CURL

Allgemeines

https://ec.haxx.se/

https://curl.haxx.se/docs/manual.html

https://curl.haxx.se/docs/httpscripting.html

https://hasdata.com/blog/curl-with-proxy

Request/Response Information

curl -iv –head https://www.netzwissen.de oder

curl https://www.netzwissen.de -I

```
* Rebuilt URL to: https://www.netzwissen.de/
*   Trying 138.201.52.53...
* TCP_NODELAY set
* Connected to www.netzwissen.de (138.201.52.53) port 443 (#0)
* ALPN, offering h2
* ALPN, offering http/1.1
* successfully set certificate verify locations:
*   CAfile: /etc/ssl/certs/ca-certificates.crt
  CApath: /etc/ssl/certs
* TLSv1.3 (OUT), TLS handshake, Client hello (1):
* TLSv1.3 (IN), TLS handshake, Server hello (2):
* TLSv1.2 (IN), TLS handshake, Certificate (11):
* TLSv1.2 (IN), TLS handshake, Server key exchange (12):
* TLSv1.2 (IN), TLS handshake, Server finished (14):
* TLSv1.2 (OUT), TLS handshake, Client key exchange (16):
* TLSv1.2 (OUT), TLS change cipher, Client hello (1):
* TLSv1.2 (OUT), TLS handshake, Finished (20):
* TLSv1.2 (IN), TLS handshake, Finished (20):
* SSL connection using TLSv1.2 / ECDHE-RSA-CHACHA20-POLY1305
* ALPN, server accepted to use http/1.1
* Server certificate:
*  subject: CN=www2.netzwissen.de
*  start date: Nov 27 15:13:22 2019 GMT
*  expire date: Feb 25 15:13:22 2020 GMT
*  subjectAltName: host "www.netzwissen.de" matched cert's
"www.netzwissen.de"
*  issuer: C=US; O=Let's Encrypt; CN=Let's Encrypt Authority X3
```

```
*  SSL certificate verify ok.> HEAD / HTTP/1.1> Host: www.netzwissen.de>
User-Agent: curl/7.58.0> Accept: */*>
<HTTP/1.1 301 Moved Permanently
HTTP/1.1 301 Moved Permanently
<Date: Sat, 21 Dec 2019 07:09:44 GMT
Date: Sat, 21 Dec 2019 07:09:44 GMT
<Server: Apache/2.4.29 (Ubuntu)
Server: Apache/2.4.29 (Ubuntu)
<Strict-Transport-Security: max-age=31536000; includeSubDomains
Strict-Transport-Security: max-age=31536000; includeSubDomains
<X-Content-Type-Options: nosniff
X-Content-Type-Options: nosniff
<Set-Cookie: 21529421b0cb0cfcd6db3ee5cf2b926a=f0uvjqlmf5eos249i316kh3hfr;
path=/; domain=netzwissen.de; secure; HttpOnly
Set-Cookie: 21529421b0cb0cfcd6db3ee5cf2b926a=f0uvjqlmf5eos249i316kh3hfr;
path=/; domain=netzwissen.de; secure; HttpOnly
<Expires: Wed, 17 Aug 2005 00:00:00 GMT
Expires: Wed, 17 Aug 2005 00:00:00 GMT
<Last-Modified: Sat, 21 Dec 2019 07:09:45 GMT
Last-Modified: Sat, 21 Dec 2019 07:09:45 GMT
<Cache-Control: no-store, no-cache, must-revalidate, post-check=0, pre-
check=0, no-store, no-cache, must-revalidate, post-check=0, pre-check=0
Cache-Control: no-store, no-cache, must-revalidate, post-check=0, pre-
check=0, no-store, no-cache, must-revalidate, post-check=0, pre-check=0
<Pragma: no-cache
Pragma: no-cache
<Location: https://www.netzwissen.de/de/
Location: https://www.netzwissen.de/de/
<Content-Type: text/html; charset=utf-8
Content-Type: text/html; charset=utf-8
<* Connection #0 to host www.netzwissen.de left intact
```

Proxy Anfragen

Basis Syntax

```
curl -x proxy_address:proxy_port URL
```

Mit dieser Anfrage bekommt an die eigene IP zurück, als Beweis, dass der Proxy selber tut:

```
curl -x 195.154.243.38:8080 https://httpbin.org/ip
```

Proxy Auth

```
curl --proxy-user username:password -x proxy_address https://httpbin.org/ip
```

Kaputte Zertifikate umgehen

```
curl --proxy http://proxy.example.com:8080 --insecure https://httpbin.org/ip
```

Proxy Request mit Header

```
curl -x proxy_address -H "Header-Name: Header-Value" https://httpbin.org/ip
```