

- The **--rotate** option's syntax has been extended to make the page range optional. If you specify **--rotate=angle** without specifying a page range, the rotation will be applied to all pages. This can be especially useful for adjusting a PDF created from a multi-page document that was scanned upside down.
- When merging multiple files, the **--verbose** option now prints information about each file as it operates on that file.
- When the **--progress** option is specified, qpdf will print a running indicator of its best guess at how far through the writing process it is. Note that, as with all progress meters, it's an approximation. This option is implemented in a way that makes it useful for software that uses the qpdf library; see API Enhancements below.
- Bug Fixes
 - Properly decrypt files that use revision 3 of the standard security handler but use 40 bit keys (even though revision 3 supports 128-bit keys).
 - Limit depth of nested data structures to prevent crashes from certain types of malformed (malicious) PDFs.
 - In “newline before endstream” mode, insert the required extra newline before the endstream at the end of object streams. This one case was previously omitted.
- API Enhancements
 - The first round of higher level “helper” interfaces has been introduced. These are designed to provide a more convenient way of interacting with certain document features than using **QPDFObjectHandle** directly. For details on helpers, see [Section 7.3, “Helper Classes”](#), [page 29](#). Specific additional interfaces are described below.
 - Add two new document helper classes: **QPDFPageDocumentHelper** for working with pages, and **QPDFAcroFormDocumentHelper** for working with interactive forms. No old methods have been removed, but **QPDFPageDocumentHelper** is now the preferred way to perform operations on pages rather than calling the old methods in **QPDFObjectHandle** and **QPDF** directly. Comments in the header files direct you to the new interfaces. Please see the header files and *ChangeLog* for additional details.
 - Add three new object helper class: **QPDFPageObjectHelper** for pages, **QPDFFormFieldObjectHelper** for interactive form fields, and **QPDFAnnotationObjectHelper** for annotations. All three classes are fairly sparse at the moment, but they have some useful, basic functionality.
 - A new example program *examples/pdf-set-form-values.cc* has been added that illustrates use of the new document and object helpers.
 - The method **QPDFWriter::registerProgressReporter** has been added. This method allows you to register a function that is called by **QPDFWriter** to update your idea of the percentage it thinks it is through writing its output. Client programs can use this to implement reasonably accurate progress meters. The **qpdf** command line tool uses this to implement its **--progress** option.
 - New methods **QPDFObjectHandle::newUnicodeString** and **QPDFObject::unparseBinary** have been added to allow for more convenient creation of strings that are explicitly encoded using big-endian UTF-16. This is useful for creating strings that appear outside of content streams, such as labels, form fields, outlines, document metadata, etc.
 - A new class **QPDFObjectHandle::Rectangle** has been added to ease working with PDF rectangles, which are just arrays of four numeric values.