



# A Guide to Our Analytics

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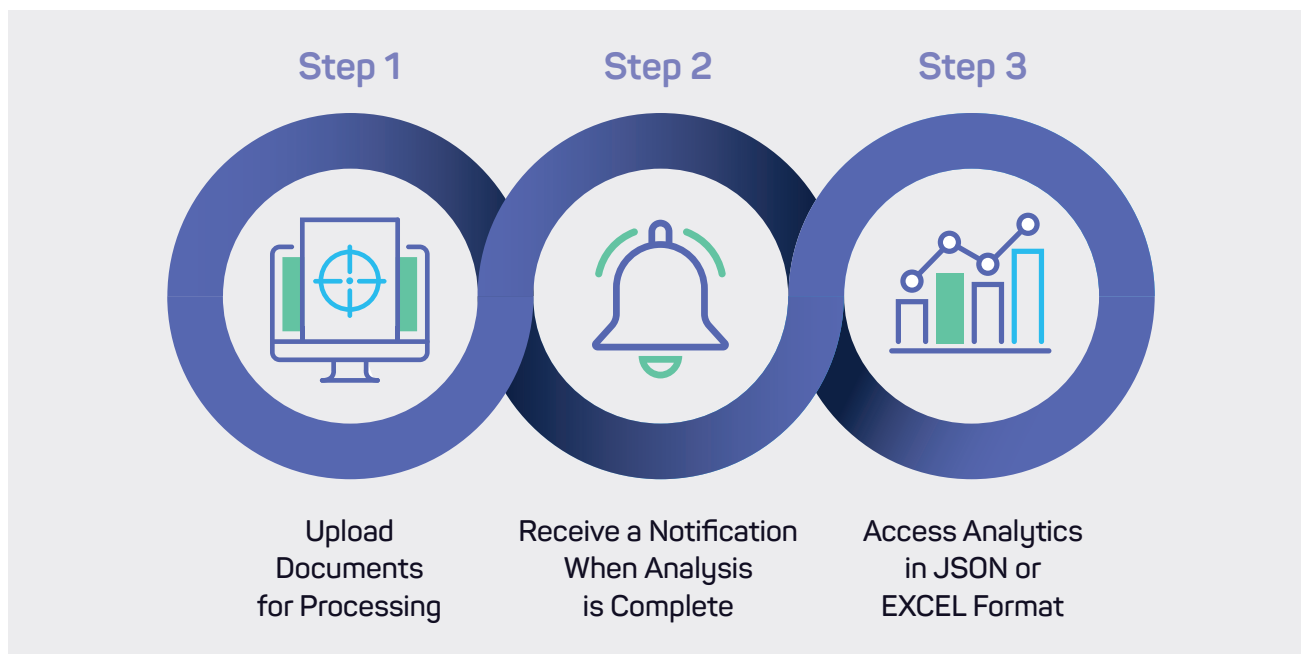
## Welcome to Human-Empowered Automation

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

The following guide details Ocrolus analytical metrics that can be requested for any submitted book or bank account.

The items are grouped by category, along with guidance on how they might be used to influence a lending decision.




### 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	DEFINITION	Available for objects:		
			BOOK	BANK ACCOUNT	PERIOD
Average Daily Balance	average_daily_balance	The average daily ending balance (including weekends).	X	X	X
Average Daily Balance (Weekdays)	average_daily_balance_weekday	The average daily ending balance of weekdays.	X	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) by Month	average_daily_balance_weekday_by_month	The average daily balance of weekdays in a calendar month (measured at the end of each weekday).	X	X	
Running Daily Balance	average_by_month	The average absolute value of all transactions in a calendar month.		X	
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	
Begin Balance	begin_balance	The beginning balance of the statement period captured from the summary section of a bank statement.			X

OCROLUS TERM	JSON ATTRIBUTE	DEFINITION	Available for objects:		
			BOOK	BANK ACCOUNT	PERIOD
End Balance	end_balance	The ending balance of the statement period captured from the summary section of a bank statement.			X
Calculated End Balance	calculated_end_balance	The balance Ocrolus calculates by taking the begin balance and summing all transactions captured in a period. Note: field will be blank unless it varies from the end balance.			X
 Cash Balance Trend - 30 Day	cash_balance_trend_30d	The normalized change in cash balances over time. Used to understand whether a business is adding to or depleting its reserves. $((\text{Mean cash balance over first 15 days}) - (\text{Mean cash balance over last 15 days})) / \text{standard deviation of cash balances over the period}$		X	
 Cash Balance Trend - 60 Day	cash_balance_trend_60d	The normalized change in cash balances over time. Used to understand whether a business is adding to or depleting its reserves. $((\text{Mean cash balance over first 30 days}) - (\text{Mean cash balance over last 30 days})) / \text{standard deviation of cash balances over the period}$		X	
 Cash Balance Trend - 90 Day	cash_balance_trend_90d	The normalized change in cash balances over time. Used to understand whether a business is adding to or depleting its reserves. $((\text{Mean cash balance over first 45 days}) - (\text{Mean cash balance over last 45 days})) / \text{standard deviation of cash balances over the period.}$		X	
 Cash Expense Days	cash_expense_days_by_month	An estimate of the number of days of expenses that could be paid using today's cash balance. Mean daily cash balance daily for the last full month available / mean daily expenses for the last full month available.		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	DEFINITION	Available for objects:		
			BOOK	BANK ACCOUNT	PERIOD
<b>NSF Count</b>	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.		<b>X</b>	<b>X</b>
<b>NSF Count by Month</b>	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.		<b>X</b>	
<b>List of NSF Transactions</b>	nsf_transactions	A list of fees associated with non-sufficient funds and overdraft transactions.		<b>X</b>	
<b>NSF Transactions Paid Or Negative Balance</b>	nsf_transactions_paid_or_negative_balance	A list of fees associated with overdraft transactions.		<b>X</b>	
<b>NSF Transactions Returned Or Not Paid</b>	nsf_transactions_returned_or_not_paid	A list of fees associated with returned and/or unpaid items due to NSF fees.		<b>X</b>	

### 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	DEFINITION	Available for objects:		
			BOOK	BANK ACCOUNT	PERIOD
<b>Average Transaction Size by Month</b>	average_by_month	The average absolute value of all transactions in a calendar month.	X	X	
<b>Average Deposit by Month</b>	average_deposit_by_month	The average value of credit transactions in a calendar month.	X	X	
<b>Estimated Revenue by Month</b>	estimated_revenue_by_month	The estimated revenue of the business in a calendar month. This is calculated by summing together all credit transactions, then removing all transfer credits (except for wire transfers), all alternative lender credits (except for factoring credits), and all transactions that contain words that signify that they are not revenue deposits. This includes words such as Refund, Reversal, Cash Back, Return, and about 20 others.	X	X	
<b>Max Deposit by Month</b>	deposit_max_by_month	The value of the largest credit transaction in a calendar month.		X	
<b>Min Deposit by Month</b>	deposit_min_by_month	The value of the smallest credit transaction in a calendar month.		X	
<b>Total Deposits Sum by Month</b>	deposits_sum_by_month	The sum of all credit transactions in a calendar month.		X	
<b>Deposit Sum</b>	deposit_sum	The total monetary value of credits.		X	X
<b>Deposit Count</b>	deposit_count	The total number of credit transactions.		X	X

OCROLUS TERM	JSON ATTRIBUTE	DEFINITION	Available for objects:		
			BOOK	BANK ACCOUNT	PERIOD
Withdrawal Sum	withdrawal_sum	The total monetary value of debits.		X	X
Withdrawal Count	withdrawal_count	The total number of debit transactions.		X	X
Deposits Not Included in Estimated Revenue	non_estimated_revenue_txns_list	The list of credit transactions that are excluded from the "Estimated Revenue by Month" calculation.		X	
Total Days	total_days	The total number of days in all statement periods captured in the bank account.		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	
Estimated Revenue by Month	estimated_revenue_by_month	The estimated revenue of the business in a calendar month. This is calculated by summing together all credit transactions, then removing all transfer credits (except for wire transfers), all alternative lender credits (except for factoring credits), and all transactions that contain words that signify that they are not revenue deposits. This includes words such as Refund, Reversal, Cash Back, Return, and about 20 others.	X	X	
Transaction Count	txn_count	The total number of transactions in a statement period.		X	X

OCROLUS TERM	JSON ATTRIBUTE	DEFINITION	Available for objects:		
			BOOK	BANK ACCOUNT	PERIOD
Average Amount	average_amount	The average monetary value of transactions in a statement period.			X
 Estimated Daily Revenue by Month	estimated_daily_revenue_by_month	Estimated daily revenue over the observed time period. Important for understanding both the magnitude of revenue, trend of revenue, and the resilience of revenue to the present situation.		X	
 Estimated Daily Expense by Month	estimated_daily_expense_by_month	Estimated daily expenses over the observed time period. Important for understanding the costs required to operate the business as well as the firm's ability to adapt spending during a period of disruption.		X	
 Estimated Expense by Month	estimated_expense_by_month	Estimated monthly expenses over the observed time period. Important for understanding the costs required to operate the business as well as the firm's ability to adapt spending during a period of disruption.		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	
 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	



OCROLUS TERM	JSON ATTRIBUTE	DEFINITION	Available for objects:		
			BOOK	BANK ACCOUNT	PERIOD
 <b>Weekday Cash Flow List</b>	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.		<b>X</b>	
 <b>Negative Cash Flow Dates</b>	negative_cash_flows	List of dates where net cash flows (defined as credits - debits) are negative.		<b>X</b>	
 <b>Negative Cash Flow Weekdays</b>	negative_cash_flows_weekday	List of weekdays where net cash flows (defined as credits - debits) are negative.		<b>X</b>	
 <b>Average Weekday Cash Flows</b>	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.		<b>X</b>	
 <b>Cash Flow Trend - 30 Days</b>	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. $((\text{Mean cash flow over first 15 days}) - (\text{Mean cash flow over last 15 days})) / \text{standard deviation of cash flow over the period}$		<b>X</b>	

OCROLUS TERM	JSON ATTRIBUTE	DEFINITION	Available for objects:		
			BOOK	BANK ACCOUNT	PERIOD
 <b>Cash Flow Trend - 60 Days</b>	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. $((\text{Mean cash flow over first 30 days}) - (\text{Mean cash flow over last 30 days})) / \text{standard deviation of cash flow over the period}$		<b>X</b>	
 <b>Cash Flow Trend - 90 Days</b>	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. $((\text{Mean cash flow over first 45 days}) - (\text{Mean cash flow over last 45 days})) / \text{standard deviation of cash flow over the period}$		<b>X</b>	
 <b>Recurring Inflow Ratio</b>	recurring_vs_episodic_inflows_by_month	The ratio of incoming transactions that are recurring, demonstrating stability of revenue over time.		<b>X</b>	
 <b>Recurring Outflow Ratio</b>	recurring_vs_episodic_outflows_by_month	The ratio of outgoing transactions that are recurring, demonstrating a likely minimum set of fixed expenses.		<b>X</b>	
 <b>Daily Revenue Pre-COVID</b>	daily_revenue_before_march_15_2020	Average daily revenue for the 60-day period ending March 15, 2020. Used to understand revenue before the COVID-19 impact.		<b>X</b>	
 <b>Daily Revenue Post-COVID</b>	daily_revenue_after_march_15_2020	Average daily revenue for the 60-day period beginning March 15, 2020. Used to understand revenue in the immediate aftermath of COVID-19-related lockdowns.		<b>X</b>	

### Fraud & Questionable Data

The following metrics identify instances of potential fraud or irregular behavior. By automatically flagging aberrant data and questionable activity, lenders can reduce fraud losses while also managing the risk of losing business due to excess false positives.

OCROLUS TERM	JSON ATTRIBUTE	DEFINITION	Available for objects:		
			BOOK	BANK ACCOUNT	PERIOD
<b>Period Balance Mismatches</b>	period_balance_mismatches	An indication of gaps between statement periods captured in the bank account.		<b>X</b>	
<b>Suspicious Activity Alerts</b>	primary_recon_error_reason secondary_recon_error_reason	<p><b>Incomplete Information:</b></p> <ul style="list-style-type: none"> <li>• <b>Incomplete Transaction Data:</b> This indicates that some of the transaction information is not available, for example, because the statement has been redacted or quality is illegible.</li> <li>• <b>Incomplete Statement Period Data:</b> This indicates that part(s) of the statement summary information is not available, for example, because the statement has been redacted or quality is illegible.</li> <li>• <b>Missing Pages:</b> This indicates that pages within the uploaded statements are missing.</li> </ul> <p><b>Potential Fraud:</b></p> <ul style="list-style-type: none"> <li>• <b>Invalid Date(s):</b> This indicates that there are dates occurring in the past/future or dates that do not exist.</li> <li>• <b>Invalid Amount or Balance:</b> Examples of this include instances where a comma is misplaced, or there is a discrepancy between the balances and sum of the transactions amounts.</li> <li>• <b>Photoshopped Data:</b> This indicates photoshopped formatting or text that is detectable by the human eye.</li> </ul> <p><b>Unreconciled Period:</b></p> <ul style="list-style-type: none"> <li>• This indicates that a reasonable amount of time was spent trying to rectify a reconciliation error, but the error was not identified.</li> </ul>			<b>X</b>

OCROLUS TERM	JSON ATTRIBUTE	DEFINITION	Available for objects:		
			BOOK	BANK ACCOUNT	PERIOD
<b>Suspicious Activity Alerts</b> (cont'd)	primary_recon_error_reason  secondary_recon_error_reason	<p><b>Potential Duplicate:</b></p> <ul style="list-style-type: none"> <li>This indicates that the calculated ending balance is twice that of the printed balance OR statement has most likely been uploaded to the book twice.</li> </ul> <p><b>File Tampering Detected:</b></p> <ul style="list-style-type: none"> <li>Page Number where FTD has indicated that a PDF has digital edits or alterations not made by the banking institution occur. Note there are no false positives with FTD.</li> </ul>			X

### Competition & Debt Capacity

Identify presence and prevalence of competitive activity. Understand potential advances and payments with other sources of capital to inform debt capacity and exposure calculations.

OCROLUS TERM	JSON ATTRIBUTE	DEFINITION	Available for objects:		
			BOOK	BANK ACCOUNT	PERIOD
<b>List of Alternative Lender Transactions</b>	alternative_lender_transactions	A list of all transactions to/from alternative lenders, including small business lenders, personal lenders, mortgage players, and others in the online lending space. This list also includes transactions relating to Merchant Cash Advance and Factoring, though these are separately filtered in unique lists for Merchant Cash Advance Transactions and Factoring Transactions.		<b>X</b>	
<b>Factoring Transactions</b>	factor_txns	A list of all transactions to/from invoice factoring companies.		<b>X</b>	
<b>Debt Consolidator Transactions</b>	debt_consolidator_txns	A list of all transactions to/from debt consolidation companies.		<b>X</b>	
<b>Merchant Cash Advance Transactions</b>	merchant_cash_advance_lender_txns	A list of all transactions to/from merchant cash advance companies.		<b>X</b>	
 <b>Average Monthly MCA Payments</b>	average_mca_payments	Average monthly debits (i.e. payments) made to merchant cash advance lenders. Provides context into a customer's access to competitive financing as well as debt service requirements.		<b>X</b>	
 <b>MCA Payments by Month</b>	mca_payments_by_month	Debits (i.e. payments) made to merchant cash advance lenders, broken out by month. Provides context into a customer's access to competitive financing as well as debt service requirements.		<b>X</b>	

OCROLUS TERM	JSON ATTRIBUTE	DEFINITION	Available for objects:		
			BOOK	BANK ACCOUNT	PERIOD
💡 Average Monthly Alternative Lender Payments	average_alt_lender_payments	Average monthly debits (i.e. payments) made to alternative lenders. Provides context into a customer's access to competitive financing as well as debt service requirements.		X	
💡 Alternative Lender Payments by Month	alt_lender_payments_by_month	Debits (i.e. payments) made to alternative lenders, broken out by month. Provides context into a customer's access to competitive financing as well as debt service requirements.		X	


### Transaction-Level Data

Ocrolus 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.

OCROLUS TERM	JSON ATTRIBUTE	DEFINITION	Available for objects:		
			BOOK	BANK ACCOUNT	PERIOD
<b>Probable Recurring Transactions</b>	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.		<b>X</b>	
<b>List of Transactions Ending in 5 Zeros or More</b>	round_number_txns	A list of transactions that end in at least five zeroes, e.g., \$1,000.00.		<b>X</b>	
<b>Transfer</b>	transfer	The list of all transfers to/from from a bank account.		<b>X</b>	
<b>Withdrawals</b>	withdrawals	The list of all debits transactions from a bank account.		<b>X</b>	
<b>List of Deposits from Outside Sources</b>	outside_source_deposits	The list of credit transactions that did not originate from one of the accounts within the application.		<b>X</b>	
<b>List of Interbank Transactions</b>	interbank_transactions	A list of all transactions to/from any bank or financial institution.		<b>X</b>	
<b>List of Alternative Lender Transactions</b>	alternative_lender_transactions	A list of all transactions to/from alternative lenders, including small business lenders, personal lenders, mortgage players, and others in the online lending space. This list also includes transactions relating to Merchant Cash Advance and Factoring, though these are separately filtered in unique lists for Merchant Cash Advance Transactions and Factoring Transactions.		<b>X</b>	



OCROLUS TERM	JSON ATTRIBUTE	DEFINITION	Available for objects:		
			BOOK	BANK ACCOUNT	PERIOD
Factoring Transactions	factor_txns	A list of all transactions to/from invoice factoring companies.		X	
Debt Consolidator Transactions	debt_consolidator_txns	A list of all transactions to/from debt consolidation companies.		X	
Merchant Cash Advance Transactions	merchant_cash_advance_lender_txns	A list of all transactions to/from merchant cash advance companies.		X	
Estimated Revenue Calculation Transactions by Month	estimated_revenue_by_month_calc_txns	The list of credit transactions that comprise the estimated revenue calculations for the business in a calendar month		X	
Estimated Revenue Transactions	estimated_revenue_txns_list	The list of credit transactions that comprise the estimated revenue of the applicant.		X	
Payroll	payroll	A list of all transactions from payroll providers.		X	X
 PPP Loan Transactions	ppp_loan_txns	A list of credit transactions associated with the SBA Payroll Protection Program.		X	
 Estimated Expense Transactions	estimated_expense_txns_list	List of transactions included in estimated expense calculations.		X	

 = New

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

For any other feedback, contact [feedback@ocrolus.com](mailto:feedback@ocrolus.com).