



A Guide to Our Consumer Analytics

Version 2.0–August 1, 2021

Make sense of consumer data with cash flow analytics & multi-source verifications

As you get started, it's helpful to understand how we define and present data, so that you can use Ocrolus Consumer Analytics to inform smarter, faster decisions.

In consumer lending industries, these analytics help loan processors and underwriters estimate income for their applicants in order to manage risk, determine loan/line of credit size, price the loan, and decide whether or not to fund the loan. The following guide details Ocrolus consumer-centric metrics that can be requested for any bank account.

Three Steps to Successful Data Output:



Cash Balances

This set of analytics describes the cash balances in a customer's bank accounts. Metrics are available at points in time as well as in trended form. This information can be used to understand the liquidity position of an applicant and evaluate the cash buffer present in order to pay expenses or service debt.

OCROLUS TERM	JSON ATTRIBUTE	DESCRIPTION	Available for objects:	
			BOOK	BANK ACCOUNT
Average Daily Balance	average_daily_balance	The average daily ending balance of weekdays.	X	X
Average Daily Balance by Month	average_daily_balance_by_month	The average daily ending balance (including weekends) in a calendar month.	X	X
Average Daily Balance (Weekdays)	average_daily_balance_by_weekday	The average daily ending balance of weekdays	X	X
Average Daily Balance (Weekdays) by Month	average_daily_balance_weekday_by_month	The average daily balance of weekdays	X	X
30 Day Cash Balance Trend	cash_balance_trend_30d	The ratio of today's cash balance to the balance 30 days ago.		X
60 Day Cash Balance Trend	cash_balance_trend_60d	The ratio of today's cash balance to the balance 60 days ago.		X
90 Day Cash Balance Trend	cash_balance_trend_90d	The ratio of today's cash balance to the balance 90 days ago.		X
Running Daily Balance	daily_balances	A list of the daily ending balances for every day.	X	X
Running Daily Balance by Month	daily_balances_by_month	A list of the daily ending balances for every day grouped by month.	X	X
Running Daily Balance Weekday	daily_balances_weekday	A list of the daily ending balances for every weekday.	X	X
Running Daily Balance Weekday by Month	daily_balances_weekday_by_month	A list of the daily ending balances for every weekday grouped by month.	X	X

OCROLUS TERM	JSON ATTRIBUTE	DEFINITION	BOOK	BANK ACCOUNT
Minimum Balance by Month	minimum_balance_by_month	The lowest end-of-day balance in a calendar month.		X
List of Days Negative Balance by Month	negative_balances_by_month	The list of all days in which the daily ending balance fell below zero in a calendar month.		X
List of Weekdays Negative Balance by Month	negative_balances_by_month_weekday	The list of all weekdays in which the daily ending balance fell below zero in a calendar month.		X

Overdrafts/NSF

These analytics identify the existence of overdraft and non-sufficient-funds transactions in a customer's bank account(s). They can be used to understand the reliability of a customer and their tendency to become overextended. Knowing the frequency of NSF/OD behavior helps lenders distinguish between customers who face episodic liquidity challenges from those who are chronically unreliable.

OCROLUS TERM	JSON ATTRIBUTE	DESCRIPTION	Available for objects:	
			BOOK	BANK ACCOUNT
NSF Count	nsf_count	The number of unique NSF & Overdraft fees for each bank account. This is especially useful with institutions that lump NSF fees into one transaction.		X
NSF Count by Month	nsf_count_by_month	The number of unique NSF fees each month. This is especially useful with institutions that lump NSF fees into one transaction.		X
List of NSF Transactions	nsf_transactions	A list of fees associated with non-sufficient funds and overdraft transactions.		X
NSF Transactions Paid Or Negative Balance	nsf_transactions_paid_or_negative_balance	A list of fees associated with overdraft transactions.		X
NSF Transactions Returned Or Not Paid	nsf_transactions_returned_or_not_paid	A list of fees associated with returned and/or unpaid items due to NSF fees.		X

Cash Inflows & Outflows

This extensive set of analytics is built on our ability to enhance each transaction with numerous additional points of detail. The information allows lenders to build a precise picture of the daily cash flow dynamics of their customers, including revenue, expenses, transaction categories, financial ratios, and trends.

OCROLUS TERM	JSON ATTRIBUTE	DESCRIPTION	Available for objects:	
			BOOK	BANK ACCOUNT
Average Amount	average_amount	The average monetary value of all transactions in a statement period.		X
Average Transaction Size by Month	average_by_month	The average absolute value of all transactions in a calendar month.	X	X
Average Daily Cash Flow	average_daily_cash_flow	Average daily cash flow over the observed period. Net Cash Flow = Credits - Debits. Important to understand if the business is running a surplus or deficit and how much free cash flow may be available for servicing new debt.		X
Average Weekday Cash Flows	average_daily_cash_flow_weekday	Average daily cash flow for weekdays over the observed period. Net Cash Flow = Credits - Debits. Important to understand if the business is running a surplus or deficit and how much free cash flow may be available for servicing new debt.		X
Average Deposit by Month	average_deposit_by_month	The average value of credit transactions in a calendar month.	X	X

OCROLUS TERM	JSON ATTRIBUTE	DEFINITION	BOOK	BANK ACCOUNT
Cash Flow Trend - 30 Days	cash_flow_trend_30d	The normalized change in cash flow over time. Used to measure the change in profitability for a business in different environments. $((\text{Mean cash flow over first 15 days}) - (\text{Mean cash flow over last 15 days})) / \text{standard deviation of cash flow over the period.}$		X
Cash Flow Trend - 60 Days	cash_flow_trend_60d	The normalized change in cash flow over time. Used to measure the change in profitability for a business in different environments. $((\text{Mean cash flow over first 30 days}) - (\text{Mean cash flow over last 30 days})) / \text{standard deviation of cash flow over the period.}$		X
Cash Flow Trend - 90 Days	cash_flow_trend_90d	The normalized change in cash flow over time. Used to measure the change in profitability for a business in different environments. $((\text{Mean cash flow over first 45 days}) - (\text{Mean cash flow over last 45 days})) / \text{standard deviation of cash flow over the period.}$		X
Daily Cash Flow List	daily_cash_flows	A list of net cash flows for each available date. Net Cash Flow = Credits - Debits. Important to understand if the business is running a surplus or deficit and how much free cash flow may be available for servicing new debt.		X
Daily Cash Flow List by Month	daily_cash_flows_by_month	A list of net cash flows for each available date by month.		X

OCROLUS TERM	JSON ATTRIBUTE	DEFINITION	BOOK	BANK ACCOUNT
Weekday Cash Flow List	daily_cash_flows_weekday	A list of net cash flows for each available weekday. Net Cash Flow = Credits - Debits. Credits - Debits. Important to understand if the business is running a surplus or deficit and how much free cash flow may be available for servicing new debt.		X
Deposit Count	deposit_count	The total number of credit transactions.		X
Max Deposit by Month	deposit_max_by_month	The value of the largest credit transaction in a calendar month.		X
Min Deposit by Month	deposit_min_by_month	The value of the smallest credit transaction in a calendar month.		X
Deposit Sum	deposit_sum	The total monetary value of credits.		X
Total Deposits Sum by Month	deposits_sum_by_month	The sum of all credit transactions in a calendar month.		X
Negative Cash Flow Dates	negative_cash_flows	List of dates where net cash flows (defined as credits - debits) are negative.		X
Negative Cash Flow Weekdays	negative_cash_flows_weekday	List of weekdays where net cash flows (defined as credits - debits) are negative.		X
Net Cash Flow By Month	net_cash_flows_by_month	The net cash flow by month. Net Cash Flow = Credits - Debits. Credits - Debits.		X

OCROLUS TERM	JSON ATTRIBUTE	DEFINITION	BOOK	BANK ACCOUNT
Recurring Inflow Ratio	recurring_vs_episodic_inflows_by_month	The ratio of incoming transactions that are recurring, demonstrating stability of revenue over time.		X
Recurring Outflow Ratio	recurring_vs_episodic_outflows_by_month	The ratio of outgoing transactions that are recurring, demonstrating a likely minimum set of fixed expenses.		X
Total Days	total_days	The total number of days in all statement periods captured in the bank account.		X
Transaction Count	txn_count	The total number of transactions in a bank account.	X	X
Withdrawal Count	withdrawal_count	The total number of debit transactions.	X	X
Withdrawal Sum	withdrawal_sum	The total monetary value of debits.	X	X
Max Withdrawals by Month	withdrawals_max_by_month	The value of the largest debit transaction in a calendar month.		X
Total Withdrawals Sum by Month	withdrawals_sum_by_month	The sum of all debit transactions in a calendar month.		X

Transaction-Level Data

Ocroly performs deep and extensive transaction enrichment based on a combination of industry knowledge and continuously evolving machine learning. These metrics and indicators give lenders the ability to understand the banking activities of their customers in a significantly deeper way than would be possible with statements alone.

OCROLY TERM	JSON ATTRIBUTE	DESCRIPTION	Available for objects:	
			BOOK	BANK ACCOUNT
Consumer Income Transactions	consumer_income_txns	List of all income transactions for a given consumer (direct deposit + gig).		X
List of Interbank Transactions	interbank_transactions	A list of all transactions to/from any bank or financial institution.		X
List of Deposits from Outside Sources	outside_source_deposits	The list of credit transactions that did not originate from one of the accounts within the application.		X
Probable Recurring Transactions	probable_recurring_txns	A list of transactions with the same dollar value that are greater than \$10 and occur two or more times within 45 days.		X
List of Transactions Ending in 5 Zeros or More	round_number_txns	A list of transactions that end in at least five zeroes, e.g., \$1,000.00.		X
Transfer	transfer	The list of all transfers to/from a bank account.		X
Withdrawals	withdrawals	The list of all debit transactions from a bank account.		X

Income

OcroLus consumer income analytics provide calculations and summaries of key income metrics for personal borrowers, including monthly and annual income, direct deposit income, and pay frequency. Our bank statement, W2 and, paystub-powered consumer analytics provide insight into the nature of income from salaried versus hourly earnings to the number of jobs and gig earnings.

OCROLUS TERM	JSON ATTRIBUTE	DESCRIPTION	Available for objects:	
			BOOK	BANK ACCOUNT
 Consumer Income by Month	consumer_income_sum_by_month	Sum of all income transactions by month.		X
 Direct Deposit Income	direct_deposit_income_sum	Sum of all income transactions received through direct deposit, basically are payrolls.		X
 Estimated Annual Income	estimated_annual_income	The estimated annual income of a consumer, calculated by the estimated monthly income * 12.		X
 Estimated Monthly Income	estimated_monthly_income	The income of a consumer during a calendar month, estimated by the average monthly income of the observed months.		X
 Gig Income	gig_income_sum	Sum of all income transactions related to gig work.		X
 Number of Income Sources	number_of_income_sources	Number of distinct income sources for a given consumer. Transactions from the same source are grouped by the descriptions whose similarities are calculated using Levenshtein distance.		X
 Estimated Pay Frequency	pay_frequency	An estimation of the frequency at which a consumer receives income, e.g., monthly, bimonthly, weekly, quarterly, from a particular source.		X

If you have any questions, or if you are interested in capturing an analytic that's not listed, our Customer Success team will be happy to help.

For any other feedback, contact
feedback@oculus.com.