

TruProfile API Reference Guide

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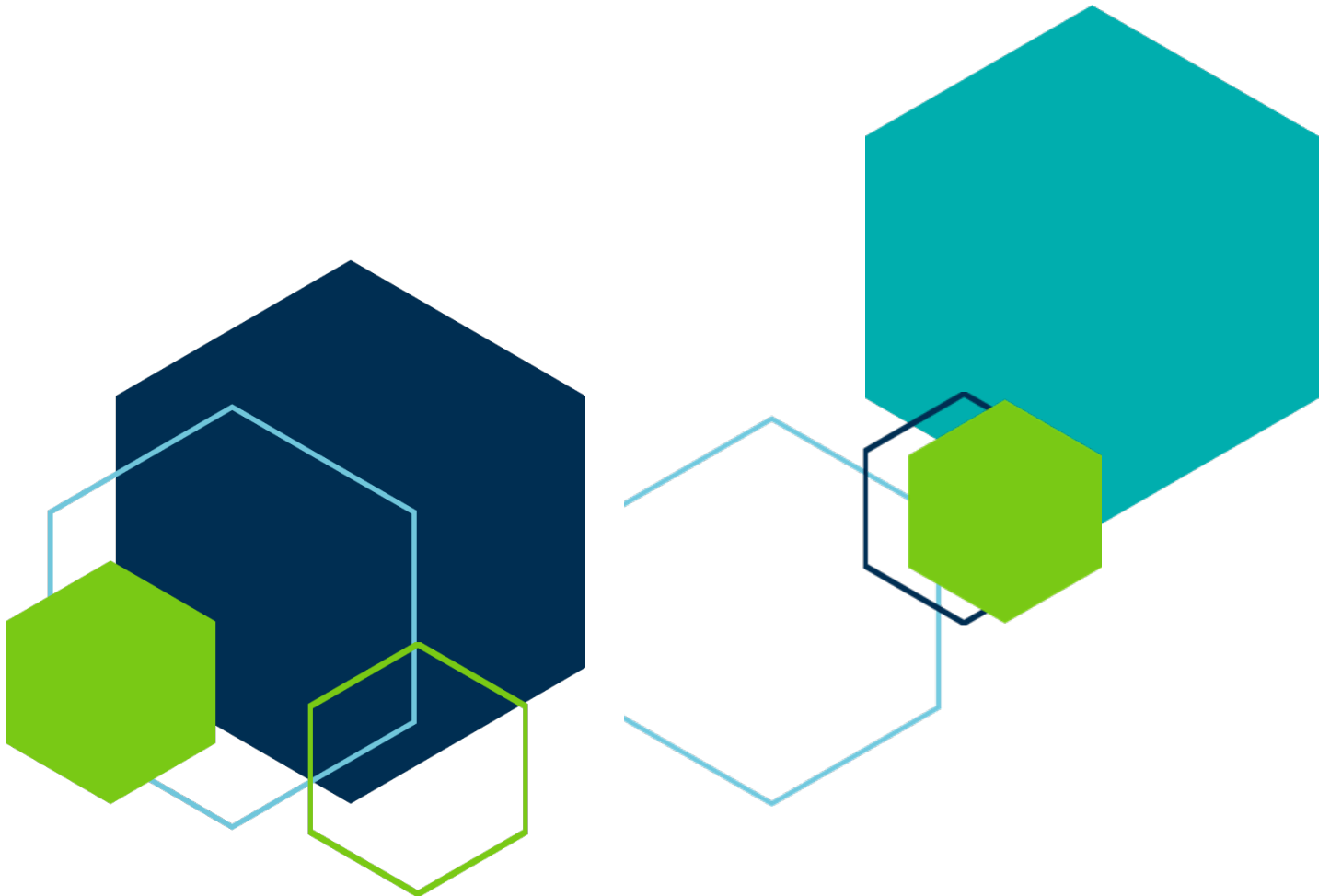




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Introducing the TruProfile API

When dealing with internet lead generation, you can expect invalid contacts containing errors due to typos on forms or intentionally false information. What if you could practically ensure valid leads with accurate contact information? The Fenris Digital ("Fenris") TruProfile service validates the contact information on leads to ensure that you are contacting real people instead of wasting time trying to contact people who don't exist, at fake addresses, with autogenerated, made-up email addresses. The first chance a client has to evaluate whether they can contact a lead occurs when they first receive the POST data. By using Fenris TruProfile service, clients get instant feedback on the quality of the contact information so that they can route the request to the appropriate channel or return the lead to the seller.

How does this work?

The Fenris **TruProfile Service** works by comparing the input contact information such as person's name, postal address, e-mail address, phone number to Fenris' reference database of more than 250 million individuals and 130 million households to determine whether the input person exists in its reference data to determine the viability of making contact with the lead. These results are also passed to Fenris' proprietary TruProfile+ scoring engine to compute a score that enables quick assessment on the viability of outreach to each lead based on all of the input contact data submitted.

What are the benefits?

We match each lead to our proprietary, multi-sourced database covering more than 97% of the US population, evaluating validity for each element so you can sift out fraudulent entries. You can decide at that point to purchase or return the lead, or you can run validated leads through the Fenris data enrichment and lead scoring APIs for an even more granular assessment of lead quality and likelihood to buy.



Validate lead contact elements

The validate endpoint receives a lead’s contact data and returns information on the validity of the elements submitted. Note that all items in the request are optional. Information will be provided only for the submitted elements.

POST <https://api.fenrisd.com/services/truprofile/v1/profile>

Headers

Header	Value	Description
Content-Type	application/json	The body is in JSON format, using UTF-8 character encoding.
Authorization	Bearer {access_token}	Use the token from the Authentication call
Submission-Id	<string>	Passthrough field containing a client-specified identifier to tie back to client data and systems. If the client does not define this value, an auto-generated value is used.

Body

Field	Required	Value	Description
person			
firstName	Optional	<string>	First name of person
middleName	Optional	<string>	Middle name or initial of person
lastName	Optional	<string>	Last name of person
dateOfBirth	Optional	<string>	The Person's date of birth in the format MM/DD/YYYY for service response. Input allows the following formats: M/D/YYYY or MM/DD/YYYY or M-D-YYYY or MM-DD-YYYY or BASIC ISO DATE (YYYYMMDD) or ISO DATE (YYYY-MM-DD). This field does not support the two-digit year format.
address			
addressLine1	Required	<string>	The standard street and the unit portion of an address
addressLine2	Optional	<string>	Optional address string applied to the address line for processing
city		<string>	City name – Either zipCode or city must be present
state	Required	<string>	Two-character USPS® state abbreviation
zipCode		<string>	Five-digit postal code: Either city or zipCode must be present

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email	Optional	<string>	Contact email. Format: example@gmail.com
phone	Optional	<string>	Contact phone number Supported formats: 123-456-7890, +12345678901, 1-123-456-7890, 1234567890, (123)456-7890
ipAddress	Optional	<string>	Contact IP address Typical formats: "192.168.0.1", "223.255.255.255"

Example Request

```
{
  "person" : {
    "firstName" : "John",
    "middleName" : "M",
    "lastName" : "Doe",
    "dateOfBirth" : "09/01/1987"
  },
  "address" : {
    "addressLine1" : "123 Main st",
    "addressLine2" : "suite 101",
    "city" : "Westminster",
    "state" : "co",
    "zipCode" : "80031"
  },
  "email" : "example@gmail.com",
  "ipAddress" : "192.168.0.1",
  "phone" : "999-999-9999"
}
```

Response

Field	Value	Description
requestId	<string>	Unique request identifier for auditing and support
submissionId	<string>	Returns the request header value, or if the value is not defined in the header, functions as the unique identifier for the request
status	<string>	Validation service status
address	[address]	Returns an array of boolean data on whether an US postal address and/or person or household member is found at that address: see Address for details.

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Field	Value	Description
person	[person]	Returns an array of Boolean data on whether a person is found in the Fenris reference data based on first and last name as well as if the date of birth for that person matches: see Person for details.
phone		
valid	<boolean>	Phone number validated
mobileOrLandline	<boolean>	Phone number is mobile or landline
email		
valid	<boolean>	The email address contains all required elements, including prefix, @, and valid domain and suffix.
ipAddress		
valid	<boolean>	INet4 address and range (not restricted) validated
notKnownProxy	<boolean>	Not found in the Fenris proxy database.
Score		
score	<string>	Fenris TruProfile+ score. Gives the likelihood that the person can be contacted. The values are Poor, Fair, Good, Very Good, Excellent.
modelVersion	<string>	Version of the model used to compute the score.

Address

Field	Value	Description
standardized	<boolean>	Postal address standardized
singleDeliveryPoint	<boolean>	Delivery point validated
residential	<boolean>	Postal residence classified
addressFound	<boolean>	Address found in reference data
householdFound	<boolean>	Last name found at address in reference data
personAtAddress	<boolean>	Person found at address in reference data

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Person

Field	Value	Description
recognizedFirstName	<boolean>	First name found in reference data
recognizedLastName	<boolean>	Last name found in reference data
personFound	<boolean>	Person (with first and last name) found in reference data
dateOfBirthVerified	<boolean>	Person with the given date of birth found in reference data

Example Response

```
{
  "requestId": "9f7a8c48-62be-4f77-8863-a40a118f3b8b",
  "submissionId": "9f7a8c48-62be-4f77-8863-a40a118f3b8b",
  "status": "Success",
  "address": {
    "standardized": true,
    "singleDeliveryPoint": true,
    "residential": true,
    "addressFound": true,
    "householdFound": true,
    "personAtAddress": true
  },
  "person": {
    "recognizedFirstName": true,
    "recognizedLastName": true,
    "personFound": true,
    "dateOfBirthVerified": true
  },
  "phone": {
    "valid": true,
    "mobileOrLandline": true
  },
  "email": {
    "valid": true
  },
  "ipAddress": {
    "valid": false,
    "notKnownProxy": true
  },
  "score": {
    "score": "fair",
    "modelVersion": "generic-truprofile-model---2022-01-01 21_42_12.424356"
  }
}
```



Errors

Code	Text message	Description and how to fix it
401	Unauthorized	The client request was not completed because it lacks valid authentication credentials for the requested resource.
404	Not Found	The requested resource is not available.

Authentication

Fenris Digital restricts access to its APIs and manages access tokens through an OAuth2 authorization server, using the the Client Credentials workflow defined by the OAuth2 specification. You will receive a Client-Id, and Client Secret used to obtain an access token from the Authorization Server.

NOTE: Access tokens are good for 24 hours after you receive them before you are required to refresh them. In order to maintain uninterrupted access, you must submit another call to obtain a new token before the previous one expires.

POST

https://auth-fenrisd.auth.us-east-1.amazoncognito.com/oauth2/token

Headers

Header	Value	Description
Content-Type	application/x-www-form-urlencoded	Type of payload contained in the body
Authorization	Basic {basic_string}	<p>The <code>basic_string</code> is the Base-64 encoding of the <code>client_id</code> and <code>client_secret</code> separated by a colon. This is the standard token passed for Basic authentication with <code>username</code> replaced by <code>client_id</code> and <code>password</code> replaced by <code>client_secret</code>.</p> <p>Many libraries will do this for you:</p> <ol style="list-style-type: none"> 1. Select BASIC authentication. 2. Set the username to your <code>client_id</code>. 3. Set the password to the <code>client_secret</code>.

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Body

Field	Value	Description
<code>client_id</code>	<code><string></code>	Obtain the <code>client_id</code> from Fenris.
<code>grant_type</code>	<code>client_credentials</code>	String that tells the authorization server that we are requesting a client credentials grant

Response

Field	Value	Description
<code>token_type</code>	<code>"Bearer"</code>	Type of security token – always a bearer token
<code>expires_in</code>	<code><integer></code>	Time remaining, in seconds, until the token expires
<code>access_token</code>	<code><string></code>	Newly-generated auth token: Use the value in this field as a Bearer token in the request's Authorization header.

Example Response

```
{
  "token_type": "Bearer",
  "expires_in": 86400,
  "access_token": "AbCdEf123456..."
}
```

Errors

Code	Text message	Description
401	Unauthorized	The request was not completed because it lacks valid authentication credentials for the requested resource.



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