



Technical Documentation

Real Time Decisions –
Inbound Identity

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Verisk Marketing Solutions Overview

Verisk Marketing Solutions is a consumer data and insights unit of Verisk that specializes in helping marketers and the platforms and providers they work with continuously maintain a real-time view of their consumers' profiles and behaviors as they change over time. We power personalized interactions to engage them with the right message, at the right time.

Verisk Marketing Solutions brings together the unique behavioral data assets from Jornaya with the proprietary identity graph from Infutor to provide marketers with comprehensive and actionable identity data for every consumer and household in the US, alongside the earliest indicators of their in-market shopping behavior. This one-of-a-kind view is maintained with the highest standards for data security and consumer privacy, preferences, and permissions.

Our solutions ensure marketers have the most complete picture of a consumer's identity, attributes, permissions, and in-market behaviors—helping to remove the guesswork around who, what, and when to reach out.

Customers who engage with us experience:

- Lead generation program ROI improvement
- Better customer acquisition & retention outcomes
- Real-time in-market insights (from 55k comparison shopping sites)
- Intelligence to inform cross-sell opportunities
- Improved reputation and financial risk management

Real-Time Decisions Inbound Identity Overview

Our Real-Time Decisions product line focuses on situations where marketers need to make real-time decisions about how to interact with a consumer. We offer APIs to access, in real-time, configured data packages that our customers can use to make better informed consumer engagement decisions.

You often have a short period of time to decide how to best interact with a consumer. Get the right data in real-time to optimize inbound interactions for these situations.

Real-Time Decisions | Inbound Identity

- With inbound leads, marketers often lack information on the consumer aside from an inbound phone number. We help you obtain the complete identity of the consumer in real-time.
- Confirm and supplement consumer provided data
- Enrich your insights on each consumer with additional attributes, so you know how best to personalize engagements with them.

Inputs

The Real Time Decisions API for Inbound Identity with ID MAX Plus accepts the following inputs.

Input Field	Description	
<i>Iac</i>	Account code	Required*
<i>FullName</i>	Full individual Name	Required*
<i>FName</i>	First name, 15 characters max	Required*
<i>LName</i>	Last name, 20 characters max	Required*
<i>Address1</i>	Address line 1, 64 characters max	Required*
<i>Address2</i>	Address line 2, 64 characters max	Optional
<i>City</i>	City name, 28 characters max. * Either City/State or Zip is required	Required*
<i>State</i>	2 character state abbreviation. * Either City/State or Zip is required	Required*
<i>Zip</i>	5 digit numeric USPS zip code. * Either City/State or Zip is required	Required*
<i>Phone1</i>	10 digit numeric phone number (without spaces, dashes, or parentheses)	Required*
<i>Phone2</i>	10 digit numeric 2nd phone number (without spaces, dashes, or parentheses)	Required*
<i>Email</i>	Email address, 100 characters max	Required*

For Identity append/competition & additional contact information, Inbound Identity requires phone, email **or** name & address input.

At a minimum, one of the following input combinations is required for processing:

- Phone1
- Phone2
- Email
- FName + LName
- FullName
- Address1 + Zip
- Address1 + City + State

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For Additional Detail



Outputs:

Identity Scoring:

Output Field	Description	Return Values
<i>ValidPhone</i>	The phone is a valid 10 digit telephone number based on the North American Numbering Plan (NANP)	Score 0-100
<i>ValidPhone2</i>	The 2nd phone is a valid 10 digit telephone number based on the North American Numbering Plan (NANP)	Score 0-100
<i>ValidEmail</i>	The email is a valid email address format	Score 0-100
<i>ValidName</i>	The individual's first and last names appear to be valid names and do not contain vulgar words or expressions	Score 0-100
<i>NameToPhone</i>	The name links to the phone	Score 0-100
<i>NameToEmail</i>	The name links to the email	Score 0-100
<i>NameToAddress</i>	The name links to the postal address	Score 0-100
<i>Deceased</i>	<p>The deceased field is used to determine whether an identity is living or deceased.</p> <p>A score of 100 indicates the individual is living and a score of 0 represents the individual is deceased. If the field is Blank, it means Unknown</p>	0 or 100 or Blank
<i>Phone Type</i>	Phone type for the Phone. L- Landline, V- VoIP, W- Wireless, O- Other	L, V, W, O
<i>PhoneConfidenceScore</i>	Score of 0 - 100 that reflects the confidence that a given phone is active and hasn't been reassigned, based on activity and velocity indicators	Score 0-100
<i>Phone2ConfidenceScore</i>	Score of 0 - 100 that reflects the confidence that a given phone is active and hasn't been reassigned, based on activity and velocity indicators	Score 0-100
<i>AddressConfidenceScore</i>	Score of 0 - 100 that reflects the confidence, accuracy, and deliverability for the input postal address	Score 0-100
<i>AddressToPhone</i>	The postal address links to the phone	Score 0-100
<i>AddressToEmail</i>	The postal address links to the email	Score 0-100
<i>PhoneToEmail</i>	The phone links to the email	Score 0-100
<i>Phone2ToEmail</i>	The 2nd phone links to the email	Score 0-100
<i>NameToPhone2</i>	The name links to the 2nd phone	Score 0-100
<i>AddressToPhone2</i>	The postal address links to the 2nd Phone	Score 0-100

ID Score:

The ID Score is an overall score, with values in the range of 0-100 that can be used for making pass/fail decisions about whether or not a given identity was verified.

<i>Output Field</i>	<i>Description</i>	<i>Return Values</i>
<i>IDVerifyScore</i>	The IDScore is an overall score to reflect the quality of an ID verification.	Score 0-100

Demographic Attributes:

<i>Output Field</i>	<i>Description</i>	<i>Return Values</i>	
<i>Gender</i>	M=male F=Female blank or U=unknown	M, F, or U	
<i>Age</i>	Adult Age	0 - 99	
<i>LOR</i>	Length of Residence in years, 2 digits	00 - 99	
<i>Homeowner</i>	H=Homeowner R=Renter A = Inferred Homeowner B = Inferred Renter	H, R, A or B	
<i>MedYrBld</i>	The year home was built. 4 digits	nnnn	
<i>EHI</i>	Estimated household income, 1 character: A = Less than \$20,000 B = \$20,000 - \$29,999 C = \$30,000 - \$39,999 D = \$40,000 - \$49,999	E = \$50,000 - \$59,999 F = \$60,000 - \$74,999 G = \$75,000 - \$99,999 H = \$100,000 - \$124,999 I = \$125,000 - \$149,999 J = \$150,000 - \$199,999 K = \$200,000 - \$249,999 L = \$250,000 - \$499,999 M = \$500,000 +	A - M
<i>Married</i>	M=Married S=Single A=Inferred Married B=Inferred Single	M, S, A, or B	
<i>WealthScr</i>	Model based on income, homeownership, and other assets owned: A = Estimated Net less than \$5,000 B = Estimated Net \$5,000 - \$19,999 C = Estimated Net \$20,000 - \$49,999	D = Estimated Net \$50,000 - \$79,999 E = Estimated Net \$80,000 - \$99,999 F = Estimated Net \$100,000 - \$249,999 G = Estimated Net \$250,000 - \$499,999 H = Estimated Net over \$500,000	A - H
<i>DwellType</i>	Dwelling Type. S=Single Family Dwelling Unit (SFDU). M=Multi-family Dwelling Unit (MFDU)	S or M	
<i>MrktHomeVal</i>	Estimated Home Market value: A = \$1,000 - \$24,999	J = \$225,000 - \$249,999 K = \$250,000 - \$274,999	A - S



	B = \$25,000 - \$49,999 C = \$50,000 - \$74,999 D = \$75,000 - \$99,999 E = \$100,000 - \$124,999 F = \$125,000 - \$149,999 G = \$150,000 - \$174,999 H = \$175,000 - \$199,999 I = \$200,000 - \$224,999	L = \$275,000 - \$299,999 M = \$300,000 - \$349,999 N = \$350,000 - \$399,999 O = \$400,000 - \$449,999 P = \$450,000 - \$499,999 Q = \$500,000 - \$749,999 R = \$750,000 - \$999,999 S = \$1,000,000+	
<i>ChildCd</i>	Presence of Children. Y= children present		Y or Blank
<i>ChildNbrCd</i>	Number of Children. A=No children B=less than 3 C= 3-5 children		A - C
<i>MHV</i>	Median House Value Code: A = Less than \$50,000 B = \$50,000 - \$99,999 C = \$100,000 - \$149,999 D = \$150,000 - \$249,999	E = \$250,000 - \$349,999 F = \$350,000 - \$499,999 G = \$500,000 - \$749,999 H = \$750,000 - \$999,999 I= \$1,000,000+	A - I
<i>MedSchl</i>	Median years of school, 3 digits max. 1 implied decimal. eg 210 = 21.0 years		000-220

Property Attributes:

Output Field	Description	Return Values	
PROP_IND	Property type indicator, 2 digit numeric: 10 = Single Family Residence / Townhouse 11 = Condominium (residential) 20 = Commercial 21 = Duplex, Triplex, Quadplex 22 = Apartment 23 = Hotel, Motel 24 = Commercial (condominium) 25 = Retail 26 = Services (general public) 27 = Office Building 28 = Warehouse	29 = Financial Institution 30 = Hospital (medical complex, clinic) 31 = Parking 32 = Amusement – Recreation 50 = Industrial 51 = Industrial Light 52 = Industrial Heavy 53 = Transport 54 = Utilities 70 = Agricultural 80 = Vacant 90 = Exempt	nn
PROP_VALCALC	The “total” (i.e., land + improvement) value closest to current market value used for assessment by county or local taxing authorities	Integer (dollars)	
PROP_IMP_VALCALC	The “improvement” value closest to current market value used for assessment by county or local taxing authorities	Integer (dollars)	
PROP_VAL_CALCIND	Property Value type: A = Assessed M = Market P = Appraised T = Transitional	A,M,P,T or blank	
PROP_ASSED_VAL	The Total Assessed Value of the Parcel's Land & Improvement values as provided by the county or local taxing/assessment authority	Integer (dollars)	
PROP_ACRES	Total land mass in acres. (4 decimal points). Example: 13000=1.3 acres	Integer	
PROP_LANDSQFT	Total land mass in Square Feet	Integer	
PROP_YRBLD	The construction year of the original building. (e.g., YYYY)	YYYY	
PROP_LIVINGSQFT	The area of a building that is used for general living. This is typically the area of a building that is heated or air conditioned and does not include Garage, Porch or Basement square footage	Integer	
PROP_RMS	Total number of rooms contained in the primary building	Integer	
PROP_BEDRMS	Total number of bedrooms contained in the primary building	Integer	
PROP_BATHS	Total number of bathrooms, 2 implied decimal places. 2.00 baths = 200	Integer	
PROP_FULLBATHS	Total number of Full Baths (typically comprised of a sink, toilet, and bathtub / shower stall). A home containing 2 1/2 baths would have the number 2 stored in this field	Integer	
PROP_HALFBATHS	Total number of Half Baths (typically comprised of a sink & toilet). A home containing 2 1/2 baths would have the number 1 stored in this field	Integer	
PROP_AC	The type of air conditioning method used to cool the building (e.g., Central, Wall Unit, Evaporative): 0=AC.NONE ACA=AC.COMMERCIAL A/C ACE=AC.CENTRAL ACH=AC.CHILLED WATER ACP=AC.CENTRAL PARTIAL APT=AC.PARTIAL APV=AC.REFRIGERATION/EVAPORATION	ASE=AC.SEPARATE SYSTEM ASO=AC.SOLAR ASP=AC.SPLIT SYSTEM ACW=AC.CENTRAL & UNIT ADU=AC.DUAL UNIT AEV=AC.EVAPORATIVE ROOF AFA=AC.FAN COOLING AHT=AC.HEAT PUMP AOF=AC.OFFICE ONLY APF=AC.REFRIGERATION APK=AC.PACKAGE APR=AC.PACKAGE	nnn (3 characters)

	AWA=AC.WALL UNIT AWI=AC.WINDOW UNIT AWN=AC.WALL/WINDOW UNIT		
<i>PROP_FRPL</i>	This field is populated with a "Y" if a fireplace is located within the building		Y or blank
<i>PROP_POOL</i>	Populated with a "Y" if a Pool is present on the parcel		Y or blank
<i>PROP_ROOFTYPE</i>	999=BYPASS 9A0=IRREGULAR 9B0=LEAN TO A=A-FRAME B=BARN C=CANOPY D=DORMER E=FRAME F=FLAT G=GABLE H=GABLE/HIPI=HIP J=GEODESIC K=MANSARD L=BARREL M=MONITOR N=CONTEMPORARY O=SHED P=PITCHED	Q=PYRAMID R=ARCHED S=SAWTOOTH T=CATHEDRAL/CLERESTORY U=BUBBLE V=GAMBREL W=SWISS CHALET/ALPINE X=COMPLEX/CUSTOM Y=BUTTERFLY Z=GAMBREL/MANSARD	nnn (3 characters)
<i>PROP_TAXAMT</i>	The tax amount provided by the county or local taxing / assessment authority. This field has 2 implied decimal spaces at the end of its value. Example: 600,010, = \$6,000.10		Integer (dollars)
<i>PROP_RECDATE</i>	The date the sales transaction was record at the county		YYYYMMDD
<i>PROP_SALEAMT</i>	Price of the sale as depicted on the recorded sales transaction		Integer (dollars)
<i>PROP_MTGAMT</i>	Amount of loan		Integer (dollars)
<i>PROP_MTGDATE</i>	Date mortgage was initiated		YYYYMMDD
<i>PROP_MTGTERM</i>	The length of time of the mortgage in years		Integer (years)
<i>PROP_MTGDUEDATE</i>	Date mortgage becomes due		YYYYMMDD

Outputs (continued)

Auto Attributes:

Output Field	Description	Return Values
<i>Make</i>	Vehicle Make, 30 characters max	String Value
<i>Model</i>	Vehicle Model, 30 characters max	String Value
<i>Year</i>	Vehicle Year	YYYY
<i>ClassCD</i>	Vehicle Class Code, 15 characters max	15 characters
<i>FuelTypeCD</i>	Vehicle Fuel Code	1 character
<i>MFGCD</i>	Vehicle Manufacturing Code	1 character
<i>StyleCD</i>	Vehicle Style Code	10 characters
<i>Mileage</i>	Mileage from the last odometer reading in increments of 10,000. A=0-10,000. Z= 250,000+	A-Z
<i>ODate</i>	Last verification date	YYYYMMDD

Identity Completion:

For API technical documentation refer to [this link here](#):

Output Field	Description	Return Values
<i>FName</i>	Appended First Name	20 characters
<i>LName</i>	Appended Last Name	20 characters
<i>MName</i>	Appended Middle Initial	1 Character
<i>BusName</i>	Appended Business Name	100 Characters
<i>PreDir</i>	Appended Street Pre Direction: N, S, E, W, NE, SW, etc.	2 Characters
<i>Street</i>	Appended Street name.	28 characters
<i>StrType</i>	Appended Street suffix: ST, AVE, BLVD, etc.	4 Characters

<i>PostDir</i>	Appended Street Post Direction: N, S, E, W, NE, SW, etc.	4 Characters
<i>AptType</i>	Appended Secondary Unit designator: Apt, Suite, etc.	2 Characters
<i>AptNbr</i>	Appended Secondary Unit number: Apt #, Suite #, etc.	8 Characters
<i>City</i>	Appended USPS City Name.	28 Characters
<i>State</i>	Appended USPS State abbreviation.	2 Characters
<i>Zip</i>	Appended numeric USPS Zip Code.	5 Characters
<i>Z4</i>	Appended numeric USPS Zip+4.	4 Characters
<i>DPC</i>	Appended Delivery Point Code with check digit.	3 Characters
<i>CRTE</i>	Appended Carrier Route.	4 Characters
<i>CNTY</i>	Appended FIPS County Code.	3 Characters
<i>Z4Type</i>	Appended USPS Zip+4 type F – Firm or company address G – General delivery address H – High-rise or business complex P – PO Box address R – Rural Route address S – Street or Residential address Blank - Unknown	F, G, H, P, R, S
<i>DPV</i>	Appended Delivery Point Validation Y – Address DPV confirmed for both primary and (if present) secondary numbers D – Address DPV confirmed for primary number only, secondary number information was missing S – Address DPV confirmed for the primary number only, and secondary number information was present but unconfirmed N – Both Primary and (if present) Secondary number information failed to DPV confirm Blank – Address not presented to hash table	Y, D, S, N
<i>Deliverable</i>	Appended Deliverable flag	Y, N, or Blank
<i>ValDate</i>	Appended Last address validation date	YYYYMMDD or YYYYMM, depending on availability.
<i>Phone</i>	Appended Phone (up to 3 additional Phone numbers)	10 characters
<i>PhoneType</i>	Appended Phone Type (up to 3, one for each appended phone number) L – Landline V – VoIP W – Wireless O – Other	L, V, W, O
<i>DID</i>	Direct Inward Dial Number	Y or blank
<i>RecType</i>	Appended Record Type R – Residential B – Business P – Payphone U – Unknown	R, B, P, U
<i>IDate</i>	Date phone record was first received	YYYYMMDD

<i>ODate</i>	Date phone record was last received as connected	YYYYMMDD
<i>TelcoName</i>	Name of original telephone company provider	100 Characters
<i>Category</i>	Appended Matched Category (up to 3, one for each appended phone number) I – Individual H – Household A – Address Z – Name/Zip	I, H, A, Z
<i>Email</i>	Appended Email (up to 3 additional Emails)	100 Characters
<i>Suppression</i>	Email Suppression Code N - Email is Eligible for Deployment	N or blank
<i>Category</i>	Appended Matched Category (up to 3, one for each appended Email) I – Individual H – Household A – Address Z – Name/Zip	I, H, A, Z
<i>Url</i>	Appended URL - Indicates the website in which the consumer "opted-in" to receive marketing emails	100 Characters
<i>ODate</i>	Appended Email Last Seen Date	YYYYMMDD

Add-on packages for Attribute Enrichment

Geo Credit Attributes:

Output Field	Description	Return Values
TOTALCR_PASTDUE_60D	Percentage of households with a credit relationship that has one more of accounts 60+ days past due. For example, the value represented for a Zip+4 = 40, this would be interpreted as "For households in the Zip+4 area, 40% have one or more credit accounts that is 60 days or more past the due date". This measure is a key indicator for measuring financial stress.	0 - 99
TOTALCR_UTILIZATION	Percentage of households credit utilization, which represents the used credit balance relative to available credit limit. For example, if the value represented for a Zip+4 = 40, this would be interpreted as "For households in a Zip+4 area, 40% of available credit is being utilized". This measure is a key indicator for measuring capacity to pay.	0-100
VANTAGE_SCR	Tri-bureau risk assessment model that predicts the likelihood of becoming a serious credit risk. The higher the score, the lower the risk.	300 - 850
VANTAGE_SCR_RNG	Tri-bureau risk assessment model that predicts the likelihood of becoming a serious credit risk. The higher the score, the lower the risk. Credit score ranges are defined by market recognized brands.	A - 300 - 499 (Very Poor) B - 500 - 600 (Poor) C - 601 - 660 (Fair) D - 661 - 780 (Good) E - 781 - 850 (Excellent)
ANYCR_INQUIRY	Percentage of households with any type of hard credit inquiry in the last 3 months. For example, if the value represented for a Zip+4 = 40, this would be interpreted as "For households in a Zip+4 area, 40% had a credit inquiry in the past 3 months". This measure is a key indicator to determine financial activity.	Any Credit Inquiry Last 3-Months Percentage: 0-100
TOTALCR_SEVDEROG	Percentage of households with a credit relationship that has one or more accounts in severe derogatory status. For example, if the value represented for a Zip+4 = 40, this would be interpreted as "For households in the Zip+4 area, 40% have one or more credit accounts in severe derogatory status". This measure is a key indicator to determine financial stress.	One or More Accounts in Severe Derogatory Status Percentage: 0-99
TOTALCR_PASTDUE_3059D	Percentage of households with a credit relationship that has one more of accounts that are 30-59 days past due. For example, if the value represented for a Zip+4 = 40, this would be interpreted as "For households in the Zip+4 area, 40% have one or more credit accounts that is 30-59 days past the due date". This measure is a key indicator to determine financial stress.	Total Credit Past Due 30-59 Days Percentage: 0-99
BANKCC_HAVEACCNT	Percentage of households with a bank credit card account. For example, if the value represented for a Zip+4 = 40, this would be interpreted as "For households in a Zip+4 area, 40% of households have a bank credit card account". This measure is a key indicator to determine capacity to pay. Bank credit cards are defined as unsecured or secured credit cards issued by a bank, national card company or credit union which includes revolving and open type accounts.	Have Bank Credit Card Percentage: 0-100
BANKCC_UTILIZATION	Percentage of households bank credit card utilization, which represents the used bank credit card balance relative to the available bank card credit limit. For example, if the value represented for a Zip+4 = 40, this would be interpreted as "For households in a Zip+4 area, 40% of available bank card credit is being utilized". This measure is a key indicator to determine capacity to pay. Bank credit cards are defined as unsecured or secured credit cards issued by a bank, national card company or credit union which includes revolving and open type accounts.	Used Bank Credit Card Balance to Credit Limit Available Percentage: 0-99
BANKCC_NEWAGE	Average minimum age of all bank card accounts on file (i.e. newest). This measure is a key indicator to determine capacity to pay. Bank credit cards are defined as unsecured or secured credit cards issued by a bank, national card company or credit union which includes revolving and open type accounts.	Average Min Age for Newest Bank Credit Card: 0-299

InMarket Attributes:

Output Field	Description	Return Values
IMS_INSUR_HOME	Verisk's InMarket Scores measure a consumer's likelihood to be in-market for home insurance. The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an	InMarket Home Insurance Values Ranges: 1-8 1: Highest Likelihood to be In-market for Home Insurance

	"8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	8: Lowest Likelihood to be In-market for Home Insurance
IMS_INSUR_AUTO	Verisk's InMarket Scores measure a consumer's likelihood to be in-market for Auto insurance. The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	InMarket Auto Insurance Values Ranges: 1-8 1: Highest Likelihood to be In-market for Auto Insurance 8: Lowest Likelihood to be In-market for Auto Insurance
IMS_INSUR_LIFE	Verisk's InMarket Scores measure a consumer's likelihood to be in-market for Life insurance. The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	InMarket Life Insurance Values Ranges: 1-8 1: Highest Likelihood to be In-market for Life Insurance 8: Lowest Likelihood to be In-market for Life Insurance
IMS_INSUR_GENERAL	Verisk's InMarket Scores measure a consumer's likelihood to be in-market for health insurance although the specific health insurance category has not yet been identified. The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	InMarket General Insurance Values Ranges: 1-8 1: Highest Likelihood to be In-market for Insurance (General) 8: Lowest Likelihood to be In-market for Insurance (General)
IMS_INSUR_HLTH_DENTAL	Verisk's InMarket Scores measure a consumer's likelihood to be in-market for dental health insurance. The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	InMarket Dental Health Insurance Values Ranges: 1-8 1: Highest Likelihood to be In-market for Dental Health Insurance 8: Lowest Likelihood to be In-market for Dental Health Insurance
IMS_INSUR_HLTH_SHORTTERM	Verisk's InMarket Scores measure a consumer's likelihood to be in-market for short-term health insurance. The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	InMarket Short-term Health Insurance Values Ranges: 1-8 1: Highest Likelihood to be In-market for Short-term Health Insurance 8: Lowest Likelihood to be In-market for Short-term Health Insurance
IMS_INSUR_HLTH_DISABILITY	Verisk's InMarket Scores measure a consumer's likelihood to be in-market for disability health insurance. The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	InMarket Disability Health Insurance Values Ranges: 1-8 1: Highest Likelihood to be In-market for Disability Health Insurance 8: Lowest Likelihood to be In-market for Disability Health Insurance
IMS_INSUR_HLTH_MEDICARESUPP	Verisk's InMarket Scores measure a consumer's likelihood to be in-market for Medicare Supplement health insurance. The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	InMarket Medicare Supplement Health Insurance Values Ranges: 1-8 1: Highest Likelihood to be In-market for Medicare Supplement Health Insurance 8: Lowest Likelihood to be In-market for Medicare Supplement Health Insurance
IMS_INSUR_HLTH_MEDICAREADV	Verisk's InMarket Scores measure a consumer's likelihood to be in-market for Medicare Advantage health insurance. The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	InMarket Medicare Advantage Health Insurance Values Ranges: 1-8 1: Highest Likelihood to be In-market for Medicare Advantage Health Insurance 8: Lowest Likelihood to be In-market for Medicare Advantage Health Insurance
IMS_INSUR_HLTH_MEDICAREGENERAL	Verisk's InMarket Scores measure a consumer's likelihood to be in-market for Medicare Health insurance (general). The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market. Verisk's InMarket Scores measure a consumer's likelihood to be in-market for home insurance. The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a	InMarket Medicare Health Insurance (General) Values Ranges: 1-8 1: Highest Likelihood to be In-market for Medicare Health Insurance (General) 8: Lowest Likelihood to be In-market for Medicare Health Insurance (General)

	"1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	
IMS_INSUR_HLTH_GENERAL	Verisk's InMarket Scores measure a consumer's likelihood to be in-market for Health insurance (general). The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	<p>InMarket Health Insurance (General) Values Ranges: 1-8</p> <p>1: Highest Likelihood to be In-market for Health Insurance (General) 8: Lowest Likelihood to be In-market for Health Insurance (General)</p>
IMS_INSUR_HLTH_OVERALL	Verisk's InMarket Scores measure a consumer's likelihood to be in-market for health insurance (overall). The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	<p>InMarket Health Insurance (Overall) Values Ranges: 1-8</p> <p>1: Highest Likelihood to be In-market for Health Insurance (Overall) 8: Lowest Likelihood to be In-market for Health Insurance (Overall)</p>
IMS_INSUR_OVERALL	Verisk's InMarket Scores measure a consumer's likelihood to be in-market for insurance (overall). The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	<p>InMarket Insurance (Overall) Values Ranges: 1-8</p> <p>1: Highest Likelihood to be In-market for Insurance (Overall) 8: Lowest Likelihood to be In-market for Insurance (Overall)</p>
IMS_MTG_NEWHOME	Verisk's InMarket Scores measure a consumer's likelihood to be in-market for a mortgage (overall) for a new home. The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	<p>InMarket New Home (Purchase) Mortgage Values Ranges: 1-8</p> <p>1: Highest Likelihood to be In-market for New Home Mortgage 8: Lowest Likelihood to be In-market for New Home Mortgage</p>
IMS_MTG_REFI	Verisk's InMarket Scores measure a consumer's likelihood to be in-market to refinance their mortgage. The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	<p>InMarket Refinance Mortgage Ranges: 1-8</p> <p>1: Highest Likelihood to be In-market for Refinance Mortgage 8: Lowest Likelihood to be In-market for Refinance Mortgage</p>
IMS_MTG_HELOC	Verisk's InMarket Scores measure a consumer's likelihood to be in-market for a home equity line of credit (HELOC). The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	<p>InMarket HELOC Mortgage Ranges: 1-8</p> <p>1: Highest Likelihood to be In-market for Refinance Mortgage 8: Lowest Likelihood to be In-market for Refinance Mortgage</p>
IMS_MTG_REVERSE	Verisk's InMarket Scores measure a consumer's likelihood to be in-market for reverse mortgage. The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	<p>InMarket Reverse Mortgage Values Ranges: 1-8</p> <p>1: Highest Likelihood to be In-market for Reverse Mortgage 8: Lowest Likelihood to be In-market for Reverse Mortgage</p>
IMS_MTG_GENERAL	Verisk's InMarket Scores measures a consumer's likelihood to be in-market for insurance in one or more of the health insurance categories (dental, short-term, disability, Medicare and/or general interest). The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	<p>InMarket Mortgage (General) Values Ranges: 1-8</p> <p>1: Highest Likelihood to be In-market for Mortgage (General) 8: Lowest Likelihood to be In-market for Mortgage (General)</p>
IMS_MTG_OVERALL	Verisk's InMarket Scores measures a consumer's likelihood to be in-market for a mortgage in one or more of the mortgage categories (new home, refinance, HELOC, reverse and/or general interest). The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	<p>InMarket Mortgage (Overall) Values Ranges: 1-8</p> <p>1: Highest Likelihood to be In-market for Mortgage (Overall) 8: Lowest Likelihood to be In-market for Mortgage (Overall)</p>

IMS_EDUCATION	Verisk's InMarket Scores measure a consumer's likelihood to be in-market for higher education. The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	InMarket Higher Education Values Ranges: 1-8 1: Highest Likelihood to be In-market for Higher Education 8: Lowest Likelihood to be In-market for Higher Education
IMS_JOBS	Verisk's InMarket Scores measure a consumer's likelihood to be in-market for a job. The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	InMarket Jobs Values Ranges: 1-8 1: Highest Likelihood to be In-market for Jobs 8: Lowest Likelihood to be In-market for Jobs
IMS_HOMEBUYER	Verisk's InMarket Scores measure a consumer's likelihood to be in-market to buy a home. The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	InMarket Homebuyers Values Ranges: 1-8 1: Highest Likelihood to be In-market for Buying Home 8: Lowest Likelihood to be In-market for Buying Home
IMS_AUTOSALES	Verisk's InMarket Scores measure a consumer's likelihood to be in-market for a new or used car. The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	InMarket Auto Sales Values Ranges: 1-8 1: Highest Likelihood to be In-market for Auto Sales 8: Lowest Likelihood to be In-market for Auto Sales
IMS_HOMESERVICES	Verisk's InMarket Scores measure a consumer's likelihood to be in-market for home services (e.g. home improvement, home security system installation, solar panel installation). The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	InMarket Home Services Values Ranges: 1-8 1: Highest Likelihood to be In-market for Home Services 8: Lowest Likelihood to be In-market for Home Services
IMS_FISERV_GENERAL	Verisk's InMarket Scores measure a consumer's likelihood to be in-market for financial services. The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	InMarket Financial Services (General) Values Ranges: 1-8 1: Highest Likelihood to be In-market for Financial Services (General) 8: Lowest Likelihood to be In-market for Financial Services (General)
IMS_ONLINE_LEADGEN	Verisk's InMarket Scores measure a consumer's likelihood to be online, exhibiting in-market behaviors. The score assesses a combination of recency, frequency, and depth of shopping behavior, as well as hundreds of household and consumer level characteristics to determine an individual's propensity to exhibit in-market behavior. Records scored with a "1" represent the highest confidence levels of in-market behavior. Records scored with an "8" have the lowest likelihood to exhibit in-market behavior, representing records with the lowest confidence levels or lacking any intelligence to indicate the record is in-market.	InMarket Online Lead Generation Values Ranges: 1-8 1: Highest Likelihood to be In-market for Online Lead Gen 8: Lowest Likelihood to be In-market for Online Lead Gen

Connex Clusters:

Output Field	Description	Return Values
HHCLSTRDCD	Assigned cluster code for Household Cluster. See Connex HouseHold Clusters Table.	3 characters
NEIGHBORHOOD_CLSTRDCD	Assigned cluster code for Neighborhood Cluster. See Connex Neighborhood Clusters Table	2 characters
FMCLSTRDCD	Assigned cluster code for Family Cluster. See Connex Family Clusters Table	2 characters

MESSAGING_CLSTRDCD	Assigned cluster code for Messaging Cluster. See Connex Messaging Clusters Table	2 characters
DIGITALCLSTRDCD	Target consumers based on their online social media and mobile behaviors, preferences and buying habits. See Connex Digital Clusters Table	2 characters
GENERATION_CLSTRDCD	Ideal for reaching consumers at specific life stages, as well as for marketing strategies that align with generational attitudes and experiences. See Connex Generation Clusters Table	2 characters
GENERATION_GRPDCD	Assigned cluster code for Generation Cluster. See Connex Generation Groups Table	2 characters
LIFESTG_CLSTRD	Develop messaging strategies based on significant milestones in consumers' lives including career, marriage, children, retirement, and more. See Connex Life Stage Clusters Table	3 characters
LIFESTG_GRPDCD	Assigned cluster code for Life Stage groups Cluster. See Connex Life Stage Groups Table	2 characters

Appendix A: JSON API Example

Example Request:

<https://api.leadid.com/SingleQuery?lac={ACCOUNTCODE}&data=FullName=FullName&FName=FName&LName=LName&Address1=Address1&Address2=Address2&City=City&State=State&Zip=Zip&Phone1=Phone1&Phone2=Phone2&Email=Email>

Example Output:

```
{
  "ResponseCode": "",
  "ResponseMsg": "Successful",
  "Detail": {
    "__type": "IDCompleteBaseResult:https://api.yourdatadelivery.com/service",
    "Identity": {
      "Name": {
        "FName": "JOHN",
        "LName": "SMITH",
        "MName": "",
        "BusName": ""
      },
      "NameAlias1": {
        "Prefix": "",
        "FName": "JONNATHAN",
        "LName": "SMITH",
        "MName": "W",
        "Suffix": ""
      },
      "NameAlias2": {
        "Prefix": "",
        "FName": "JOHNNIE",
        "LName": "SMITH",

```

```
"MName": "",
"Suffix": "JR"
},
"NameAlias3": {
  "Prefix": "",
  "FName": "WILLIAM",
  "LName": "SMITH",
  "MName": "",
  "Suffix": "JR"
},
"Address": {
  "House": "123",
  "PreDir": "E",
  "Street": "MAIN",
  "StrType": "ST",
  "PostDir": "",
  "AptType": "APT",
  "AptNbr": "10",
  "City": "CHICAGO",
  "State": "IL",
  "Zip": "60601",
  "Z4": "1107",
  "DPC": "224",
  "CRTE": "C018",
  "CNTY": "",
  "Z4Type": "S",
  "DPV": "Y",
  "Deliverable": "Y",
  "ValDate": "201808"
},
"PreviousAddress1": {
  "House": "456",
  "PreDir": "",
  "Street": "MICHIGAN",
  "StrType": "AVE",
  "PostDir": "",
  "AptType": "",
  "AptNbr": "",
  "City": "CHICAGO",
  "State": "IL",
  "Zip": "60601",
  "Z4": "1107",
  "DPC": "224",
  "CRTE": "C018",
  "DPV": "Y"
},
"PreviousAddress2": {
  "House": "789",
  "PreDir": "N",
  "Street": "GENERAL",
  "StrType": "DR",
  "PostDir": "",
  "AptType": "",
  "AptNbr": "",
  "City": "INDIANAPOLIS",
```

```
"State": "IN",
"Zip": "46229",
"Z4": "2192",
"DPC": "418",
"CRTE": "C003",
"DPV": "Y"
},
"PreviousAddress3": {
  "House": "147",
  "PreDir": "",
  "Street": "MAIN",
  "StrType": "PL",
  "PostDir": "",
  "AptType": "",
  "AptNbr": "",
  "City": "INDIANAPOLIS",
  "State": "IN",
  "Zip": "46229",
  "Z4": "4113",
  "DPC": "251",
  "CRTE": "C003",
  "DPV": "Y"
},
"Phones": {
  "Phone": {
    "Phone": "1234567890",
    "PhoneType": "W",
    "DID": "",
    "RecType": "R",
    "IDate": "20080221",
    "ODate": "20090601",
    "TelcoName": "TELEPHONE COMPANY 1",
    "Category": "I"
  },
  "Phone2": {
    "Phone": "9876543210",
    "PhoneType": "L",
    "DID": "",
    "RecType": "R",
    "IDate": "20180111",
    "ODate": "20180111",
    "TelcoName": "TELEPHONE COMPANY 2",
    "Category": "I"
  },
  "Phone3": {
    "Phone": "1234569870",
    "PhoneType": "V",
    "DID": "",
    "RecType": "R",
    "IDate": "20180112",
    "ODate": "20180112",
    "TelcoName": "TELEPHONE COMPANY 3",
    "Category": "H"
  }
},
}
```

```
"Emails": {
  "Email": {
    "Email": "JSMITH@EMAIL.com",
    "Suppression": "N",
    "Category": "I",
    "Url": "MYDOMAIN.COM",
    "ODate": "20171129",
    "Sha2": "F5709E36F630621B3277F262C58262E83BB18B969CF87C898BA76B45D5F7C3AB",
    "Sha1": "E8C33707A5C4A5C4DA935B1ED6B02F3BB8B46AD7",
    "MD5": "A6147361910ABBAA4299B2C368DB4766"
  },
  "Email2": {
    "Email": "JOHNS@EMAIL.com",
    "Suppression": "N",
    "Category": "I",
    "Url": "DOMAIN.NET",
    "ODate": "20110215",
    "Sha2": "8A4A794CEC9D653F4E6C3280F8C6FFF3031AEA11D4059AE5EA708ECA2D93BC0F",
    "Sha1": "00D9190243F3C5419662F9512F69636E2560500A",
    "MD5": "4F6D63B91B5BA8436A154FA59AF2AA1F"
  },
  "Email3": {
    "Email": "JOSMITH@EMAIL.COM",
    "Suppression": "N",
    "Category": "I",
    "Url": "DOMAIN.COM",
    "ODate": "20170101",
    "Sha2": "4A801A1EFB8748A691E75B096AA3C09704FD7AF038F1B1D4DE48203E15ADA6AC",
    "Sha1": "981686F5D433FE8B57D1FBAEE63DA6EDCA16476E",
    "MD5": "23E1474E3425ECCA21AE763345EA261D"
  }
}
}
```

Appendix B: API Response Codes

The following is a table of potential output response codes & messages.

<i>Output Field</i>	<i>Description</i>
0	Successful
1	No Records found
2	Missing required parameter(s)
3	Too many results. Please refine your search criteria
4	You have reached the maximum number of transactions allowed
102	The user is invalid (double-check credentials)
<i>All other codes</i>	System error. Retry search, if failure continues, contact support