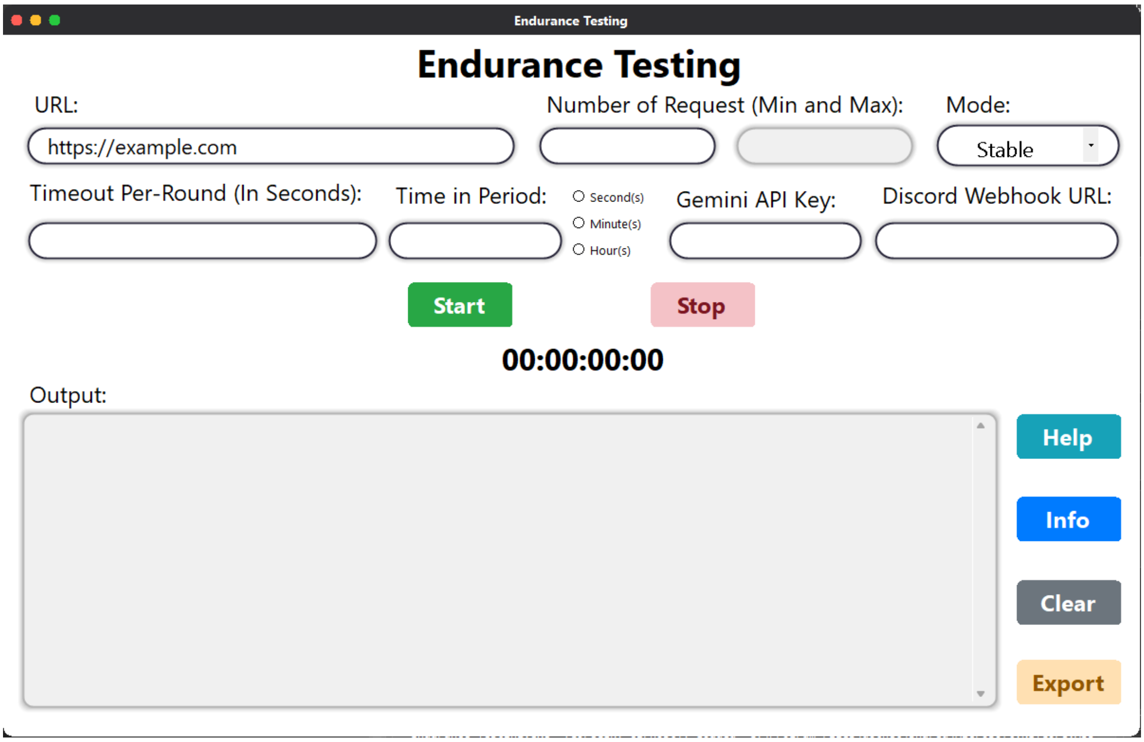
USER GUIDE

Endurance testing, also known as soak testing, involves subjecting an application to a sustained load for an extended period. This methodology helps uncover memory leaks, resource depletion, and other performance degradation issues that might only surface after prolonged usage.

The Endurance Testing Software is a tool for evaluating the performance and stability of web applications through continuous load testing. It enables users to send multiple HTTP requests simultaneously to a specified URL while monitoring various performance metrics such as load time, wait time, response time, throughput, and error rate.

A. System

Here is the User Guide for the Endurance Testing Software. Before using this tool, ensure that your internet connection is stable to maintain smooth testing performance.



URL: https://example.com

Mode: Stable

00:00:00:00

1. Enter the target URL to be tested in the field labeled **“URL”**, ensuring that the format is correct by using either the http:// or https:// protocol.

2. Specify the minimum number of requests to be sent in each testing round using the **“Number of Requests (Min and Max)”** field, with a maximum limit of 1,000 requests. If selecting the Progressive or Fluctuative mode, also define the maximum number of requests per round (which must be greater than the minimum request value).
3. Select the testing mode from the **“Mode”** dropdown menu:
   - Stable: Sends a fixed number of requests in each testing round.
   - Progressive: Gradually increases the number of requests over time.
   - Fluctuative: Sends a varying number of requests randomly within the specified minimum and maximum range.
4. Set the timeout threshold for each testing round in the **“Timeout Per-Round (In Seconds)”** field.
5. Specify the testing duration in the **“Time in Period”** field, then select the appropriate time unit (seconds, minutes, or hours).
6. (Optional) Enter the Gemini API Key in the **“Gemini API Key”** field to enable the AI-powered feature for generating a descriptive summary of the test results.
7. (Optional) Enter the Discord Webhook URL in the **“Discord Webhook URL”** field to receive notifications on your Discord server automatically after the test is completed.
8. Click the **“Start”** button to begin the test.
9. Click the **“Stop”** button if you want to halt the test before the countdown timer reaches zero.
10. Monitor the test results in the **“Output”** textbox.
    - The textbox displays only the results from the latest testing round.
    - To view the complete data, export the test results or open the EnduranceTestLog.txt file located in the same directory as the software executable.
11. After the test is completed, the software will display a summary of the test results, including:
    - Total Requests: The total number of requests sent during the test.
    - Successful Requests: The number of requests that received an HTTP 200 (OK) response.
    - Failed Requests: The number of requests that did not receive an HTTP 200 (OK) response or timed out.

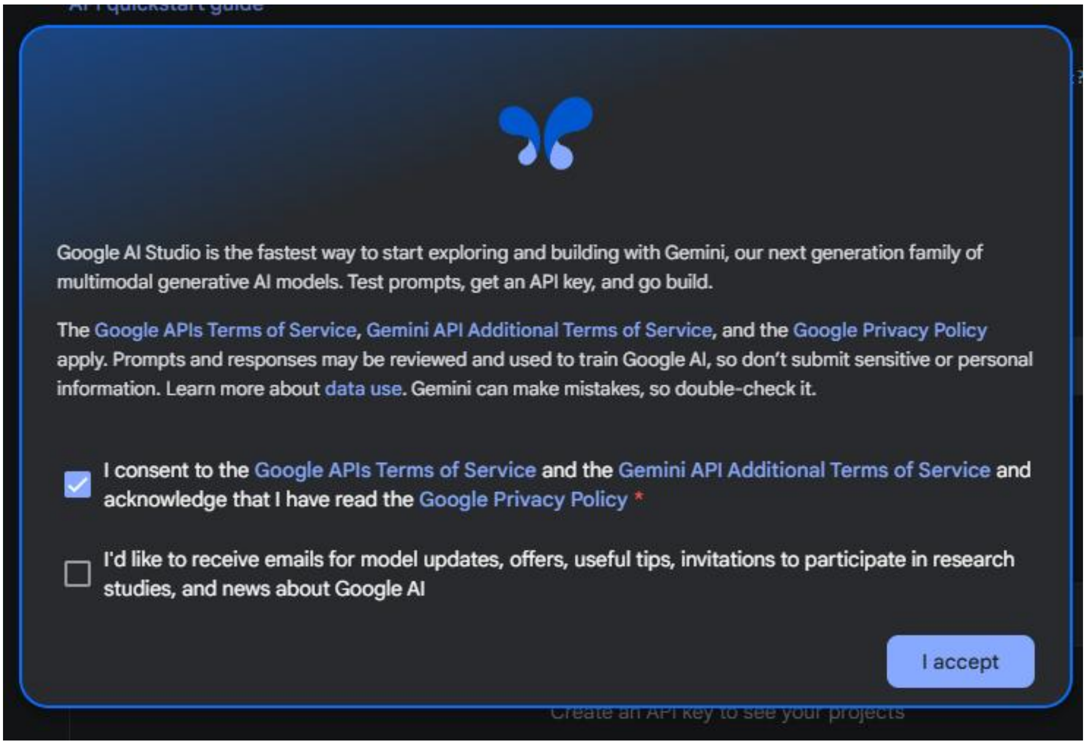
- Average Computer’s CPU Usage: The average CPU usage of the computer during the test.
- Average Computer’s RAM Usage: The average RAM usage of the computer in megabytes during the test.
- Average Load Time: The average time required to fully receive a request.
- Average Wait Time: The average time until the first byte is received after sending a request.
- Average Response Time: The average response time for all requests.
- Average Throughput: The average number of requests processed per second.
- Average Error Rate: The percentage of requests that failed or timed out.
- Average Round Duration: The average time to complete one testing round.
- AI Analysis: If the Gemini API Key is provided, a descriptive summary of the test results will be displayed.

12. Click the **“Clear”** button to reset the test parameters and erase the test results.
13. Click the **“Export”** button to save the test results in the following formats:
    - Excel (.xlsx)
    - CSV (.csv)
    - JSON (.json)
    - HTML (.html)
    - Discord (summary of test results only)

B. Gemini API Key

Here is the guide to obtaining a Gemini API Key:

1. First, create a Google account if you do not already have one. Then, visit https://aistudio.google.com/u/3/apikey, check the option **“I consent to the Google APIs Terms of Service and the Gemini API Additional Terms of Service and acknowledge that I have read the Google Privacy Policy *”** and click the **“I accept”** button.



API quickstart guide

Google AI Studio is the fastest way to start exploring and building with Gemini, our next generation family of multimodal generative AI models. Test prompts, get an API key, and go build.

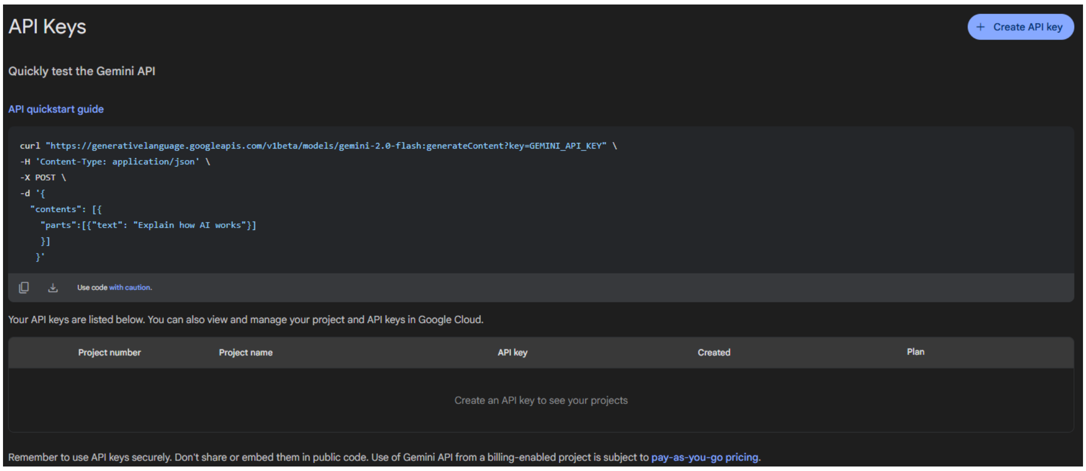
The Google APIs Terms of Service, Gemini API Additional Terms of Service, and the Google Privacy Policy apply. Prompts and responses may be reviewed and used to train Google AI, so don't submit sensitive or personal information. Learn more about data use. Gemini can make mistakes, so double-check it.

☑ I consent to the Google APIs Terms of Service and the Gemini API Additional Terms of Service and acknowledge that I have read the Google Privacy Policy *

□ I'd like to receive emails for model updates, offers, useful tips, invitations to participate in research studies, and news about Google AI

Create an API key to see your projects

2. Click the **"Create API key"** button and wait for the loading process to complete.



API Keys

Quickly test the Gemini API

API quickstart guide

```
curl "https://generativelanguage.googleapis.com/v1beta/models/gemini-2.0-flash:generateContent?key=GEMINI_API_KEY" \
-H 'Content-Type: application/json' \
-X POST \
-d '{
  "contents": [{
    "parts":[{"text": "Explain how AI works"}]
    }]
   }'
```

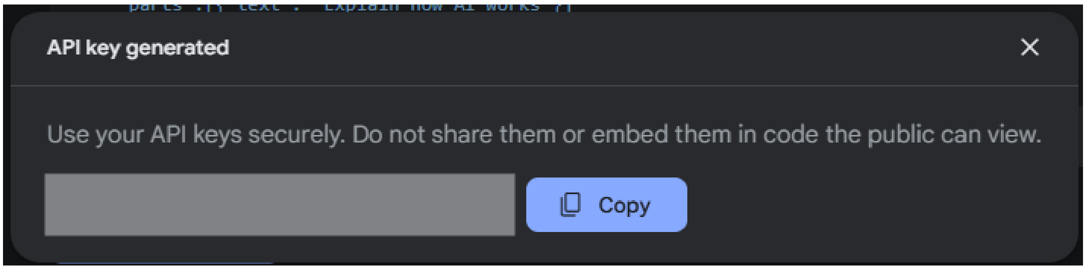
Use code with caution.

Your API keys are listed below. You can also view and manage your project and API keys in Google Cloud.

Project number	Project name	API key	Created	Plan
		Create an API key to see your projects		

Remember to use API keys securely. Don't share or embed them in public code. Use of Gemini API from a billing-enabled project is subject to pay-as-you-go pricing.

3. The API key is now ready to be copied and used.



"parts":[{"text": "Explain how AI works"}]

API key generated

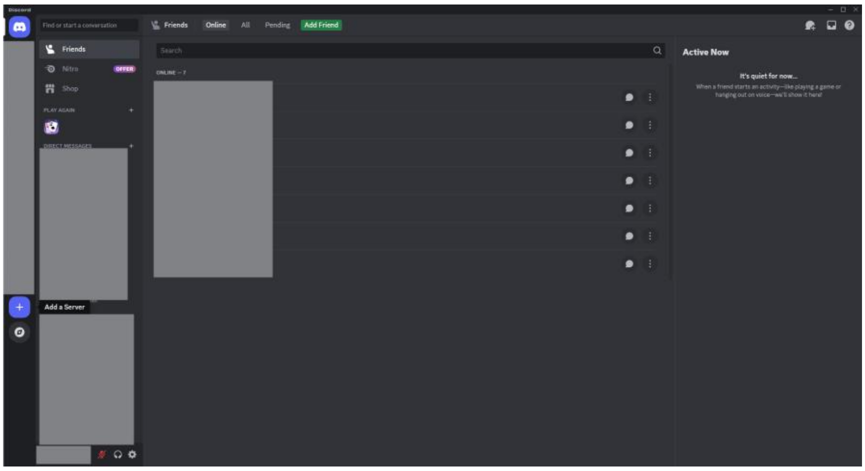
Use your API keys securely. Do not share them or embed them in code the public can view.

[redacted]

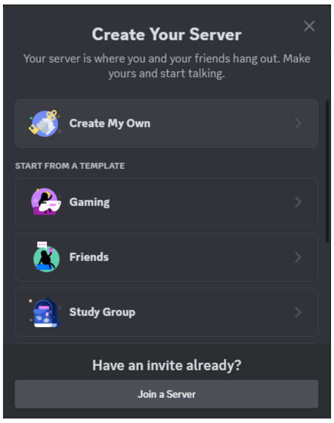
C. Discord Webhook URL

Here is the guide to obtaining a Discord Webhook URL:

1. Create a new server by clicking the **“Add a Server”** icon on the left side of the screen (you may skip this step if you already have a server).



2. Select **“Create My Own”**, then choose **“For me and my friends”** or customize it according to your needs.



Create Your Server

Your server is where you and your friends hang out. Make yours and start talking.

Create My Own

START FROM A TEMPLATE

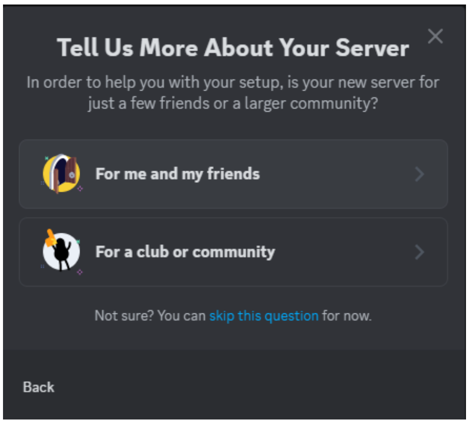
Gaming

Friends

Study Group

Have an invite already?

Join a Server



Tell Us More About Your Server

In order to help you with your setup, is your new server for just a few friends or a larger community?

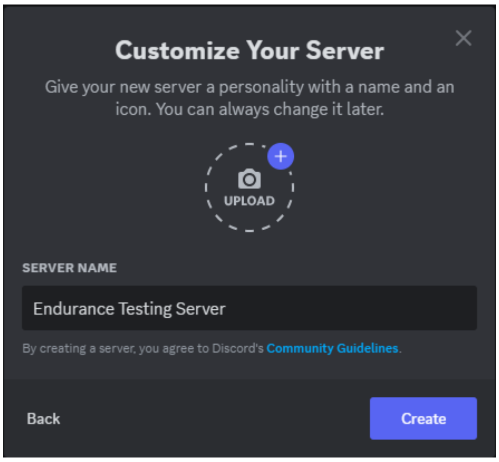
For me and my friends

For a club or community

Not sure? You can skip this question for now.

Back

3. Enter a name for your server and click **“Create”**.



Customize Your Server

Give your new server a personality with a name and an icon. You can always change it later.

UPLOAD

SERVER NAME

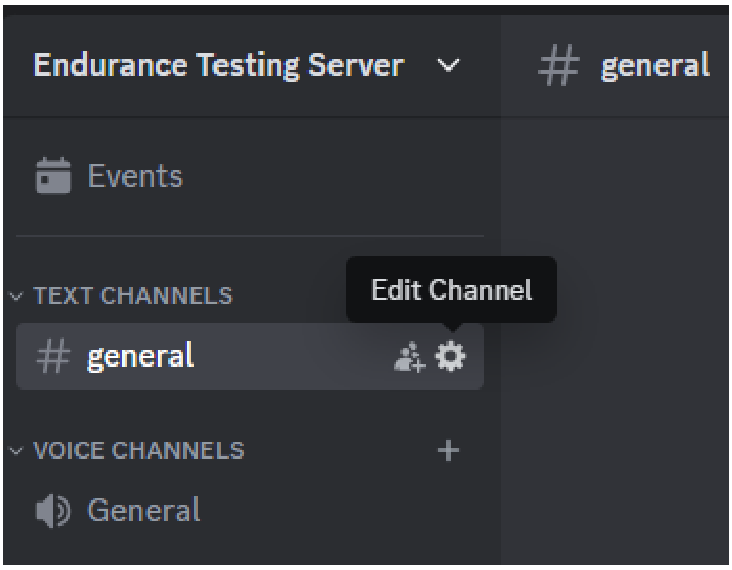
Endurance Testing Server

By creating a server, you agree to Discord's Community Guidelines.

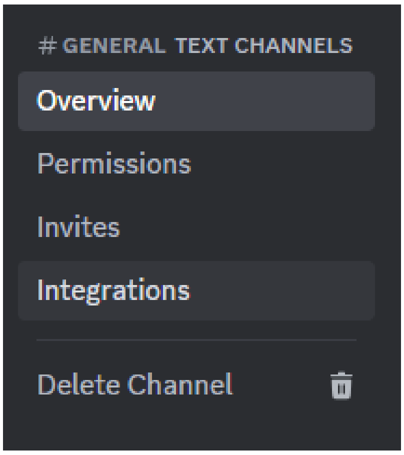
Back

Create

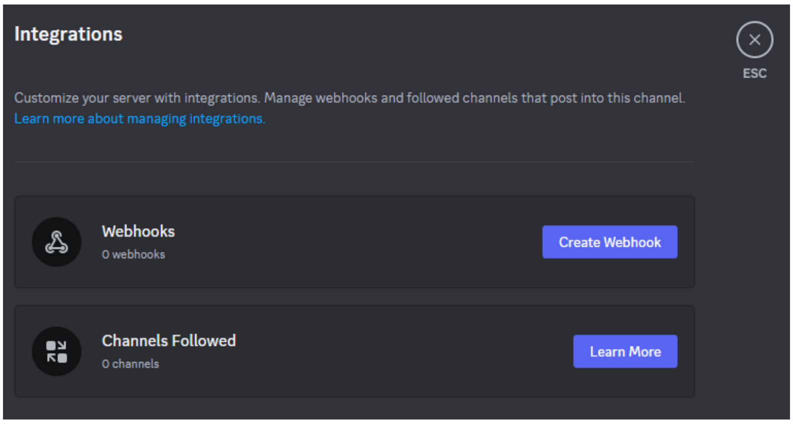
4. Click the gear icon on the left side of the server.



5. Select the **"Integrations"** tab.

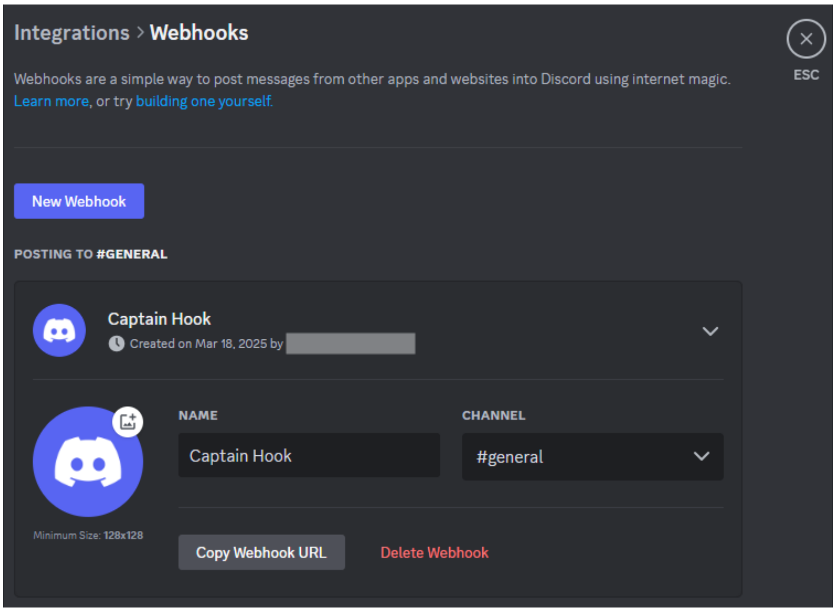


6. Click **"Create Webhook"**.



Customize your server with integrations. Manage webhooks and followed channels that post into this channel. Learn more about managing integrations.

7. The Webhook URL is now ready to be copied and used.



Integrations > Webhooks

Webhooks are a simple way to post messages from other apps and websites into Discord using internet magic. Learn more, or try building one yourself.

POSTING TO #GENERAL

Captain Hook

Created on Mar 18, 2025 by [redacted]

NAME: Captain Hook

CHANNEL: #general

Minimum Size: 128x128