qpdf PDF page surgery

CONCEPTS

qpdf never changes how pages look. It restructures the PDF: select, merge, split, rotate, encrypt, repair.

Input PDF or --empty
↓ --pages / --rotate
Transform pages, crypto, streams
↓ write
Output PDF or --replace-input

Output is always the last plain argument. Options may come before or after the input file.

Exit code 0 is clean, 2 is an error, 3 means warnings only (output was still written).

INSPECT AND REPAIR

qpdf --check *<in.pdf>*
Check structure and stream data

qpdf --show-npages *<in.pdf>*
Print the page count

qpdf --is-encrypted *<in.pdf>*
Exit status tells if encrypted

qpdf --requires-password *<in.pdf>*
Exit status tells if a password is needed

qpdf --show-encryption *<in.pdf>*
Show encryption and permissions

qpdf *<in.pdf> <out.pdf>*
Rewrite file, often repairs damage

qpdf --json *<in.pdf>*
Dump structure as JSON

qpdf --warning-exit-0 *<in> <out>*
Treat warnings as success

PAGE SELECTION

qpdf *<in.pdf>* **--pages .** *<range>* **--** *<out.pdf>*
Keep only these pages

qpdf --empty --pages *<a.pdf> <b.pdf>* **--** *<out.pdf>*
Merge whole files

PAGE SELECTION (cont.)

--pages *<a.pdf>* **1-3** *<b.pdf>* **5,z --**
Mix ranges from several files

1-5,8,10-z
Range: list, span, to last page

r1 / z
Last page

r3-r1
Last three pages

5-1
Reversed range

1-z:odd / 1-z:even
Odd or even positions in a range

1-z,x3-4
Exclude pages from a range

--pages *<enc.pdf>* **--password=***<pw>* **1-z --**
Password for one input

--collate=*<n>* **--empty --pages ...**
Interleave pages from inputs

SPLIT AND ROTATE

qpdf --split-pages *<in.pdf> <out.pdf>*
One file per page

qpdf --split-pages=*<n>* *<in.pdf> <out.pdf>*
Groups of n pages

--rotate=+90:*<range>*
Turn pages clockwise

--rotate=-90:*<range>*
Turn pages counterclockwise

--rotate=180
Set rotation on every page

qpdf *<in>* **--overlay** *<top.pdf>* **--** *<out>*
Stamp pages over the input

qpdf *<in>* **--underlay** *<bg.pdf>* **--** *<out>*
Put pages behind the input

--overlay *<f.pdf>* **--to=1-5 --from=1 --repeat=2 --**
Choose target and source pages

--flatten-annotations=all
Bake annotations into the page

ENCRYPTION

qpdf --encrypt *<user-pw> <owner-pw>* **256 --** *<in> <out>*
Password-protect, AES-256

--encrypt ... --print=none --modify=none --
Restrict printing and editing

qpdf --decrypt --password=*<pw> <in> <out>*
Remove encryption

--password-file=*<file>*
Read password from first line of file

Passwords on the command line show up in history and ps. Prefer --password-file.

OPTIMIZE AND EDIT

qpdf --linearize *<in.pdf> <out.pdf>*
Fast web view layout

qpdf --replace-input *<in.pdf>* **--linearize**
Overwrite the input file

--object-streams=generate
Pack objects for smaller files

--compress-streams=y
Flate-compress streams

qpdf --qdf --object-streams=disable *<in> <out>*
Make a text-editable PDF

RECIPES

Merge, skipping covers

```
qpdf --empty --pages \
  a.pdf 2-z b.pdf 2-z --
merged.pdf
```

Split into chapters of 10 pages

```
qpdf --split-pages=10 book.pdf
ch.pdf
# ch-01-10.pdf, ch-11-20.pdf, ...
```

Unlock and shrink in place

```
qpdf --password-file=pw.txt --
decrypt \
  --object-streams=generate --
replace-input in.pdf
```

Fix one sideways scan page

```
qpdf --check scan.pdf
qpdf scan.pdf --rotate=+90:3
fixed.pdf
```