

# CG URL Shortener Document

Release Version 1.0.0

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## Revision History

Document Version	Description
1.0	Initial version.

## CG URL Shortener Made Life Simple

A URL shortener, also known as a link shortener, seems like a simple tool, but it is a service that can have a dramatic impact on your marketing efforts.

Link shorteners work by transforming any long URL into a shorter, more readable link. When a user clicks the shortened version, they're automatically forwarded to the destination URL.

Think of a short URL as a more descriptive and memorable nickname for your long webpage address. You can, for example, use a short URL like [cg.com/CoinGecko](#) so people will have a good idea about where your link will lead before they click it.

If you're contributing content to the online world, you *need* a URL shortener.

Make your URLs stand out with our easy to use free link shortener.

## Generating Short URL

Description: This API allows you to generate a Url entity which includes the target URL, short URL, code, created time and other relevant information. By default, the Short URL generated will be valid for 30 days from the time of generation, after which, user will not be able to access through the short URL.

**Method:** POST

**Content-Type:** application/json

### Request format

Field Name	Parameter Name	Condition	Data type	Remarks
<b>API Parameters</b>				
<b>Target URL</b>	targetUrl	Required	String	A Target URL is the URL which your user will be redirected to after accessing the Short URL.  Requirement: The Target URL must be accessible and protocol such as http or https should be provided.

### Example to generate Short URL

```
POST http://localhost:8080/api/createUrl
Content-Type: application/json

{
  "targetUrl": "https://www.coingecko.com"
}
```

### Example of response

```
{
  "urlCode": "Ywjl2OjOCx",
  "shortUrl": "http://cg.com/r/Ywjl2OjOCx",
  "targetUrl": "https://www.coingecko.com",
  "urlTitle": "Cryptocurrency Prices, Charts, and Crypto Market Cap | CoinGecko",
  "expiredDate": "2021-11-12T23:00:55.403"
}
```

## Redirecting to Target URL

Description: This API allows you to retrieve the Target URL based on the short code detected. If the short URL entered is valid, and return ResponseEntity which will redirect user based on the stored Target URL. The redirection will be performed through Java's *HttpServletResponse.sendRedirect(url)* function which Sends a temporary redirect response to the client using the specified redirect location URL.

**Method:** GET

URL Format: `http://localhost:8080/r/{shortCode}`

### Example of redirection

<code>http://localhost:8080/r/XITctU8lvc</code>
---

## Generating Usage Report

Description: This API is used to generate the usage report of short code. It will returns the **number of clicks, originating geolocation, originating IP, timestamp** of each visit to a Short URL.

Method: GET

### Request format

Field Name	Parameter Name	Condition	Data type	Remarks
API Parameters				
Short Code	shortCode	Required	String	<p>A short code is the code appended at the back of generated domain which will be provided when generating the Short URL.</p> <p>Eg: The short code generated for the URL link <a href="https://localhost:8080/r/ud2JaAJYM0">https://localhost:8080/r/ud2JaAJYM0</a> Is ud2JaAJYM0.</p>

### Example to generate usage report

```
GET http://localhost:8080/api/report/short-code/?shortCode=ud2JaAJYM0
```

### Example of response

```
{
  "numberOfClicks": 2,
  "targetUrl": "https://gitlab.com/coingecko-dev-test/link-shortener",
  "urlEvents": [
    {
      "id": "ud2JaAJYM02021-10-11T01:52:40.946",
      "shortCode": "ud2JaAJYM0",
      "targetUrl": "https://gitlab.com/coingecko-dev-test/link-shortener",
      "originIp": "60.52.96.127",
      "originGeolocation": "Kuala Lumpur, 50603, Malaysia (3.11681, 101.66752)",
      "timestamp": "2021-10-11T01:52:40.946"
    },
    {
      "id": "ud2JaAJYM02021-10-11T01:53:19.483",
      "shortCode": "ud2JaAJYM0",
      "targetUrl": "https://gitlab.com/coingecko-dev-test/link-shortener",
      "originIp": "60.52.96.127",
      "originGeolocation": "Kuala Lumpur, 50603, Malaysia (3.11681, 101.66752)",
      "timestamp": "2021-10-11T01:53:19.483"
    }
  ]
}
```