

# Script runDoc

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Thanks to:

## 1 Introduction

The Lua program `runDoc` parses an (L)A<sup>T</sup>E<sub>X</sub>-document for lines starting with `%! HV`. The «HV» has no meaning, it should only be a significant marker for the command lines. Such lines can define commands which will be executed by `runDoc`. These lines must be at the beginning of the document. Only empty lines before will be ignored. `runDoc` will stop parsing for commands if a line without a preceding `%! HV` is found.

### 1.1 Syntax

The syntax is `runDoc [...] <file>` where [...] are optional arguments, either in short or long form which, of course, can be mixed:

```
runDoc [-h,--help] [-v,--verbose] [-V,--version ] filename
```

Every executed command gets an own logfile `runDoc-?.log` in which the question mark is the number of the corresponding command lines in the document. This allows to locate any problem in the several external runs. With the option `-v` (verbose) a short logfile which lists more or less only the important steps from within the script is `runDoc.log`.

All L<sup>A</sup>T<sub>E</sub>X commands are startet with the option

`--interaction=nonstopmode`

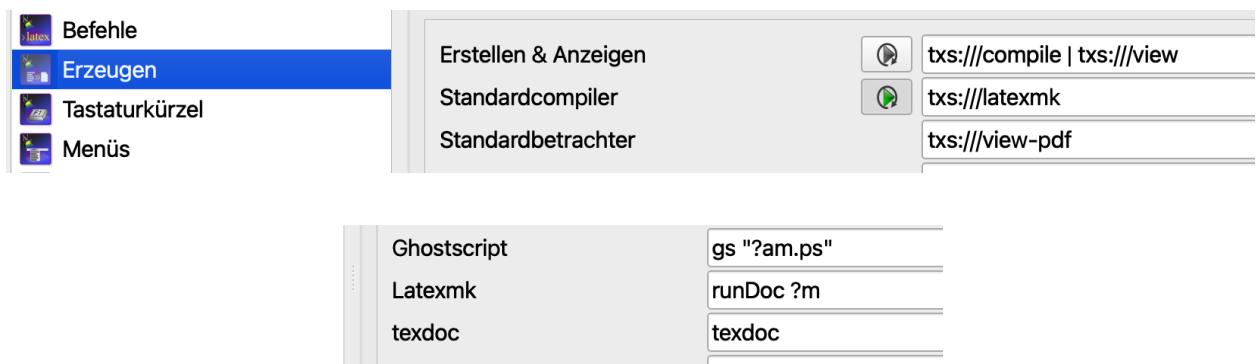
The supported (L)A<sup>T</sup>E<sub>X</sub>-commands are

```
local commands = {"lualatex", "luatex", "luahbtex", "latex", "pdflatex",
                  "xelatex", "xetex" }
```

This is not really of interest, because it is only needed for the decision to use the option `--interaction=nonstopmode` or not. The optional filename `<file>` must always be used if the current command expects another filename (see example for multiple index files).

### 1.2 T<sub>E</sub>Xstudio

For T<sub>E</sub>Xstudio use as compiler `latexmk` and simply replace the name by `runDoc`:



## 2 examples

### 2.1 This document

The header looks like

#### Command lines for this document

```
%! HV lualatex
%! HV biber
%! HV lualatex
%! HV lualatex

%% .11402025 07 1810 39 09
%
\listfiles\setcounter{errorcontextlines}{100}
\documentclass[paper=a4,fontsize=11pt,DIV=14,parskip=half-,
               captions=tableabove,twoside=on]{scrartcl}
\usepackage{fontspec}
[...]
```

In this case no extra filename is needed, running `runDoc runDoc-doc` is sufficient. More complex is the header of example `test2`:

### 2.2 Document test

This document uses package `imakeidx` which itself runs the index commands.

#### Example test

```
%! HV lualatex --shell-escape
%! HV biber <test.aux>
%! HV lualatex --shell-escape
%! HV lualatex --shell-escape

%% The index files are run by imakeidx
[...]
```

The filename for `biber` is not really needed, because it also works with the main filename.

### 2.3 Document test2

A more complex example:

#### Example test2

```
%! HV lualatex --shell-escape
%! HV biber
%! HV lualatex --shell-escape
%! HV xindex
%! HV xindex --config DIN2 -l DE -o test2.vwd <test2.vwx>
%! HV xindex --config DIN2 -l DE -o test2.dbd <test2.dbx>
%! HV lualatex --shell-escape
%! HV lualatex --shell-escape
```

There is an optional argument for `lualatex` and options with another filename for two of the three `xindex` runs.