

# cURL

cURL?????????????curl?libcurl?????????????????URL??????  
cURL????????????????????????????????

- [Tips](#)
- [Online Tools](#)
- [Learning cURL](#)

# Tips

## Cheat Sheet



hide progress	verbose	extra info	output	timeout
<b>-s</b>	<b>-v</b> <b>--trace-ascii &lt;file&gt;</b>	<b>-w "format"</b>	<b>-O</b> <b>-o &lt;file&gt;</b>	<b>-m &lt;seconds&gt;</b>
POST	POST encoded	multipart formpost	PUT	HEAD (ers too)
<b>-d "string"</b> <b>-d @file</b>	<b>--data-urlencode</b> <b>"[name]=val"</b>	<b>-F name=value</b> <b>-F name=@file</b>	<b>-T &lt;file&gt;</b>	<b>-I</b> <b>-i</b>
custom method	read cookiejar	write cookiejar	send cookies	user-agent
<b>-X "METHOD"</b>	<b>-b &lt;file&gt;</b>	<b>-c &lt;file&gt;</b>	<b>-b "c=1; d=2"</b>	<b>-A "string"</b>
proxy	add/remove headers	custom address	smaller data	insecure HTTPS
<b>-x &lt;host:port&gt;</b>	<b>-H "name: value"</b> <b>-H "name:"</b>	<b>--resolve</b> <b>&lt;host:port:addr&gt;</b>	<b>--compressed</b>	<b>-k</b>
Basic auth	follow redirects	parallel	generate code	list options
<b>-u user:passwd</b>	<b>-L</b>	<b>-Z</b>	<b>--libcurl &lt;file&gt;</b>	<b>--help</b>

## Options in the integration with Shell

```
CURL_CMD="curl"  
CURL_OPT="-qSfs -m 60"  
CURL_OPT_POST="-qSfs -m 60 -X POST"
```

## POST Request

### Send an Empty POST Request

```
curl -X POST https://catonmat.net
```

### Send a POST Request with Form Data

```
curl -d 'login=emma&password=123' -X POST https://google.com/login
```

## GET Request

## Send a GET Request and Print the Response to Screen

```
curl https://catonmat.net/api?a=1&b=2
```

## Send a GET Request and Save the Response to a File

```
curl -o response.txt https://catonmat.net/api?a=1&b=2
```

## Self-Signed Certificate

“Error: curl: (60) SSL certificate problem: unable to get local issuer certificate

? curl ?? HTTPS ?????? self-signed certificate ?????????????????????? curl  
????????????????????????????? curl ????

????????

1. ? Firefox ? Chrome ?????????? CA ?? \*.pem
2. curl ?? \*.pem CA ???????

```
curl -s -k -H "Host: www.letsencrypt.org" -H "User-Agent: curl/7.28.1" -H "Accept: */*" https://acme-v01.api.letsencrypt.org/acme/new-reg
```

# 

--	--	--

```
curl --cacert your-server-ca.pem https://your-server-name
```

# 

--	--	--

```
# curl -CApath, CA file
```

```
curl --cacert XXX https://your-server-name
```

curl: (77) error setting certificate verify locations:

CAfile: xxx

CAPATH: /etc/ssl/certs <===

```
# CApath /usr/local/share/ca-certificates.crt , /usr/local/share/certs
```

[illegible]

```
# curl CA file
```

```
cat your-server-ca.pem >> /etc/ssl/certs/ca-certificates.crt
```

```
curl https://your-server-name
```

## HTTP Status Codes

"HTTP Status Code" --> A 3 Digit "Server Response" sent by a web server to a client, indicating the request was completed successfully or not.

1XX : HTTP Information Code	3XX : HTTP Redirection Codes	4XX : HTTP Client Error Codes
-100 : Continue	-300 : Multiple Choices	-400 : Bad Request
-101 : Switching Protocols	-301 : Moved Permanently	-401 : Unauthorized
-102 : Processing	-302 : Found	-402 : Payment Required
-103 : Checkpoint	-303 : See Other	-403 : Forbidden
-122 : Request-URI too Long	-304 : Not Modified	-404 : Not Found
	-305 : Use Proxy	-405 : Method Not Allowed
2XX : HTTP Successful Codes	3XX : HTTP Redirection Codes	4XX : HTTP Client Error Codes
-200 : OK	-306 : Switch Proxy	-406 : Not Acceptable
-201 : Created	-307 : Temporary Redirect	-407 : Proxy Authentication Required
-202 : Accepted	-308 : Permanent Redirect	-408 : Request Timeout
-203 : Non-Authoritative Information		-409 : Conflict
-204 : No Content	5XX : HTTP Server Error Codes	-410 : Gone
-205 : Reset Content	-500 : Internal Server Error	-411 : Length Required
-206 : Partial Content	-501 : Not Implemented	-412 : Precondition Failed
-207 : Multi-Status	-502 : Bad Gateway	-413 : Request Entity Too Large
-208 : Already Reported	-503 : Service Unavailable	-414 : Request URI too long
-226 : IM Used	-504 : Gateway Timeout	-415 : Unsupported Media Type
	-505 : HTTP Version Not Supported	-416 : Requested Range not Satisfiable
Request Methods :	-506 : Variant Also Negotiates	-417 : Expectation Failed
-GET : Requests a representation of the specified resource	-507 : Insufficient Storage	-418 : I am a teapot
-POST : Requests the server to accept the entity enclosed in the request	-508 : Loop Detected	-422 : Unprocessable Entity
-HEAD : Request similar to GET but without the response body	-509 : Bandwidth Limit Exceeded	-423 : Locked
-PUT : Requests to store the enclosed entity to supplied URI	-510 : Not Extended	-424 : Failed Dependency
-DELETE : Deletes the specified resource	-511 : Network Authentication Required	-425 : Unordered Collection
-OPTIONS : Returns the HTTP Methods supported by server for URL Specified	-512 : Network Read Timeout Error	-426 : Upgrade Required
-CONNECT : starts a two-way communication with requested resource	-513 : Network Connect Timeout Error	-428 : Precondition Required
		-429 : Too Many Requests
		-431 : Request Header Fields too large
		-444 : No Response
		-449 : Retry With
		-450 : Blocked by Windows Parental Controls
		-451 : Unavailable for Legal Reasons
		-499 : Client Closed Request

## Use a Proxy

```
curl -x username:Password@myproxy.com:8080 https://catonmat.net
```

## Download

```
curl --request GET \
  --url 'https://www.tenable.com/downloads/api/v2/pages/nessus/files/Nessus-10.5.1-es9.x86_64.rpm' \
  --output 'Nessus-10.5.1-es9.x86_64.rpm'
```



# Online Tools

More online tools

- [Online CSV Tools](#)
- [Online Time Tools](#)

## Public IP

↪ curl ifconfig.me

219.68.222.111↵

↪ curl ifconfig.me/ip

219.68.222.111↵

↪ curl ip.im

↪ curl ipv4.im

↪ curl ip.im/info

↪ curl ip.im/8.8.8.8

curl ifconfig.co

curl checkip.amazonaws.com

curl canihazip.com

curl ipecho.net/plain

curl -Ls myip.check.place

## CryptoCurrency

[rate.sx](#)

[curl-rate.sx.png](#) curl -rate.sx: source unknown

curl rate.sx

curl rate.sx/btc

curl rate.sx/btc@3d # for last 3 days

curl rate.sx/1btc # convert 1 BTC to ?? USD

curl rate.sx/:help

# Weather

[wttr.in](https://wttr.in)

[curl-wttr.in.png](#) curl-wttr.in.png: unknown

```
curl wttr.in
curl wttr.in/TaoYuan
curl wttr.in/:help
```

# QRcode

[qrencode](https://qrencode.org)

[curl-qrencode.png](#) curl-qrencode.png: unknown

```
curl qrencode
curl qrencode/www.youtube.com
curl qrencode/:help
printf "$@" | curl -F=@<- qrencode
```

# Shorten URL

[0x0.st](https://0x0.st)

[curl-0x0.st.png](#) curl-0x0.st.png: unknown

```
curl -F 'shorten=https://www.osslab.tw' https://0x0.st
```

## Tinyurl.com: short URL from the terminal

```
echo https://URL | xargs -r -l {} curl -s -d url={} -G https://tinyurl{.}com/create.php | \
awk '/indent/ {print substr($2,19,39)}' | sed '2!d' | sed 's/<.*//'
```

# Learning cURL

- [Basics of HTTP Requests with cURL: An In-Depth Tutorial](#)
- [Curl Cookbook](#)
- [Httpie](#) - Alternative to Curl