

Updated: 2025-01-19

## Demo App

You can follow the link below to play with the API using our demo app. The app comes with a demo photo for you to test. If you would like to use a different photo, be sure to use your own API key as the DEMO key won't work with customized photos.

<https://facial-demo.offenders.io/>

Select profile photo

DEMO.jpg

API Key

DEMO

☒ Save my API key

☒ View JSON response only

Use Demo Photo

Submit

## Facial Search

The Facial Recognition API is used to do image-based searches. It takes in a POST request, with base64 encoded image string as the payload. The API will perform facial matching against our entire sex offender dataset and return the registrants who look similar to the photo you submitted, ordered by similarity.

POST <https://faces.api.offenders.io/faces>

### Headers

- Content-Type: application/json


### Request Body

The request body should be a JSON object with the following key:

- **queryImageBase64**: A string containing the Base64 encoded image.

## Example Request Body

json

 Copy code

```
{
  "queryImageBase64": "/9j/4AAQSkZJRgABAQAAQABAAQ/2wBDAFBQUFBVUFpZkZFP9h3iHfbmqm5uc"
}
```

## Response

```
✓ object {1}
  ✓ faceMatches [8]
    ✓ 0 {5}
      similarity: 99.2160873413086
      faceId: "3d8d1b28-0969-4a4b-b4f2-244fbe44491b"
      uuid: "2e4a50a3-dd77-5d35-a24f-292fc0375bbe"
      matchedImageUrl: "https://photos.offenders.io/2e4a50a3-dd77-5d35-a24f-292fc0375bbe"
    ✓ offender {6}
      firstName: "Anthony"
      lastName: "Hatcher"
      dob: "1969-12-04T00:00:00.000Z"
      offenderUrl: "http://www.criminaljustice.ny.gov/SomsSUBDirectory/offenderDetails.jsp?offenderid=36546"
      offenderImageUrl: "https://www.criminaljustice.ny.gov/SomsSUBDirectory/offenderDetailsServlet0ther?imageid=36546"
      personUuid: "a33399f5-1371-5247-aaec-73de70b10984"
    ✓ 1 {5}
      similarity: 99.2160873413086
      faceId: "06879fa6-5667-48a0-9afc-023e655b9879"
      uuid: "91f59fe7-9eeb-5a15-80f2-b802b38f1a09"
      matchedImageUrl: "https://photos.offenders.io/91f59fe7-9eeb-5a15-80f2-b802b38f1a09"
    ✓ offender {6}
      firstName: "Antoine"
      lastName: "Hatcher"
      dob: "1969-12-04T00:00:00.000Z"
      offenderUrl: "http://www.criminaljustice.ny.gov/SomsSUBDirectory/offenderDetails.jsp?offenderid=36546"
      offenderImageUrl: "https://www.criminaljustice.ny.gov/SomsSUBDirectory/offenderDetailsServlet0ther?imageid=36546"
      personUuid: null
    ✓ 2 {5}
      similarity: 99.2160873413086
      faceId: "17d6d01b-4aaa-47fe-aa05-a8c741515e66"
      uuid: "bae4ab77-613a-5de6-825c-82dc1d7bad6c"
      matchedImageUrl: "https://photos.offenders.io/bae4ab77-613a-5de6-825c-82dc1d7bad6c"
    ✓ offender {6}
      firstName: "Jibroni"
      lastName: "Hatcher"
      dob: "1969-12-04T00:00:00.000Z"
      offenderUrl: "http://www.criminaljustice.ny.gov/SomsSUBDirectory/offenderDetails.jsp?offenderid=36546"
      offenderImageUrl: "https://www.criminaljustice.ny.gov/SomsSUBDirectory/offenderDetailsServlet0ther?imageid=36546"
      personUuid: null
    ✓ 3 {5}
```

## Code Snippet

```
1  (async () => {  
2    const rawResponse = await fetch(`https://faces.api.offenders.io/faces?key=${YOUR_API_KEY}`, {  
3      method: 'POST',  
4      headers: {  
5        'Content-Type': 'application/json'  
6      },  
7      body: JSON.stringify({queryImageBase64: '/9j/4AAQSkZ...KSm1/9k='})  
8    });  
9    const content = await rawResponse.json();  
10  
11    console.log(content);  
12  })();  
13
```

## Request Body Payload

Field Name	Description	Example Value
<b>queryImageBase64</b>	<p>(string) Base64 encoded string of the image content only.</p> <p>No MIME prefix (e.g. no `data:image/png;base64`,`)</p> <p>Size Limit: &lt; 3 MB</p> <p><i>Consider compressing images before submission to ensure a faster response time. With our industry-leading facial-matching search, a few KB is more than sufficient. See our <a href="#">DEMO app</a> as an example (&lt; 1KB).</i></p> <p>Supported Format: jpg/jpeg/png</p>	"/9j/4AAQSkZ...KSm1/9k="

## Request Response Fields

Field Name	Description	Example Value	Empty Value
<b>faceMatches</b>	(array) Array of the matches face object	[faceObj1, faceObj2, ...]	[]

<b>similarity</b>	(number) How similar the matched faces are compared to the submitted photo (80% - 100%)	91.81	Always Returned
<b>faceId</b>	(string) UUID of the matched face  This value can be used to further query the registrant with our <a href="#">Offender Search API</a>	"3d8d1b28-0969-4a4b-b4f2-244fbe44491b"	Always Returned
<b>uuid</b>	(string) UUID of the registrant in the Offenders.io system  This value can be used to further query the registrant with our <a href="#">Offender Search API</a>	"2e4a50a3-dd77-5d35-a24f-292fc0375bbe"	null
<b>matchedImageUrl</b>	(string) The exact image that was used for the query match	<a href="https://photos.offenders.io/2e4a50a3-dd77-5d35-a24f-292fc0375bbe">https://photos.offenders.io/2e4a50a3-dd77-5d35-a24f-292fc0375bbe</a>	Always Returned
<b>offender</b>	(object) Info of the registrant in the photo. If the value is null, you could use faceId to query against our offender search endpoint to get the full offender data.	{...}	null
<b>firstName</b>	(string) First name of the offender	"Alice"	""
<b>lastName</b>	(string) Last name of the offender	"Ceci"	""
<b>dob</b>	(ISO Date String) Date of birth of the offender. <b>Please note all DOB is stored as UTC time, please make sure you process them accordingly.</b>	"1957-07-14T00:00:00.000Z"	null
<b>offenderUrl</b>	(string) URL to the offender's source State agency	<a href="https://meganslaw.ca.gov/OffenderDisplay.aspx?searchby=offender&amp;ID=186...363&amp;NSOPRFlag=True">https://meganslaw.ca.gov/OffenderDisplay.aspx?searchby=offender&amp;ID=186...363&amp;NSOPRFlag=True</a>	null
<b>offenderImageUrl</b>	(string) URL of the offender's profile image	<a href="https://meganslaw.ca.gov/NSOPWPI.ashx?f=186...363&amp;NSOPRFlag=True">https://meganslaw.ca.gov/NSOPWPI.ashx?f=186...363&amp;NSOPRFlag=True</a>	null

<b>personUuid</b>	(string) UUID of the registrant in the Offenders.io system. A single personUuid can have multiple UUID. This is used internally for records dedupe  This value can be used to further query the registrant with our <a href="#">Offender Search API</a>	"a33399f5-1371-5247-aaec-73de70b10984"	<b>null</b>
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## Enhanced Offenders Detail Search

The facial search API returns basic registrants information like name and date of birth, further registrants details can be obtained by following the offenderUrl field which contains the reporting agency profile URL of the registrants.

If you would like to get those details via API, we also provide the ability to retrieve enhanced registrant details via our Offender [Search API](#). You could pass a single 'facelId' parameter in your query to get enhanced registrant results. Alternatively, you could also pass uuid or personUuid instead, depending on your app's implementation.

Below is a sample request:

[https://api.offenders.io/sexoffender?facelId=4d8ade05-b9cd-442c-bfff-6623189e923c&key={YOUR\\_API\\_KEY}](https://api.offenders.io/sexoffender?facelId=4d8ade05-b9cd-442c-bfff-6623189e923c&key={YOUR_API_KEY})

## Default Result Limits

To ensure our API endpoint can provide blazing-fast responses, the following limitations are applied by default.

### Facial Search

Normal search results are limited to 20 records by default to ensure the response time, and we only return faces that have >80% similarity. In reality, you should only consider faces that are >90% in similarity.

For best coverage, you should consider using [Offender Search API](#) to perform a name search, in addition to your facial search. This is because not all state agencies are providing the photos of the registrants, and the facial matching by nature will have a smaller coverage than the regular name search.

## Error Handling

### 400s response example:

```
{
  "code": 401,
  "message": "Missing API key"
}
```

#### HTTP 400

Bad Request: any requests that we are unable to handle

#### HTTP 401

Unauthorized: usually it is because missing API key or invalid API key in your request

#### HTTP 405

Method Not Allowed: the request was sent using a method that we don't support

### 200s response example:

Empty results (no match):

```
✓ object {1}
  faceMatches : []
```

Found matching results:

```

  object {1}
    faceMatches [8]
      0 {5}
        similarity : 99.2160873413086
        faceId : "3d8d1b28-0969-4a4b-b4f2-244f44491b"
        uuid : "2e4a50a3-dd77-5d35-a24f-292fc0375bbe"
        matchedImageUrl : "https://photos.offenders.io/2e4a50a3-dd77-5d35-a24f-292fc0375bbe"
      offender {6}
        firstName : "Anthony"
        lastName : "Hatcher"
        dob : "1969-12-04T00:00:00.000Z"
        offenderUrl : "http://www.criminaljustice.ny.gov/SomsSUBDirectory/offenderDetails.jsp?offenderid=36546"
        offenderImageUrl : "https://www.criminaljustice.ny.gov/SomsSUBDirectory/offenderDetailsServletOther?imageid=36546"
        personUuid : "a33399f5-1371-5247-aaec-73de70b10984"
    1 {5}
      similarity : 99.2160873413086
      faceId : "06879fa6-5667-48a0-9afc-023e655b9879"
      uuid : "91f59fe7-9eeb-5a15-80f2-b802b38f1a09"
      matchedImageUrl : "https://photos.offenders.io/91f59fe7-9eeb-5a15-80f2-b802b38f1a09"
    offender {6}
      firstName : "Antoine"
      lastName : "Hatcher"
      dob : "1969-12-04T00:00:00.000Z"
      offenderUrl : "http://www.criminaljustice.ny.gov/SomsSUBDirectory/offenderDetails.jsp?offenderid=36546"
      offenderImageUrl : "https://www.criminaljustice.ny.gov/SomsSUBDirectory/offenderDetailsServletOther?imageid=36546"
      personUuid : null
    2 {5}

```

Invalid query param combinations:

```

{
  "error": "Invalid input params",
  "reason": "no query params presented"
}

```