - 1.5 Canceling Recurring Orders13
 - 1.6 Editing Existing Transactions.....14
 - 1.7 Updating Merchant Order Number (merordernumber)15
 - 1.8 Updating Recurring Transactions.....15
 - 1.9 Checking the Status of a Transaction16
 - 1.10 Pre-Note Conversion Block20
 - 1.11 Check Credit Reserve Balance20
- Retrieval of Transaction Data..... 21**
 - Transaction History File Format.....21
 - Returned Variables21
 - Returned Variables Examples23
 - Order Tracking24
 - Webhooks25
- Definitions 26**
- ACH Transaction Types 26**
- ACH Transaction Life Cycle..... 27**
- Processing Cutoff Times..... 27**

Version History:

v6: 01/11/2023

- Updated “currency” value to **required**; added value “CAN” for Canadian currency.

v6.1: 04/12/2023

- Changes to reflect NACHA terminology with updated definitions.
- Added “Day” file option in ***Transaction History File Specifications***.

v6.2: 05/15/2023

- ***Refunding Transactions*** – refunds can now be submitted anytime vs. waiting on settlement status.
- Added processing cutoff times.
- Added “Day” transaction history file option.

v6.3: 06/19/2023

- API Connection – Clarification on username/password usage for API calls
- Correction - 1.7 Updating Merchant Order Number
- Idempotency – Added additional clarification vs. Actum’s duplicate check feature.

Actum Processing API Integration Guide

Overview

This integration guide facilitates direct posting of billing requests to the Actum Processing system.

It was built for merchants who require a high level of customization and possibly have daily pricing changes.

Actum Processing uses HTTPS for all transactions, ensuring the safety of customer information.

The following sections outline the data to be transmitted and the response codes that will be sent back.

Server Information

Endpoint: https://join.actumprocessing.com/cgi-bin/dbs/man_trans.cgi

Request Method: POST

Content Type: application/x-www-form-urlencoded **or** multipart/form-data

API Connection

Actum creates a separate username/password for CRM/SaaS Partners to <https://reports.actumprocessing.com>.

The username/password is strictly for the API connection and the password needs to be changed at the above-mentioned URL. The updated password will need to be plugged into the API calls where the username/password is required. Actum sends these credentials through a single-use link that expire in 24 hours or once viewed, whichever event occurs first.

1.1 Submitting Transactions

FIELD NAME	REQUIREMENT	TYPE	DESCRIPTION
parent_id	required	VARCHAR2(8 BYTE)	Your ParentID assigned by Actum
sub_id	required	VARCHAR2(32 BYTE)	Your SubID assigned by Actum
pmt_type	required	--	pmt_type = chk
response_location	optional	Full path URL	The man_trans.cgi script will respond to this URL with response variables if passed in.
custname	required	VARCHAR2(64 BYTE)	Customer's full name
companyname	optional	VARCHAR2(64 BYTE)	Name of business account being debited/credited
custemail	based on merchant settings	VARCHAR2(64 BYTE)	Customer's email address
custaddress1	based on merchant settings	VARCHAR2(96 BYTE)	Customer's street address
custaddress2	optional	VARCHAR2(64 BYTE)	Customer's street address
custcity	based on merchant settings	VARCHAR2(32 BYTE)	Customer's city

custstate	based on merchant settings	VARCHAR2(32 BYTE)	Customer's state
custzip	based on merchant settings	VARCHAR2(16 BYTE)	Customer's zip code

The following table outlines the required and optional fields to submit a debit/credit to the Actum system.

FIELD NAME	REQUIREMENT	TYPE	DESCRIPTION
custphone	Based on merchant settings	VARCHAR2(18 BYTE)	Customer's phone number
custssn	based on merchant settings	VARCHAR2(9 BYTE)	Last 4 or full social security number of consumer
birth_date	based on merchant settings	DATE MM/DD/YYYY	Consumer's birth date in MM/DD/YYYY format
acct_type	required if a Savings account		"C"=checking "S"=savings
chk_acct	required	VARCHAR2(17 BYTE)	checking account number
chk_aba	required	VARCHAR2(9 BYTE)	ABA/Routing number
currency	required	VARCHAR2(3 BYTE)	"US" = United States "CAN" = Canada
initial_amount	required	XX.XX ex. 49.95	Initial amount of the bill
recur_amount	optional	XX.XX ex. 49.95	Recurring Amount – not required for one-time billing. Default to initial_amount if no value defined. If any value is entered in <i>recur_amount</i> then you must enter a value in <i>days_til_recur</i> or the customer will be billed twice on the same day no matter what recurring <i>billing_cycle</i> you select.
billing_cycle	required	NUMBER	One-Time Billing = -1 Weekly = 1 Monthly = 2 Bi-Monthly = 3 Quarterly = 4 Semi-Annually = 5 Annually = 6 Bi-Weekly = 7 Business-Daily = 8
days_til_recur	optional	NUMBER	Days until recur_amount is billed

max_num_billing	optional	NUMBER	Maximum number of times customer will be billed. Default to “-1” (perpetual billing) if no value defined.
ip_forward	required	VARCHAR2(32 BYTE)	IP of the client connecting to your server
merordernumber	optional	VARCHAR2(512)	Merchant defined order number. This field will be saved to the database.
action_code	Optional		action_code=P (required for credit transactions)
creditflag**	optional	NUMBER	Set creditflag=1 to issue a credit. Note - This is not for refunds, but rather to issue a credit for a transaction that was not initially debited.
trans_modifier	dependent on request		S = Same-Day Transaction N = Pre-note Transaction Y = NSF Retry For Same-Day transactions, please contact support@actumprocessing.com to have this feature enabled.
futureinitial	optional	DATE MM/DD/YYYY	Required for submitting a transaction to originate on a future date. Please contact support@actumprocessing.com to have this feature enabled.
retry_fee_amt	optional	XX.XX ex. 10.00	The return fee you want to bill on an NSF Retry. Must be separate than the initial_amount.
addenda***	Optional	VARCHAR2(80)	Allows addenda record to be attached to the transaction entry. Addenda data is not guaranteed to appear on the Receiver’s bank statement.

****** Requires a sufficient, pre-funded credit reserve balance.

******* Additional information regarding the “addenda” field: If more than 80 characters are submitted in the “addenda” field, our system breaks up the addenda data into 80-character blocks in separate addenda records. If you want to control where the breaks occur, you may put pipe characters (‘|’) in the value and we will break at those spots.

For example, if the submission is ***addenda=name/address/city/state***, we will write multiple addenda records to the bank file in the following format.

Entry Data Record: <normal data>

Addenda Record 1: name

Addenda Record 2: address

Addenda Record 3: city

Addenda Record 4: state

1.1.1 Idempotence to Prevent Unintended Duplicate Transactions

When Actum receives an API request, a response is always generated and sent back to the client (the originating endpoint). In the event of a timeout or other network connection failure, the client may not receive this response, making it impossible to know whether the request was successfully processed.

As a best practice, all transactions should be submitted using an ***idempotent*** API request, which means that the client can repeatedly make an identical call to Actum's server without generating duplicate transactions. This is done by generating an **idempotence key** that ***uniquely*** identifies each operation. If an API request gets interrupted, the client should resubmit that request using the same **idempotence key** to receive the "status" of that operation. If the interruption occurred BEFORE Actum received the initial API request, the subsequent attempt will be recognized as an initial attempt, and Actum will process the request normally and return a response. If the interruption occurred AFTER Actum received the initial API request, the subsequent attempt will be recognized as a "status check", and simply respond with the stored response from the initial attempt. If the interruption caused the client to cancel the transaction, and an idempotent response shows that the transaction was approved, the client may then revoke the transaction using the data provided in the response.

Idempotence doesn't require any special configuration to use and will conflict with Actum's Duplicate Checking feature if used simultaneously. Please contact support@actumprocessing.com to discuss these features.

FIELD NAME	REQUIREMENT	TYPE	DESCRIPTION
idempotence	optional	VARCHAR(128)	A unique key to identify the operation

1.2 Validation Errors

Upon submission, the Actum Processing system will validate each form field. If all required form fields are valid, the request will be sent to our transaction server. If a form field is invalid or not supplied as required, the output returned to your script will contain a listing of errors, which are listed below.

MESSAGE:
Email address is required.
Email address is invalid.
Email address is too long.
First name is required.
First name <First Name> is invalid.

Last name is required.
Last name <Last Name> is invalid.
Last name is too long.
Address is required.
Address is invalid.
Address is too long.
City is required.
City is invalid.
City is too long.
State is required.
State is invalid.
State is too long.
Account Number is required.
Account Number is invalid.
Account Number is too long.
Routing Number is required.
Routing Number is invalid.
Routing Number is too long.
Routing Number must be at least 8 in length.
Zip Code required.
Zip Code is invalid.
Zip Code is too long.
Zip Code must be at least 5 in length.
Phone Number is required.
Phone Number is invalid.
Phone Number is too long.
Social Security Number is required.
Social Security Number is invalid.
Social Security Number must be at least 4 in length.
Social Security Number is too long.
Date of Birth month is required.
Date of Birth month is too long.
Date of Birth month is invalid.
Date of Birth year is required.
Date of Birth year is too long.
Date of Birth year is invalid.
Date of Birth day is required.
Date of Birth day is too long.
Date of Birth day is invalid.
Invalid birth date entered.

1.3 Decline Codes

CODE	DEFINITION
DAR104	Account number length > 17
DAR105	Account number contains 123456
DAR108	Invalid ABA Number
DAR109	Invalid Fractional
DCR103	Name scrub
DCR105	Email blocking
DCR106	Previous scrubbed account (Negative BD)
DCR107	Recurring Velocity Check Exceeded
DDR101	Duplicate Check indicates that this transaction was previously declined
DMR001	Invalid merchant
DMR002	Invalid billing profile
DMR003	Invalid cross sale ID
DMR004	Invalid Consumer Unique
DMR005	Missing field: processtype, parent_id, mersubid, accttype, consumername, accountname, host_ip, or client_ip
DMR006	Payment Type Not Supported
DMR007	Invalid Origination Code
DMR104	Merchant not authorized for credit
DMR105	Invalid or non-matching original order for repeat-order-only subid
DMR106	Invalid Amount Passed In
DMR107	Invalid Merchant TransID Passed In
DMR109	Invalid SysPass or Subid
DMR110	Future Initial Billing not authorized for this merchant
DMR201	Amount over the per-trans limit
DMR202	Amount over daily amount limit
DMR203	Count over daily count limit
DMR204	Amount over monthly amount limit
DMR205	Count over monthly count limit
DOR002	A recur has been found for Order
DOR003	A return has been found for Order
DOR004	Order was not found
DOR005	Order is not active.
DOR006	The merchant does not match the order
DOR008	Could not find original transaction for orderkeyid
DOR009	Recur Record not found for keyid
DOR010	Multiple transactions found with that TransID
DTA001	Consumer identity could not be verified
DTE200	Account information could not be verified

1.4 Returned Variables for Immediate Response

Depending on the status returned, the additional information returned to the merchant server will vary. Outlined below are the expected return variables for each status the Actum Processing system returns. When **status=Accepted** or **status=Declined**, the variables listed below may be returned. These responses will be printed to the open socket created by the merchant.

FIELD NAME	EXPLANATION
duplicatetrans	This field is a flag for duplicate transactions. In the event of a duplicate transaction detected, duplicatetrans will be set to "1," the status will be set as "Accepted" with the order_id will be that of the order caught as a duplicate. The default time interval is 300 seconds (5 minutes) and can be changed by an Actum Merchant Support representative.
status	Will return as one of two: Accepted, Declined
reason	See Section 1.12 and 1.13
order_id	This is unique KeyID used for this order. This field will appear in all reports issued by Actum Processing.
history_id	This field is the unique ID for the history of the transaction
consumer_unique	This field is used as a unique identifier for identifying the consumer separate from the transaction. Used mainly with one click signups where the merchant can send the consumer_unique code to identify the consumer.
authcode	This field is utilized to tell the reason for the declined transaction or the authcode for the accepted transaction.
testtrans	If you receive this back this means that it was a test transaction and not a live transaction. When it's a test we will set this variable to 1.

1.4.1 Sample Responses

Sample responses come in two types: Accepted and Declined. Each type of response is outlined below in the respective sections and can be directed to the same or different scripts, based on preference.

Responses are not URL encoded and are new-line delimited. Below is a SAMPLE response, which contains the status of the transaction ["Accepted" | "Declined"], a reason for any declined status, and a set of variables returned from the transaction server, and **PostedVars**, which is a block that contains all variables passed to the Actum Processing system, except for the account information.

Example Accepted Response
status=Accepted
order_id=12345678
history_id=1234567
consumer_unique=/GNmcHnsfsUHE
authcode=CheckAuth:001234567

Example Accepted Response
PostedVars=BEGIN
parent_id=ACTUM
sub_id=SUBID
pmt_type=CHK
custname=John Doe
custemail=alkdj@alkdj.com
custaddress1=123 John Doe Way
custaddress2=
custcity=Sometown
custstate=TX
custzip=78717
custphone=1234567890
initial_amount=1.25
billing_cycle=2
recur_amount=99.99
days_til_recur=14
max_num_billing=6
currency=US
chk_number=1234
PostedVars=END

Example Decline Response
status=declined
reason=Your transaction has been declined.
history_id=9396994
authcode=Invalid ABA Number
PostedVars=BEGIN
parent_id=ACTUM
sub_id=SUBID
pmt_type=CHK
custname=John Dough
custemail=alkdj@alkdj.com
custaddress1=123 John Dough Way
custaddress2=
custcity=Sometown
custstate=TX
custzip=78717
custphone=1234567890
initial_amount=1.25
billing_cycle=2

Example Decline Response	
recur_amount=99.99	
days_til_recur=14	
max_num_billing=6	
currency=US	
chk_number=1234	
PostedVars=END	

1.3 Refunding Transactions

To submit a refund on an existing debit, the following parameters are required. Refunds can be submitted anytime but will show as “pending” until the 3rd banking day following the effective entry date.

FIELD NAME	REQUIREMENT	TYPE	DESCRIPTION
username	required	VARCHAR2(16 BYTE)	Actum portal username
password	required	VARCHAR2(16 BYTE)	Actum portal password
syspass	required	VARCHAR2(16 BYTE)	System password assigned by Actum
action_code	required		action_code=R to tell the script we are refunding the transaction
prev_history_id	If order_id is not provided	NUMBER	History_ID of the transaction you want to refund
order_id	If prev_history_id is not provided	NUMBER	Order ID of the transaction you want to refund
initial_amount	required	XX.XX ex. 49.95	Initial amount of the bill. Partial refunds are allowed.

The response may contain the following parameters:

- status = accepted | error
- authcode

1.4 Revoking Transactions

Revoking a transaction will prevent the transaction from being originated to the bank for processing. The cut-off times for revoking vary depending on the transaction type and merchant configuration. Please refer to the Processing Cutoff Times.

FIELD NAME	REQUIREMENT	TYPE	DESCRIPTION
username	required	VARCHAR2(16 BYTE)	Actum portal username
password	required	VARCHAR2(16 BYTE)	Actum portal password
syspass	required	VARCHAR2(16 BYTE)	System password assigned by Actum
action_code	required		action_code=K
prev_history_id	If order_id is not provided	NUMBER	History_ID of the transaction you want to revoke
order_id	If prev_history_id is not provided	NUMBER	Order ID of the transaction you want to revoke

The response may contain the following parameters:

- status=success
- status=Error error=Order Number Not Found (transaction has already originated)

1.5 Canceling Recurring Orders

To cancel a recurring order from further billing, the following parameters are required.

FIELD NAME	REQUIREMENT	TYPE	DESCRIPTION
username	required	VARCHAR2(16 BYTE)	Actum portal username
password	required	VARCHAR2(16 BYTE)	Actum portal password
syspass	required	VARCHAR2(16 BYTE)	System password assigned by Actum
action_code	required		action_code=C
order_id	If prev_history_id is not provided	NUMBER	Order ID of the transaction you would like to cancel
canceltype	required	NUMBER	canceltype=1

The response may contain the following parameters:

- status=success last date active=05/01/2021 – (if order is active)
- status=Error error=Order Inactive! - (If already canceled)

When canceling recurring transactions, please note the transaction scheduled to originate the day of the cancel request will still originate to the bank.

1.6 Editing Existing Transactions

To edit an existing transaction that is scheduled to originate the day of the request, the following parameters are required.

FIELD NAME	REQUIREMENT	TYPE	DESCRIPTION
username	required	VARCHAR2(16 BYTE)	Actum portal username
password	required	VARCHAR2(16 BYTE)	Actum portal password
syspass	required	VARCHAR2(16 BYTE)	System password assigned by Actum
action_code	required		action_code=M
prev_history_id	required	NUMBER	history_id of the transaction you want to edit
order_id	optional	NUMBER	order_id of the transaction you want to edit
upd_amount	dependent on request	XX.XX ex. 49.95	New billing amount
custname	dependent on request	VARCHAR2(64 BYTE)	Consumer's name
chk_acct	dependent on request	VARCHAR2(32 BYTE)	Consumer's account number
chk_aba	dependent on request	VARCHAR2(16 BYTE)	Consumer's ABA number
acct_type	dependent on request		"C"=checking "S"=savings
companyname	dependent on request	VARCHAR2(64 BYTE)	The name of the company that is being debited (CCD SEC codes only)

Please note if you change the *custname*, *chk_acct*, *chk_aba*, *acct_type* or *companyname*, these fields will be updated going forward.

The response may contain the following parameters:

- status=Success
- status=Error

1.7 Updating Merchant Order Number (merordernumber)

FIELD NAME	REQUIREMENT	TYPE	DESCRIPTION
username	required	VARCHAR2(16 BYTE)	Actum portal username
password	required	VARCHAR2(16 BYTE)	Actum portal password
syspass	required	VARCHAR2(16 BYTE)	System password assigned by Actum
action_code	required		action_code=O
order_id	required	NUMBER	Order ID to update
new_mer_ordernum	required	VARCHAR2(512)	New merchant order number

1.8 Updating Recurring Transactions

To update the billing amount, billing cycle, maximum number of billings, or the next billing date, the following parameters are required. Please note that this request will apply to the transaction scheduled to originate the next scheduled banking day.

FIELD NAME	REQUIREMENT	TYPE	DESCRIPTION
username	required	VARCHAR2(16 BYTE)	Actum portal username
password	required	VARCHAR2(16 BYTE)	Actum portal password
syspass	required	VARCHAR2(16 BYTE)	System password assigned by Actum
action_code	required		action_code=D
order_id	required	NUMBER	The Order ID you would like to update

Send one or more of the following parameters that needs to be adjusted.

FIELD NAME	REQUIREMENT	TYPE	DESCRIPTION
recur_amount	dependent on request	XX.XX ex. 49.95	The new billing amount
billing_cycle	dependent on request	NUMBER	One-Time Billing = -1 Weekly = 1 Monthly = 2 Bi-Monthly = 3 Quarterly = 4 Semi-Annually = 5 Annually = 6 Bi-Weekly = 7 Business-Daily = 8
max_num_billing	dependent on request	NUMBER	Maximum number of times consumer will be billed (-1 is for perpetual billing)
next_bill_date	dependent on request	DATE MM/DD/YYYY	The date of the next billing

The response may contain the following parameters:

- status=success
- status=error (with reason for error)

1.9 Checking the Status of a Transaction

To check the transaction status, the following parameters are required.

FIELD NAME	REQUIRED	TYPE	EXPLANATION
username	required	VARCHAR2(16 BYTE)	Actum portal username
password	required	VARCHAR2(16 BYTE)	Actum portal password
action_code	required		action_code=A
prev_history_id	if order_id is not provided	NUMBER	History_ID from transaction you would like to check the status on
order_id	if prev_history_id is not provided	NUMBER	Order ID from transaction you would like to check the status on
type	optional		'basic' 'extended' (if neither are provided then default=basic)

The response may contain the following parameters:

- **curr_bill_status:**
 - *Debit - CheckAuth:012345678*
 - *Credit - CheckAuth:012345678*
 - *Returned – Return Reason (RCode)*
 - *Declined – Merchant Request; Revoked by ACTUMUSER*
- **origination_status:**
 - *Originated*
 - The transaction has been written to a bank file
 - *Pending*
 - The transaction has **not** been written to a bank file
- **refund_status**
- **join_date**
- **amount**
- **curr_status:**
 - *Debit*
 - *Credit*
 - *Settled*
 - *Refunded*
 - *Returned*
 - *Declined*
 - *Stopped (Merchant revoked)*
- **details:** definition of R (return) code; authcode for debit / credit transaction
 - *Account Closed (Return)*
 - *CheckAuth:102953203 (Debit & Credit)*
 - *Merchant Request; Revoked by ACTUMUSER*
- **return_code:** *R01, R02, R03, etc...*
- **settlement_date** (only for type=extended)
- **recurstatus** (only for type=extended)
- **billing_cycle** (only for type=extended)
- **last_billing_date** (only for type=extended)
- **next_billing_date** (only for type=extended)
- **error**

Example Responses

Debit Origination:

If *origination_status=Originated*, the transaction has already been written to a bank file and it is too late to modify or revoke.

curr_bill_status=Debit - CheckAuth:103054466
origination_status=Originated
join_date=04/25/2023
amount=610.53
billing_cycle=One-Time/None
last_billing_date=04/25/2023
max_num_billings=1
curr_status=Debit
details=CheckAuth:103054466

Credit Origination:

curr_bill_status=Credit - CheckAuth:102927238
origination_status=Originated
join_date=04/18/2023
amount=68.85
billing_cycle=One-Time/None
last_billing_date=04/18/2023
max_num_billings=1
curr_status=Credit
details=CheckAuth:102927238

Return:

curr_bill_status=Returned - No Account/Unable to Locate Account (R03)
origination_status= Originated
recurstatus=Inactive j
oin_date=12/01/2021
billing_cycle=Quarterly
last_billing_date=12/09/2021
max_num_billings=-1
curr_status=Returned
details=No Account/Unable to Locate Account
return_code=R03

Settlement:

curr_bill_status=Settled - CheckAuth:012345678
origination_status= Originated
settlement_date=12/10/2021
recurstatus=Inactive
join_date=12/01/2021
amount=69.95

billing_cycle=Quarterly
last_billing_date=12/09/2021
max_num_billings=-1
curr_status=Settled
details=CheckAuth:012345678

Declined:

curr_bill_status=Declined - Invalid ABA
Number origination_status=Pending
recurstatus=Inactive
join_date=10/18/22022am
ount=39.95
billing_cycle=Monthly
last_billing_date=11/19/20
22max_num_billings=-1
curr_status=Declined
details=Invalid ABA
Number

Declined by Merchant Request (Revoked):

curr_bill_status=Declined - Merchant Request; Revoked by ACTUMUSER
origination_status=Stopped
join_date=04/01/2023
amount=1.50
billing_cycle=One-Time/None
last_billing_date=04/01/2023
max_num_billings=1
curr_status=Declined
details=Merchant Request; Revoked by ACTUMUSER

Notice of Change (NOC):

curr_bill_status=Debit - Incorrect Routing Number: 012345678
origination_status=Pending
join_date=04/01/2022
amount=0.00
billing_cycle=One-Time/None
last_billing_date=04/07/2022
max_num_billings=1
curr_status=PreAuth
details=Incorrect Routing Number:102945278

1.10 Pre-Note Conversion Block

The following parameters are needed to stop a Pre-Note from converting to a Debit.

FIELD NAME	REQUIREMENT	TYPE	DESCRIPTION
username	required	VARCHAR2(16 BYTE)	Actum portal username
password	required	VARCHAR2(16 BYTE)	Actum portal password
syspass	required	VARCHAR2(16 BYTE)	
action_code	required		action_code=E
prev_history_id	required	NUMBER	history_id of the pre-note transaction
order_id	required	NUMBER	order_id of the pre-note transaction

The response may contain the following parameters:

- error=Prenote already converted, but debit was declined. Too late to modify.
- error=Prenote already converted. Too late to modify.
- status=Prenote was already successfully stopped in system.

1.11 Check Credit Reserve Balance

The following parameters are needed to check the balance of the credit reserve.

FIELD NAME	REQUIREMENT	TYPE	DESCRIPTION
username	required	VARCHAR2(16 BYTE)	Actum portal username
password	required	VARCHAR2(16 BYTE)	Actum portal password
action_code	required		action_code=B
sub_id	required	VARCHAR2(16 BYTE)	Your SubID assigned by Actum

The response may contain the following:

- balance=The net balance of the credit reserve
- error=Error message if error occurs

Retrieval of Transaction Data

The default transaction history file will contain all initial sales (Debit, Same-Day Debit), Returns (Return), Funded Debits (Settlement), and Refunds / Credits (Refund, Same-Day Credit) from the previous day (12am – 11:59pm CST). A transaction history file will come in a flat, quote-qualifier, comma-delimited file, which can either be picked up from our FTP server or sent to the merchant’s FTP server.

The following Operating systems are expecting the following to know when there is an end of line:

UNIX uses a (LF) Linefeed

Windows uses a (CRLF) Carriage Return / Line Feed

The Transaction History File on our server will only have a (LF) Line Feed

The naming format of the default transaction history file will be:

PARENTID-trans-ACTUM-YYYYMMDD.txt e.g.: ACTUMTST-trans-ACTUM-20230501.txt

In addition to the default transaction history file, merchants may request to receive the “Day” file that contains the same data as the default file except it will show activity from 12am – 3pm CST and will be available on the SFTP server at 3:05pm CST. The “Day” file will be useful if the merchant would like to receive transaction statuses earlier in the day, as it will contain all Funded Debits (Settlements) and most of the day’s returns. Merchants will still receive the default file as the “Day” file is not a complete file of all transaction activity.

The naming format of the “Day” transaction history file will be:

PARENTID-trans-ACTUM-YYYYMMDD-day.txt e.g.: ACTUMTEST-trans-ACTUM-20230501-day.txt

Transaction History File Format

Returned Variables

The naming format of the transaction history file will be:

PARENTID-trans-ACTUM-YYYYMMDD.txt e.g.: ACTUMTST-trans-ACTUM-20210212.txt

The files will contain the following transaction history file fields listed in the table below.

FIELD NAME	DESCRIPTION
SubID	Your SubID assigned by Actum Processing
Transaction Date	Date of the transaction
Amount	Amount of the transaction
Consumer Name	Consumer's full name
Account Name	Customer’s account name

FIELD NAME	DESCRIPTION
Transaction Type	Details the transaction type Debit, Return for returned item, Settlement for funds that have not been returned. Refund for refund or credit. Same-Day Debit for Same-Day debit. Same-Day Credit for Same-Day credit. ACH NOC for notice of change. Pre-Note for pre-note transaction
Transaction Result	Details whether the transaction was approved, declined, or returned
Authorization Code	This is the code that we received from the Receiver's bank
Account Type Description	Will always be check
Recurring Description	Will be initial or recurring
Company Name	Company Name if given during transaction
Billing Address	Customer Mailing information
Billing Address2	
Billing City	Customer City
Billing State	Customer State
Billing Zip	Customer Zip Code
Billing Country	
Shipping Address	
Shipping Address2	
Shipping City	
Shipping State	
Shipping Zip	
Shipping Country	
Phone Number	Customer Phone Number
E-Mail Address	Customer E-mail Address
IP Address	The IP address of the consumer
Server Referrer	This will contain referrer information that was submitted during transaction
MerchantOrderNumber	Contains any extra affiliate code information submitted during transaction
Order Number	Unique key assigned to every order
History KeyID	Unique key associated with each transaction of an order
Reference KeyID	Contains the previous History Keyid
Profile KeyID	If a billing profile keyid was provided it will be listed here
Reseller Code	Used for cross sell transactions
Partner Code	Will contain the partner associated with this transaction
Username	If username is sent we will include it here
ConsumerUniqueID	Will be used later for offering One-Click sales to current/former consumers

The file format should be in the order listed above, but here is each field inside example delimiting fields:

"SubID","Transaction Date","Amount","Consumer Name","Account Name","Transaction Type","Transaction Result","Authorization Code","Routing Number","Account Number","Account Type Description","Credit Card Number","Credit Card Expiration Date","Recurring Description","Company Name","Billing Address","Billing Address2","Billing City","Billing State","Billing Zip","Billing Country","Shipping Address","Shipping Address2","Shipping City","Shipping State","Shipping Zip","Shipping Country","Phone Number","E-Mail Address","IP Address","Server Referrer","MerchantOrderNumber","Order Number","History KeyID","Reference KeyID","Profile KeyID","Reseller Code","Partner Code","Username","ConsumerUniqueID"

Returned Variables Examples

Note: There will be no word wrap in the Transaction history files; therefore, each example listed below will be on one line.

Debit:

"ACTUM01","Jun 28, 2003 12:03AM","6.95","John Doe","John Doe","Check Pre-Auth","Approved","CheckAuth:009999999","HIDDEN","HIDDEN","Check","","","Initial","","123 John Doe st","","JohnsonCity","TX","12345","","","","","","","(123)1234567","johndoe@website.com","123.123.123.123","","1000","1234567","1234567","","12345","","",""

Settlement:

"ACTUM02","Jun 28, 2003 02:21AM","6.95","John Doe","John Doe","Check Settlement","Approved","CheckAuth:009999999","HIDDEN","HIDDEN","Check","","","Initial","","123 John Doe st","","Johnson City","TX","12345","","","","","","","(123)1234567","johndoe@website.com","123.123.123.123","","1000","1234567","1234567","","12345","","",""

Late Return:

"ACTUM02","Jun 28, 2003 02:21AM","6.95","John Doe","John Doe","Check Late Return","Declined","Consumer Advises: Not Authorized","HIDDEN","HIDDEN","Check","","","Initial","","123 John Doe st","","Johnson City","TX","12345","","","","","","","(123)1234567","johndoe@website.com","123.123.123.123","","1000","1234567","1234567","","12345","","",""

Return:

"ACTUM03","Jun 28, 2003 02:27AM","6.95","John Doe","John Doe","Check Return","Declined","NSF","HIDDEN","HIDDEN","Check","","","Initial","","123 JohnDoe st","","Johnson City","TX","12345","","","","","","","(123)1234567","johndoe@website.com","123.123.123.123","","1000","1234567","1234567","","12345","","",""

Order Tracking

Persistent Data: Order Number, SubID

Reference Data: History KeyID, Reference KeyID

Definitions:

Order: An order is all transactions of Debit, Same-Day Debit, Settlement, Return, Late Return for an order by a customer.

Transaction: This is one piece of an order as in the Debit, Same-Day Debit, Settlement, etc...

Transaction Block: Is the block of transactions from validating the account / requesting the monies to receiving the monies or receiving a return. One order can have several transaction blocks for the initial transactions and the recurred transactions.

To Determine Initial Transactions:

Take all transactions for a date range then parse them out by Debit where the Reference KeyID is blank and Recurring Description is Initial. This number gives you the total number of initial signups during that time period.

Refunds:

Refunds can be submitted anytime but will show as pending until the 3rd banking day following the effective entry date.

Tracking the Stages of an Order:

Each product sold will have a persistent Order Number throughout the life span of the order, even when it is in a recurring stage. The combination of the Order Number, Reference KeyID and History KeyID will let you track the step-by-step transactions that led to the current status of an order. Please refer to the Transaction Life Cycle below for clarification on the below paragraph.

Linking up Transactions for a Particular Order:

If you get a Return but you don't know where it occurred in the order or from what transaction block, you can use referencekeyid found with the Return entry to start the process of finding which block it came from for this particular order. Take this reference keyid and look for a transaction that contains that referencekeyid as the historykeyid. This should return the Debit for which we received the Return. You can use this process for any Return, Late Return, Refund, Settlement, ACH NOC, etc... until you find a transaction entry that has a blank referencekeyid. This puts you at the beginning of this particular transaction block.

One thing to note is that each time we recur a transaction the Debit will have a blank referencekeyid indicating that a new transaction block is starting. The easiest way to see the transaction blocks in order would be to grab all transactions for a particular orderid and then sort those by date and referencekeyid, which should put those into order from start to finish.

Another approach if you wanted to display each transaction block would be to grab all Debits sorted by date with a blank referencekeyid. Then, go through each of those using the historykeyid and find the next transaction in the list by looking for the next transaction that contains that history keyid as the referencekeyid. Grab the history keyid for that transaction and look for the transaction that contains that as the referencekeyid. You can continue this process until you get no more results indicating that you have hit the end of the transaction block and continue with the next transaction block in the list.

Our recommendation is to import everything because the data can be used to your advantage later. Order Number and SubID will always be persistent, and if you sort the transactions by date, you can get a very clear idea of what went on with the account. In rare cases, we send two transactions per Order Number in one day, but timestamps should show the definitive order.

Webhooks

Origination Webhook

For Originations, a webhook events record will be inserted when we upload a bank file to the bank. The POST will be sent to the merchant no later than 3 minutes after the bank file is uploaded. The POSTDATA will be sent in a JSON data block that matches the following format:

```
{
  "originations": [
    {"trans_id":88151319, "clear_date":"10/29/2021"},
    {"trans_id":88151335, "clear_date":"10/29/2021"},
    {"trans_id":88151357, "clear_date":"10/29/2021"},
    ...
    {"trans_id":88128429, "clear_date":"10/29/2021"}
  ]
}
```

Please note there will be no linefeed characters. It will be a single line of data.

The *trans_id* is the historykeyid of the transaction and *clear_date* is the date it should be clear of any returns, which is 2 business days after the effective entry date of the transaction. If there are 10 transactions in the origination file, there will be 10 `'{"trans_id":NNNNNNNN,"clear_date":"MM/DD/YYYY"}'` items in the list. If there are 200 transactions in the file, there will be 200 such items in the list. Also, one postback will be sent per origination file.

Returns Webhook

For Returns, we will insert a webhook events record for each individual return received. The JSON data block will match the following format, minus linefeed characters.

```
{
  "trans_id": 87654321,
  "order_id": 23456789,
  "return_desc": "<Rcode desc>"
}
```

The description will be the Return Code and description. By example:

R01 - Insufficient Funds

R02 - Account Closed

R07 – Authorization Revoked by Customer

Definitions

Originator – The Actum merchant client that is originating ACH entries to a Receiver account.

Receiver – The customer of the Originator that can be a consumer or a business.

ACH Transaction Types

Transaction Type will be defined by one of the following terms:

Pre-Notification (Pre-note): This means that we are sending a Pre-Notification for a subsequent **Debit or Same-Day Debit** entry to allow the RDFI (Receiver's bank) the opportunity to return (**Return**) or correct (**Notice of Change (NOC)**) the item. If the RDFI does not respond to the **Pre-note**, the entry may still be returned.

Debit: A debit entry to a **Receiver's** account effective the following banking day.

Same-Day Debit: A debit entry that will debit the **Receiver's** account the same day.

Credit: A credit entry that will credit the **Receiver's** account the following banking day.

Same-Day Credit: A credit entry that will credit the **Receiver's** account the same day.

Refund: A credit entry that is tied to a specific and prior **Debit or Same-Day Debit**. Refunds can be partial or total but may never exceed the total of the original debit entry.

NSF Fee: A return fee applied to a **Debit or Same-Day Debit** that is returned due to Insufficient Funds.

NSF Retry: Per NACHA regulations an **Originator** can retry a **Debit or Same-Day Debit** that has been returned due to Insufficient Funds up to 2 times within 180 days of the effective entry date.

Settlement: This indicates that the **Debit or Same-Day Debit** has not been returned by the RDFI (Receiver's bank) prior to the specified time period indicated in the Service Agreement the merchant and Actum Processing entered into.

Return: This means that the RDFI (Receiver's bank) has returned the item prior to the specified time period defining a **Settlement** (Settled Funds) indicated in the Actum Processing Service Agreement.

Late Return: This means that a **Return** was received by Actum Processing after a **Settlement**.

Notice of Change (NOC): This means a response from the RDFI that Actum Processing needs to make a change to the ABA or bank account data in order to properly process the entry.

ACH Transaction Life Cycle

The list below describes the typical ACH transaction flow for Debit entries.

- Pre-Note – Debit or Same-Day Debit – Settlement
- Pre-Note – Debit or Same-Day Debit – Settlement – Refund
- Pre-Note – Debit or Same-Day Debit – Settlement – Late Return
- Pre-Note – Debit or Same-Day Debit – Return
- Pre-Note – Return
- Debit or Same-Day Debit – Settlement
- Debit or Same-Day Debit – Settlement – Refund
- Debit or Same-Day Debit – Settlement – Late Return
- Debit or Same-Day Debit – Return

Credits/Same-Day Credits do not convert to a Settlement but they can convert to a Return or NOC.

Processing Cutoff Times

(All times listed are in CST)

WINDOW	MERCHANT CUTOFF	SETTLEMENT TIME**
Same Day 1	7:00am	12:00pm
Same Day 2	11:00am	4:00pm
Same Day 3	2:00pm	5:00pm
Regular Daily	5:00pm	7:30am (next banking day)*
Late Night	9:00pm	7:30am (next banking day)*
Sunday	7:00pm	7:30am (next banking day)*
Holidays (if Monday)	7:00pm	7:30am (next banking day)*
Canadian EFT	9:00am	7:30am (next banking day)*

*Or the opening of the Bank, whichever is later.

**Settlement indicates the time the Receiver should see the debit/credit hit their account.