

Curl is a tool to transfer data to and from a server, supporting protocols including HTTP, FTP, IMAP, LDAP, POP3, SCP, SFTP, SMB, SMTP, and more.

## Web browsing

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| Fetch HTTP headers | <code>curl --head "https://example.com"</code> |
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| List contents of a directory |
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|--|
| <code>curl --list-only "https://example.com/foo/"</code> |
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| Redirect query as specified by a 3xx response |
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|---|
| <code>curl --location "https://iana.org"</code> |
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| Fail quickly |
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| <code>curl --fail-early "http://opensource.ga"</code> |
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| Check whether a site is down |
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| <code>curl --head --show-error "http://example.com"</code> |
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| Expand a shortened URL |
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|--|
| <code>curl --head --location "https://bit.ly/2yDyS4T"</code> |
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## Downloading files

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| Download a file, saving the file without changing its name |
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| <code>curl --remote-name "https://example.com/linux-distro.iso"</code> |
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|-----------------|
| Rename the file |
|-----------------|

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|---|
| <code>curl --remote-name "http://example.com/index.html" --output foo.html</code> |
|---|

|                             |
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| Continue a partial download |
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|  |
|--|
| <code>curl --remote-name --continue-at - "https://example.com/linux-distro.iso"</code> |
|--|

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|---------------------------------------|
| Download a file from multiple domains |
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| <code>curl "https://www.{example,w3,iana}.org/index.html" --output "file_#1.html"</code> |
|--|

|   |
|---|
| Download a sequence of files (outputs foo_file1.webp, foo_file2.webp...bar_file1_webp, etc) |
|---|

|   |
|---|
| <code>curl "https://{foo,bar}.com/file_[1-4].webp" --output "#1_#2.webp"</code> |
|---|

|   |
|---|
| Download a sequence of files (outputs foo_file1.webp, foo_file2.webp...bar_file1_webp, etc) |
|---|

|   |
|---|
| <code>curl "https://{foo,bar}.com/file_[1-4].webp" --output "#1_#2.webp"</code> |
|---|

## Downloading files (continued)

Download all PNG files from a site (uses GNU grep)

```
curl https://example.com | grep --only-matching 'src="[^\"]*.[png]"' | \
cut -d\" -f2 | \
while read i; do curl https://example.com/"${i}" -o "${i###/}"; done
```

## API interaction

Query an API endpoint

```
curl "https://gitlab.com/api/v4/projects"
```

Send raw data to an API endpoint

```
curl --data "Some data" "https://example.com/api/v4/endpoint"
```

Send form data (emulates a form and Submit button)

```
curl --form "username=seth" --form "password=12345678" \
"https://example.com/api/v4/endpoint"
```

Send a file as form data (uses the @ syntax)

```
curl --form "profile=@me.jpg" "https://example.com/foo/bar"
```

Send contents of a file as form data (uses the < syntax)

```
curl --form "description=<file.md" "https://example.com/foo/bar"
```

Send HTTP header data (for example, an authorization token)

```
curl --header "Authorization: Bearer F66eD5ffXHp2Y" \
"https://example.com/api/v4/endpoint"
```

Specify HTTP Method

```
curl --request POST --data "Foo: bar" "https://example.com/api/endpoint"
```

Make an API call to a service

```
curl --request PUT --header "PRIVATE-TOKEN: your_access_token_here" \
--data "?per_page=10" "https://gitlab.com/api/v4/namespaces"
```