# The rpgtex Package

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elcome to the RPGTEX package. This LATEX package is designed to allow users to flexibly typeset documents associated with Role Playing Games such as *Dungeons & Dragons* — and many more besides. This packages defines a central engine: rpgcore which define a number of useful functions and classes, and a flexible set of themes which control how those commands are rendered in the final document.

### Attribution & License

This package would not have been possible without the team who developed its predecessor, the 'DND 5e LateX Template'. That code was released under an MIT license, the text of which can be found in the LICENSE file. rpgtex is released under the same license.

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# Part I rpgtex Core

## Chapter 1: Installation & Usage

## Getting rpgtex

There are a number of different ways to acquire rpgtex. Once you have installed it, it is vital to ensure that it is properly configured (see below).

#### texmf Installation

The simplest way to use rpgtex is to install it on the texmf path, where the compiler can automatically find it:

git clone

https://github.com/DrFraserGovil/rpgtex.git "\$(kpsewhich -var-value TEXMFHOME)/tex/latex/rpgtex"

This will clone the repository into your LATEX path.

#### **Indirect Installation**

If you want to tinker with rpgtex – such as by creating a new theme – it is helpful to have it in a more accessible location. Clone the repository into a location of your choice:

git clone

https://github.com/DrFraserGovil/rpgtex.git ~/your/rpgtex/directory

You then have two options to make the package visible to the compiler:

#### Use TEXINPUTS

Setting the environment variable TEXINPUTS allows the compiler access:

TEXINPUTS=~/your/rpgtex/directory/::

(Or similar commands, depending on your shell – in fish you would call set TEXINPUTS dir).

#### Use Symlinks

You can symlink the install location to the texmf directory, allowing the compiler to act as if you had performed the texmf installation:

## Overleaf (Not recommended!)

We do not recommend using Overleaf since the free-tier subscription has reduced compilation times drastically, making compiling documents using complex packages such as this one extremely difficult. Nevertheless:

1. Download this GitHub repository as a ZIP archive using the Clone or download link above.

- On Overleaf, click the New Project button and select Upload Project. Upload the ZIP archive you downloaded from this repository.
- 3. Manually create the file rpg-config.cfg with the contents "\edef\RpgPackagePath{../}". This replaces the configuration step described below.

## Configuring rpgtex

Wherever one installs rpgtex from, it is vital that it is properly configured. From within the rpgtex-root directory, call:

./configure

Or – if one is (reasonably!) wary about running arbitrary executables – manually create the relevant file:

cd <rpgtex root directory>
cmd="\edef\RpgPackagePath{\$(pwd)}"
echo \$cmd >> core/rpg-config.cfg

#### Why is configuration necessary?

TEX is generally set up so that when a file calls include or input it is possible to use filepaths relative to the package itself. rpg.sty can call \input{core/font.sty} and it will know to first check for the file relative to rpg.sty; even if the package resides within the texmf path and the user has no idea where rpgroot/rpg.sty, or rpgroot/core/font.sty, are.

An annoying exception to this is fonts and typefaces. xelatex searches for fonts based on *filepaths relative to* the current working directory – or from those installed in as system fonts.

Since rpgtex includes several (license free) typefaces as part of the provided themes, this poses a problem. We must either require that:

- 1. rpgtex documents can only be prepared in restricted locations relative to the install location of rpgtex.
- 2. Users must identify and specify the  ${\tt rpgtex}$  root path when preparing a document
- 3. Users must install the provided fonts to the system
- 4. rpgtex must be configured to know 'where it is', and so provide an absolute filepath to the internal fonts.

The Configuration step is the most portable and easiest-to-use of these options.

Without a core/rpg-config.cfg file, any document which includes rpgtex will fail to compile.

## Package & Class Usage

rpgtex can be used either as a standalone package, or as part of a number of classes

### Standalone Package

The standalone package can be used directly by including the rpgtex package:

```
\documentclass{arbitrary-class}
\usepackage[options]{rpgtex}
\begin{document}
....
```

This will load only the core commands into the document, and (unless called explicitly) no themes will be imported. Using the package in this way does not activate any of the commands which change the overall geometry, background or headers of the document.

#### Classes

rpgtex can also be loaded through a number of classes which drastically alter the appearance of the document, defining new geometries backgrounds and adding headers

The provided classes are:

- 1. rpgbook (page 6). Based on the standard book class, this is designed for larger RPG documents.
- 2. rpghandout (page 7). Based on the article class, this is designed for shorter documents
- 3. rpgcard (page 8). A small-document class designed for creating modular 'handout' cards for items, spells or abilities.

## Compiling

rpgtex uses the fontspec package to allow custom
fonts, and therefore requires compiling with xelatex or
luatex:

```
xelatex main.tex #works
luatex main.tex #works
pdflatex main.tex #fails
```

## Chapter 2: Core Commands

# Part II rpgtex Classes

# Chapter 3: rpgbook Class

# Chapter 4: rpghandout Class

# Chapter 5: rpgcard Class

Part III

Themes

## Chapter 6: default Theme

# CHAPTER 7: DND THEME

# Chapter 8: scifi Theme