curl Transfer data by URL

CONCEPTS

curl prints the response body to stdout and progress to stderr, so it composes with pipes. It does not fail on HTTP 404/500 unless you add -f.

URL scheme, host, path
↓ connect
Request method, headers, body
↓ send
Response status, headers, body
↓ output
Output stdout, -o, -O

Quote URLs containing & or ? so the shell does not split them.

REQUESTS

curl *<url>*
GET a URL

curl -X *<method>* *<url>*
Set the request method

curl -d *<data>* *<url>*
POST form-encoded data

curl -d @*<file>* *<url>*
POST data from a file

curl --json '*<json>***'** *<url>*
POST JSON with proper headers

curl -F *<name>*=*<value>* *<url>*
Multipart form field

curl -F *<name>*=@*<file>* *<url>*
Upload a file as form field

curl -G -d *<k=v>* *<url>*
Send data as query string

curl --url-query *<k=v>* *<url>*
Add an encoded query param

curl -I *<url>*
HEAD request, headers only

HEADERS & AUTH

curl -H "*<name>***:** *<value>***"** *<url>*
Add a custom header

curl -u *<user>*:*<pass>* *<url>*
Basic authentication

curl -H "Authorization: Bearer *<token>***"** *<url>*
Send a bearer token

HEADERS & AUTH (cont.)

curl -b *<jar>* **-c** *<jar>* *<url>*
Read and write a cookie file

OUTPUT & DOWNLOAD

curl -o *<file>* *<url>*
Save body to a file

curl -O *<url>*
Save under the remote name

curl -L *<url>*
Follow redirects

curl -i *<url>*
Include response headers

curl -s *<url>*
Silent: no progress meter

curl -sS *<url>*
Silent, but show errors

curl -f *<url>*
Fail on HTTP errors (22)

curl -C - -O *<url>*
Resume a partial download

curl -w "*<format>***"** *<url>*
Print info after transfer

NETWORK & TLS

curl -k *<url>*
Skip certificate checks

curl -x *<proxy>* *<url>*
Use a proxy

curl --resolve *<host>*:*<port>*:*<ip>* *<url>*
Pin a hostname to an IP

curl -m *<s>* *<url>*
Limit total time

curl --retry *<n>* *<url>*
Retry transient failures

DEBUGGING

curl -v *<url>*
Verbose request and response

curl -w "%{time_total}\n" -o /dev/null -s *<url>*
Time a request

curl -sI *<url>*
Check headers quietly