

Yuan 的 HTTP Echo Server

- Demo: [https://echo.yuaner.tw/ ...](https://echo.yuaner.tw/)
- 專案原始碼 <https://github.com/chyuaner/cloudflare-echo-server>

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主要核心功能

本專案是提供CDN Edge層級的http回音伺服器

你對我發出Request，我的伺服器就會把我從你這邊接到的資訊：

- 以什麼網址字串
- 帶了什麼Post Body
- 帶了什麼Request Header

會如實的以ResponseBody方式回應給你。

同時也可以當作MyIP查詢使用，會顯示在「Host」區塊。

Yuan 的 HTTP Echo Server

GET https://echo.yuaner.tw/assets/text/dict/textpar.html?ref=tablericons&utm_source=tablericons-mainsite&utm_medium=partner&utm_campaign=250k-more-icons&tab=all

Method	GET
BaseUrl	https://echo.yuaner.tw
OriginalUrl	/assets/text/dict/textpar.html?ref=tablericons&utm_source=tablericons-mainsite&utm_medium=partner&utm_campaign=250k-more-icons&tab=all
Protocol	https

URL Params	URL Query	Host
1. assets	• ref: tablericons	• IP: 2001:b400:e2c2:c865:d68b:4031:6d82:80f3
2. text	• utm_source: tablericons-mainsite	• hostname: echo.yuaner.tw
3. dict	• utm_medium: partner	• Colo: SJC
4. textpar.html	• utm_campaign: 250k-more-icons	• Country: TW
	• tab: all	• City: Kaohsiung

HTTP Header	
Key	Value
accept	text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
accept-encoding	gzip, br
accept-language	zh-TW,zh;q=0.8,en-US;q=0.5,en;q=0.3
cf-connecting-ip	2001:b400:e2c2:c865:d68b:4031:6d82:80f3
cf-ipcountry	TW
cf-ray	9a6201217b0cf94b
cfvisitor	{"scheme":"https"}
connection	Keep-Alive



專案特色

在CDN Edge層級直接提供完整服務

傳統後端架構 (以我習慣的PHP為例)

公網 → CDN快取 → Reverse Proxy(管理vhost) → Nginx → php-fpm → 我的專案

🚀 本專案採用的是：CDN層級直接服務架構

公網 → CDN直接服務

理論上極致效能低延遲

Post Request - My Workspace

Workspaces API Network

Post Request +

https://echo.yuaner.tw/config/assets/aaa.html?key=valuea&echo_code=400

Params Authorization Headers (12) Body Scripts Settings

Key	Value	Description
key	valuea	
echo_code	400	

Cookies Headers (10) Test Results

400 Bad Request • 208 ms • 2.78 KB

Preview Debug with AI

```
{ "request": { "params": [ "config", "assets", "aaa.html" ], "query": { "key": "valuea", "echo_code": "400" }, "cookies": {}, "cookiesRaw": "", "body": { "description": "A Minecraft Server", "version": { "protocol": 767 } } }, "bodyRaw": "\n    \"description\": \"A Minecraft Server\",\n    \"version\": {\n        \"protocol\": 767\n    }\n", "headers": { "aaaaaaaaaaaaaa": "aaaaa", "accept": "*/*", "accept-encoding": "gzip, br", "cache-control": "no-cache", "cf-connecting-ip": "2001:b400:e2c2:f6aa:b514:4f58:231e:6131", "cf-ipcountry": "TW", "cf-ray": "9a79e70e9d46f005" } }
```

Runner Capture requests Cookies Variables

JSON格式作為預設 Response Body輸出

基本上以 [ealen/echo-server](#) 專案為基礎，重新撰寫復刻核心功能

分為三大塊：

- request
- http
- host

可用於 Postman、Paw、Insomnia、
Hopscotch 等 HTTP API 調試客戶端
使用

 有設計精美的網頁UI界面

Yuan 的 HTTP Echo Server

GET https://echo.yuaner.tw/assets/text/dict/textpar.html?ref=tablericons&utm_source=tablericons-mainsite&utm_medium=partner&utm_campaign=250k-more-icons&tab=all

Method	GET
BaseUrl	https://echo.yuaner.tw
OriginalUrl	/assets/text/dict/textpar.html?ref=tablericons&utm_source=tablericons-mainsite&utm_medium=partner&utm_campaign=250k-more-icons&tab=all
Protocol	https

URL Params

- 1. assets
- 2. text
- 3. dict
- 4. textpar.html

URL Query

- **ref:** tablericons
- **utm_source:** tablericons-mainsite
- **utm_medium:** partner
- **utm_campaign:** 250k-more-icons
- **tab:** all

Host

- IP: 2001:b400:e2c2:c865:d68b:4031:6d82:80f3
- hostname: echo.yuaner.tw
- Colo: SJC
- Country: TW
- City: Kaohsiung
- Continent: AS
- Latitude: 22.61626
- Longitude: 120.31333
- Region: Takao
- Region Code: KHH
- Timezone: Asia/Taipei

Header

Key	Value
accept	text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
accept-encoding	gzip, br
accept-language	zh-TW,zh;q=0.8,en-US;q=0.5,en;q=0.3
cf-connecting-ip	2001:b400:e2c2:c865:d68b:4031:6d82:80f3
cf-ipcountry	TW
cf-ray	9a6201217b0cf94b
cfvisitor	{"scheme":"https"}
connection	Keep-Alive

清楚明瞭的HTTP Method

網址列顏色會根據 GET, POST, PUT, DELETE改變顏色

GET <https://echo.yuaner.tw/config/assets/aaa.html?key=valuea>

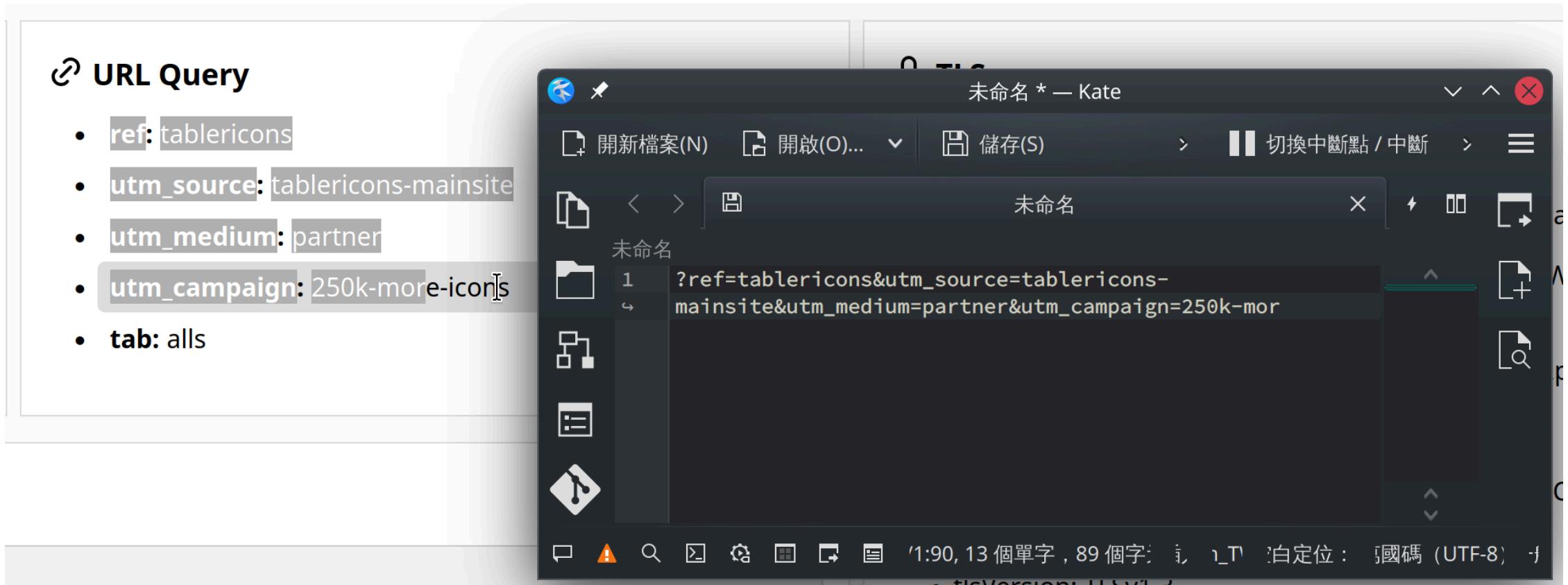
POST <https://echo.yuaner.tw/config/assets/aaa.html?key=valuea>

PUT <https://echo.yuaner.tw/config/assets/aaa.html?key=valuea>

DELETE <https://echo.yuaner.tw/config/assets/aaa.html?key=valuea>

顏色挑選有特別與Swagger、API Doc對齊

網址文字友善複製



有特別為「URL Params」、「URL Query」區塊特別設計友善文字複製。界面乍看下是ul li項目清單，但圈選文字後，會直接複製成可直接貼上網址列的字串

RWD手機友善 與 Dark Mode配色

RWD手機友善

HTTP Header

accept	text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
accept-encoding	gzip, br
accept-language	zh-TW,zh;q=0.8,en-US;q=0.5,en;q=0.3
cf-connecting-ip	2001:b400:e2c2:f6aa:b514:4f58:231e:6131
cf-ipcountry	TW
cf-ray	9a7a6e2dcfb5dc0d

Dark Mode配色

Yuan 的 HTTP Echo Server

GET https://echo.yuaner.tw/assets/text/dict/textpar.html?ref=tablericons&utm_source=tablericons-mainsite&utm_medium=partner&utm_campaign=250k-more-icons&tab=alls

BaseUrl	https://echo.yuaner.tw
OriginalUrl	/assets/text/dict/textpar.html?ref=tablericons&utm_source=tablericons-mainsite&utm_medium=partner&utm_campaign=250k-more-icons&tab=alls
Protocol	HTTP/2

URL Params

- 1. assets
- 2. text
- 3. dict
- 4. textparhtml

URL Query

- ref: tablericons
- utm_source: tablericons-mainsite
- utm_medium: partner
- utm_campaign: 250k-more-icons
- tab: alls

TLS

- tlsCipher: AEAD-AES128-GCM-SHA256
- tlsClientCiphersSha1: LnbVHP1R8ay/dUs ahfir53h8aw4=
- tlsClientExtensionsSha1Le: l41A6hAf8CFQan+yuADUWHCIneg=
- tlsClientExtensionsSha1Le: //MhjMRn06+Eij5CchZp/zi/yQ=
- tlsClientHelloLength: 1826
- tlsClientRandom: MSQocOjYZ/ck6QgAZxhX9BKL+nCfLpkBDs0uF9/Qm4w=
- tlsVersion: TLSv1.3

HTTP Header

Key	Value
accept	text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
accept-encoding	gzip, br
accept-language	zh-TW,zh;q=0.8,en-US;q=0.5,en;q=0.3
cf-connecting-ip	2001:b400:e2c2:f6aa:b514:4f58:231e:6131
cf-ipcountry	TW
cf-ray	9a7a6e2dcfb5dc0d
cfvisitor	{"scheme": "https"}

Host

- IP: 2001:b400:e2c2:f6aa:b514:4f58:231e:6131
- hostname: echo.yuaner.tw

網頁界面仍有提供Raw Response Body

模擬本後端的JSON模式原始輸出，方便切換客戶端比對使用

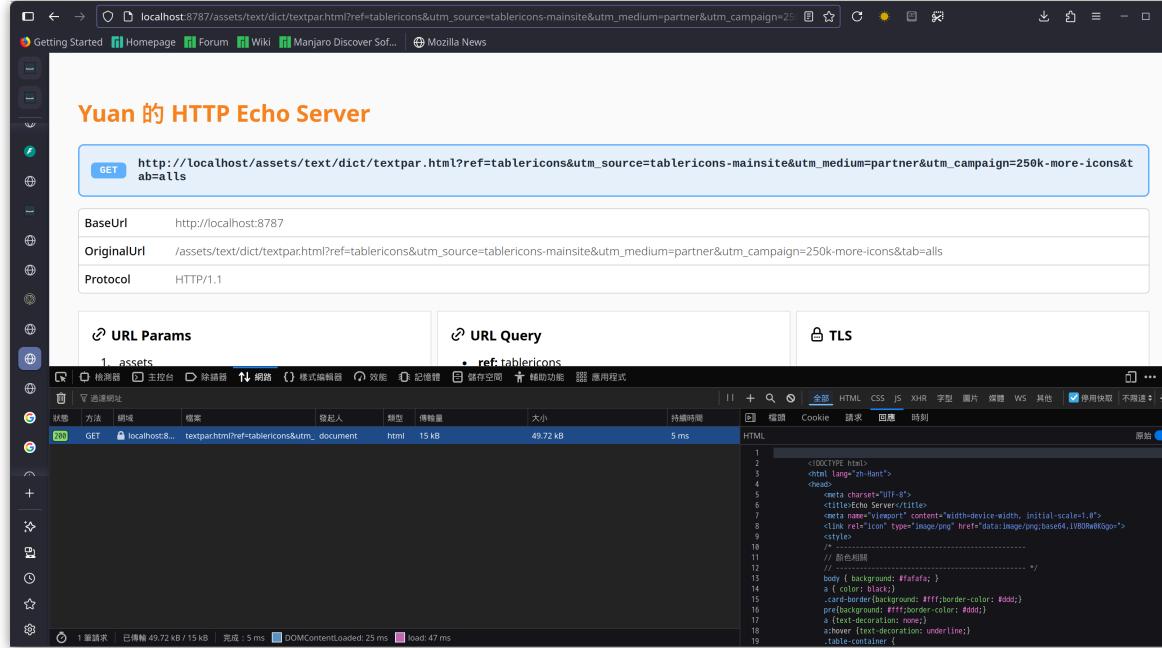
sec-referer-user	:	i
upgrade-insecure-request	1	
user-agent	Mozilla/5.0 (X11; Linux x86_64; rv:139.0) Gecko/20100101 Firefox/139.0	
x-forwarded-proto	https	
x-real-ip	2001:b400:e2c2:f6aa:b514:4f58:231e:6131	

- As Organization: HiNet Taiwan
- Region: Taiwan
- Region Code: 04
- Timezone: Asia/Taipei

</> Raw Response Body

```
{  
  "request": {  
    "params": [  
      "assets",  
      "text",  
      "dict",  
      "textpar.html"  
    ],  
    "query": {  
      "ref": "tablericons",  
      "utm_source": "tablericons-mainsite",  
      "utm_medium": "partner",  
      "utm_campaign": "250k-more-icons",  
      "tab": "alls"  
    },  
    "cookies": {},  
    "cookiesRaw": "",  
    "body": {},  
    "bodyRaw": "",  
    "headers": {  
      "accept": "text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8",  
      "accept-encoding": "gzip, br",  
      "accept-language": "zh-TW,zh;q=0.8,en-US;q=0.5,en;q=0.3",  
      "cf-connecting-ip": "2001:b400:e2c2:f6aa:b514:4f58:231e:6131",  
      "cf-ipcountry": "TW",  
      "cf-ray": "9a7a6e2dcfb5dc0d",  
      "cfvisitor": "{\"scheme\":\"https\"}",  
      "connection": "Keep-Alive",  
      "host": "echo.yuaner.tw",  
      "sec-referer-user": "i",  
      "upgrade-insecure-request": "1",  
      "user-agent": "Mozilla/5.0 (X11; Linux x86_64; rv:139.0) Gecko/20100101 Firefox/139.0",  
      "x-forwarded-proto": "https",  
      "x-real-ip": "2001:b400:e2c2:f6aa:b514:4f58:231e:6131"  
    }  
  }  
}
```

效能考量設計



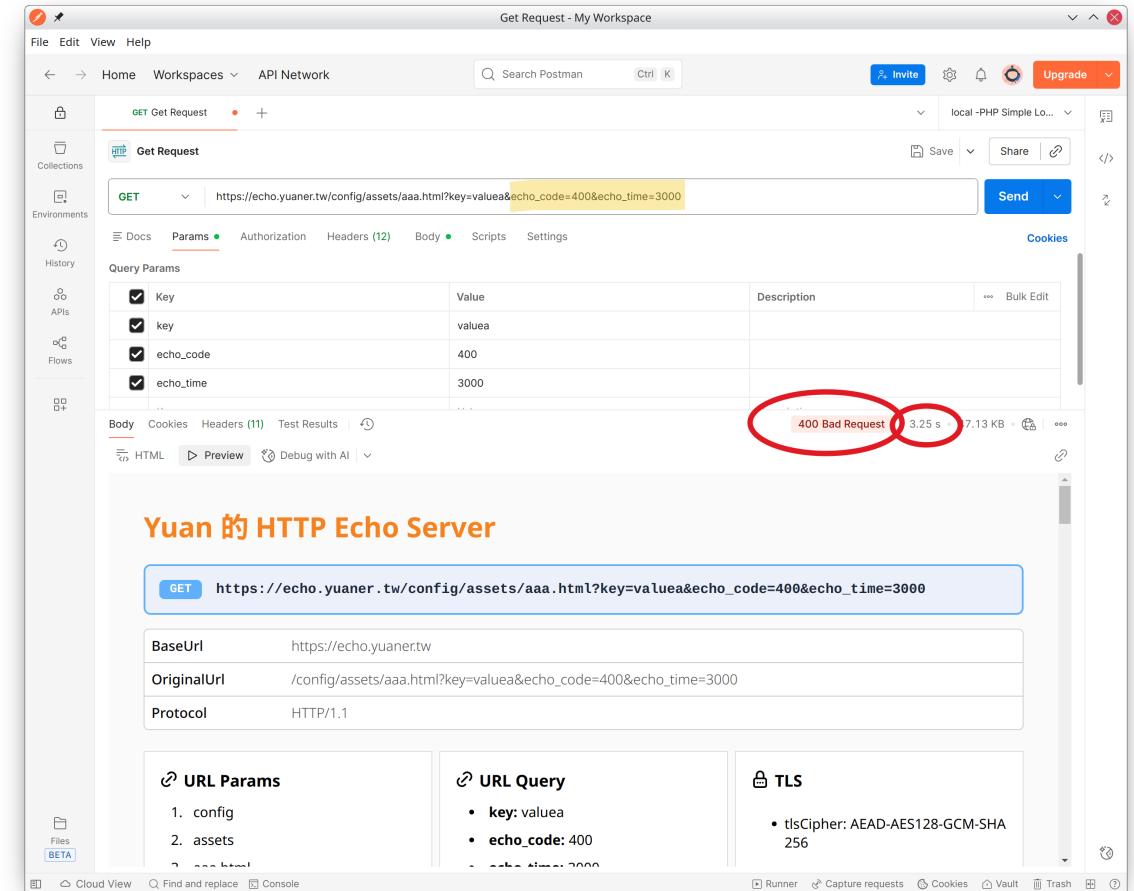
網頁版不會產生額外Request載入其他資源！（如：圖片、CSS、JS等等）

- 所有外部資源如Icons與Syntax Highlight JS都已直接內嵌在單一這個Request。
- 所有圖片都是SVG格式

→ 附加功能

提供 URL Query 參數 來控制以下功能

- echo_code=200 : 控制要回傳的 HTTP Status Code
- echo_time=3000 : 控制伺服器要延遲多久才會送 Response , 模擬較差網路品質狀況使用



→ 提供本地架設方式

本專案雖然是為Cloudflare量身打造的，但也有提供傳統的架設方式

- Docker

```
docker run -p 3000:3000
```

```
chuaner/echo-server
```

- Node直接啟動

```
npm i && npm run start
```

The screenshot shows the Docker Hub repository page for 'chuaner/echo-server'. The repository was created by 'chuaner' and updated about 3 hours ago. It provides a lightweight http echo server (Docker independent execution version). The page includes tabs for 'ARTIFACT' and 'IMAGE'. Below the repository details, there's an 'Overview' section with a summary of the project, a 'Tag summary' section showing the 'master' tag, and a 'Content type' section indicating it's an 'Image'. The 'Digest' section shows the SHA256 hash: sha256:1e5421ffd... . The 'Size' is listed as 45.7 MB. The 'Last updated' section shows it was updated about 3 hours ago. At the bottom, there's a command to pull the image: docker pull chuaner/echo-server:master.

Explore / chuaner / echo-server

chuaner/echo-server

By chuaner • Updated about 3 hours ago

提供輕量化的http回音伺服器 (Docker獨立執行版本)

ARTIFACT IMAGE

☆0 ↓ 91

Overview Tags

Yuan 的 HTTP Echo Server

<https://github.com/chuaner/cloudflare-echo-server>

本專案是提供CDN Edge層級的http回音鵝伺服器 (也提供本機端獨立運作的方式)

就如字面上所說的，你對我發出的Request後，我的伺服器就會把我從你這邊接到的資訊：以什麼網址串、帶了什麼Post Body、Request Header，一五一實的以ResponseBody方式回應給你。

同時也可以當作MyIP查詢使用，會顯示在「Host」區塊。

Demo https://echo.yuaner.tw/assets/text/dict/textpar.html?ref=tablericons&utm_source=tablericons-mainsite&utm_medium=partner&utm_campaign=250k-more-icons&tab=all

Yuan 的 HTTP Echo Server

Method: GET
BaseUrl: https://echo.yuaner.tw
OriginalUrl: /assets/text/dict/textpar.html?ref=tablericons&utm_source=tablericons-mainsite&utm_medium=partner&utm_campaign=250k-more-icons&tab=all
Protocol: https

URL Params:

- 1. assets
- 2. text
- 3. dict
- 4. textpar.html

URL Query:

- ref: tablericons
- utm_source: tablericons-mainsite
- utm_medium: partner
- utm_campaign: 250k-more-icons
- tab: all

Host:

- IP: 2001:b400::2:c865:6d8b:4031:6d82:80f3
- hostname: echo.yuaner.tw
- City: Kaohsiung
- Country: TW
- Continent: AS
- Latitude: 22.61626
- Longitude: 120.31333
- Region: Tainan
- Region Code: KH
- Timezone: Asia/Taipei

Header:

Key	Value
accept	text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
accept-encoding	gzip, br
accept-language	zh-TW,zh;q=0.8,en-US;q=0.5,en;q=0.3
cf-connecting-ip	2001:b400::2:c865:6d8b:4031:6d82:80f3
cf-ipcountry	TW
cf-ray	9a6201217b0cf94b
cfvisitor	{"scheme": "https"}



開發心得

本次採用語言

其實我本身比較擅長PHP，但...

- 本次目的就是想減少自有主機依賴，變成要遷就雲端提供商的限制
- Cloudflare Workers基本上就是以NodeJS語言為主
- 本次目的是盡可能減少線路「繞圈」與「轉換」，來換取效能

開發緣由

先前都是使用 ealen/echo-server

雖然已包好Docker，架設簡單、輸出結構簡潔漂亮，但是...

- 只有提供JSON格式回傳
- 需要有自己的主機架設
 - 然後我近期的主機資源很吃緊~~~
- 其他原因，下述...

近期對CDN優化有興趣

我以前使用Cloudflare Worker用途

- 網址搬遷時用白名單Mapping表概念，讓特定舊網址跳轉到新網址
- 短網址直接跳轉
- 偵測客戶端特定國家自動跳轉專用網址

後來發現Workers其實可以做到以下事情

- 拿到客戶端傳來的Request
 - URL Params / Query
 - Request Post Body
 - Request Post Body
- 可以控制Response內容
 - 跳轉導向到特定的網址
 - 改寫 Response Body內容
 - 可以直接輸出指定的字串，也包含整串HTML大字串

 評估下來，本次需求僅用以上功能就足夠了！！！

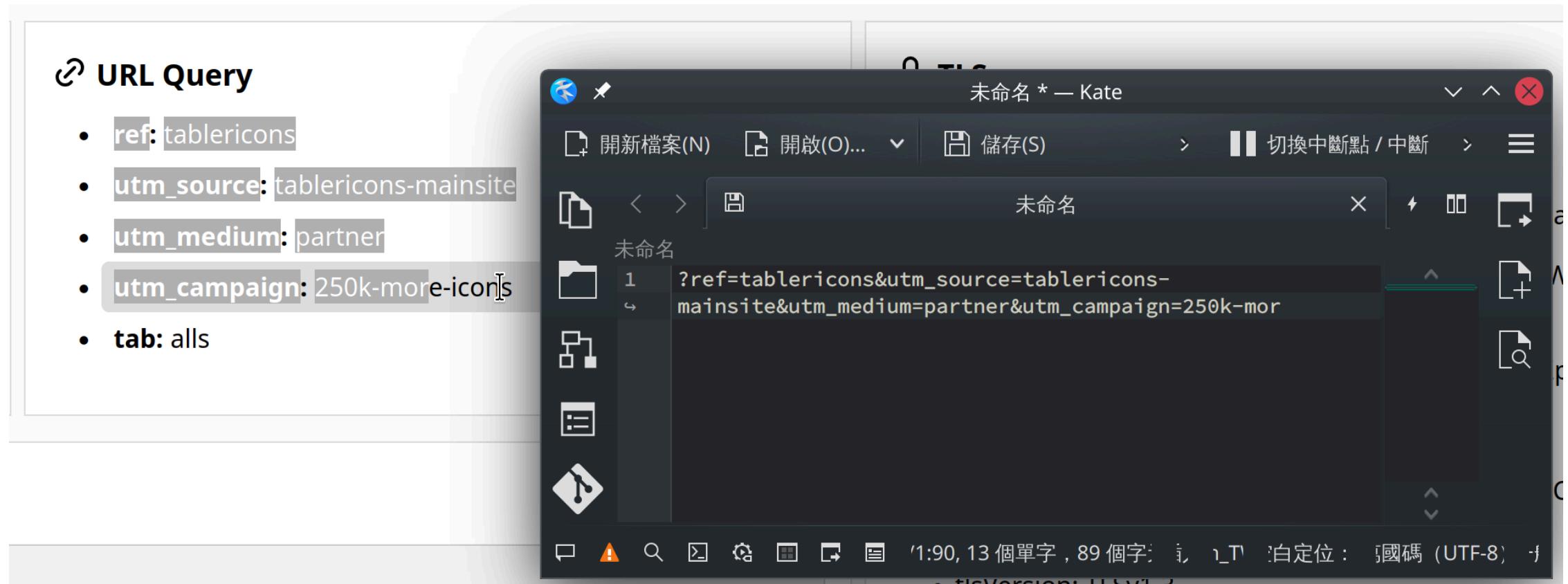
Cloudflare Worker執行能力有限

- 並不是完整的NodeJS環境，只能執行Cloudflare API名單內的function
- 沒有檔案概念，若需要額外資源檔案，需要另外加掛資源空間
 - 也直接導致很難使用ejs之類的模板框架（遇到底層有使用到 eval 與 fs 就會被拒絕執行）

對策：

- 所有資源全部Hard Code寫死內嵌，整理成JS陣列。
- 不使用模板系統，直接靠func整理HTML字串。
 - 但自己在規劃JS Function時仍然會盡量模組化。

網址文字友善複製



界面乍看下是ul li項目清單，但圈選文字後，會直接複製成可直接貼上網址列的字串

網址文字友善複製 實做方式

原始結構全部都是 ``

```
<span class="firstchar">?</span>
<span class="li">
  <span class="part">
    <span class="key">ref</span><span class="kvsplit">=</span>tablericons
  </span>
  <span class="split">&amp;lt;/span>
</span>
<span class="li">
  <span class="part">
    <span class="key">utm_source</span><span class="kvsplit">=</span>tablericons-mainsite
  </span>
  <span class="split">&amp;lt;/span>
</span>
<span class="li">
  <span class="part">
    <span class="key">utm_medium</span><span class="kvsplit">=</span>partner
  </span>
  <span class="split">&amp;lt;/span>
</span>
<span class="li">
  <span class="part">
    <span class="key">utm_campaign</span><span class="kvsplit">=</span>250k-more-icons
  </span>
  <span class="split">&amp;lt;/span>
</span>
<span class="li">
  <span class="part">
    <span class="key">tab</span><span class="kvsplit">=</span>alls
  </span>
</span>
```

全由CSS模擬 `` 的效果
0% JavaScript處理

```
.urltext {margin-left:1em;margin-bottom:-1em;}
.urltext .li {
  display: inline-block;
  vertical-align: middle;
  padding-left: 0.5em;
  border-radius: 5px;
}
.urltext .firstchar { padding-left:1em; }
.urltext .firstchar,.urltext .split, .urltext .kvsplit{
  opacity: 0;
}
.urltext .li {
  display: list-item;
  margin-left: 1em;
  position: relative;
  top: -2em;
  line-height: 2em;
}
.urltext .key{ font-weight: bold; }
.urltext .key::after {
  content: ":" ;
  position: absolute;
}
```

提供本地架設方式

開發過程90%都是使用Cloudflare提供的wrangler模擬環境測試
但考量隨時會有獨立架設需求，仍有特別製作 `/src/server.js` 供獨立執行使用

`/src/index.js` 核心主功能流程與Cloudflare Workers直接進入點

`/src/server.js` 獨立執行專用 進入點

- 以NodeJS最原生的node:http為主
 - 本次需求沒有複雜的 router、session...等等，也沒有多頁面需求，不使用express這類框架
- 會銜接回 `/src/index.js`，讓所有功能都與Cloudflare Workers模式對齊
 - Cloudflare專屬功能提供的GeoIP資料則無法使用，需要用替代方式處理GeoIP問題。因為我暫時還沒有常駐用的獨立架設需求，就暫時不處理了。

搭配 Github Actions 自動更新Docker Hub

New workflow

Docker Image

Metrics

All workflows

Showing runs from all workflows

12 workflow runs

Event ▾ Status ▾ Branch

✓ 將json輸出改成原文輸出不排版

Build & Push Docker Image #10: Commit [857a465](#) pushed by [master](#)
chyuanner

Today
51s

✓ Fix Dockerfile & add package-lock

Build & Push Docker Image #6: Commit [e7921d0](#) pushed by [master](#)
chyuanner

Today
48s

✗ Fix Dockerfile

Build & Push Docker Image #5: Commit [ceb1968](#) pushed by [master](#)
chyuanner

Today
24s

✗ Fix Dockerfile

Build & Push Docker Image #4: Commit [9fd19c2](#) pushed by [master](#)
chyuanner

Today
28s

✗ fix github actions: 先移除以tag觸發

Build & Push Docker Image #3: Commit [87483c3](#) pushed by [master](#)
chyuanner

Today
27s

✗ github actions: 先移除以tag觸發

Build & Push Docker Image #2: Commit [ef04b36](#) pushed by [master](#)
chyuanner

Today
26s

✗ add github action: docker 以 branch mast...

Build & Push Docker Image #1: Commit [1c9e5a0](#) pushed by [master](#)
chyuanner

Today
16s

後續新專案要不要用 Cloudflare Worker ?

- 他有提供介接DB的機能，但...
- Cloudflare Workers執行能力有限！！！
 - 本次專案已經用了大量的Wordaround方法，尤其是有不少直接Hard Code寫死
- 如果是傳統電商需求，100%一定不會考慮！！
- 小專案：Fake Images Please 復

The screenshot shows a grid of six template cards. Each card includes a small icon, the template name, a brief description, and a 'Featured' badge.

- Remix Framework Starter**
Build a full-stack web application with Remix.
- Vite React Template**
A template for building a React application with Vite, Hono,...
- Backend OpenAPI Template**
Complete backend API template using Hono + Chanfana + D1 + Vitest.
- Worker + D1 Database**
Cloudflare's native serverless SQL database.
- Durable Chat App**
Chat with other users in real-time using Durable Objects and PartyKit.
- LLM Chat App**
A simple chat application powered by Cloudflare Workers AI

At the bottom right of the grid, there are two buttons: '返回' (Return) and '瀏覽所有範本 ↗' (View all templates).

- 選擇方法
- 選取範本
- 建立和部署

就醬，歡迎交流 😊