

Introduction

You can interact with the API through HTTP requests from any language, via our official Python bindings, our official Node.js library, or a [community-maintained library](#).

To install the official Python bindings, run the following command:

```
pip install openai
```

To install the official Node.js library, run the following command in your Node.js project directory:

```
npm install openai@^4.0.0
```

Authentication

The OpenAI API uses API keys for authentication. Visit your [API Keys](#) page to retrieve the API key you'll use in your requests.

Remember that your API key is a secret! Do not share it with others or expose it in any client-side code (browsers, apps). Production requests must be routed through your own backend server where your API key can be securely loaded from an environment variable or key management service.

All API requests should include your API key in an `Authorization` HTTP header as follows:

```
Authorization: Bearer OPENAI_API_KEY
```

Requesting organization

For users who belong to multiple organizations, you can pass a header to specify which organization is used for an API request. Usage from these API requests will count against the specified organization's subscription quota.

Example curl command:

```
1 curl https://api.openai.com/v1/models \  
2   -H "Authorization: Bearer $OPENAI_API_KEY" \  
3   -H "OpenAI-Organization: org-RFLyrTqL0wbryabSrvSsEHau"
```

Example with the `openai` Python package:

```
1 import os  
2 import openai  
3 openai.organization = "org-RFLyrTqL0wbryabSrvSsEHau"  
4 openai.api_key = os.getenv("OPENAI_API_KEY")  
5 openai.Model.list()
```

Example with the `openai` Node.js package:

```
1 import { Configuration, OpenAIApi } from "openai";  
2 const configuration = new Configuration({  
3   organization: "org-RFLyrTqL0wbryabSrvSsEHau",  
4   apiKey: process.env.OPENAI_API_KEY,  
5 });  
6 const openai = new OpenAIApi(configuration);  
7 const response = await openai.listEngines();
```

Organization IDs can be found on your [Organization settings](#) page.

Making requests

You can paste the command below into your terminal to run your first API request. Make sure to replace `$OPENAI_API_KEY` with your secret API key.

```
1 curl https://api.openai.com/v1/chat/completions \  
2   -H "Content-Type: application/json" \  
3   -H "Authorization: Bearer $OPENAI_API_KEY" \  
4   -d '{  
5     "model": "gpt-3.5-turbo",
```

```
6     "messages": [{"role": "user", "content": "Say this is a test!"}],
7     "temperature": 0.7
8 }'
```

This request queries the `gpt-3.5-turbo` model (which under the hood points to the **latest** `gpt-3.5-turbo` **model variant**) to complete the text starting with a prompt of "Say *this* is a test". You should get a response back that resembles the following:

```
1  {
2    "id": "chatcmpl-abc123",
3    "object": "chat.completion",
4    "created": 1677858242,
5    "model": "gpt-3.5-turbo-0613",
6    "usage": {
7      "prompt_tokens": 13,
8      "completion_tokens": 7,
9      "total_tokens": 20
10   },
11   "choices": [
12     {
13       "message": {
14         "role": "assistant",
15         "content": "\n\nThis is a test!"
16       },
17       "finish_reason": "stop",
18       "index": 0
19     }
20   ]
21 }
```

Now that you've generated your first chat completion, let's break down the **response object**. We can see the `finish_reason` is `stop` which means the API returned the full chat completion generated by the model without running into any limits. In the choices list, we only generated a single message but you can set the `n` parameter to generate multiple messages choices.

Audio

Learn how to turn audio into text.

Related guide: [Speech to text](#)

Create transcription

POST <https://api.openai.com/v1/audio/transcriptions>

Transcribes audio into the input language.

Request body

file file **Required**

The audio file object (not file name) to transcribe, in one of these formats: flac, mp3, mp4, mpeg, mpga, m4a, ogg, wav, or webm.

model string **Required**

ID of the model to use. Only `whisper-1` is currently available.

prompt string Optional

An optional text to guide the model's style or continue a previous audio segment. The **prompt** should match the audio language.

response_format string Optional Defaults to json

The format of the transcript output, in one of these options: json, text, srt, verbose_json, or vtt.

temperature number Optional Defaults to 0

The sampling temperature, between 0 and 1. Higher values like 0.8 will make the output more random, while lower values like 0.2 will make it more focused and deterministic. If set to 0, the model will use **log probability** to automatically increase the temperature until certain thresholds are hit.

language string Optional

The language of the input audio. Supplying the input language in **ISO-639-1** format will improve accuracy and latency.

Returns

The transcribed text.

Example request

curl   Copy

```
1 curl https://api.openai.com/v1/audio/transcriptions \  
2   -H "Authorization: Bearer $OPENAI_API_KEY" \  
3   -H "Content-Type: multipart/form-data" \  
4   -F file="@/path/to/file/audio.mp3" \  
5   -F model="whisper-1"
```

Response

 Copy

```
1 {  
2   "text": "Imagine the wildest idea that you've ever had, and you're curious about it"  
3 }
```

Create translation

POST <https://api.openai.com/v1/audio/translations>

Translates audio into English.

Request body

file file **Required**

The audio file object (not file name) to translate, in one of these formats: flac, mp3, mp4, mpeg, mpga, m4a, ogg, wav, or webm.

model string **Required**

ID of the model to use. Only `whisper-1` is currently available.

prompt string Optional

An optional text to guide the model's style or continue a previous audio segment. The **prompt** should be in English.

response_format string Optional Defaults to json

The format of the transcript output, in one of these options: json, text, srt, verbose_json, or vtt.

temperature number Optional Defaults to 0

The sampling temperature, between 0 and 1. Higher values like 0.8 will make the output more random, while lower values like 0.2 will make it more focused and deterministic. If set to 0, the model will use **log probability** to automatically increase the temperature until certain thresholds are hit.

Returns

The translated text.

Example request

curl  Copy

```
1 curl https://api.openai.com/v1/audio/translations \
2   -H "Authorization: Bearer $OPENAI_API_KEY" \
3   -H "Content-Type: multipart/form-data" \
4   -F file="@/path/to/file/german.m4a" \
5   -F model="whisper-1"
```

Response

 Copy

```
1 {
2   "text": "Hello, my name is Wolfgang and I come from Germany. Where are you heading
3 }
```

Chat

Given a list of messages comprising a conversation, the model will return a response.

Related guide: [Chat completions](#)

The chat completion object

Represents a chat completion response returned by model, based on the provided input.

id string

A unique identifier for the chat completion.

object string

The object type, which is always `chat.completion`.

created integer

The Unix timestamp (in seconds) of when the chat completion was created.

model string

The model used for the chat completion.

choices array

A list of chat completion choices. Can be more than one if `n` is greater than 1.

[+ Show properties](#)

usage object

Usage statistics for the completion request.

[+ Show properties](#)

The chat completion object

 Copy

```
1  {
2    "id": "chatcmpl-123",
3    "object": "chat.completion",
4    "created": 1677652288,
5    "model": "gpt-3.5-turbo-0613",
6    "choices": [{
7      "index": 0,
8      "message": {
9        "role": "assistant",
10       "content": "\n\nHello there, how may I assist you today?",
11     },
12     "finish_reason": "stop"
```

```
13   }],  
14   "usage": {  
15     "prompt_tokens": 9,  
16     "completion_tokens": 12,  
17     "total_tokens": 21  
18   }  
19 }
```

The chat completion chunk object

Represents a streamed chunk of a chat completion response returned by model, based on the provided input.

id string

A unique identifier for the chat completion chunk.

object string

The object type, which is always `chat.completion.chunk`.

created integer

The Unix timestamp (in seconds) of when the chat completion chunk was created.

model string

The model to generate the completion.

choices array

A list of chat completion choices. Can be more than one if `n` is greater than 1.

[+ Show properties](#)

The chat completion chunk object

 Copy

```
1  {  
2    "id": "chatcmpl-123",  
3    "object": "chat.completion.chunk",  
4    "created": 1677652288,  
5    "model": "gpt-3.5-turbo",  
6    "choices": [{
```



```
7     "index": 0,  
8     "delta": {  
9         "content": "Hello",  
10    },  
11    "finish_reason": "stop"  
12  }]  
13 }
```

Create chat completion

POST <https://api.openai.com/v1/chat/completions>

Creates a model response for the given chat conversation.

Request body

`model` string **Required**

ID of the model to use. See the [model endpoint compatibility](#) table for details on which models work with the Chat API.

`messages` array **Required**

A list of messages comprising the conversation so far. [Example Python code](#).

[+ Show properties](#)

`functions` array **Optional**

A list of functions the model may generate JSON inputs for.

[+ Show properties](#)

`function_call` string or undefined **Optional**

Controls how the model responds to function calls. "none" means the model does not call a function, and responds to the end-user. "auto" means the model can pick between an end-user or calling a function. Specifying a particular function via `{"name": "my_function"}` forces the model to call that function. "none" is the default when no functions are present. "auto" is the default if functions are present.

`temperature` number or null **Optional** Defaults to 1

What sampling temperature to use, between 0 and 2. Higher values like 0.8 will make the output more random, while lower values like 0.2 will make it more focused and deterministic.

We generally recommend altering this or `top_p` but not both.

`top_p` number or null Optional Defaults to 1

An alternative to sampling with temperature, called nucleus sampling, where the model considers the results of the tokens with `top_p` probability mass. So 0.1 means only the tokens comprising the top 10% probability mass are considered.

We generally recommend altering this or `temperature` but not both.

`n` integer or null Optional Defaults to 1

How many chat completion choices to generate for each input message.

`stream` boolean or null Optional Defaults to false

If set, partial message deltas will be sent, like in ChatGPT. Tokens will be sent as data-only **server-sent events** as they become available, with the stream terminated by a `data: [DONE]` message.

[Example Python code.](#)

`stop` string / array / null Optional Defaults to null

Up to 4 sequences where the API will stop generating further tokens.

`max_tokens` integer or null Optional Defaults to inf

The maximum number of **tokens** to generate in the chat completion.

The total length of input tokens and generated tokens is limited by the model's context length.

[Example Python code](#) for counting tokens.

`presence_penalty` number or null Optional Defaults to 0

Number between -2.0 and 2.0. Positive values penalize new tokens based on whether they appear in the text so far, increasing the model's likelihood to talk about new topics.

[See more information about frequency and presence penalties.](#)

`frequency_penalty` number or null Optional Defaults to 0

Number between -2.0 and 2.0. Positive values penalize new tokens based on their existing frequency in the text so far, decreasing the model's likelihood to repeat the same line verbatim.

[See more information about frequency and presence penalties.](#)

`logit_bias` map Optional Defaults to null

Modify the likelihood of specified tokens appearing in the completion.

Accepts a json object that maps tokens (specified by their token ID in the tokenizer) to an associated bias value from -100 to 100. Mathematically, the bias is added to the logits generated by the model prior to sampling. The exact effect will vary per model, but values between -1 and 1 should decrease or increase likelihood of selection; values like -100 or 100 should result in a ban or exclusive selection of the relevant token.

user string Optional

A unique identifier representing your end-user, which can help OpenAI to monitor and detect abuse.

[Learn more.](#)

Returns

Returns a **chat completion** object, or a streamed sequence of **chat completion chunk** objects if the request is streamed.

NO STREAMING

STREAMING

Example request

gpt-3.5-turbo ▾ curl ▾  Copy

```
1 curl https://api.openai.com/v1/chat/completions \
2   -H "Content-Type: application/json" \
3   -H "Authorization: Bearer $OPENAI_API_KEY" \
4   -d '{
5     "model": "gpt-3.5-turbo",
6     "messages": [
7       {
8         "role": "system",
9         "content": "You are a helpful assistant."
10      },
11      {
12        "role": "user",
13        "content": "Hello!"
14      }
15    ]
16  }'
```

Response

 Copy

```
1 {
2   "id": "chatcmpl-123",
3   "object": "chat.completion",
4   "created": 1677652288,
```

```
5     "model": "gpt-3.5-turbo-0613",
6     "choices": [{
7         "index": 0,
8         "message": {
9             "role": "assistant",
10            "content": "\n\nHello there, how may I assist you today?",
11        },
12        "finish_reason": "stop"
13    }],
14    "usage": {
15        "prompt_tokens": 9,
16        "completion_tokens": 12,
17        "total_tokens": 21
18    }
19 }
```

Completions Legacy

Given a prompt, the model will return one or more predicted completions, and can also return the probabilities of alternative tokens at each position. We recommend most users use our Chat completions API. [Learn more](#)

Related guide: [Legacy Completions](#)

The completion object Legacy

Represents a completion response from the API. Note: both the streamed and non-streamed response objects share the same shape (unlike the chat endpoint).

id string

A unique identifier for the completion.

object string

The object type, which is always "text_completion"

created integer

The Unix timestamp (in seconds) of when the completion was created.

model string

The model used for completion.

choices array

The list of completion choices the model generated for the input prompt.

[+ Show properties](#)

usage object

Usage statistics for the completion request.

[+ Show properties](#)

The completion object

 Copy

```
1  {
2    "id": "cmpl-uqkvlQyYK7bGYrRHQ0eXlWi7",
3    "object": "text_completion",
4    "created": 1589478378,
5    "model": "gpt-3.5-turbo",
6    "choices": [
7      {
8        "text": "\n\nThis is indeed a test",
9        "index": 0,
10       "logprobs": null,
11       "finish_reason": "length"
12     }
13   ],
14   "usage": {
15     "prompt_tokens": 5,
16     "completion_tokens": 7,
17     "total_tokens": 12
18   }
19 }
```

Create completion Legacy

POST <https://api.openai.com/v1/completions>

Creates a completion for the provided prompt and parameters.

Request body

`model` string **Required**

ID of the model to use. You can use the [List models](#) API to see all of your available models, or see our [Model overview](#) for descriptions of them.

`prompt` string or array **Required**

The prompt(s) to generate completions for, encoded as a string, array of strings, array of tokens, or array of token arrays.

Note that `<|endoftext|>` is the document separator that the model sees during training, so if a prompt is not specified the model will generate as if from the beginning of a new document.

`suffix` string or null **Optional** Defaults to null

The suffix that comes after a completion of inserted text.

`max_tokens` integer or null **Optional** Defaults to 16

The maximum number of **tokens** to generate in the completion.

The token count of your prompt plus `max_tokens` cannot exceed the model's context length.

[Example Python code](#) for counting tokens.

`temperature` number or null **Optional** Defaults to 1

What sampling temperature to use, between 0 and 2. Higher values like 0.8 will make the output more random, while lower values like 0.2 will make it more focused and deterministic.

We generally recommend altering this or `top_p` but not both.

`top_p` number or null **Optional** Defaults to 1

An alternative to sampling with temperature, called nucleus sampling, where the model considers the results of the tokens with `top_p` probability mass. So 0.1 means only the tokens comprising the top 10% probability mass are considered.

We generally recommend altering this or `temperature` but not both.

`n` integer or null **Optional** Defaults to 1

How many completions to generate for each prompt.

Note: Because this parameter generates many completions, it can quickly consume your token quota. Use carefully and ensure that you have reasonable settings for `max_tokens` and `stop`.

`stream` boolean or null **Optional** Defaults to false

Whether to stream back partial progress. If set, tokens will be sent as data-only **server-sent events** as they become available, with the stream terminated by a `data: [DONE]` message. [Example Python code](#).

logprobs integer or null Optional Defaults to null

Include the log probabilities on the `logprobs` most likely tokens, as well the chosen tokens. For example, if `logprobs` is 5, the API will return a list of the 5 most likely tokens. The API will always return the `logprob` of the sampled token, so there may be up to `logprobs+1` elements in the response.

The maximum value for `logprobs` is 5.

echo boolean or null Optional Defaults to false

Echo back the prompt in addition to the completion

stop string / array / null Optional Defaults to null

Up to 4 sequences where the API will stop generating further tokens. The returned text will not contain the stop sequence.

presence_penalty number or null Optional Defaults to 0

Number between -2.0 and 2.0. Positive values penalize new tokens based on whether they appear in the text so far, increasing the model's likelihood to talk about new topics.

[See more information about frequency and presence penalties.](#)

frequency_penalty number or null Optional Defaults to 0

Number between -2.0 and 2.0. Positive values penalize new tokens based on their existing frequency in the text so far, decreasing the model's likelihood to repeat the same line verbatim.

[See more information about frequency and presence penalties.](#)

best_of integer or null Optional Defaults to 1

Generates `best_of` completions server-side and returns the "best" (the one with the highest log probability per token). Results cannot be streamed.

When used with `n`, `best_of` controls the number of candidate completions and `n` specifies how many to return – `best_of` must be greater than `n`.

Note: Because this parameter generates many completions, it can quickly consume your token quota. Use carefully and ensure that you have reasonable settings for `max_tokens` and `stop`.

logit_bias map Optional Defaults to null

Modify the likelihood of specified tokens appearing in the completion.

Accepts a json object that maps tokens (specified by their token ID in the GPT tokenizer) to an associated bias value from -100 to 100. You can use this [tokenizer tool](#) (which works for both GPT-2 and GPT-3) to convert text to token IDs. Mathematically, the bias is added to the logits generated by the model prior to sampling. The exact effect will vary per model, but values between -1 and 1 should decrease or increase likelihood of selection; values like -100 or 100 should result in a ban or exclusive selection of the relevant token.

As an example, you can pass `{"50256": -100}` to prevent the `<|endoftext|>` token from being generated.

user string Optional

A unique identifier representing your end-user, which can help OpenAI to monitor and detect abuse. [Learn more.](#)

Returns

Returns a **completion** object, or a sequence of completion objects if the request is streamed.

NO STREAMING

STREAMING

Example request

text-davinci-003 ▾ curl ▾  Copy

```
1 curl https://api.openai.com/v1/completions \
2   -H "Content-Type: application/json" \
3   -H "Authorization: Bearer $OPENAI_API_KEY" \
4   -d '{
5     "model": "text-davinci-003",
6     "prompt": "Say this is a test",
7     "max_tokens": 7,
8     "temperature": 0
9   }'
```

Response

text-davinci-003 ▾  Copy

```
1 {
2   "id": "cmpl-uqkvlQyYK7bGYrRHQ0eXlWi7",
3   "object": "text_completion",
4   "created": 1589478378,
5   "model": "text-davinci-003",
6   "choices": [
```



```
7      {
8        "text": "\n\nThis is indeed a test",
9        "index": 0,
10       "logprobs": null,
11       "finish_reason": "length"
12     }
13   ],
14   "usage": {
15     "prompt_tokens": 5,
16     "completion_tokens": 7,
17     "total_tokens": 12
18   }
19 }
```

Embeddings

Get a vector representation of a given input that can be easily consumed by machine learning models and algorithms.

Related guide: [Embeddings](#)

The embedding object

Represents an embedding vector returned by embedding endpoint.

index integer

The index of the embedding in the list of embeddings.

object string

The object type, which is always "embedding".

embedding array

The embedding vector, which is a list of floats. The length of vector depends on the model as listed in the [embedding guide](#).

The embedding object

```
1  {
2    "object": "embedding",
3    "embedding": [
4      0.0023064255,
5      -0.009327292,
6      .... (1536 floats total for ada-002)
7      -0.0028842222,
8    ],
9    "index": 0
10 }
```

Create embeddings

POST <https://api.openai.com/v1/embeddings>

Creates an embedding vector representing the input text.

Request body

model string **Required**

ID of the model to use. You can use the [List models](#) API to see all of your available models, or see our [Model overview](#) for descriptions of them.

input string or array **Required**

Input text to embed, encoded as a string or array of tokens. To embed multiple inputs in a single request, pass an array of strings or array of token arrays. Each input must not exceed the max input tokens for the model (8191 tokens for `text-embedding-ada-002`). [Example Python code](#) for counting tokens.

user string **Optional**

A unique identifier representing your end-user, which can help OpenAI to monitor and detect abuse. [Learn more.](#)

Returns

A list of **embedding** objects.

Example request

curl   Copy

```
1 curl https://api.openai.com/v1/embeddings \
2   -H "Authorization: Bearer $OPENAI_API_KEY" \
3   -H "Content-Type: application/json" \
4   -d '{
5     "input": "The food was delicious and the waiter...",
6     "model": "text-embedding-ada-002"
7   }'
```

Response

 Copy

```
1  {
2    "object": "list",
3    "data": [
4      {
5        "object": "embedding",
6        "embedding": [
7          0.0023064255,
8          -0.009327292,
9          .... (1536 floats total for ada-002)
10         -0.0028842222,
11       ],
12       "index": 0
13     }
14   ],
15   "model": "text-embedding-ada-002",
16   "usage": {
17     "prompt_tokens": 8,
18     "total_tokens": 8
19   }
20 }
```

Fine-tuning

Manage fine-tuning jobs to tailor a model to your specific training data.

Related guide: **[fine-tune models](#)**

The fine-tuning job object

The `fine_tuning.job` object represents a fine-tuning job that has been created through the API.

`id` string

The object identifier, which can be referenced in the API endpoints.

`object` string

The object type, which is always "fine_tuning.job".

`created_at` integer

The Unix timestamp (in seconds) for when the fine-tuning job was created.

`finished_at` integer or null

The Unix timestamp (in seconds) for when the fine-tuning job was finished. The value will be null if the fine-tuning job is still running.

`model` string

The base model that is being fine-tuned.

`fine_tuned_model` string or null

The name of the fine-tuned model that is being created. The value will be null if the fine-tuning job is still running.

`organization_id` string

The organization that owns the fine-tuning job.

`status` string

The current status of the fine-tuning job, which can be either `created`, `pending`, `running`, `succeeded`, `failed`, or `cancelled`.

`hyperparameters` object

The hyperparameters used for the fine-tuning job. See the [fine-tuning guide](#) for more details.

[+ Show properties](#)

training_file string

The file ID used for training. You can retrieve the training data with the [Files API](#).

validation_file string or null

The file ID used for validation. You can retrieve the validation results with the [Files API](#).

result_files array

The compiled results file ID(s) for the fine-tuning job. You can retrieve the results with the [Files API](#).

trained_tokens integer or null

The total number of billable tokens processed by this fine-tuning job. The value will be null if the fine-tuning job is still running.

The fine-tuning job object

 Copy

```

1  {
2    "object": "fine_tuning.job",
3    "id": "ft-zRdUkP4QeZqeYjDcQL0wwam1",
4    "model": "davinci-002",
5    "created_at": 1692661014,
6    "finished_at": 1692661190,
7    "fine_tuned_model": "ft:davinci-002:my-org:custom_suffix:7q8mpxmy",
8    "organization_id": "org-123",
9    "result_files": [
10     "file-abc123"
11   ],
12   "status": "succeeded",
13   "validation_file": null,
14   "training_file": "file-abc123",
15   "hyperparameters": {
16     "n_epochs": 4,
17   },
18   "trained_tokens": 5768 | null
19 }
```

Create fine-tuning job

POST https://api.openai.com/v1/fine_tuning/jobs

Creates a job that fine-tunes a specified model from a given dataset.

Response includes details of the enqueued job including job status and the name of the fine-tuned models once complete.

[Learn more about fine-tuning](#)

Request body

`training_file` string **Required**

The ID of an uploaded file that contains training data.

See [upload file](#) for how to upload a file.

Your dataset must be formatted as a JSONL file. Additionally, you must upload your file with the purpose `fine-tune`.

See the [fine-tuning guide](#) for more details.

`validation_file` string or null **Optional**

The ID of an uploaded file that contains validation data.

If you provide this file, the data is used to generate validation metrics periodically during fine-tuning. These metrics can be viewed in the fine-tuning results file. The same data should not be present in both train and validation files.

Your dataset must be formatted as a JSONL file. You must upload your file with the purpose `fine-tune`.

See the [fine-tuning guide](#) for more details.

`model` string **Required**

The name of the model to fine-tune. You can select one of the [supported models](#).

`hyperparameters` object **Optional**

The hyperparameters used for the fine-tuning job.

[+ Show properties](#)

`suffix` string or null **Optional** Defaults to null

A string of up to 18 characters that will be added to your fine-tuned model name.

For example, a `suffix` of "custom-model-name" would produce a model name like `ft:gpt-3.5-turbo:openai:custom-model-name:7p4lURel`.

Returns

A **`fine-tuning.job`** object.

NO HYPERPARAMETERS

HYPERPARAMETERS

Example request

curl   Copy

```
1 curl https://api.openai.com/v1/fine_tuning/jobs \
2   -H "Content-Type: application/json" \
3   -H "Authorization: Bearer $OPENAI_API_KEY" \
4   -d '{
5     "training_file": "file-abc123"
6     "model": "gpt-3.5-turbo",
7   }'
```

Response

 Copy

```
1 {
2   "object": "fine_tuning.job",
3   "id": "ft-AF1WoRqd3aJAHsqc9NY7iL8F",
4   "model": "gpt-3.5-turbo-0613",
5   "created_at": 1614807352,
6   "fine_tuned_model": null,
7   "organization_id": "org-123",
8   "result_files": [],
9   "status": "pending",
10  "validation_file": null,
11  "training_file": "file-abc123",
12 }
```

List fine-tuning jobs

GET `https://api.openai.com/v1/fine_tuning/jobs`

List your organization's fine-tuning jobs

Query parameters

after string Optional

Identifier for the last job from the previous pagination request.

limit integer Optional Defaults to 20

Number of fine-tuning jobs to retrieve.

Returns

A list of paginated **fine-tuning job** objects.

Example request

curl   Copy

```
1 curl https://api.openai.com/v1/fine_tuning/jobs?limit=2 \  
2   -H "Authorization: Bearer $OPENAI_API_KEY"
```

Response

 Copy

```
1  {  
2    "object": "list",  
3    "data": [  
4      {  
5        "object": "fine_tuning.job.event",  
6        "id": "ft-event-TjX0lMf0niCZX64t9PUQT5hn",  
7        "created_at": 1689813489,  
8        "level": "warn",  
9        "message": "Fine tuning process stopping due to job cancellation",  
10       "data": null,  
11       "type": "message"  
12     },  
13     { ... },  
14     { ... }  
15   ], "has_more": true  
16 }
```

Retrieve fine-tuning job


```
GET https://api.openai.com/v1/fine_tuning/jobs/{fine_tuning_job_id}
```

Get info about a fine-tuning job.

Learn more about fine-tuning

Path parameters

`fine_tuning_job_id` string Optional

The ID of the fine-tuning job.

Returns

The **fine-tuning** object with the given ID.

Example request

curl   Copy

```
1 curl https://api.openai.com/v1/fine_tuning/jobs/ft-AF1WoRqd3aJAHsqc9NY7iL8F \
2   -H "Authorization: Bearer $OPENAI_API_KEY"
```

Response

 Copy

```
1 {
2   "object": "fine_tuning.job",
3   "id": "ft-zRdUkP4QeZqeYjDcQL0wwam1",
4   "model": "davinci-002",
5   "created_at": 1692661014,
6   "finished_at": 1692661190,
7   "fine_tuned_model": "ft:davinci-002:my-org:custom_suffix:7q8mpxmy",
8   "organization_id": "org-123",
9   "result_files": [
10     "file-abc123"
11   ],
12   "status": "succeeded",
13   "validation_file": null,
14   "training_file": "file-abc123",
15   "hyperparameters": {
16     "n_epochs": 4,
17   },
18   "trained_tokens": 5768 | null
19 }
```

Cancel fine-tuning

POST https://api.openai.com/v1/fine_tuning/jobs/{fine_tuning_job_id}/cancel

Immediately cancel a fine-tune job.

Path parameters

`fine_tuning_job_id` string Optional

The ID of the fine-tuning job to cancel.

Returns

The cancelled **fine-tuning** object.

Example request

curl   Copy

```
1 curl -X POST https://api.openai.com/v1/fine_tuning/jobs/ft-AF1WoRqd3aJAHsqc9NY7iL8F/  
2   -H "Authorization: Bearer $OPENAI_API_KEY"
```

Response

 Copy

```
1  {  
2    "object": "fine_tuning.job",  
3    "id": "ft-gleYLJhWh1YFufiy29AahVpj",  
4    "model": "gpt-3.5-turbo-0613",  
5    "created_at": 1689376978,  
6    "fine_tuned_model": null,  
7    "organization_id": "org-123",  
8    "result_files": [],  
9    "hyperparameters": {  
10     "n_epochs": "auto"  
11   },  
12   "status": "cancelled",  
13   "validation_file": "file-abc123",  
14   "training_file": "file-abc123"  
15 }
```

List fine-tuning events

GET `https://api.openai.com/v1/fine_tuning/jobs/{fine_tuning_job_id}/events`

Get status updates for a fine-tuning job.

Path parameters

`fine_tuning_job_id` string Optional

The ID of the fine-tuning job to get events for.

Query parameters

`after` string Optional

Identifier for the last event from the previous pagination request.

`limit` integer Optional Defaults to 20

Number of events to retrieve.

Returns

A list of fine-tuning event objects.

Example request

curl   Copy

```
1 curl https://api.openai.com/v1/fine_tuning/jobs/ft-AF1WoRqd3aJAHsqc9NY7iL8F/events \
2   -H "Authorization: Bearer $OPENAI_API_KEY"
```

Response

 Copy

```
1 {
2   "object": "list",
3   "data": [
4     {
5       "object": "fine_tuning.job.event",
```

```
6      "id": "ft-event-ddTJfwuMVpfLXse00Am0Gqjm",
7      "created_at": 1692407401,
8      "level": "info",
9      "message": "Fine tuning job successfully completed",
10     "data": null,
11     "type": "message"
12 },
13 {
14     "object": "fine_tuning.job.event",
15     "id": "ft-event-tyiGuB72evQncpH87xe505Sv",
16     "created_at": 1692407400,
17     "level": "info",
18     "message": "New fine-tuned model created: ft:gpt-3.5-turbo:openai::7p4lURel",
19     "data": null,
20     "type": "message"
21 }
22 ],
23 "has_more": true
24 }
```

Files

Files are used to upload documents that can be used with features like **fine-tuning**.

The file object

The `File` object represents a document that has been uploaded to OpenAI.

`id` string

The file identifier, which can be referenced in the API endpoints.

`object` string

The object type, which is always "file".

`bytes` integer

The size of the file in bytes.

`created_at` integer

The Unix timestamp (in seconds) for when the file was created.

`filename` string

The name of the file.

`purpose` string

The intended purpose of the file. Currently, only "fine-tune" is supported.

`status` string

The current status of the file, which can be either `uploaded`, `processed`, `pending`, `error`, `deleting` or `deleted`.

`status_details` string or null

Additional details about the status of the file. If the file is in the `error` state, this will include a message describing the error.

The file object

 Copy

```
1  {
2    "id": "file-abc123",
3    "object": "file",
4    "bytes": 120000,
5    "created_at": 1677610602,
6    "filename": "my_file.jsonl",
7    "purpose": "fine-tune",
8    "status": "uploaded",
9    "status_details": null
10 }
```

List files

GET <https://api.openai.com/v1/files>

Returns a list of files that belong to the user's organization.

Returns

A list of **file** objects.

Example request

curl   Copy

```
1 curl https://api.openai.com/v1/files \  
2   -H "Authorization: Bearer $OPENAI_API_KEY"
```

Response

 Copy

```
1  {  
2    "data": [  
3      {  
4        "id": "file-abc123",  
5        "object": "file",  
6        "bytes": 175,  
7        "created_at": 1613677385,  
8        "filename": "train.jsonl",  
9        "purpose": "search"  
10     },  
11     {  
12       "id": "file-abc123",  
13       "object": "file",  
14       "bytes": 140,  
15       "created_at": 1613779121,  
16       "filename": "puppy.jsonl",  
17       "purpose": "search"  
18     }  
19   ],  
20   "object": "list"  
21 }
```

Upload file

POST <https://api.openai.com/v1/files>

Upload a file that contains document(s) to be used across various endpoints/features. Currently, the size of all the files uploaded by one organization can be up to 1 GB. Please contact us if you need to increase the storage limit.

Request body

`file` string **Required**

Name of the **JSON Lines** file to be uploaded.

If the `purpose` is set to "fine-tune", the file will be used for fine-tuning.

`purpose` string **Required**

The intended purpose of the uploaded documents.

Use "fine-tune" for **fine-tuning**. This allows us to validate the format of the uploaded file.

Returns

The uploaded **file** object.

Example request

curl   Copy

```
1 curl https://api.openai.com/v1/files \
2   -H "Authorization: Bearer $OPENAI_API_KEY" \
3   -F purpose="fine-tune" \
4   -F file="@mydata.jsonl"
```

Response

 Copy

```
1 {
2   "id": "file-abc123",
3   "object": "file",
4   "bytes": 140,
5   "created_at": 1613779121,
6   "filename": "mydata.jsonl",
7   "purpose": "fine-tune",
8   "status": "uploaded" | "processed" | "pending" | "error"
9 }
```

Delete file

DELETE https://api.openai.com/v1/files/{file_id}

Delete a file.

Path parameters

file_id string Optional

The ID of the file to use for this request.

Returns

Deletion status.

Example request

curl   Copy

```
1 curl https://api.openai.com/v1/files/file-abc123 \  
2   -X DELETE \  
3   -H "Authorization: Bearer $OPENAI_API_KEY"
```

Response

 Copy

```
1 {  
2   "id": "file-abc123",  
3   "object": "file",  
4   "deleted": true  
5 }
```

Retrieve file

GET https://api.openai.com/v1/files/{file_id}

Returns information about a specific file.

Path parameters

file_id string Optional

The ID of the file to use for this request.

Returns

The **file** object matching the specified ID.

Example request

curl   Copy

```
1 curl https://api.openai.com/v1/files/file-abc123 \  
2   -H "Authorization: Bearer $OPENAI_API_KEY"
```

Response

 Copy

```
1 {  
2   "id": "file-abc123",  
3   "object": "file",  
4   "bytes": 140,  
5   "created_at": 1613779657,  
6   "filename": "mydata.jsonl",  
7   "purpose": "fine-tune"  
8 }
```

Retrieve file content

GET `https://api.openai.com/v1/files/{file_id}/content`

Returns the contents of the specified file.

Path parameters

`file_id` string Optional

The ID of the file to use for this request.

Returns

The file content.

Example request

curl   Copy

```
1 curl https://api.openai.com/v1/files/file-abc123/content \  
2   -H "Authorization: Bearer $OPENAI_API_KEY" > file.jsonl
```

Images

Given a prompt and/or an input image, the model will generate a new image.

Related guide: [Image generation](#)

The image object

Represents the url or the content of an image generated by the OpenAI API.

`url` string

The URL of the generated image, if `response_format` is `url` (default).

`b64_json` string

The base64-encoded JSON of the generated image, if `response_format` is `b64_json`.

The image object

 Copy

```
1 {  
2   "url": "..."  
3 }
```

Create image

POST <https://api.openai.com/v1/images/generations>

Creates an image given a prompt.

Request body

prompt string **Required**

A text description of the desired image(s). The maximum length is 1000 characters.

n integer or null Optional Defaults to 1

The number of images to generate. Must be between 1 and 10.

size string or null Optional Defaults to 1024x1024

The size of the generated images. Must be one of `256x256`, `512x512`, or `1024x1024`.

response_format string or null Optional Defaults to url

The format in which the generated images are returned. Must be one of `url` or `b64_json`.

user string Optional

A unique identifier representing your end-user, which can help OpenAI to monitor and detect abuse.

[Learn more.](#)

Returns

Returns a list of **image** objects.

Example request

curl   Copy

```
1 curl https://api.openai.com/v1/images/generations \
2   -H "Content-Type: application/json" \
3   -H "Authorization: Bearer $OPENAI_API_KEY" \
4   -d '{
5     "prompt": "A cute baby sea otter",
6     "n": 2,
7     "size": "1024x1024"
8   }'
```

Response

```
1  {
2    "created": 1589478378,
3    "data": [
4      {
5        "url": "https://..."
6      },
7      {
8        "url": "https://..."
9      }
10   ]
11 }
```

Create image edit

POST <https://api.openai.com/v1/images/edits>



Creates an edited or extended image given an original image and a prompt.

Request body

image string **Required**

The image to edit. Must be a valid PNG file, less than 4MB, and square. If mask is not provided, image must have transparency, which will be used as the mask.

mask string **Optional**

An additional image whose fully transparent areas (e.g. where alpha is zero) indicate where  should be edited. Must be a valid PNG file, less than 4MB, and have the same dimensions as  .

prompt string **Required**

A text description of the desired image(s). The maximum length is 1000 characters.

n integer or null **Optional** Defaults to 1

The number of images to generate. Must be between 1 and 10.

size string or null **Optional** Defaults to 1024x1024

The size of the generated images. Must be one of `256x256`, `512x512`, or `1024x1024`.

response_format string or null Optional Defaults to url

The format in which the generated images are returned. Must be one of `url` or `b64_json`.

user string Optional

A unique identifier representing your end-user, which can help OpenAI to monitor and detect abuse.

[Learn more.](#)

Returns

Returns a list of **image** objects.

Example request

curl   Copy

```
1 curl https://api.openai.com/v1/images/edits \  
2   -H "Authorization: Bearer $OPENAI_API_KEY" \  
3   -F image="@otter.png" \  
4   -F mask="@mask.png" \  
5   -F prompt="A cute baby sea otter wearing a beret" \  
6   -F n=2 \  
7   -F size="1024x1024"
```

Response

 Copy

```
1  {  
2    "created": 1589478378,  
3    "data": [  
4      {  
5        "url": "https://..."  
6      },  
7      {  
8        "url": "https://..."  
9      }  
10   ]  
11 }
```

Create image variation

POST `https://api.openai.com/v1/images/variations`

Creates a variation of a given image.

Request body

image string **Required**

The image to use as the basis for the variation(s). Must be a valid PNG file, less than 4MB, and square.

n integer or null Optional Defaults to 1

The number of images to generate. Must be between 1 and 10.

size string or null Optional Defaults to 1024x1024

The size of the generated images. Must be one of `256x256` , `512x512` , or `1024x1024` .

response_format string or null Optional Defaults to url

The format in which the generated images are returned. Must be one of `url` or `b64_json` .

user string Optional

A unique identifier representing your end-user, which can help OpenAI to monitor and detect abuse.

[Learn more.](#)

Returns

Returns a list of **image** objects.

Example request

curl   Copy

```
1 curl https://api.openai.com/v1/images/variations \  
2   -H "Authorization: Bearer $OPENAI_API_KEY" \  
3   -F image="@otter.png" \  
4   -F n=2 \  
5   -F size="1024x1024"
```

Response

```
1  {
2    "created": 1589478378,
3    "data": [
4      {
5        "url": "https://..."
6      },
7      {
8        "url": "https://..."
9      }
10   ]
11 }
```

Models

List and describe the various models available in the API. You can refer to the [Models](#) documentation to understand what models are available and the differences between them.

The model object

Describes an OpenAI model offering that can be used with the API.

id string

The model identifier, which can be referenced in the API endpoints.

object string

The object type, which is always "model".

created integer

The Unix timestamp (in seconds) when the model was created.

owned_by string

The organization that owns the model.

The model object

✓  Copy

```
1 {
2   "id": "davinci",
3   "object": "model",
4   "created": 1686935002,
5   "owned_by": "openai"
6 }
```

List models

GET <https://api.openai.com/v1/models>

Lists the currently available models, and provides basic information about each one such as the owner and availability.

Returns

A list of **model** objects.

Example request

curl ✓  Copy

```
1 curl https://api.openai.com/v1/models \
2   -H "Authorization: Bearer $OPENAI_API_KEY"
```

Response

 Copy

```
1 {
2   "object": "list",
3   "data": [
4     {
5       "id": "model-id-0",
6       "object": "model",
7       "created": 1686935002,
8       "owned_by": "organization-owner"
9     },
10    {
11      "id": "model-id-1",
12      "object": "model",
```



```
13     "created": 1686935002,  
14     "owned_by": "organization-owner",  
15 },  
16 {  
17     "id": "model-id-2",  
18     "object": "model",  
19     "created": 1686935002,  
20     "owned_by": "openai"  
21 },  
22 ],  
23 "object": "list"  
24 }
```

Retrieve model

GET <https://api.openai.com/v1/models/{model}>

Retrieves a model instance, providing basic information about the model such as the owner and permissioning.

Path parameters

`model` string Optional

The ID of the model to use for this request

Returns

The **model** object matching the specified ID.

Example request

text-davinci-003 ▾ curl ▾  Copy

```
1 curl https://api.openai.com/v1/models/text-davinci-003 \  
2 -H "Authorization: Bearer $OPENAI_API_KEY"
```

Response

text-davinci-003 ▾  Copy

```
1 {  
2   "id": "text-davinci-003",  
3   "object": "model",  
4   "created": 1686935002,  
5   "owned_by": "openai"  
6 }
```

Delete fine-tune model

DELETE <https://api.openai.com/v1/models/{model}>

Delete a fine-tuned model. You must have the Owner role in your organization to delete a model.

Path parameters

model string Optional

The model to delete

Returns

Deletion status.

Example request

curl   Copy

```
1 curl https://api.openai.com/v1/models/ft:gpt-3.5-turbo:acemeco:suffix:abc123 \  
2   -X DELETE \  
3   -H "Authorization: Bearer $OPENAI_API_KEY"
```

Response

 Copy

```
1 {  
2   "id": "ft:gpt-3.5-turbo:acemeco:suffix:abc123",  
3   "object": "model",  
4   "deleted": true  
5 }
```

Moderations

Given a input text, outputs if the model classifies it as violating OpenAI's content policy.

Related guide: [Moderations](#)

The moderation object

Represents policy compliance report by OpenAI's content moderation model against a given input.

id string

The unique identifier for the moderation request.

model string

The model used to generate the moderation results.

results array

A list of moderation objects.

[+ Show properties](#)

The moderation object

 Copy

```
1  {
2    "id": "modr-XXXXX",
3    "model": "text-moderation-005",
4    "results": [
5      {
6        "flagged": true,
7        "categories": {
8          "sexual": false,
9          "hate": false,
10         "harassment": false,
11         "self-harm": false,
12         "sexual/minors": false,
13         "hate/threatening": false,
14         "violence/graphic": false,
```

```
15     "self-harm/intent": false,  
16     "self-harm/instructions": false,  
17     "harassment/threatening": true,  
18     "violence": true,  
19 },  
20 "category_scores": {  
21     "sexual": 1.2282071e-06,  
22     "hate": 0.010696256,  
23     "harassment": 0.29842457,  
24     "self-harm": 1.5236925e-08,  
25     "sexual/minors": 5.7246268e-08,  
26     "hate/threatening": 0.0060676364,  
27     "violence/graphic": 4.435014e-06,  
28     "self-harm/intent": 8.098441e-10,  
29     "self-harm/instructions": 2.8498655e-11,  
30     "harassment/threatening": 0.63055265,  
31     "violence": 0.99011886,  
32 }  
33 }  
34 ]  
35 }
```

Create moderation

POST <https://api.openai.com/v1/moderations>

Classifies if text violates OpenAI's Content Policy

Request body

input string or array **Required**

The input text to classify

model string Optional Defaults to text-moderation-latest

Two content moderations models are available: `text-moderation-stable` and `text-moderation-latest`.

The default is `text-moderation-latest` which will be automatically upgraded over time. This ensures you are always using our most accurate model. If you use `text-moderation-stable`, we will provide advanced notice before updating the model. Accuracy of `text-moderation-stable` may be slightly lower than for `text-moderation-latest`.

Returns

A **moderation** object.

Example request

curl   Copy

```
1 curl https://api.openai.com/v1/moderations \  
2   -H "Content-Type: application/json" \  
3   -H "Authorization: Bearer $OPENAI_API_KEY" \  
4   -d '{  
5     "input": "I want to kill them."  
6   }'
```

Response

 Copy

```
1  {  
2    "id": "modr-XXXXX",  
3    "model": "text-moderation-005",  
4    "results": [  
5      {  
6        "flagged": true,  
7        "categories": {  
8          "sexual": false,  
9          "hate": false,  
10         "harassment": false,  
11         "self-harm": false,  
12         "sexual/minors": false,  
13         "hate/threatening": false,  
14         "violence/graphic": false,  
15         "self-harm/intent": false,  
16         "self-harm/instructions": false,  
17         "harassment/threatening": true,  
18         "violence": true,  
19       },  
20       "category_scores": {  
21         "sexual": 1.2282071e-06,  
22         "hate": 0.010696256,  
23         "harassment": 0.29842457,  
24         "self-harm": 1.5236925e-08,  
25         "sexual/minors": 5.7246268e-08,  
26         "hate/threatening": 0.0060676364,  
27         "violence/graphic": 4.435014e-06,  
28         "self-harm/intent": 8.098441e-10,  
29         "self-harm/instructions": 2.8498655e-11,  
30         "harassment/threatening": 0.63055265,
```

```
31         "violence": 0.99011886,  
32     }  
33 }  
34 ]  
35 }
```

Fine-tunes Deprecated

Manage legacy fine-tuning jobs to tailor a model to your specific training data.

We recommend transitioning to the updating [fine-tuning API](#)

The fine-tune object Deprecated

The `FineTune` object represents a legacy fine-tune job that has been created through the API.

`id` string

The object identifier, which can be referenced in the API endpoints.

`object` string

The object type, which is always "fine-tune".

`created_at` integer

The Unix timestamp (in seconds) for when the fine-tuning job was created.

`updated_at` integer

The Unix timestamp (in seconds) for when the fine-tuning job was last updated.

`model` string

The base model that is being fine-tuned.

`fine_tuned_model` string or null

The name of the fine-tuned model that is being created.

organization_id string

The organization that owns the fine-tuning job.

status string

The current status of the fine-tuning job, which can be either `created`, `running`, `succeeded`, `failed`, or `cancelled`.

hyperparams object

The hyperparameters used for the fine-tuning job. See the [fine-tuning guide](#) for more details.

[+ Show properties](#)

training_files array

The list of files used for training.

validation_files array

The list of files used for validation.

result_files array

The compiled results files for the fine-tuning job.

events array

The list of events that have been observed in the lifecycle of the FineTune job.

The fine-tune object

 Copy

```

1  {
2    "id": "ft-AF1WoRqd3aJAHsqc9NY7iL8F",
3    "object": "fine-tune",
4    "model": "curie",
5    "created_at": 1614807352,
6    "events": [
7      {
8        "object": "fine-tune-event",
9        "created_at": 1614807352,
10       "level": "info",
11       "message": "Job enqueued. Waiting for jobs ahead to complete. Queue number: 0",
12     },
13     {
14       "object": "fine-tune-event",
15       "created_at": 1614807356,

```

```
16     "level": "info",
17     "message": "Job started."
18 },
19 {
20     "object": "fine-tune-event",
21     "created_at": 1614807861,
22     "level": "info",
23     "message": "Uploaded snapshot: curie:ft-acmeco-2021-03-03-21-44-20."
24 },
25 {
26     "object": "fine-tune-event",
27     "created_at": 1614807864,
28     "level": "info",
29     "message": "Uploaded result files: file-abc123."
30 },
31 {
32     "object": "fine-tune-event",
33     "created_at": 1614807864,
34     "level": "info",
35     "message": "Job succeeded."
36 }
37 ],
38 "fine_tuned_model": "curie:ft-acmeco-2021-03-03-21-44-20",
39 "hyperparams": {
40     "batch_size": 4,
41     "learning_rate_multiplier": 0.1,
42     "n_epochs": 4,
43     "prompt_loss_weight": 0.1,
44 },
45 "organization_id": "org-123",
46 "result_files": [
47     {
48         "id": "file-abc123",
49         "object": "file",
50         "bytes": 81509,
51         "created_at": 1614807863,
52         "filename": "compiled_results.csv",
53         "purpose": "fine-tune-results"
54     }
55 ],
56 "status": "succeeded",
57 "validation_files": [],
58 "training_files": [
59     {
60         "id": "file-abc123",
61         "object": "file",
62         "bytes": 1547276,
63         "created_at": 1610062281,
64         "filename": "my-data-train.jsonl",
```



```
65     "purpose": "fine-tune-train"  
66   }  
67 ],  
68 "updated_at": 1614807865,  
69 }
```

Create fine-tune Deprecated

POST <https://api.openai.com/v1/fine-tunes>

Creates a job that fine-tunes a specified model from a given dataset.

Response includes details of the enqueued job including job status and the name of the fine-tuned models once complete.

[Learn more about fine-tuning](#)

Request body

`training_file` string Required

The ID of an uploaded file that contains training data.

See [upload file](#) for how to upload a file.

Your dataset must be formatted as a JSONL file, where each training example is a JSON object with the keys "prompt" and "completion". Additionally, you must upload your file with the purpose `fine-tune`.

See the [fine-tuning guide](#) for more details.

`validation_file` string or null Optional

The ID of an uploaded file that contains validation data.

If you provide this file, the data is used to generate validation metrics periodically during fine-tuning. These metrics can be viewed in the [fine-tuning results file](#). Your train and validation data should be mutually exclusive.

Your dataset must be formatted as a JSONL file, where each validation example is a JSON object with the keys "prompt" and "completion". Additionally, you must upload your file with the purpose `fine-tune`.

See the [fine-tuning guide](#) for more details.

model string Optional Defaults to curie

The name of the base model to fine-tune. You can select one of "ada", "babbage", "curie", "davinci", or a fine-tuned model created after 2022-04-21 and before 2023-08-22. To learn more about these models, see the [Models](#) documentation.

n_epochs integer or null Optional Defaults to 4

The number of epochs to train the model for. An epoch refers to one full cycle through the training dataset.

batch_size integer or null Optional Defaults to null

The batch size to use for training. The batch size is the number of training examples used to train a single forward and backward pass.

By default, the batch size will be dynamically configured to be ~0.2% of the number of examples in the training set, capped at 256 - in general, we've found that larger batch sizes tend to work better for larger datasets.

learning_rate_multiplier number or null Optional Defaults to null

The learning rate multiplier to use for training. The fine-tuning learning rate is the original learning rate used for pretraining multiplied by this value.

By default, the learning rate multiplier is the 0.05, 0.1, or 0.2 depending on final `batch_size` (larger learning rates tend to perform better with larger batch sizes). We recommend experimenting with values in the range 0.02 to 0.2 to see what produces the best results.

prompt_loss_weight number or null Optional Defaults to 0.01

The weight to use for loss on the prompt tokens. This controls how much the model tries to learn to generate the prompt (as compared to the completion which always has a weight of 1.0), and can add a stabilizing effect to training when completions are short.

If prompts are extremely long (relative to completions), it may make sense to reduce this weight so as to avoid over-prioritizing learning the prompt.

compute_classification_metrics boolean or null Optional Defaults to false

If set, we calculate classification-specific metrics such as accuracy and F-1 score using the validation set at the end of every epoch. These metrics can be viewed in the [results file](#).

In order to compute classification metrics, you must provide a `validation_file`. Additionally, you must specify `classification_n_classes` for multiclass classification or `classification_positive_class` for binary classification.

classification_n_classes integer or null Optional Defaults to null

The number of classes in a classification task.

This parameter is required for multiclass classification.

classification_positive_class string or null Optional Defaults to null

The positive class in binary classification.

This parameter is needed to generate precision, recall, and F1 metrics when doing binary classification.

classification_betas array or null Optional Defaults to null

If this is provided, we calculate F-beta scores at the specified beta values. The F-beta score is a generalization of F-1 score. This is only used for binary classification.

With a beta of 1 (i.e. the F-1 score), precision and recall are given the same weight. A larger beta score puts more weight on recall and less on precision. A smaller beta score puts more weight on precision and less on recall.

suffix string or null Optional Defaults to null

A string of up to 40 characters that will be added to your fine-tuned model name.

For example, a `suffix` of "custom-model-name" would produce a model name like `ada:ft-your-org:custom-model-name-2022-02-15-04-21-04`.

Returns

A **`fine-tune`** object.

Example request

curl   Copy

```
1 curl https://api.openai.com/v1/fine-tunes \
2   -H "Content-Type: application/json" \
3   -H "Authorization: Bearer $OPENAI_API_KEY" \
4   -d '{
5     "training_file": "file-abc123"
6   }'
```

Response

 Copy

```
1  {
2    "id": "ft-AF1WoRqd3aJAHsqc9NY7iL8F",
3    "object": "fine-tune",
4    "model": "curie",
5    "created_at": 1614807352,
6    "events": [
7      {
8        "object": "fine-tune-event",
9        "created_at": 1614807352,
10       "level": "info",
11       "message": "Job enqueued. Waiting for jobs ahead to complete. Queue number: 6"
12     }
13   ],
14   "fine_tuned_model": null,
15   "hyperparams": {
16     "batch_size": 4,
17     "learning_rate_multiplier": 0.1,
18     "n_epochs": 4,
19     "prompt_loss_weight": 0.1,
20   },
21   "organization_id": "org-123",
22   "result_files": [],
23   "status": "pending",
24   "validation_files": [],
25   "training_files": [
26     {
27       "id": "file-abc123",
28       "object": "file",
29       "bytes": 1547276,
30       "created_at": 1610062281,
31       "filename": "my-data-train.jsonl",
32       "purpose": "fine-tune-train"
33     }
34   ],
35   "updated_at": 1614807352,
36 }
```

List fine-tunes Deprecated

GET <https://api.openai.com/v1/fine-tunes>

List your organization's fine-tuning jobs

Returns

A list of **fine-tune** objects.

Example request

curl   Copy

```
1 curl https://api.openai.com/v1/fine-tunes \  
2   -H "Authorization: Bearer $OPENAI_API_KEY"
```

Response

 Copy

```
1  {  
2    "object": "list",  
3    "data": [  
4      {  
5        "id": "ft-AF1WoRqd3aJAHsqc9NY7iL8F",  
6        "object": "fine-tune",  
7        "model": "curie",  
8        "created_at": 1614807352,  
9        "fine_tuned_model": null,  
10       "hyperparams": { ... },  
11       "organization_id": "org-123",  
12       "result_files": [],  
13       "status": "pending",  
14       "validation_files": [],  
15       "training_files": [ { ... } ],  
16       "updated_at": 1614807352,  
17     },  
18     { ... },  
19     { ... }  
20   ]  
21 }
```

Retrieve fine-tune Deprecated

GET https://api.openai.com/v1/fine-tunes/{fine_tune_id}

Gets info about the fine-tune job.

[Learn more about fine-tuning](#)

Path parameters

`fine_tune_id` string Optional

The ID of the fine-tune job

Returns

The **fine-tune** object with the given ID.

Example request

curl   Copy

```
1 curl https://api.openai.com/v1/fine-tunes/ft-AF1WoRqd3aJAHsqc9NY7iL8F \
2   -H "Authorization: Bearer $OPENAI_API_KEY"
```

Response

 Copy

```
1  {
2    "id": "ft-AF1WoRqd3aJAHsqc9NY7iL8F",
3    "object": "fine-tune",
4    "model": "curie",
5    "created_at": 1614807352,
6    "events": [
7      {
8        "object": "fine-tune-event",
9        "created_at": 1614807352,
10       "level": "info",
11       "message": "Job queued. Waiting for jobs ahead to complete. Queue number: 6"
12     },
13     {
14       "object": "fine-tune-event",
15       "created_at": 1614807356,
16       "level": "info",
17       "message": "Job started."
18     },
19     {
20       "object": "fine-tune-event",
21       "created_at": 1614807861,
22       "level": "info",
23       "message": "Uploaded snapshot: curie:ft-acmeco-2021-03-03-21-44-20."
24     },
25     {
26       "object": "fine-tune-event",
```

```
27     "created_at": 1614807864,  
28     "level": "info",  
29     "message": "Uploaded result files: file-abc123."  
30 },  
31 {  
32     "object": "fine-tune-event",  
33     "created_at": 1614807864,  
34     "level": "info",  
35     "message": "Job succeeded."  
36 }  
37 ],  
38 "fine_tuned_model": "curie:ft-acmeco-2021-03-03-21-44-20",  
39 "hyperparams": {  
40     "batch_size": 4,  
41     "learning_rate_multiplier": 0.1,  
42     "n_epochs": 4,  
43     "prompt_loss_weight": 0.1,  
44 },  
45 "organization_id": "org-123",  
46 "result_files": [  
47     {  
48         "id": "file-abc123",  
49         "object": "file",  
50         "bytes": 81509,  
51         "created_at": 1614807863,  
52         "filename": "compiled_results.csv",  
53         "purpose": "fine-tune-results"  
54     }  
55 ],  
56 "status": "succeeded",  
57 "validation_files": [],  
58 "training_files": [  
59     {  
60         "id": "file-abc123",  
61         "object": "file",  
62         "bytes": 1547276,  
63         "created_at": 1610062281,  
64         "filename": "my-data-train.jsonl",  
65         "purpose": "fine-tune-train"  
66     }  
67 ],  
68 "updated_at": 1614807865,  
69 }
```

Cancel fine-tune Deprecated

POST https://api.openai.com/v1/fine-tunes/{fine_tune_id}/cancel

Immediately cancel a fine-tune job.

Path parameters

`fine_tune_id` string Optional

The ID of the fine-tune job to cancel

Returns

The cancelled **fine-tune** object.

Example request

curl   Copy

```
1 curl https://api.openai.com/v1/fine-tunes/ft-AF1WoRqd3aJAHsqc9NY7iL8F/cancel \
2   -H "Authorization: Bearer $OPENAI_API_KEY"
```

Response

 Copy

```
1  {
2    "id": "ft-xhrpBbvVUzYGo8oU01FY4nI7",
3    "object": "fine-tune",
4    "model": "curie",
5    "created_at": 1614807770,
6    "events": [ { ... } ],
7    "fine_tuned_model": null,
8    "hyperparams": { ... },
9    "organization_id": "org-123",
10   "result_files": [],
11   "status": "cancelled",
12   "validation_files": [],
13   "training_files": [
14     {
15       "id": "file-abc123",
16       "object": "file",
17       "bytes": 1547276,
```



```
18     "created_at": 1610062281,  
19     "filename": "my-data-train.jsonl",  
20     "purpose": "fine-tune-train"  
21 }  
22 ],  
23 "updated_at": 1614807789,  
24 }
```

List fine-tune events Deprecated

GET https://api.openai.com/v1/fine-tunes/{fine_tune_id}/events

Get fine-grained status updates for a fine-tune job.

Path parameters

fine_tune_id string Optional

The ID of the fine-tune job to get events for.

Query parameters

stream boolean Optional Defaults to false

Whether to stream events for the fine-tune job. If set to true, events will be sent as data-only **server-sent events** as they become available. The stream will terminate with a `data: [DONE]` message when the job is finished (succeeded, cancelled, or failed).

If set to false, only events generated so far will be returned.

Returns

A list of fine-tune event objects.

Example request

curl   Copy

```
1 curl https://api.openai.com/v1/fine-tunes/ft-AF1WoRqd3aJAHsqc9NY7iL8F/events \  
2
```

```
-H "Authorization: Bearer $OPENAI_API_KEY"
```

Response

 Copy

```
1  {
2    "object": "list",
3    "data": [
4      {
5        "object": "fine-tune-event",
6        "created_at": 1614807352,
7        "level": "info",
8        "message": "Job enqueued. Waiting for jobs ahead to complete. Queue number: 6"
9      },
10     {
11       "object": "fine-tune-event",
12       "created_at": 1614807356,
13       "level": "info",
14       "message": "Job started."
15     },
16     {
17       "object": "fine-tune-event",
18       "created_at": 1614807861,
19       "level": "info",
20       "message": "Uploaded snapshot: curie:ft-acmeco-2021-03-03-21-44-20."
21     },
22     {
23       "object": "fine-tune-event",
24       "created_at": 1614807864,
25       "level": "info",
26       "message": "Uploaded result files: file-abc123"
27     },
28     {
29       "object": "fine-tune-event",
30       "created_at": 1614807864,
31       "level": "info",
32       "message": "Job succeeded."
33     }
34   ]
35 }
```

Edits Deprecated

Given a prompt and an instruction, the model will return an edited version of the prompt.

The edit object Deprecated

object string

The object type, which is always `edit`.

created integer

The Unix timestamp (in seconds) of when the edit was created.

choices array

A list of edit choices. Can be more than one if `n` is greater than 1.

[+ Show properties](#)

usage object

Usage statistics for the completion request.

[+ Show properties](#)

The edit object

 Copy

```
1  {
2    "object": "edit",
3    "created": 1589478378,
4    "choices": [
5      {
6        "text": "What day of the week is it?",
7        "index": 0,
8      }
9    ],
10   "usage": {
11     "prompt_tokens": 25,
12     "completion_tokens": 32,
13     "total_tokens": 57
14   }
15 }
```

Create edit Deprecated

POST <https://api.openai.com/v1/edits>

Creates a new edit for the provided input, instruction, and parameters.

Request body

model string **Required**

ID of the model to use. You can use the `text-davinci-edit-001` or `code-davinci-edit-001` model with this endpoint.

input string or null **Optional** Defaults to ""

The input text to use as a starting point for the edit.

instruction string **Required**

The instruction that tells the model how to edit the prompt.

n integer or null **Optional** Defaults to 1

How many edits to generate for the input and instruction.

temperature number or null **Optional** Defaults to 1

What sampling temperature to use, between 0 and 2. Higher values like 0.8 will make the output more random, while lower values like 0.2 will make it more focused and deterministic.

We generally recommend altering this or `top_p` but not both.

top_p number or null **Optional** Defaults to 1

An alternative to sampling with temperature, called nucleus sampling, where the model considers the results of the tokens with top_p probability mass. So 0.1 means only the tokens comprising the top 10% probability mass are considered.

We generally recommend altering this or `temperature` but not both.

Returns

Returns an **edit** object.

Example request

text-davinci-edit-001 ▾ curl ▾  Copy

```
1 curl https://api.openai.com/v1/edits \
2   -H "Content-Type: application/json" \
3   -H "Authorization: Bearer $OPENAI_API_KEY" \
4   -d '{
5     "prompt": "PROMPT_HERE"
6   }'
```