

NPW (Nyctergatis PDF Writer)

NPW is a small open-source library to create multi-page PDF files. In addition to basic PDF features such as lines, Bezier curves and text, it features text formatting based on simple low-level markup.

Description

The library core is made of two source files in C:

- `NPWBase.h`: header file with all extern declarations and detailed usage information, compatible with C++;
- `NPWBase.c`: function definitions.

The main goal of `NPWBase` is to keep track of PDF objects and pages to produce the required cross-reference tables. The content streams which define the displayed material must be written as free text.

To avoid any dependency on the operating system, `NPWBase` relies on two callbacks: one to handle memory allocation, and one to write output. Implementations are provided:

- `NPWStdAlloc.h`:

Support for PDF meta-information (title, author, creation date, etc.) is provided by two optional source files:

- `NPWInfo.h`: header file
- `NPWInfo.c`: implementation

As an alternative to producing directly content with free-form source code, NPW provides a set of functions and macros in two optional files:

- `NPWGraphics.h`: header file
- `NPWGraphics.c`: implementation

`NPWGraphics`, like the PDF format itself, doesn't provide support for text wordwrap and alignment. NPW provides two source files which require `NPWGraphics`:

- `NPWText.h`: header file
- `NPWText.c`: implementation

To display text with multiple fonts and styles in the same paragraphs, `NPWText` relies on markup embedded in the input text. While any markup can be defined (or none at all), simple markup for the base features of text style and paragraph format is defined in two source files:

- `NPWTextMarkup.h`: header file
- `NPWTextMarkup.c`: implementation