Cisco URLyBud REST API Quick Start Guide

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Contents

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Overview

URLyBud Shortens long URLs to short URLs. Once you have succeeded in abbreviation, you can access the original URL through a short URL. You can control connection and analyze statistics of requests without modifying source code of original URL-side software. URLyBud works as two servers logically. So you need at least two TCP/IP ports. URLyBudA provides several APIs and must be connected in an internal network. URLyBudB which redirects short URL request to original URL must be connected in an outer network.

Configuration

You can change default configuration and design via director path /URLyBud/conf

Change default values

/URLyBud/conf/config.json file's contents are like below.

```
{
   "A_IP": "0.0.0.0",
   "A_PORT": "2020",
   "B_IP": "0.0.0.0",
   "B_PORT": "80",
   "INVALID_PASS_MAX": 5,
   "STEP": 7
}
```

If you want to change IP address bound to URLyBudA then change the value in that file "0.0.0.0" text to some IP that you want. Port can be changed same way as well. You can specify the max times of invalid password input by setting the value of INVALID_PASS_MAX. In this case, URLyBud will lock the short URL with invalid password requests after 5 times.

Change design of error pages

There are information pages for HTTP response error code in the path(folder) "**/URLyBud/conf/ePages**". For example, if you want to change design of 404 error page then just update or replace 404.html file in that path.

Change design of authentication pages & wrap template

There are template pages for each authentication type in the path(folder) "**/URLyBud/conf/ePages**". If s short URL's AuthType value is not 0 then it will redirect request to original URL without authentication process. But if AuthType value is not 0 then it will show authentication page instead of redirection. If you want to prettify it then update or

replace each {AuthType}.html file. For example, if a short URL's AuthType value is "birthday" then modify birthday.html in the path that mentioned above.

URLyBudA

Register a URL

You can register an original URL and get a unique key of short URL. You can group a bunch of URLs with 'gid' parameter. You can operate many URLs with 'gid' at once. You can modify properties of URLs with same 'gid' as a group. You can specify a certain value for parameter 's' but if that value is already in URLyBud's unique key DB then 'duplicated exception' would be occur. It's good to use when you want to make a long URL's alias.

Request Path

Method	URL
GET/POST	http://host.domain:2020/**uset**

Request Variable

Name	Type	Must	Comment
s	string	N	Short URL Omit then URLyBud will create unique one else server will check uniqueness.
wrap	string	N	Whether hide original URL or not
gid	string	N	Group ID (Batch Code)
uid	string	N	User ID
l	string	Y	Original URL (Long URL)
a	string	Y	Authentication Type
p	string	Y	Authentication Value
c	number	Y	Max click Set 1then it will work as an One-Time link
e	number	Y	Valid until (Unix Time as millisecond) In Java, Date Object's getTime() value

Response

CODE	BODY	Comment
200	Short URL	Registered successfully
400	Error message	Request variable mismatch
500	Error message	System error

Example

Register an original URL "www.google.com" and allow it's short URL to work only once.

Request

[http://localhost:2020/uset?l=http://www.google.com&a=0&p=0&e=1540998000000 &c=1](http://localhost:2020/uset?l=http://www.google.com&a=0&p=0&e=1540998000000&c=1)

Result

1gXefrn

Update a URL

Request Path

Method	URL
GET/POST	http://host.domain:2020/**uupdate**

Request Variable

Name	Type	Must	Comment
_id	string	Y	Short URL
wrap	string	N	Whether hide original URL or not
gid	string	N	Group ID (Batch Code)
uid	string	N	User ID
l	string	N	Original URL (Long URL)
a	string	N	Authentication Type
p	string	N	Authentication Value
c	number	N	Max click Set 1then it will work as an One-Time link
e	number	N	Valid until (Unix Time as millisecond) In Java, Date Object's getTime() value
pc	number	N	Invalid Password Count
h	number	N	Click count

Response

CODE	BODY	Comment
200	ok	Updated successfully
400	Error message	Request variable mismatch
500	Error message	System error

Example

Set short URL 1gXefrn's Max Click value to 5

Request

http://localhost:2020/uupdate?_id=1gXefrn&c=5

Result

ok

Query URLs

Request Path

Method	URL
GET/POST	http://host.domain:2020/**urls**

Request Variable

Name	Type	Must	Comment
limit	number	Y	Record count 1 ~ 200 (201 or more == 200)
skip	number	N	Skip count
_id	string	N	Short URL
gid	string	N	Group ID (Batch Code)
uid	string	N	User ID

Response

CODE	BODY	Comment
200	ResultJSON	Success
400	Error message	Request variable mismatch
500	Error message	System error

Example

Find records whose register user id is "mirim" and get 101th record. 101 = skip 100 + limit 1 **Sort order is always registered date desc.**

Request

http://localhost:2020/urls?skip=100&limit=1&uid=mirim

Result

Count: Total count of record with certain condition. In this example it's 220635.

Data: each record's detail.

{"count":220635,"data":[{"_id":"1gXg71s","l":"https://www.samsungcard.com/personal/card/simple-apply/UHPPCA0225M0.jsp?code=AAP1483&alncmpC=MGM1&affcode=MG10012273475","a":"0","p":"1111","e":1527776280000,"c":6,"gid":"9898775053164468-0","uid":"mirim","pc":0,"h":0,"idt":1525824590371,"wrap":"0"}]}

Get a unique key

Method	URL
GET/POST	http://host.domain:2020**/uget**

Request Variable

Name	Type	Must	Comment
None			

Response

CODE	BODY	Comment
200	Short URL	Success
500	Error message	System error

Example

Get a unique key from URLyBud

Request

http://localhost:2020/uget

Result

1gXg7dc

Register groups

Request Path

Method	URL
GET/POST	http://host.domain:2020**/group**

Request Variable

Name	Type	Must	Comment
uid	string	N	User ID
gid	string	Y	Group ID Multiple values are allowed. If gid is multiple then expires, counts and authType should be multiple too.
expires	number	Y	Valid until (Unix Time as millisecond) In Java, Date Object's getTime() value
counts	number	Y	Max click
authType	string	Y	Authentication Type

Response

CODE	BODY	Comment
200	ok	Success
500	Error message	System error

Example

Register two groups.
Detail of each group is like below.

UID	GID	EXPIRES	AUTYTYPE
xx	g11	1 Oct 2018	2
xx	g22	1 Oct 2018	2

Request

http://localhost:2020/group?uid=xx&gid=g11&gid=g22&expires=1540998000000&expires=1540998000000&counts=11&counts=22&authTypes=1&authTypes=2

Result

OK

Update a group

Request Path

Method	URL
GET/POST	http://host.domain:2020/**gupdate**

Request Variable

Name	Type	Must	Comment
_id	string	Y	Group ID
e	number	Y	Valid until (Unix Time as millisecond) In Java, Date Object's getTime() value
c	number	Y	Max click

Response

CODE	BODY	Comment
200	ok	Success
400	Error message	Request variable mismatch
500	Error message	System error

Example

Find all records whose group id is "3099846194253866-2" and update expire value to 1 Nov 2018 and max click value to 3.

Request

http://localhost:2020/gupdate?_id=3099846194253866-2&c=3&e=1540998000000

Result

ok

Query groups

Request Path

Method	URL
GET/POST	http://host.domain:2020/**groups**

Request Variable

Name	Type	Must	Comment
limit	number	Y	Record count 1 ~ 20 (21 or more == 20)
skip	number	N	Skip count
_id	string	N	Group ID
uid	string	N	User ID

Response

CODE	BODY	Comment
200	ResultJSON	Success
400	Error message	Request variable mismatch
500	Error message	System error

Example

Get first 3 records from group.

Sort order is always registered date desc.

Request

http://localhost:2020/groups?limit=3

Result

Count: Total count of record with certain condition. In this example it's 56.

Data: each record's detail.

{"count":56,"data":[{"_id":"g22","uid":"xx","expire":2,"count":22,"authType":"2","idt":1525829633100},{"_id":"g11","uid":"xx","expire":1,"count":11,"authType":"1","idt":1525829633100},{"_id":"3099846194253866-2","uid":"hottguy","expire":1540998000000,"count":3,"authType":"2","idt":1525824584008}]}

Query click logs

All the request into URLyBudB makes each log record. You can analyze those records and get statistics of end users click actions. Must be careful to use this API because this might make a serious performance problem on URLyBud. You can query by time period so you'd better

make a copy of each hour or every day.

Request Path

Method	URL
GET/POST	http://host.domain:2020/**clicks**

Request Variable

Name	Type	Must	Comment
limit	number	Y	Record count 1 ~ 1000 (1001 or more == 1000)
skip	number	N	Skip count
s	string	N	Short URL
gid	string	N	Group ID
code	string	N	HTTP Response status code
d1	number	N	From date (Unix Time as millisecond)
d2	number	N	To date (Unix Time as millisecond) d1, d2 must be sent.

Response

CODE	BODY	Comment
200	Result JSON	Success
400	Error message	Request variable mismatch
500	Error message	System error

Example

Get first 100 click logs for short URL (1gXg7cK)
Sort order is always registered date desc.

Request

http://localhost:2020/clicks?limit=100&s=1gXg7cK

Result

Count: Total count of record with certain condition. In this example it's 4 only.

Data: each record's detail.

{"count":4,"data":[{"_id":"5af3af073f8b641dd8285eff","idt":1525919495856,"s":"1gXg7cK","gid":"9898775053164468-0","ip":"127.0.0.1","code":200},{"_id":"5af3aef53f8b641dd8285efe","idt":1525919477033,"s":"1gXg7cK","gid":"9898775053164468-0","ip":"127.0.0.1","code":200},{"_id":"5af3ac51cf8ecd19dca9fc19","idt":1525918801683,"s":"1gXg7cK","gid":"9898775053164468-0","ip":"127.0.0.1","code":200},{"_id":"5af389870c9b77072ce72719","idt":1525909895461,"s":"1gXg7cK","gid":"9898775053164468-0","ip":"127.0.0.1","code":200}]}

URLyBudB

Lookup an original URL by shorten URL

Request Path

Method	URL
GET/POST	http://host.domain/**ShortURL**

Request Variable

Name	Type	Must	Comment
None			

Response

CODE	BODY	Comment
200	HTML(Iframe)	Success. (wrap setting is on)
302	None	Success. Redirect to original URL
241	Error message	Exceed max click
242	Error message	Expired
243	Error message	Invalid password too many times
244	Error message	Invalid authentication value
401	HTML	Needs Authentication Shoe Authentication Page(HTML) bound to the authentication type.
404	Error message	Short URL not found
500	Error message	System error