aria2 Fast multi-download

START HERE

`aria2c <url>`
Download a file

`aria2c <file>.torrent`
Fetch a torrent

`aria2c -x 8 -s 8 <url>`
Use 8 connections

`aria2c --max-download-limit=1M <url>`
Cap the speed

`aria2c -c <url>`
Resume a download

`aria2c -i <file>`
Download a URL list

`aria2c -d <dir> -o <name> <url>`
Choose folder and name

`aria2c "<magnet>"`
Fetch a magnet link

Source URL, magnet, .torrent → `-s splits` → **Pieces** min size -k → `-x connections` → **Parallel streams** per server / peers → `writes` → **File** -d dir, -o name

CONCEPTS

aria2c takes URLs, magnets, .torrent and .metalink files, and mixes protocols for one file.

-x limits connections per server (max 16); -s is how many pieces to split into. Raise both for more speed.

Only download content you are allowed to copy; respect copyright and the site's terms.

aria2c exits with status 0 only if every download succeeded, so scripts can test it.

DOWNLOADING

`aria2c <url>`
Download one file to the current dir

`aria2c <url1> <url2>`
Download several files

`aria2c <url> <mirror-url>`
Same file from several mirrors

`aria2c -d <dir> <url>`
Save into a directory

`aria2c -o <name> <url>`
Save under another name

`aria2c -c <url>`
Continue a partial download

DOWNLOADING (cont.)

`aria2c -x <n> <url>`
Connections per server
The default is 1; 16 is the maximum.

`aria2c -s <n> <url>`
Split the file into n parts

`aria2c -k <size> <url>`
Minimum split size, e.g. 1M

`aria2c -Z <url1> <url2>`
Treat each URL as a separate file
Needed when giving mirrors that should not be merged into one download.

`aria2c --allow-overwrite=true <url>`
Replace an existing file

`aria2c --auto-file-renaming=false <url>`
Never rename on name clash

`aria2c --conditional-get=true <url>`
Skip if the local file is current

`aria2c --checksum=<type>=<digest> <url>`
Verify the download
Example type: sha-256.

LISTS AND QUEUE

`aria2c -i <file>`
Read URLs from a file

`aria2c -j <n> -i <file>`
Run n downloads at once

LISTS AND QUEUE (cont.)

`aria2c --save-session=<file> -i <file>`
Save unfinished downloads on exit

`aria2c --dry-run=true <url>`
Check availability without downloading

`aria2c --max-tries=<n> --retry-wait=<sec>`
Retry count and pause

`aria2c -t <sec>`
Connection timeout

`aria2c --lowest-speed-limit=<speed>`
Drop connections slower than this

`aria2c --on-download-complete=<cmd>`
Run a command when done

`aria2c --file-allocation=<method>`
none, prealloc, trunc or falloc

URL list with per-file options

```
https://example.com/a.iso
  dir=/data/isos
  out=a-renamed.iso
# mirrors: put them on one line, TAB-separated
```

SPEED AND LIMITS

`aria2c --max-download-limit=<speed> <url>`
Cap one download, e.g. 500K

SPEED AND LIMITS (cont.)

`aria2c --max-overall-download-limit=<speed>`
Cap all downloads together

`aria2c --max-upload-limit=<speed>`
Cap upload per torrent

`aria2c --max-overall-upload-limit=<speed>`
Cap total upload

`aria2c -l <file>`
Write a log file

`aria2c --console-log-level=<level>`
debug, info, notice, warn, error

`aria2c -D <url>`
Run in the background

TORRENTS AND MAGNETS

`aria2c "<magnet-uri>"`
Download a magnet link
Quote it: the shell would eat the & characters.

`aria2c <file>.torrent`
Download a torrent file

`aria2c -S <file>.torrent`
List files in a torrent

`aria2c --select-file=<n,m-k> <file>.torrent`
Only these file indexes

TORRENTS AND MAGNETS (cont.)

`aria2c --seed-time=<min> <file>.torrent`
Seed this many minutes after done

`aria2c --seed-ratio=<ratio> <file>.torrent`
Seed until this share ratio
Default is 1.0; 0.0 seeds forever when no seed-time is set.

`aria2c --seed-time=0 <file>.torrent`
Do not seed

`aria2c --bt-tracker=<url,url>`
Add extra trackers

`aria2c -M <file>.metalink`
Download from a metalink

HTTP AND AUTH

`aria2c --header="<Name: value>" <url>`
Add a request header

`aria2c -U <agent> <url>`
Set the User-Agent

`aria2c --http-user=<u> --http-passwd=<p> <url>`
HTTP basic auth

`aria2c --load-cookies=<file> <url>`
Send cookies from a file

HTTP AND AUTH (cont.)

`aria2c --all-proxy=<host:port> <url>`
Use a proxy for all protocols

RPC DAEMON

`aria2c --enable-rpc`
Start the JSON-RPC server

`aria2c --rpc-secret=<token>`
Require a token for RPC calls

Web UIs such as AriaNg talk to the RPC server; always set a secret before exposing the port.

RECIPES

Fast resumable download

```
aria2c -c -x 16 -s 16 -k 1M \
  -d ~/Downloads <url>
```

Batch from a list, 3 at a time

```
aria2c -c -j 3 -x 4 -i urls.txt \
  -d downloads --save-session=left.txt
```

Fetch one file from a torrent

```
aria2c -S debian.torrent
aria2c --select-file=2 --seed-time=0 debian.torrent
```

Authenticated, limited download

```
aria2c --header="Authorization: Bearer <token>" \
  --max-download-limit=2M -o data.zip <url>
```