The `fbithesis` package[*]

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Abstract

`fbithesis.cls` is a LaTeX 2ε document-class tuned for research reports or internal reports like master/phd-theses at the TU Dortmund University.

At the Department of Computer Science at the TU Dortmund there are cardboard cover pages for internal reports like master/phd-theses. The main function of the LaTeX2e document-class provided by this package is a replacement for the `\aketitle` command to typeset a title page that is adjusted to these cover pages.

See `README` for a short overview and additional (legal) information and `example.tex` for—of course—an example.

Contents

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[*]This file has version number v1.2m. It was last revised on 2011/02/06, the documentation is dated 2008/02/17.
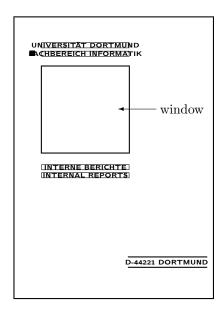
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Figure 1: A rough outline of the DIN-A4 cardboard cover page for diploma and doctoral theses and project reports provided by the Department of Computer Science at the TU Dortmund. The title page of the document is visible through the window.

1 Introduction

At the Department of Computer Science at the TU Dortmund University there are cardboard cover pages (see figure 1 on page 2) for internal reports like master/phd-theses. The main function of the LaTeX 2_ε document-class `fbithesis` is to replace the `\maketitle` command to typeset a title page that is adjusted to these cover pages (see figure 2 on page 3).

As you can see the title page is not only adjusted to the cardboard, but even imitates the cover: it repeats the text found on the cover page. Usually theses are presented to the world in two shapes: printed on paper or electronically (e.g. as a PDF or PostScript file). In the first case the repetition is not necessary, in the second (electronical) case one would miss important information without it. Since it doesn't hurt in the paper case I decided to make it possible to repeat this 'decoration' of the cover page on the title page (see options decor and nodecor in section 2.2).

This package doesn't make much sense outside of Germany or even outside the TU Dortmund. Nevertheless the documentation is in English. This shouldn't be a problem nowadays and it's a good training for me ;-)
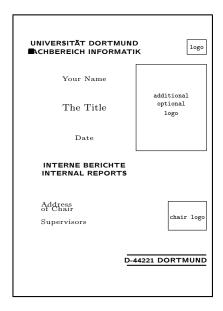
v1.2m2011/02/06new

Figure 2: The title page as generated by `fbithesis`. The important part of the title page (author, title and date) is visible through the window in the cover page. This sketch can only give you a very coarse impression. For a more authentic one use the example (see section 4 on the pages 14ff).

1.1 Why the name?

When this package was created, the Department of Computer Science had the name '**F**ach**b**ereich **I**nformatik' in german. The abbreviation 'FBI' was quite common in those days. Since the package is meant for that department I used the abbreviation for my package. (And of course because its kinda cool `;-)`)

In the meantime however the 'UniversitÃďt Dortmund' was renamed to 'Technische UniversitÃďt Dortmund' (technical university of Dortmund) and the department to 'FakultÃďt fÃijr Informatik'.

1.2 Other packages

Apart from `fbithesis` there is at least one more approach that deals with the same subject. This is `diplomatitle`[1] by Thomas Leineweber[2]. `diplomatitle` isn't officially released. It hasn't left development status yet and it is doubtful if it ever will, as the author seems to have abandoned active development.

Together with Thomas, Marc Seitz[3] worte `pgthesis` which is based on `fbithesis`. It aims at final reports of project groups (Projektgruppen End-

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[1] http://ls6-www.cs.uni-dortmund.de/~leineweb/tex/interneBerichte/ (Some of the files aren't reachable. Perhaps you have to contact the author first.)

[2] <Thomas Leineweber> leineweb@ls6.cs.uni-dortmund.de

[3] <Marc Seitz> marc@marcseitz.de

berichte) but isn't yet officially released. If you are interested please contact the authors.

Some other approaches use the `titlepage` environment and provide a sort of template for the title page. Representatives of these approaches are for example the 'LaTeX-Templates'[4] by KOHLER[5] or 'daTitelblatt'[6] by DITTRICH[7]. Of course these template-approaches give a great flexibility to the user. On the other hand the necessary customization often requires a deeper knowledge of LaTeX.

Additionally there is `udotitle`[8] by GERD SEBASTIANI. This package however does not produce a title page to be used with the cardboard of the department of computer science but complies with the official corporate design of the university.

1.3   What's new

Since the last stable version v1.0d (2003/01/08) some new features were added:

1. compatibility with the $\mathcal{AMS}$-classes (`amsbook` or `amsreport`) as baseclasses (see section 2.3.4 on page 13)

2. better handling of baseclass-specific macros

3. new options `decor` and `nodecor` (see section 2.2.3 on page 10)

4. better warnings if needed files could not be found

5. new options `ngerman` and `american` (see section 2.2.2 on page 9)

6. new options `declaration` and `nodeclaration` (see section 2.2.4 on page 11)

7. since the last public release the university and the department were renamed.

1.4   What do you need

There are some packages, that are required with the use of `fbithesis`. Some others are recommended.

1. Packages, that are essentially required by `fbithesis`:

   (a) LaTeX 2_ε (at least the 1994/12/01 release)[9]
       `fbithesis` is a LaTeX 2_ε document-class. So obviously you'll need LaTeX 2_ε...

   (b) `graphicx`[10] (at least 1996/08/05 v1.0a)
       The logos are included by using the `\includegraphics` command provided by `graphicx`.

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[4] http://ls7-www.cs.uni-dortmund.de/~kohler/verschiedenes/LaTeX-Templates.tgz
[5] <MARKUS KOHLER> markus.kohler@uni-dortmund.de
[6] http://ls11-www.cs.uni-dortmund.de/resources/docs/daLatex/daTitelblatt.tex
[7] <PETER DITTRICH> gisbert.dittrich@udo.edu
[8] http://www.forum.fset.de/
[9] CTAN: macros/latex/base
[10] CTAN: macros/latex/required/graphics/graphicx.dtx

2. Packages, that are recommended to use with `fbithesis`:

   (a) `scrbook` (part of KOMA-Script[11], at this time the latest version is 2007/12/24 v2.98)

   This is a replacement for the (standard) `book` document-class and has many enhancements and useful features.

3. Packages, that are supported by `fbithesis`:

   (a) `amsbook` (part of $\mathcal{AMS}$-LaTeX[12], at this time the latest version is 2004/08/06 v2.20)

   Like KOMA-Script this is a replacement for the `book` class. This one follows the style conventions of American Mathematical Society publications.

Under normal circumstances you don't have to install any special packages (except `fbithesis` of course: its installation process is described in the next section) since all these should be part of every serious LaTeX-distribution. If this is not the case you'll find the most recent versions at CTAN[13].

1.5 Installation

file `fbithesis.dtx`   The file `fbithesis.dtx` is an 'one-file-contains-it-all'. It contains (of course) the `.cls`-file and its documentation (not to forget a customizable driver for the docu), but also the `.ins`-batch file, an example and a 'read me'.

It is recommended to check the integrity of the package before installing. This file `fbithesis.dtx.asc`   is done with `fbithesis.dtx.asc`, an OpenPGP signature made with GnuPG and the key `1024D/F4D24AC9 2002-04-01 Andre Dierker (software distribution key) <software@kand.de>`[14]. Verify `fbithesis.dtx.asc` with PGP or GnuPG (for GnuPG this is '`gnupg --verify fbithesis.dtx.asc`') to be sure, you got the complete and unmanipulated distribution.

1.5.1 By Hand

To start the installation, run `fbithesis.dtx` through LaTeX[15]. This will generate the batch file (`fbithesis.ins`) and a `README`. Additionally the documentation (`fbithesis.dvi`) is generated (to get the cross-references right, you have to rerun this twice, however).

file `fbithesis.ins`   The actual installation is done by running the newly generated `fbithesis.ins` through LaTeX. This will generate the `fbithesis.cls` file, an `example.tex`, the documentation driver (`fbithesis.drv`) and a sample configuration file

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[11]CTAN: `macros/latex/contrib/koma-script` by FRANK NEUKAM and MARKUS KOHM [14, 10]
[12]CTAN: `macros/latex/required/amslatex` by the AMERICAN MATHEMATICAL SOCIETY [1, 2]
[13]Comprehensive TeX Archive Network: `http://www.ctan.org/`
[14]BTW: I'm always looking for people to exchange key-signatures. Contact me!
[15]It is recommended to use `pdflatex` instead of `latex`. If you prefer an output in DVI-format you can use '`pdflatex -ouput-format DVI`'

(`fbithesis.cfg`). If you have set `\BaseDirectory`[16] in your `docstrip.cfg`, the document-class `fbithesis.cls` is immediately moved to an appropriate location (e.g. '`$(TEXMF)/tex/latex/misc/`' with a TDS[17] compliant LaTeX installation). Otherwise you have to move it yourself into a directory searched by LaTeX. *If you don't know where this could be simply drop the file into your thesis' directory.*

Now you could already start since the rest of the installation process is optional.

Normally (with a TDS installation) all configuration (`.cfg`) files are collected in '`$(TEXMF)/tex/latex/config/`'. Since there may be already an older 'file fbithesis.cfg' — '`fbithesis.cfg`' that perhaps mustn't be overwritten, you have to move (and merge) the file yourself.

To finish the installation it is recommended to move `fbithesis.dvi` and `example.tex` to where you collect the documentations (with a TDS compliant LaTeX installation this would be '`$(TEXMF)/doc/tex/latex/fbithesis`' for example).

file `example.tex`   For a demonstration of the possibilities of `fbithesis` see the example file and run it through LaTeX.

The '`pdflatex fbithesis.dtx`'-run above will—by default—generate the 'user' documentation. If you need the full documentation (with complete listing of the documented source code and/or command index and the change history) file `fbithesis.drv` you may edit `fbithesis.drv` to meet your needs (never edit `fbithesis.dtx` itself!). For more information on the enhanced documentation see `fbithesis.drv` or `README`.

So, in short you have to do the following:

1. Check the integrity of the package: '`gnupg --verify fbithesis.dtx.asc`'

2. Generate the documentation: '`pdflatex fbithesis.dtx`'

3. Generate the `fbithesis.cls` file: '`pdflatex fbithesis.ins`'

4. Finish the documentation: '`pdflatex fbithesis.dtx`' (two times)

5. move `fbithesis.cls` (e.g. to your thesis' directory)

6. Optional: move `fbithesis.dvi` and `example.tex`

1.5.2 By `make`

Alternatively you can use `make` to do the tasks. In this case you have to do the following:

1. Check the integrity of the package: '`gnupg --verify fbithesis.dtx.asc`'

2. Generate the documentation: '`make doc`'

3. Generate the `fbithesis.cls` file: '`make install`'

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[16]see the documentation of the docstrip program: [12]
[17]TeX Directory Structure, see [15]

4. move `fbithesis.cls` (e.g. to your thesis' directory)

5. Optional: move `fbithesis.dvi` and `example.tex`

1.6   To do

At this time the package doesn't offer many features. I plan to add a few as soon as I have the time to:

1. The logos of university and department have changed and need to be updated. If someone can provied files, please mail me.

2. Better support for final reports of project groups (Projektgruppen Endberichte)

3. Provide some alternative layouts

4. Provide a `titlepage`-like environment to give the user more flexibility.

5. Adopt `fbithesis` to the layout of the research reports, a second series with own cover pages. (These use DIN-A5 instead of DIN-A4 as paper format.)

6. At this time `fbithesis` affects only the title page and doesn't interfere with the layout of the rest of the document. Enhance the package to a full 'thesis'-class, perhaps by integrating the 'LaTeX-Templates' (see subsection 1.2 on page 3f).

7. Fix bugs (see subsection 1.7), misspellings or whatever.

If you have any further suggestions for enhancements or corrections feel free to mail me.

1.7   Known Bugs

Actually I'm aware of one bug:

- To provide the `\thanks`-mechanism I had to redefine `\footnote`. At the end of `\maketitle` the `\footnote` command is reset to its original definition. Unfortunately the definition is *not* reset, if there's no `\maketitle` in your document. A solution is not known.

If you have a solution to fix the bug or if you find a new one I'd be glad to hear[18] from you!

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[18]mail to <Andre Dierker> dierker@kand.de

1.8 Thanks

Thanks go to STEPHAN LEHMKE, the local TEX- and LATEX-Guru at the University
of Dortmund. He put the idea of writing this package into my mind and helped
with many tips and hints. Furthermore I'd like to thank KLAUS KRAMER. He gave
me feedback and pointed me to a bug. Further bugs were found by MATTHIAS
SCHWEINOCH and RALF KELLERMANN.

ROMAN KLINGER suggested to make the decoration optional (see the options
decor and nodecor in section 2.2, CLEMENS RENNER proposed the inclusion of a
declaration in fbithesis, while DIRK FÖRSTERLING gave feedback to the instal-
lation routine.

TIMON KELTER provided information about the renaming of university and
department and so triggered a new release.

Furthermore thanks go to QuinScape[19], the company that lets me use my TEX-
Skills to earn a living. They have a great product named DocScape[20]. Do you
have a large amount of data, that has to be layouted? Give DocScape[21] a try. It
is a solution for data based publishing with a rule based layout. It makes possible
a complete automatic but nevertheless extreme flexible layout and produces really
high quality output.

Finally I want to thank the three most important persons in my life: my wife
KATHARINA, my daughter HANNA and my son NOAH. I love you.

2 Usage

Now lets come to the interesting stuff.

2.1 The *baseclass* and loading

You are free to choose your favorite thesis-document-class as the *baseclass*, since
the only part concerned by fbithesis is the title page. fbithesis doesn't inter-
fere with the layout of the rest of your document.[22] By default fbithesis will
use scrbook (part of KOMA-Script, see [14]) as *baseclass*.

\baseclass You may change the *baseclass* by defining the macro \baseclass. ***Important:***
this has to be done before the \documentclass command! (See the example in
section 4 on the pages 14ff.) For example if you prefer the standard class book
from LATEX 2ε simply do:

    \def\baseclass{book}

Afterwards the class is loaded with:

    \documentclass{fbithesis}

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[19]http://www.QuinScape.de/
[20]http://www.DocScape.de/
[21]Contact us: Norbert.Jesse@QuinScape.de
[22]However this may change in the future, see subsection 1.6 on page 7

You can modify the behaviour of `fbithesis` with options (all available options are described below in subsection 2.2):

```
\documentclass[<options>]{fbithesis}
```

You may choose every LaTeX 2ε-document-class as *baseclass*, on condition that it provides a `\maketitle` command (and its supportive commands as described in subsection 2.3.1 on page 11) and supports a title page. For example with `article` from LaTeX 2ε you have to use its titlepage option, since `article` doesn't generate an explicit title page by default.

option titlepage

2.2 Options

There are several class options available with `fbithesis`. Most of the following options are mutual exclusive. (For example draft and final; german/ngerman and english / american and others.) If you do specify two opposing options like in this example

```
\documentclass[draft,final]{fbithesis}
```

New description
2003/06/30 v1.1i

the last one (in this case final) 'wins'. However both global options are passed to the packages. So in this example

```
\documentclass[english,american]{fbithesis}
```

english will be a kind of fallback if a package doesn't implement the option american.

2.2.1 draft/final

option draft
option final

The first two options switch between the draft and final mode. The draft mode adds some marks to the title page to help with the positioning of the page (see section 3 on page 13).

```
\documentclass[draft]{fbithesis}
```

In the final mode of course no marks are shown.

```
\documentclass[final]{fbithesis}
```

2.2.2 Language options

The second bunch of options switches the language. As you can see below (in subsection 2.3.2 on page 12) the supervisors of the thesis can be added to the title page by using the macro `\supervisors`. These are captioned by 'Gutachter:' with the german option.

option german

```
\documentclass[german]{fbithesis}
```

If you want to do your thesis in English, the 'Gutachter:' would spoil the effect. It is replaced by 'Supervisors:' with the english option.

option english

```
\documentclass[english]{fbithesis}
```
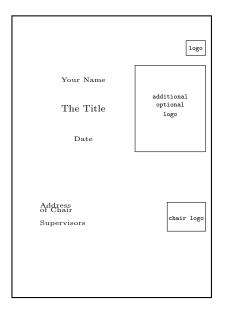
9

Figure 3: The title page as generated by `fbithesis` with option `nodecor`. To compare with the repeated decoration please refer to figure 2 on page 3

option ngerman
option american
option german
option english

There are two more class options: ngerman and american. These are just synonyms for german and english. Since class (or global) options are passed to the imported styles (by \usepackage) the synonyms can make things easier: you don't have to specify the optional argument with language-specific packages. So you can write

```
\documentclass[ngerman]{fbithesis}
\usepackages{babel}
```

instead of

```
\documentclass[german]{fbithesis}
\usepackages[ngerman]{babel}
```

option ngerman   The language ngerman is the default choice.

2.2.3 decor/nodecor

option decor
option nodecor

The options decor and nodecor control the decoration on the title page. As already said in section 1 it is possible to repeat the decoration of the cardboard on the title page. To do this, all you have to do is:

```
\documentclass[decor]{fbithesis}
```

(which is the default behaviour). If you don't want the decoration (as shown in figure 3) you can use

```
\doucmentclass[nodecor]{fbithesis}
```

2.2.4 declaration/nodeclaration

If you do a diploma thesis you'll have to give a declaration that you have written everything by yourself. By the options declaration and nodeclaration you are able to include this declaration into your thesis:

```
\documentclass[declaration]{fbithesis}
```

This inserts a new page with a form of the declaration. Since the text is taken from the Diplomprüfungsordnung it should be sufficient for the deans office. You only have to sign it.

As you might have guessed

```
\documentclass[nodeclaration]{fbithesis}
```

will suppress the declaration. This is the default behaviour.

2.2.5 Paper options

The position of the various elements on the title page is implemented in the class option a4paper. There is no need for a alternative letter because the cardboard is only offered in the paper format DIN-A4 (and DIN-A5 but that is a topic for further development. See section 1.6 on page 7). Since there is no other paper format implemented at the time, the option a4paper is the default behaviour.

2.2.6 Options of the *baseclass*

Furthermore you may choose every option provided by the *baseclass* (see subsection 2.1 on page 8), since all other options are forwarded to it. For example with the default *baseclass* scrbook[23] you may want something like this:

```
\documentclass[10pt, a4paper, BCOR12mm, headsepline]{fbithesis}
```

For a description of possible options of your chosen *baseclass* look at the corresponding documentation. The scrbook-options used above for example are described in [14, 10].

2.3 Commands

2.3.1 LaTeX-Commands

As in the standard LaTeX 2ε classes the user defines the title and author by the declarations[24] \title{⟨name⟩} and \author{⟨name⟩}. As in the standard LaTeX 2ε classes multiple authors have to be separated with \and. In general master/phd-theses won't have more than one author, but just in case (and because it will be needed for research reports, see subsection 1.6 on page 7) the \and command is also provided.

\title
\author

\and

---

[23]scrbook is part of KOMA-Script by Frank Neukam and Markus Kohm
[24]For a more detailed view on these macros please look at [3].

The \date command differs from the definition in the LaTeX-Kernel. In the standard LaTeX 2$_\varepsilon$ classes the command is used to specify the date of the document: \date{⟨*date*⟩}. In fbithesis the macro is enhanced by an optional argument to \date specify the period of the thesis: \date[⟨*begin date*⟩]{⟨*end date*⟩}. If you leave out the optional argument only the end date is set, if you leave out the whole \date command, \date{\today} is assumed by default.

\maketitle   As in the standard classes the title is set by using the \maketitle[25] command. This is redefined in this package to match the cardboard cover page of the Department of Computer Science at the TU Dortmund.

If you really want to make acknowledgements on the title page you may use \thanks   \thanks{⟨*text*⟩}. The text would be set as a footnote at the bottom of the cardboard window. In my opinion this does not look well and I recommend not to use \thanks. The correct place for eMail-addresses, acknowledgements, dedications and such things is a preface or—if you use scrbook or scrreprt as the *baseclass*—the enhanced title of KOMA-Script (see subsection 2.3.3 and [14, 10])

\title   The \title and \author commands are mandatory: You have to define them \author   if you want fbithesis to do its job. All other commands are optional. So the only thing you have to do to use this package is to choose your favorite *baseclass* (see subsection 2.1 on page 8), load fbithesis and provide the information you would like to have on the title page.

2.3.2 `fbithesis`-Commands

The commands above are all provided by the standard LaTeX classes. In fbithesis there are a few more commands to provide additional information.

\subject   By the command \subject{⟨*sub*⟩} you may provide the 'type' of the thesis (like 'Diplomarbeit', or 'Dissertation'). As the LaTeX-commands above (see subsection 2.3.1) \subject, too, affects the look in the window of the cardboard. The content of the following commands is placed in other areas of the title page and isn't visible through the window.

\unidologo   By using the command \unidologo{⟨*filename*⟩} you may include the logo of the TU Dortmund to the title page. '⟨*filename*⟩' should be a graphics file (e.g. EPS or PDF). Additionally it is possible to add the logo of the chair to the title \chairlogo   page. This is done by \chairlogo{⟨*filename*⟩}.

If you have a thesis-specific logo, it can be placed on the title page by using \thesislogo   \thesislogo{⟨*filename*⟩}. The logo is set next to the window of the cardboard (see figure 2 on page 3).

Some folks want the names of the chair, the department and the university \chair   to appear on the title page. This can be done by \chair{⟨*information*⟩}. The argument ⟨*information*⟩ may consist of lines separated by '\\'.

\supervisors   The supervisors of the thesis may be provided by \supervisors{⟨*first supervisor*⟩}{⟨*second supervisor*⟩}.

Please note: Due to aesthetic reasons it is recommended to use \chair, \chairlogo and \supervisors only in combination: either all or none.

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[25]See [11] for the original definition

2.3.3 KOMA-Script-Commands

`fbithesis` supports parts of the enhanced title of KOMA-Script. So if you use `scrbook` or `scrreprt` you may use the following KOMA-Script-commands. For more information on these three macros see [10, section 3.3].

If you print your document two sided, the back of the title page normally is left empty. You can use the commands `\uppertitleback{⟨text⟩}` and `\lowertitleback{⟨text⟩}` to place additional information there.

KOMA-Script provides a special dedication page. If you want to dedicate your thesis to someone, use `\dedication{⟨text⟩}`.

There are some more KOMA-Script-commands affecting the title. Theses are ignored by `fbithesis` since they are useless in our case: `\extratitle` is not necessary since the cardboard cover serves exactly the purpose of the cover page `\extratitle` would produce. `\titlehead` would mess up the layout of the title page and `\publishers` is nonsense since no thesis has got a publisher.

2.3.4 $\mathcal{AMS}$-Commands

`fbithesis` also supports `amsbook` as baseclass. However the $\mathcal{AMS}$-classes use a different macro for the dedication than KOMA-Script. So if you choose `amsbook` as baseclass you may use the command `\dedicatory{⟨text⟩}`. For more information on this macro see [2, chapter 3].

There are some more $\mathcal{AMS}$-commands affecting the title. Theses are ignored by `fbithesis` since they are useless in our case: `\subjclass`, `\keywords` and `\translators` are nonsense since no thesis is specified by the $\mathcal{AMS}$-classification or is translated. The other $\mathcal{AMS}$-commands (like `\address`, `\curraddr`, `\urladdr`, `\email`) are used to provide additional information to contact the author(s). It is unusual to provide this information on the title page of a thesis. You may include it into your preface however.

3 Customization

The horizontal and vertical placement of the writable area on the paper depends on many factors like page size and layout, printer margins or corrections done by the device driver. Some of these (like page layout) can be directly controlled by TeX, others (like page size) can be taken into account. Unfortunately there may still be some factors that cannot be influenced by this package, so a correct adjustment cannot be done completely automatically. A correct adjustment on the other hand is very important to center the title in the window in the cardboard cover.

`fbithesis` provides a "pretty good guess" concerning the placement of the title page, however a correct adjustment cannot be guaranteed. In fact the "guess" is much better than only "pretty good": in the case of a mismatch you are strongly recommended to check the positioning of your printer. Please run '`latex testpage.tex`', print a copy, check the result and correct the position-

ing. However if this does not help please send a bug report to the author[26]. For the meantime `fbithesis` provides a stopgap solution. Positive values for

`\titlevadjust` `\titlevadjust{`⟨*length*⟩`}` move the page up, negative values down. Similar with
`\titlehadjust` `\titlehadjust{`⟨*length*⟩`}`: positive values move the page to the left, negative to the right.

3.1 Configuration file

file `fbithesis.cfg` You may use a site-wide configuration file `fbithesis.cfg` to set some defaults. This configuration file—placed somewhere LaTeX is able to find it—will be read whenever the `fbithesis` class is used. Of course you may overwrite these local defaults by placing concurrent definitions in your source file.

To generate the following sample configuration file, run `fbithesis.ins` through LaTeX. On a TDS compliant LaTeX installation the configuration files are normally collected in '`$(TEXMF)/doc/tex/latex/config/`'. However because there may already be an older configuration file '`fbithesis.cfg`' you have to move (and merge) it yourself.

```
1 ⟨*config⟩
```

If the graphics-files containing the logos are installed centrally, it may be useful
`\unidologo` to define the commands `\unidologo` and `\chairlogo` site-wide. (Conforming to
`\chairlogo` [5] you may want to skip the extensions of the filenames.)

```
2 % \unidologo{tulogo}
3 % \chairlogo{ls9logo}
```

`\chair` The same with `\chair`:

```
4 % \chair{Chair IX (Virtual Research)\\
5 %   Department of Computer Science\\
6 %   TU Dortmund}
```

```
7 ⟨/config⟩
```

4 Example

file `example.tex` Here is a little example file. To generate it, run `fbithesis.ins` through LaTeX. First we use the `filecontents*` environment to provide the PostScript-Code of three dummy logos used by the example. The original logos should be available at your chair, contact your supervisor or system administrator.

```
8 ⟨*example⟩
```

At first we include an auxiliary file that contains the logos. You can ignore this line since it is only necessary in this example.

```
9 \include{exampleaux}
```

---

[26] mail to <ANDRE DIERKER> dierker@kand.de

fbithesis supports three classes as 'baseclass'. To use 'book' or 'amsbook' you have to use one of the following lines. To use 'scrbook' from KOMA-Script as baseclass you have to do nothing since this is the default. If you don't know what I'm talking about just leave these lines as they are. Almost everyone uses 'scrbook' as baseclass. It is a wise decision.

```
10 %           \def\baseclass{book}
11 %           \def\baseclass{amsbook}
```

Of course we choose `fbithesis` as document class. Additionally we want to look at the `draft` mode and test the option forwarding of `a4paper` to the *baseclass*. Since the example is in English, we also choose `english`.

option draft
option a4paper
option english

```
12 \documentclass[a4paper, english]{fbithesis}
```

We begin our document:

```
13 \begin{document}
14   \frontmatter
```

\title   As in the standard LATEX classes we use the `\title` command. Normally one can trust TEX's ability to compute a satisfactory line breaking. However TEX's algorithm is not optimized for titles but for continuous text. To make it more difficult the cardboard window is quite small. So if you prefer a different make up, help yourself with an appropriate placed '\\', as you can see in this example.

```
15   \title{Example file for the\\ \texttt{fbithesis} package%
```

\thanks   The `\thanks` command is used to provide further information[27]. As you can see the result of the `\thanks` mechanism does not look well. Therefore I do not recommend the usage. It is better to write a preface instead.

```
16     \thanks{The \texttt{fbithesis}~package has version number
17       \fileversion.  It was last revised on \filedate.}%
18   }
```

\author   The usage of the `\author` command: In general master/phd-theses will have
\and   only one author, but just in case the `\and`-command is also provided.

```
19   \author{Andre Dierker%
```

The use of the command `\thanks` is not recommended (see page 12).

```
20 % \thanks{\texttt{software@kand.de}}%
```

Perhaps there ist a second author:

```
21   \and Nobody Else%
```

Again the use of `\hanks` is not recommended.

```
22 %   \thanks{\texttt{no@body.el.se}}%
23   }
```

\subject Normally the subject would be something like 'Diplomarbeit' or 'Dissertation'...

```
24   \subject{Example}
```

\date   You may give the beginning and the deadline of your thesis here.

```
25   \date[Created April 3, 2002]{Printed \today}
```

\supervisors	Providing the supervisors of the thesis.

```
26    \supervisors{First Tutor}{Second Tutor}
```

	If there is a site-wide configuration file (see subsection 3.1) the commands
\unidologo	\unidologo and \chairlogo may already be defined. You may override them
\chairlogo	locally. Conforming to [5] we skip the extensions of the filenames. Due to this
	TEX is able to include the correct version of the file (EPS or PDF)

```
27    \unidologo{tulogo}
28    \chairlogo{ls9logo}
```

\thesislogo	You may use the command \thesislogo if you want to place a thesis-specific logo on the title page.

```
29    \thesislogo{thesislogo}
```

\chair	The \chair command is the other candidate for a site-wide configuration file. This, too, can be overwritten.

```
30    \chair{Chair IX (Virtual Research)\\
31      Department of Computer Science\\
32      TU Dortmund}
```

	The data provided by the above macros is now used to set the title page. This
\maketitle	is done with the macro \maketitle

```
33    \maketitle
```

So after the title page is set your thesis may begin:

```
34    \mainmatter
```
. . .

. . . (Sorry, but I won't write your thesis. I've had trouble enough with my own one. . . ;-))

. . .

```
35    Now here comes your text.
```

Now our minimal document is ready.

```
36 \end{document}
37 ⟨/example⟩
```

Have fun using `fbithesis`.

4.1 Logos

file exampleaux.tex	Here is a auxiliary file that its used by the example. It contains the logos. We use the filecontents* environment to provide the PostScript- and PDF-Code of three dummy logos used by the example. The original logos should be available at your chair, contact your supervisor or system administrator.

```
38 ⟨*exampleaux⟩
39 \begin{filecontents*}{tulogo.eps}
```

```
(Here comes some EPS-code for a provisional logo of the university.)
```

---

[27]You can safely ignore the \fileversion and \filedate commands. They are only helping me creating a consistent distribution of this package.

```
40 \end{filecontents*}
41 \begin{filecontents*}{tulogo.pdf}

   (Here comes some PDF-code for the university logo above.)

42 \end{filecontents*}

43 \begin{filecontents*}{ls9logo.eps}

   (Some more EPS-code for an exemplary logo of a hypothetical chair.)

44 \end{filecontents*}
45 \begin{filecontents*}{ls9logo.pdf}

   (Here comes some PDF-code for the
   corresponding PDF-Version of the chair logo above.)

46 \end{filecontents*}

47 \begin{filecontents*}{thesislogo.eps}

   (Even more EPS-code for a dummy thesis-specific logo.)

48 \end{filecontents*}
49 \begin{filecontents*}{thesislogo.pdf}

   (Here comes the PDF-code of the thesis-specific logo above.)

50 \end{filecontents*}
51 ⟨/exampleaux⟩
```

References

[1] American Mathematical Society. The amsart, amsproc, and amsbook document classes. CTAN: `macros/latex/required/amslatex/classes/amsclass.dtx`, August 2004. 12

[2] American Mathematical Society and Michael Downes. $\mathcal{AMS}$-LaTeX: Instructions for preparation of paper and monographs. CTAN: `macros/latex/required/amslatex/classes/instr-l.tex`, December 1999. 12, 2.3.4

[3] Johannes Braams, David P. Carlisle, Alan Jeffrey, Leslie Lamport, Frank Mittelbach, Chris Rowley, Tobias Oetiker, and Rainer Schöpf. ltsect.dtx. CTAN: `macros/latex/base/ltsect.dtx`, December 1996. 24

[4] Johannes Braams, David P. Carlisle, Alan Jeffrey, Leslie Lamport, Frank Mittelbach, Chris Rowley, and Rainer Schöpf. ltfloat.dtx. CTAN: `macros/latex/base/ltfloat.dtx`, October 2002.

[5] David P. Carlisle. Packages in the 'graphics' bundle. CTAN: `macros/latex/required/graphics/grfguide.tex`, January 1999. 3.1, 4

[6] David P. Carlisle, Leslie Lamport, Frank Mittelbach, and Chris Rowley. ltboxes.dtx. CTAN: `macros/latex/base/ltboxes.dtx`, April 1999.

[7] David P. Carlisle and Sebastian P. Q. Rahtz. The graphics package. CTAN: `macros/latex/required/graphics/graphics.dtx`, July 2001.

[8] D. A. Glazkov. tracking.sty. CTAN: `macros/latex/contrib/supported/tracking/tracking.sty`, March 1996.

[9] Donald Erwin Knuth. *The TeXbook*. Computers & typesetting. Addison-Wesley, Reading, MA, USA, 1986.

[10] Markus Kohm and Jens-Uwe Morawski. *KOMA-Script: Eine Sammlung von Klassen und Paketen für LaTeX*. Edition dante. Lehmanns Fachbuchhandlung, 2., überarbeitete und erweitere auflage edition, January 2006. 11, 2.2.6, 2.3.1, 2.3.3

[11] Leslie Lamport, Frank Mittelbach, and Johannes Braams. Standard document classes for LaTeX version 2e. CTAN: `macros/latex/base/classes.dtx`, February 2004. 25

[12] Frank Mittelbach, Denys Duchier, Johannes Braams, Marcin Woliński, and Mark Wooding. The DocStrip program. CTAN: `macros/latex/base/docstrip.dtx`, March 1999. 16

[13] Frank Mittelbach, Chris Rowley, Alan Jeffrey, and David P. Carlisle. The main structure of documents. CTAN: `macros/latex/base/ltclass.dtx`, August 2001.

[14] Frank Neukam and Markus Kohm. Die Haupt-classes und -packages des KOMA-Script Pakets. CTAN: macros/latex/contrib/supported/koma-script/scrclass.dtx, August 2005. 11, 2.1, 2.2.6, 2.3.1

[15] TUG Working Group on a TeX Directory Structure (TWG-TDS). A directory structure for TeX files. CTAN: tds/tds.pdf, April 1999. 17

[16] The LaTeX3 Project. The LaTeX Project Public License. URL: http://www.latex-project.org/lppl.txt, October 2004. 2.2.6