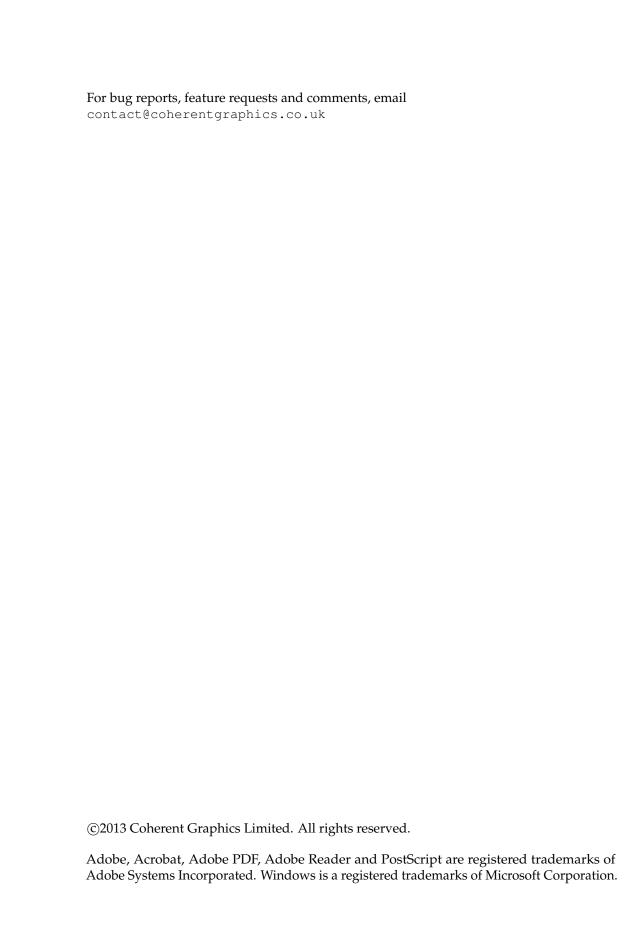
# **Coherent PDF Library (libcpdf)**

Developer's Manual

Version 1.8 (December 2013)





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#### Notes

The chapters are numbered to be the same as those in the manual for the Coherent PDF Command Line Tools (cpdfmanual.pdf).

#### Installation

The Coherent PDF Library is provided either in compiled form (the archive file libcpdf.a and the library header <code>cpdflibwrapper.h</code>), or as source code. Instructions for building from source are included in the distribution.

Place libcpdf.a somewhere suitable. Instruct your C linker to link with it. Place cpdflibwrapper.h somewhere suitable and instuct your C compiler to search for headers there. The library is now ready for use.

#### 1 Preliminaries

```
/* The function cpdf_startup must be called with argv before using the
library. */
void cpdf_startup (char **);
/* Set demo mode. Upon library startup is false. If set, files written will
 * have the text DEMO stamped over each page. This stamping will also slow down
 * the library significantly. */
void cpdf_setDemo(int);
/* Errors. lastError and lastErrorString hold information about the last error
 \star to have occurred. They should be consulted after each call. If
 * cpdf_lastError is non-zero, there was an error, and cpdf_lastErrorString
 * gives details. If cpdf_lastError is zero, there was no error on the most
 * recent cpdf call. */
int cpdf_lastError;
char* cpdf_lastErrorString;
/* Clear the current error state. */
void cpdf_clearError (void);
/* A debug function which prints some information about resource usage. This
\star can be used to detect if PDFs or ranges are being deallocated properly. \star/
void cpdf_onExit (void);
/* Remove a PDF from memory, given its number. */
void cpdf_deletePdf(int);
/* Calling replacePdf(a, b) places PDF b under number a. Original a and b are
 * no longer available. */
void cpdf_replacePdf(int, int);
/\star To enumerate the list of currently allocated PDFs, call
 \star cpdf_startEnumeratePDFs which gives the number, n, of PDFs allocated, then
 * cpdf_enumeratePDFsInfo and cpdf_enumeratePDFsKey with index numbers from
 * 0...(n - 1). Call cpdf_endEnumeratePDFs to clean up. */
int cpdf_startEnumeratePDFs(void);
int cpdf_enumeratePDFsKey(int);
char* cpdf_enumeratePDFsInfo(int);
void cpdf_endEnumeratePDFs(void);
```

### 2 Basics

3 Merging and Splitting

# 4 Pages

# 5 Encryption

# 6 Compression

### 7 Bookmarks

### 8 Presentations

9 Logos, Watermarks and Stamps

# 10 Multipage Facilities

### 11 Document Information and Metadata

### 12 File Attachments

### 13 Miscellaneous

# 14 Page Labels

# 15 Special functionality 1. – Encryption and Permission status

# 16 Special functionality 2. – Undo

#### **A** Dates

Dates in PDF are specified according to the following format:

```
D:YYYYMMDDHHmmSSOHH'mm'
```

#### where:

- YYYY is the year;
- MM is the month;
- DD is the day (01-31);
- HH is the hour (00-23);
- mm is the minute (00-59);
- SS is the second (00-59);
- 0 is the relationship of local time to Universal Time (UT), denoted by '+', '-' or 'Z';
- HH is the absolute value of the offset from UT in hours (00-23);
- mm is the absolute value of the offset from UT in minutes (00-59).

A contiguous prefix of the parts above can be used instead, for lower accuracy dates. For example:

```
D:2011 (2011)
D:20110103 (3rd March 2011)
D:201101031854-08'00' (3rd March 2011, 6:54PM, US Pacific Standard Time)
```

# B Example Program in C

This program loads a file from disk, adds page numbers, and then writes the file encrypted to disk.