



IDresponseSM

JSON API User Guide

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Change Control

Date	Version	Changes
July 24, 2014	2.0	Added "Error Code" Section
August 8, 2014	3.0	Added "Testing" Section
October 1, 2014	4.0	Changed IDMatch5.0.COMPLY service name
October 1, 2014	4.0	Added s"Multiple SSN" to known issues



Introduction

The Veratad IDresponseSM JSON API* is accessible via https POST requests exposing solutions that are used for verification processes. The following documentation provides an overview of how to interact with the platform.

*XML version also available upon request.

Destination URL:

<https://production.idresponse.com/process/5/gateway>

Credential:

Your Veratad credential will be provided by your account representative.

For any technical issues or integration queries IDresponse Administrators can also get in touch with the Veratad Support Team – please see details below:

IDresponseSM Support

Telephone number: 201-510-6000 EXT 3

Email: support@veratad.com

Opening times: Monday thru Friday 8am-7pm



The JSON Query

The Object

JSON Attribute	Value	Example
user*	Your Veratad Username	ws@company.com
pass*	Your Veratad Password	xxxxxxxxxx
service*	Your Veratad Service Name	AgeMatch5.0
reference	A Unique Transaction Identifier	123456
target*	The Target Sent for Verification	See Target Below

*required

The Target Attribute

All JSON targets are passed to Veratad with certain attributes as an argument for Veratad to verify.

JSON Attribute	Value	Example
fn*	First Name	John
ln*	Last Name	Smith
addr*	Street Address	123 Main St Apt 54
city	City	Anytown
state	State	NJ
zip*	Zip Code	12345
dob	Date of Birth	19870621
dob_type	Date of Birth Format	YYYYMMDD
age**	The Individual's age or age range	27, 18+, 18-25
dcalc_mask	The unique ID of what IDR Calc question presented	1000000001
dcalc_answer	The answer provided to the IDR Calc question	6
ssn	Full or Last 4 SSN	123456789

*required

**required for all AgeMatch Services

JSON Query Example:

```
{
  "user": "ws@company.com",
  "pass": "xxxxxxxxxx",
  "service": "AgeMatch5.0",
  "reference": "123456",
  "target": {
    "fn": "JOHN",
    "ln": "WHO",
    "addr": "245 MAIN ST APT 54",
    "city": "ANYTOWN",
    "state": "NJ",
    "zip": "12346",
    "dob": "19870621",
    "age": "21+",
    "dob_type": "YYYYMMDD",
    "ssn": "123456789"
  }
}
```



JSON Target Attributes

First and Last Name

Capitalization rules do not apply. For example, the first name entry of “stephen” provides the same meaning as “Stephen”. Also, the Veratad platform accounts for nickname equivalences. For example, “Bob” provides the same meaning as “Robert”.

Address

Spaces are used to identify component separation when parsing. For example, a street address entry of “26 N Franklin St” provides a different meaning from “26N Franklin St”. “26 N” from the first address entry will be interpreted as house number = 26 and a street pre-direction = “N” with an equivalency = North. The second example with “26N” (no space) will be interpreted as house number = 26N with no street address pre-direction.

Date of Birth

Any combination of Year, Month or Day is acceptable and in any order as long as the dob_type attribute correctly identifies it to the system. If no type is supplied the default is YYYYMMDD.

SSN

A 9 or 4 digit integer is acceptable. If any other integer length is supplied it will be treated as if no SSN was provided.

Age

Veratad’s target age attribute will allow you to validate or dispute:

1. an age
2. an age range

JSON Attribute	Value	Example
age	The Individual’s age	27
age	The individual’s age range	18-27
age	The individual’s greater than age	18+
age	The individual’s less than age	55-

IDR Calc

IDR Calc is Veratad’s patented process to validate the sum of any combination of digits in a target’s SSN. Veratad recommends using questions that include the first digit and the last 4 to prove knowledge of the SSN in its entirety.

JSON Attribute	Value	Example
dcalc_mask*	The unique ID of what IDR Calc question presented	1000000001
dcalc_answer	The answer provided to the IDR Calc question	6

*the digit “1” appearing in the sequence position, represents the digits of an SSN you have asked the end user to sum. Therefore, the above would translate to: “What is the sum of the first and last digit of your SSN?”



Veratad Verification Solutions

Overview

The IDresponse Platform includes a suite of verification and authentication technology solutions that include:

- AgeMatchSM
- IDMatchSM
- IDMatch+PLUSSM
- IDMatch+COMPLYSM

Each of these solutions can be consumed via the Veratad API and employed concurrently or stand-alone.

After you've decided which solution(s) fit your company's needs, the next step is to either select an "in-a-box" service (described below) or design your own.

You can quickly and easily design your own Veratad service by completing our Service Wizard [\(click here to see a preview\)](#). When creating your own Veratad Service, you can select the inputs, evaluation rules, challenge question options and the query/return format. Once you are ready to complete the Veratad Service Wizard make an appointment with your appointed Veratad professional service team member.

Veratad "In a Box" Service Guide (instructions on how to connect can be found on the following pages)	
Service Name	Description
AgeMatch5.0	Veratad's Age Verification Solution designed to verify an age or age range.
IDMatch5.0	Veratad's Identity Verification solution designed to verify all submitted target attributes.
IDMatchPLUS5.0_en	Veratad's Identity Authentication Product that delivers "Out of Wallet" challenge questions in conjunction with an identity validation. (Questions Delivered in English)
IDMatchPLUS5.0_es	Same as above. (Questions Delivered in Spanish)
IDMatch5.0.COMPLY	IDMatch+COMPLY SM is Veratad's solution that will enhance your CIP/AML/PATRIOT ACT compliance needs by validating an identity as well as checking if the name is on a government watch list.
IDMatchPLUSCOMPLY5.0_en	Same as above with the addition of "Out of Wallet" challenge questions. (Questions Delivered in English)
IDMatchPLUSCOMPLY5.0_es	Same as above. (Questions Delivered in Spanish)



Veratad “in-a-box” Service Connection Instructions

AgeMatch

Veratad's Age Verification Solution is designed to verify an age or age range.

AgeMatch5.0

AgeMatch 5.0 is Veratad's “in-a-box” Age Verification Service designed to check the age of an individual in real time and return a “PASS” or “FAIL” message.

This service will let you know:

- If the target was located
- If the target was found as deceased
- If the target supplied an accurate age or age range

AgeMatch5.0 Evaluation Rules and Return

Evaluation Rules:

- PASS – The target is located has supplied an accurate age or age range and is not deceased
- FAIL – Any result that does not meet the “PASS” requirement

Example Return*

```
{
  "meta": {
    "company": "Company, LLC",
    "confirmation": "1522984756",
    "reference": "123456",
    "service": "AgeMatch5.0",
    "timestamp": "2014-01-24 13:10:53",
    "user": "ws@company.com "
  },
  "result": {
    "action": "PASS",
    "detail": "ALL CHECKS PASSED"
  }
}
```

*to see full result detail scenarios see Exhibit A

WHAT DO I DO WHEN SOMEONE FAILS?

The Veratad Document Capture and Management SaaS (software as a service), provides a simple way for your online customers to upload a copy of a required document at time of transaction. This service eliminates the need for paper, provides an online portal for document review, allows for communication with your customer and keeps an audit trail for reporting and compliance purposes. Please contact your account representative for more details.



IDMatch

Veratad's identity verification solution designed to verify all submitted target attributes.

IDMatch5.0

IDMatch5.0 is Veratad's "in-a-box" Identity Verification service designed to validate target supplied attributes in real time and return a "PASS", "REVIEW" or "FAIL" response.

This service will let you know:

- If the target was found
- If the target was found as deceased
- If the target passed verification checks

IDMatch5.0 Evaluation Rules and Return

Evaluation Rules:

- PASS – The target is located and has passed verification checks and is not deceased
- REVIEW – The target is located and has passed some verification checks and is not deceased
- FAIL – The target is not found and/or did not pass any verification checks or is deceased.

Example Return:*

```
{
  "meta": {
    "company": "Company, LLC",
    "confirmation": "1522984756",
    "reference": "123456",
    "service": "IDMatch5.0",
    "timestamp": "2014-01-24 13:10:53",
    "user": "ws@company.com "
  },
  "result": {
    "action": "PASS",
    "detail": "ALL CHECK PASSED",
    "issues": []
  }
}
```

*to see full result detail scenarios see Exhibit B

DO YOU NEED TO COMPLY WITH CIP/AML/PATRIOT ACT REGULATIONS?

Veratad's IDMatch+COMPLYSM is Veratad's solution that will enhance your CIP/AML/PATRIOT ACT compliance needs by validating an identity as well as checking if the name is on a government watch list. For a full menu of Veratad Watch Lists please contact your account representative.



IDMatch+PLUS

IDMatchPLUS5.0_en

Veratad's Identity Authentication Product that delivers Knowledge Based "Out of Wallet" challenge questions in conjunction with an identity validation.

*Questions can be delivered in any desired language.

This service will let you know:

- If the target was found
- If the target was found as deceased
- If the target passed verification checks
- 4 challenge questions to be presented

Question Settings:

- Returns a set of four questions with five answer choices for each question
- At least one synthetic question included with each set of four. A synthetic is a question where the correct answer is "None of the above".
- Pulls from Veratad's carefully crafted pool of questions to display the best questions for that customer at that time.
- Questions are returned in English. To return questions in Spanish add an "es" to the service name. For example, "IDMatch+PLUS5.0_es".

IDMatchPLUS5.0_en Evaluation Rules and Return

Evaluation Rules:

- PASS – The target is located and has passed verification checks and is not deceased
- REVIEW – The target is located and has passed some verification checks and is not deceased
- FAIL – The target is not found and/or did not pass any verification checks or is deceased.

Return: See example return on the following page.

ONCE I'VE CREATED A VERIFIED ACCOUNT HOW CAN I KEEP IT SECURE?

ProtectID, Veratad's Two Factor Out-of-band Authentication solution (powered by StrikeForce), delivers an affordable, flexible and redundant 2Factor and Out of Band Authentication for Banks, Corporations, Universities, Gov't agencies and Social Networking Websites. ProtectID authenticates individuals, employees and transactions in real-time and can be integrated into many types of environments such as remote access (VPN), domain access, website access, risk-mitigation and transaction based systems. ProtectID can be managed on-premise or via our hosted cloud service. For more information on how your company might utilize this service please contact your account representative.



Example Return

```
{
  "meta": {
    "company": "Company, LLC",
    "confirmation": "157136",
    "reference": "None",
    "service": "IDMatchPLUS5.0_en",
    "timestamp": "2014-04-22 15:11:14",
    "user": "ws@company.com"
  },
  "result": {
    "action": "PASS",
    "detail": "ALL CHECKS PASSED",
    "issues": []
  },
  "output": {"questions": {"answerkey": "000010100001000000010",
"questions": [{"prompt": "Which of the following high schools have you
attended?", "type": "highschool", "answers": [{"text": "Lake Placid High
School", "correct": false}, {"text": "Chamberlain High School", "correct":
false}, {"text": "Citrus High School", "correct": false}, {"text": "Lehigh
Senior High School", "correct": false}, {"text": "None of the above",
"correct": true}]}], {"prompt": "LION ST is in which of the following
cities?", "type": "city", "answers": [{"text": "SOLANA BEACH", "correct":
false}, {"text": "STATEN ISLAND", "correct": true}, {"text": "CHASE CITY",
"correct": false}, {"text": "ISLIP", "correct": false}, {"text": "None of
the above", "correct": false}]}], {"prompt": "Which of the following email
addresses are you or have you been associated?", "type": "email", "answers":
[{"text": "thomascanfarotta2@me.com", "correct": false}, {"text":
"tcanfarotta22@aol.com", "correct": true}, {"text": "tcanfarotta754@me.com",
"correct": false}, {"text": "thomasc130@sbcglobal.net", "correct": false},
{"text": "None of the above", "correct": false}]}], {"prompt": "In which
county is MAIN ST located?", "type": "county", "answers": [{"text": "CRAIG",
"correct": false}, {"text": "SEWARD", "correct": false}, {"text": "MINGO",
"correct": false}, {"text": "FAIRFIELD", "correct": true}, {"text": "None of
the above", "correct": false}]}]}}
```



IDMatch+COMPLY

IDMatch+COMPLYSM is Veratad's solution that will enhance your CIP/AML/PATRIOT ACT compliance needs by validating an identity as well as checking if the name is on a government watch list.

IDMatch5.0.COMPLY

This service will let you know:

- If the target was found on OFAC
- If the target was found
- If the target was found as deceased
- If the target passed verification checks

IDMatch5.0 Evaluation Rules and Return

Evaluation Rules:

- PASS – The target is located and has passed verification checks and is not deceased
- REVIEW – The target is located and has passed some verification checks, is on OFAC and is not deceased
- FAIL – The target is not found and/or did not pass any verification checks or is deceased.

Example Return*

```
{
  "meta": {
    "company": "Company, LLC",
    "confirmation": "1522984756",
    "reference": "123456",
    "service": "IDMatch5.0.COMPLY",
    "timestamp": "2014-01-24 13:10:53",
    "user": "ws@company.com "
  },
  "result": {
    "action": "FAIL",
    "detail": "NO MATCH",
    "issues": []
  }
}
```

*to see full result detail scenarios see Exhibit B



Exhibit A

The following is a list of all possible result “Action” and “Detail” responses.

AgeMatch5.0 Result Detail

Possible Reponses			
Action	Detail	Explanation	Test Key
FAIL	NO MATCH	There are no records to use for verification	general
FAIL	TARGET IS DECEASED	The target was found on the SSA Master Deceased List	deceased
FAIL	AGE NOT SUBMITTED	No Age Range submitted	general
FAIL	POSSIBLE MINOR*	The target has a record with a DOB that indicates they could be a minor	pos_minor
FAIL	AGE NOT VERIFIED	The target did not meet the age criteria	age not verified
PASS	ALL CHECKS PASSED	The target has been located, met the age criteria and is not deceased.	general

*Many times this result occurs in a father/son scenario. This “FAIL” may be resolved if you resubmit the query with more information about the target i.e. a DOB, Last 4 SSN or 9 SSN.

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Exhibit B

The following is a list of all possible result “Action”, “Detail” and “Issues” responses.

IDMatch5.0, IDMatch+PLUS5.0 and IDMatch+COMPLY5.0 Result Detail

Action	Detail	Possible Issues	Test Key
FAIL	NO MATCH	ALL (see list below)	general
FAIL	TARGET IS DECEASED	NONE	deceased
REVIEW	TRANSACTION REQUIRES FURTHER ATTENTION	ALL (see list below)	general
PASS	ALL CHECKS PASSED	NONE	general

IDMatch5.0, IDMatch+PLUS5.0 and IDMatch+COMPLY5.0 Issues Explanation

Possible Issues	Explanation
NAME FOUND ON WATCH LIST*	A target was found on a government watch list
SSN CHECK FAILED	SSN supplied did not match
DOB CHECK FAILED	DOB supplied did not match
ADDRESS CHECK FAILED	Address supplied did not match
AGE CHECK FAILED	Age supplied did not meet the requirement.
MULTIPLE SSNS FOUND**	There are records with conflicting SSNS. If you resubmit the query with a SSN you may be able to resolve this issue.

*only will return when utilizing IDMatch5.0.COMPLY or IDMatchPLUSCOMPLY5.0 _en/_es (see test key below to create this result).

**This issue is important to consider when generating challenge questions. If this issue is returned during challenge question generation please resubmit the query with the last 4 or full 9 SSN to resolve the ambiguity.



Testing

The following is a list of Targets that can be used to return a desired result. When testing just add the JSON attribute “test_key” to work with the target associated.

JSON Attribute	Value	Target
test_key	deceased	fn = Abraham, ln = Lincoln, addr = 1300 Pennsylvania Ave NW, city = Washington, state = DC, zip = 20500, dob = 18090212, ssn= 851425789
test_key	pos_minor	fn = Tim, ln = Hardaway, addr = 5 Broadway, city = New York, state = NY, zip = 10458, dob = 19750614, ssn= 123456897 (to resolve Possible Minor Correct DOB. Dad DOB = 19720618, Son DOB = 20141225)
test_key	age_not_verified	fn = Steve, ln = Jones, addr = PO Box 451, city =New York, state = NY, zip = 10458, dob = 19900215, ssn= 232145987
test_key	underage	fn = John, ln = Boy, addr = 574 Main St, city = New York, state = NY, zip = 10458, dob = 19850611, ssn= 012458745
test_key	general	fn = Barbara, ln = Miller, addr = 123 Main St, city = Stratford, state = CT, zip = 06614, dob = 19740821, ssn = 854125698
test_key	name_on_list	fn = Osama, ln = Bin Laden, addr = 123 Main St, city = Anytown, state = TX, zip = 12345, dob =19700213, ssn = 123456789
test_key	multiple_ssn	fn = Bob, ln = Uncle, addr = 78 Frank W. Burr Blvd, city = Teaneck, state = NJ, zip = 07666, dob = 19840718, ssn = 232145987

A Target is considered a “MATCH” when any of the following are true:

Name and Address Match

Name, Zip Code and FULL DOB Match

Name, House Number and FULL DOB Match

Name, Zip Code and 4 SSN Match

Name, House Number and 4 SSN Match

Name, YOB and 4 SSN Match

Name and 9 SSN Match

In order to force a “NO MATCH” result -- send any query that does not meet any of the above.



JSON Query Example:

```
{
  "user": "ws@company.com",
  "pass": "xxxxxxxxxx",
  "service": "IDMatch5.0.RJRT.CUSTOM",
  "reference": "123456",
  "target": {
    "fn": "Barbara",
    "ln": "Miller",
    "addr": "123 Main St",
    "city": "Stratford",
    "state": "CT",
    "zip": "06614",
    "dob": "19740821",
    "dob_type": "YYYYMMDD",
    "age": "21+",
    "ssn": "5698",
    "test_key": "general"
  }
}
```

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Error Code Enumeration

The following is a list of potential errors categorized in four series and their explanations.

Error Series "IN"	
Error Code	Message
IN0	No query
IN1	Query Not Parsable
IN2	Missing Credentials
IN3	Missing Service Identifier

Error Series "AUTH"	
Error Code	Message
AUTH0	Bad Login
AUTH1	No such service
AUTH2	Service unavailable
AUTH3	User Not Active
AUTH4	Company Not Active
AUTH5	Service Not Active

Error Series "SEC"	
Error Code	Message
SEC0	IP Not Recognized
SEC1	Service Window Closed
SEC2	Service Limit Exceeded
SEC3	Blacklisted IP



Error Series "QRY"	
Error Code	Message
QRY0	No Target
QRY1	Missing Required Input
QRY2	Input Failed Validation
QRY3	Transaction Not Found
QRY4	Transaction Closed
QRY5	Wrong Transaction ID

Example Return with Error

```
{
  "meta": {
    "timestamp": "2014-07-28 12:42:35"
  },
  "error": {
    "message": "Query Not Parsable",
    "code": "IN1"
  }
}
```