

Document Summarizer

Connected System Plugin for **Appian**

Appian Corporation

Version 1.0.0

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Overview

The Document Summarizer Connected System allows developers to get a summary of a document or text with the help of OpenAI services. It allows users to specify the length of the summary with the number of paragraphs and number of sentences per paragraph.

Developers can leverage their document summarization capabilities through Appian by entering the credentials retrieved from either OpenAI or Azure OpenAI Studio into the connected system configuration. This documentation outlines the process of obtaining and inputting these credentials within the Appian platform.

Note: This AI Tool can utilize external LLMs such as OpenAI and Azure OpenAI. As with all plug-ins, data sent to these external organizations is subject to the external organization's security policies, procedures, and pricing. Please check with your administrator and your organization's AI policy before sending any sensitive information to external services.


Features

- Use OpenAI or Azure OpenAI to generate a summary of any document or plain text
- Specify the length of summary with the number of paragraphs and the number of sentences per paragraph

Connected System Configuration

Chat Completion Model: OpenAI

Connected System Properties



Document Summarizer
Summarize documents using ChatGPT
Version: 1

Name *

Description

Document Summarizer Configuration

Authentication

Use the OpenAI services for Chat Completion

OpenAI API Key
***** (Clear)
Enter your OpenAI APIKey. Visit <https://beta.openai.com/account/api-keys> to get an API key for your account.

Completion Model *

Provide the name of the model to use for text completion. Example: gpt-3.5-turbo for GPT 3.5 Turbo model, gpt-4 for GPT 4 model. Visit <https://platform.openai.com/docs/models/model-endpoint-compatibility> and use one of the models listed under /v1/chat/completions endpoint.

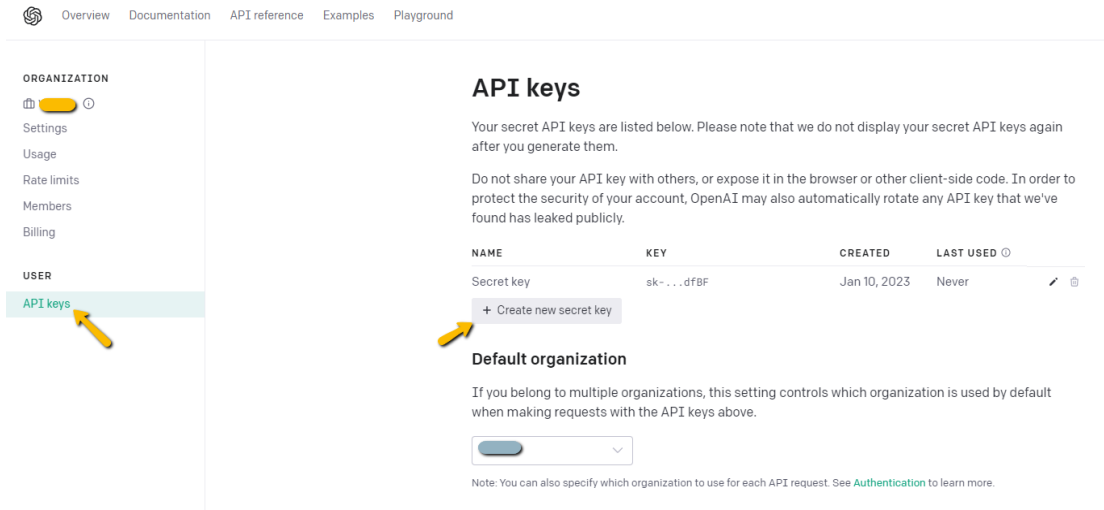
TEST CONNECTION

CANCEL **USE IN NEW INTEGRATION** **SAVE**

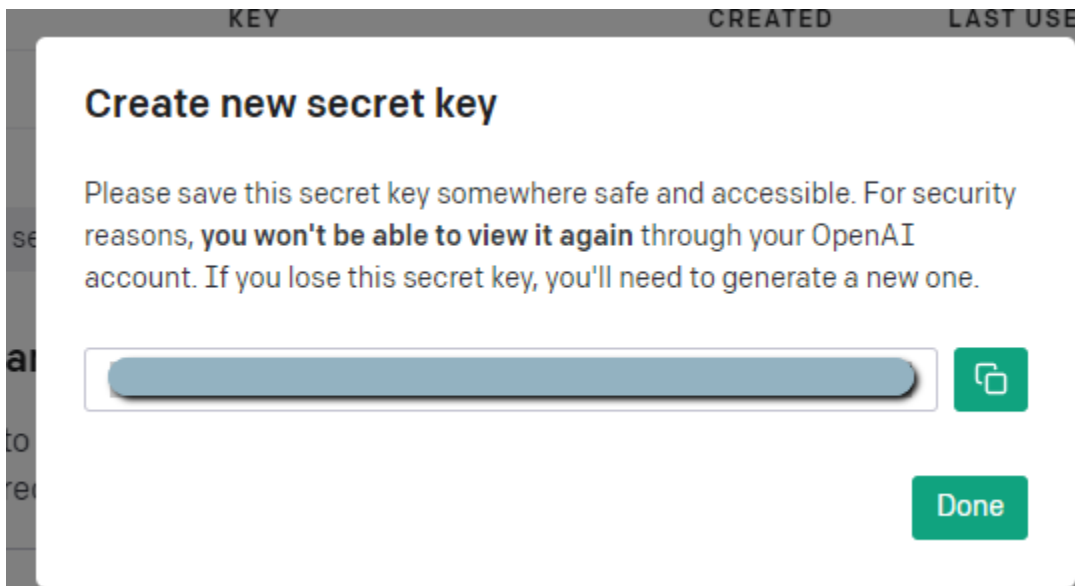
The Document Summarization Connected system with OpenAI authentication requires the following credentials: **OpenAI API Key** and **Chat Completion model**.

To retrieve your OpenAI API Key:

1. Go to the [OpenAI console](#). Make sure that the **API keys** menu is selected.



2. Click on **Create new secret key** to generate a new API key.
3. Copy the value and save it separately as we won't be able to access it again. Paste the API key in the connected system dialog box.




To find the appropriate Chat Completions model:

1. Visit <https://platform.openai.com/docs/models/model-endpoint-compatibility> and use one of the models listed under /v1/chat/completions endpoint. Example: gpt-3.5-turbo for GPT 3.5 Turbo model, gpt-4 for GPT 4 model.
 - a. Each model has unique strengths so try to select the most appropriate for your use. If you would like to prioritize consistency in the size and format of your generated summary, we recommend you use a GPT 4 model. If you need to prioritize speed of generation, GPT 3.5 Turbo might be better suited.

Chat Completion Model: Azure OpenAI

Connected System Properties



Document Summarizer
Summarize documents using ChatGPT
Version: 1

Name *

Description

Document Summarizer Configuration

Authentication

Use the Azure OpenAI services for Chat Completion

Azure Region *

Provide the Azure region.

Deployment ID *

Provide the Deployment ID.

Azure API Key *

Provide the API Key obtained from Azure OpenAI

Connection successful

TEST CONNECTION

This authentication requires the following credentials: Azure Region, Azure Deployment ID and Azure API Key. Follow these steps to get the Azure credentials.

Set up your Azure OpenAI Account

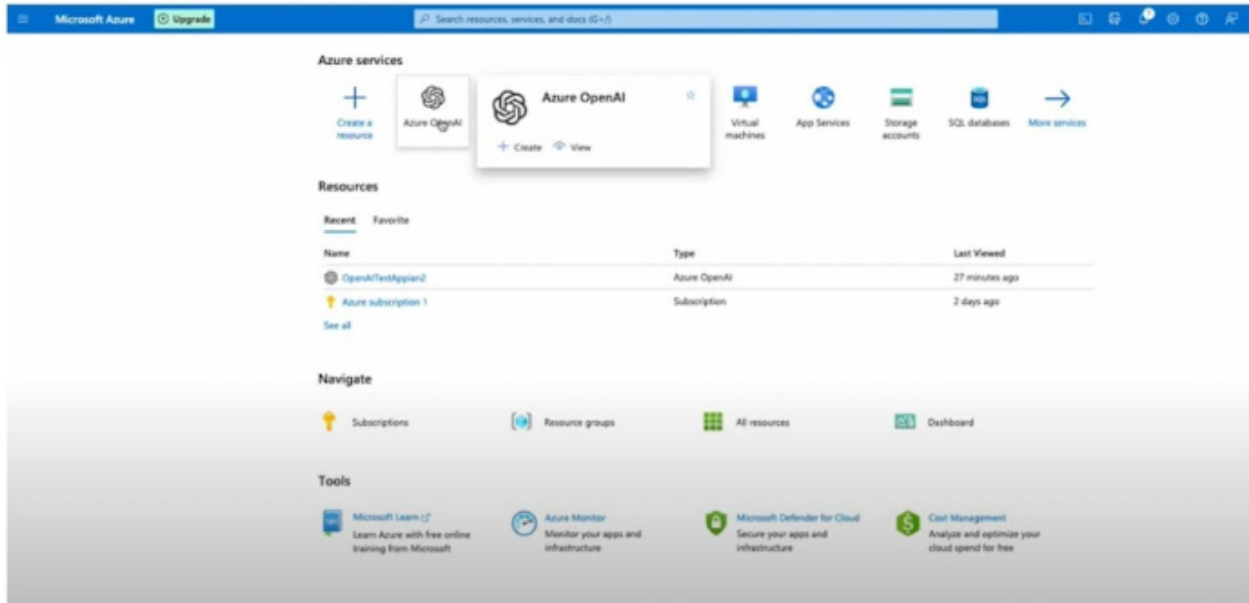
1. Navigate to [Azure's OpenAI API docs](#) and ensure you have met the listed prerequisites. View the prerequisites by selecting "Quickstarts." If you have not already done so, [create an Azure subscription](#).

The screenshot shows the Azure OpenAI Service Documentation page. At the top, there is a navigation bar with the Microsoft logo, 'Learn', and various categories like 'Documentation', 'Training', 'Certifications', 'Q&A', 'Code Samples', 'Assessments', 'Shows', and 'Events'. A search bar and 'Sign in' link are also present. Below the navigation bar, the main heading is 'Azure OpenAI Service Documentation'. Underneath, there is a sub-heading: 'Learn how to use Azure OpenAI's powerful language models including the GPT-3, Codex and Embeddings model series for content generation, summarization, semantic search, and natural language to code translation.' The page features a grid of eight tiles: 'OVERVIEW: What is Azure OpenAI Service?', 'QUICKSTART: Quickstarts', 'HOW-TO GUIDE: Create a resource', 'TUTORIAL: Embeddings', 'HOW-TO GUIDE: Completions', 'TRAINING: Intro to Azure OpenAI training', 'CONCEPT: Azure OpenAI Models', and 'REFERENCE: Support and help options'. Below this grid, there is a section titled 'Additional resources' with four sub-sections: 'Azure OpenAI' (including links for Studio, support, quotas, and access), 'Video' (Combining OpenAI models with the power of Azure), 'Reference' (REST API, Terms of use), and 'Tools' (Azure CLI, PowerShell).

2. Apply for access to Azure OpenAI services by completing the form [here](#). You will need your subscription ID from the previous step.

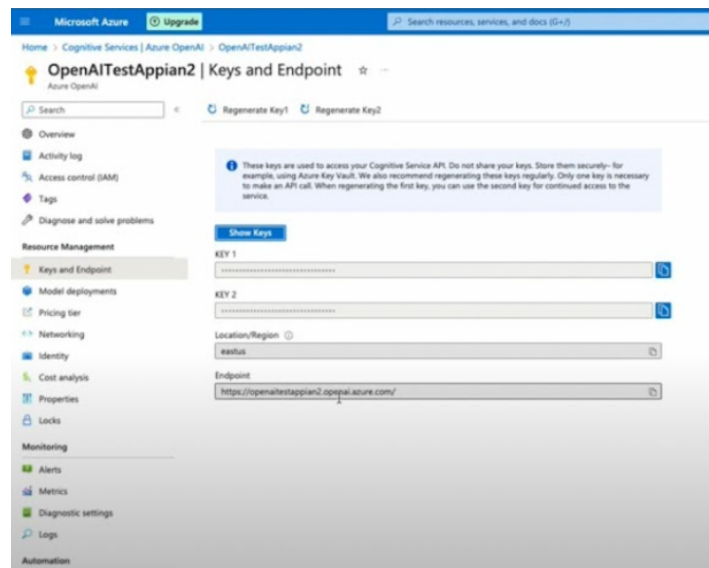
The screenshot shows the 'Request Access to Azure OpenAI Service' form. The title is 'Request Access to Azure OpenAI Service'. Below the title, there is a section labeled '* Required' with the instruction: 'Please read all instructions carefully and complete form as instructed'. The form contains the following text: 'Thank you for your interest in Azure OpenAI Service. Please submit this form to register for approval to access and use Azure OpenAI's Limited Access text and code and/or DALL-E 2 text to image models (as indicated in the form). All use cases must be registered. Azure OpenAI Service requires registration and is currently only available to approved enterprise customers and partners. Learn more about limited access to Azure OpenAI Service here.' Below this, there is a section titled 'Limited access scenarios:' which states: 'When evaluating which scenarios to onboard, we consider who will directly interact with the application, who will see the output of the application, whether the application will be used in a high-stakes domain (e.g., medical), and the extent to which the application's capabilities are tightly scoped. In general, applications in high stakes domains will require additional mitigations and are more likely to be approved for applications with internal-only users and internal-only audiences. Applications with broad possible uses, including content generation capabilities, are more likely to be approved if 1) the domain is not high stakes and users are authenticated or 2) in the case of high stakes domains, anyone who views or interacts with the content is internal to your company.' At the bottom, there is a note: 'Please be sure to visit the Azure OpenAI Service's transparency note, which provides information and guidelines for responsible use of the service as well as system limitations that may be applicable to your scenario.'

3. Create a service and set your domain name.



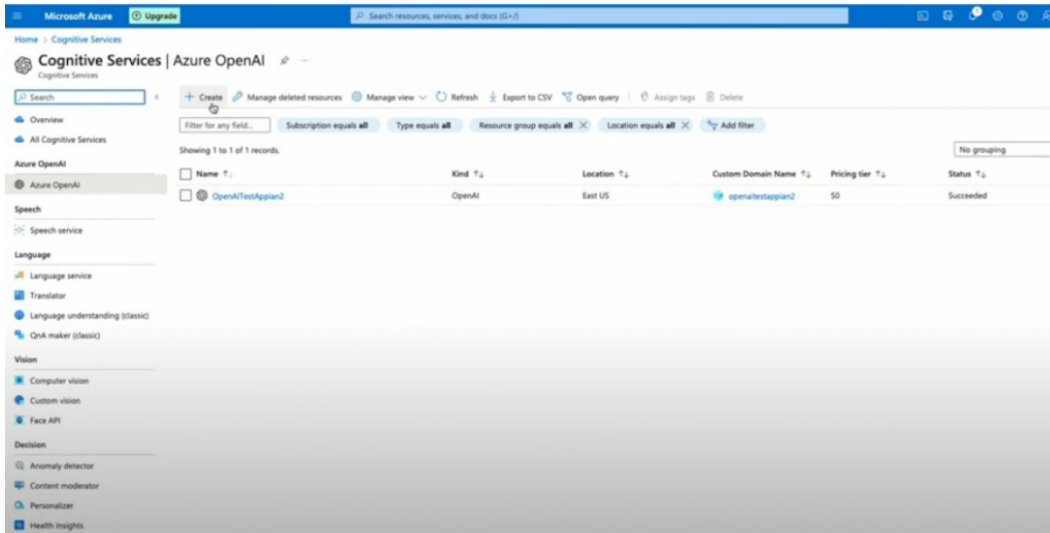
Create and Access API Keys

4. Within your service, create and access API keys through “Keys and Endpoints” under Resource Management. The “Location/Region” listed in this window will be used as your **Azure Region** in the Connected System configuration.

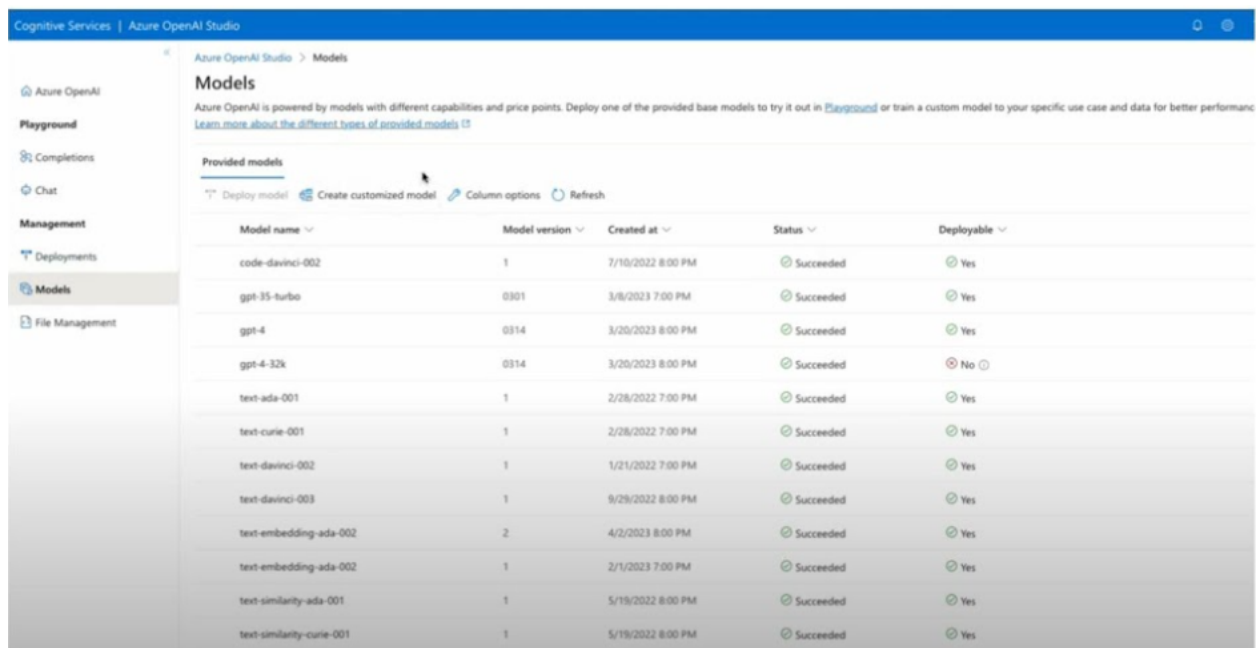


Deploy OpenAI Models and Set your Deployment ID

5. Visit the Azure OpenAI Studio to deploy OpenAI models under your created resource.



6. Click into your resource to enter the Azure OpenAI Studio. Navigate to “Models” seen as a tab on the left side of the screen. After selecting the best OpenAI Model for your data and use case, deploy your selected chat completions model. The **deployment ID** you create during deployment will be used when configuring your Connected System.



Integration

Get summary of a text or document.

ChatGPT Prompt used:

Summarize the following in <5/10/15> sentences from the perspective of <perspective>.

Note:

This Integration makes multiple API calls to OpenAI for summarization. Refer the below table for the estimated number of API requests and the request time for documents with varying number of pages.

Sl. No	Pages	Request Time in seconds(On average)	Number of API Requests
1	1	7	1
2	5	20	3
3	10	18	5
4	20	29	7
5	30	34	19

1. Document Input Type

Inputs:

Document To Be Summarized (Document) - Required - Provide the document from which the entities are extracted.

Number of Paragraphs(Number(Integer)) – Optional - Provide the approximate number of paragraphs to be generated. Default:1.

Number of Sentences(Number(Integer)) – Optional - Provide the estimated number of sentences to be present in each paragraph in the generated summary. Default:4.

Note:

Due to the nature of LLMs, the size of this generated summary can not be guaranteed to match your selected number of sentences and paragraphs. The default is 1 paragraph of 4 sentences

Perspective(Text) - Optional - Provide the perspective from which the summary is generated.

Example: Software Developer.

The screenshot shows the DSSA_INT_documentSummarizer interface. On the left, there are configuration options: Connected System (DSSA CS Document Summarizer), Input Type (Document), Document To Be Summarized (r|inputDocument), Number of Paragraphs (r|paragraphs), Number of Sentences (r|sentences), and Perspective (r|perspective). A 'TEST REQUEST' button is at the bottom left. The main area displays a table of rule inputs and their values, and a 'Result' tab showing a successful execution with a summary text and success status.

Rule Input Name	Expression	Value
inputDocument (Document)	1	DD_DOC_Adobe...
perspective (Text)	1 null	null (Text)
paragraphs (Number (Integer))	1 null	null (Number (Integer))
sentences (Number (Integer))	1 null	null (Number (Integer))

Result

Success!

Time
24,624 ms
Prepare: < 1 ms - Execute: 24,624 ms (Send/Wait/Receive: 1 ms) - Transform: < 1 ms

Value: Result

- Dictionary
 - summaryText "The Adobe Developer Terms of Use cover the use of Adobe developer sites, tools, and Adobe Exchange.
 - success true (Boolean)

Output: Dictionary

```
{  
  summaryText: "The terms say that we can't use the Adobe trademarks in a way that makes Adobe look bad or that is not true. We have to follow the rules and laws when using the trademarks. We can only use badges to show off our software, but not on the screen where people use it. If our software works with Adobe services, we have to use the special Adobe sign-in and icons. We can't use the Adobe trademarks in the name or icon of our software, and we can't use similar names or trademarks. Adobe can use our name and trademarks to advertise their services and our software. If we use special tools that are not released yet, we have to follow special rules and give feedback to Adobe. We have to keep secret information secret and not tell anyone else. We have to make sure our software doesn't break any laws or hurt anyone's rights. We have to pay Adobe for any problems that happen because of our software. Either of us can stop using the tools at any time. We have to stop using them if the agreement ends. There are more rules for using the tools with InDesign, Adobe Stock, and other things. We have to follow those rules too.",  
  success: true  
}
```

2. Text Input Type

Inputs:

Text To Be Summarized (Text) - Required - Provide the text for which summary is to be generated.

Number of Paragraphs (Number(Integer)) – Optional - Provide the approximate number of paragraphs to be generated. Default:1.

Number of Sentences (Number(Integer)) – Optional - Provide the estimated number of sentences to be present in each paragraph in the generated summary. Default:4.

Note:

Due to the nature of LLMs, the size of this generated summary can not be guaranteed to match your selected number of sentences and paragraphs. The default is 1 paragraph of 4 sentences

Perspective (Text) - Required - Provide the perspective from which the summary is generated. Example: Software Developer.

DSSA_INT_textSummarizer

Connected System*

DSSA CS Document Summarizer X

Input Type*

Text

Provide the input type for summarization. Valid values are: TEXT, DOCUMENT.

Text To Be Summarized

rl|text

Provide the text for which summary is to be generated.

Number of Paragraphs

rl|paragraphs

Provide the number of paragraphs to be generated. Default:1.

Number of Sentences

rl|sentences

Provide the approximate number of sentences to be present in the generated summary. Default:4.

Perspective

rl|perspective

Provide the perspective from which the summary is generated. Example: Software Developer.

TEST REQUEST

Rule Input Name	Expression	Value
text (Text)	1 chatGPT is a large language model-based c	"ChatGPT is a large language model-based chatbot developed by OpenAI. It was launched in November 2022 and allows users ...More
perspective (Text)	1	
paragraphs (Number (Integer))	1 null	null (Number (Integer))

Result Request Response

Success!

Time
4,077 ms
Prepare: < 1 ms - Execute: 4,077 ms (Send|Wait|Receive: 1 ms) - Transform: < 1 ms

Value: Result

Dictionary

- summaryText "OpenAI has developed ChatGPT, a chatbot powered by large language models. It was launched in Nov
- success true (Boolean)

Output: Dictionary

```
{
  summaryText: "ChatGPT is a chatbot developed by OpenAI that allows users to steer conversations towards their desired length, format, style, level of detail, and language. It is built upon OpenAI's GPT-3.5 and GPT-4 models, which have been fine-tuned for conversational applications using supervised and reinforcement learning techniques. Initially released as a research preview, ChatGPT gained immense popularity and is now operated on a freemium model, with a free tier providing access to the GPT-3.5 version and a paid subscription offering the more advanced GPT-4 version and priority access to new features." & fn!char(10) & fn!char(10) "By January 2023, ChatGPT had gained over 100 million users, making it the fastest-growing consumer software application in history. This contributed to OpenAI's valuation growing to $29 billion. The success of ChatGPT prompted competitors like Google, Baidu, and Meta to accelerate the development of their own chatbot products. However, concerns have
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been raised about the potential impact of ChatGPT on human intelligence, as well as its potential to enable plagiarism and fuel misinformation." & fn!char(10) & fn!char(10) & "The fine-tuning of ChatGPT involved human trainers who played both the user and AI assistant roles to improve the model's performance. In the reinforcement learning stage, trainers ranked the model's responses from previous conversations to create ""reward models"" used for further fine-tuning. OpenAI also used outsourced workers from Kenya, earning low wages, to label harmful content and train a safety system against such content. This outsourcing partner was Sama, a training-data company based in San Francisco. Initially, ChatGPT used a Microsoft Azure supercomputing infrastructure specifically built for OpenAI, but Microsoft later upgraded it due to the success of the chatbot.",

success: true

}