Bern University
of Applied Sciences

Image

BFH-CI

LaTeX Bundle for Bern University of Applied Sciences

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Contents

1 Quickstart

BFH-CI provides mechanisms for different types of documents. Most mechanisms exist among all types. These can be extended by using the BFHModule mechanism (see section 4).

The release includes the following example files:

DEMO-BFHPub.tex The source to this document. General example for print publications. There are some more specific variants for project proposals (`DEMO-BFHProjektProposal.tex`) or fact sheets (`DEMO-BFHFactsheet.tex`).

DEMO-BFHBeamer.tex Beamer presentations. There's also a variant with a sidebar in `DEMO-BFHBeamer-Sidebar.tex`

DEMO-BFHThesis.tex Thesis template including an affidavit and additional title fields.

DEMO-BFHLetter.tex Letters using `bfhletter` a layouting wrapper package for `scrletter`.

DEMO-BFHSciPoster.tex Scientific posters based on `tcolorbox`'s poster library.

It might be useful to start a new document using one of these example files. An extended variant of this documentation and general advice for LaTeX users can be found at `https://latex.ti.bfh.ch`

2 Helper packages

The basic design elements for BFH-CI are implemented by the packages `bfhcolors`, `bfhfonts` and `bfhlogo`. The latter one is not included in the CTAN Releas due to trademark restrictions. Users can download it from the internal GitLab. Detailed Information can be found at the installation instructions at `https://latex.ti.bfh.ch`.

These packages will be loaded automatically if one of the bfh-classes or the letter package are loaded.

The classes `bfhpub` and `bfhthesis` as well as the beamerarticle-mode of bfhbeamer also load the `bfhlayout` package. It provides the basic layout functionality without a documentclass requirement. Though it should not be loaded without a KOMA-Script class.

2.1 bfhcolors

2.1.1 Available Colors

The following table shows all by `bfhcolors` defined colors. For their usage please have a look at the `xcolor` documentation.

BFH-DarkBlue	BFH-MediumBlue	BFH-LightBlue
BFH-DarkGreen	BFH-MediumGreen	BFH-LightGreen
BFH-DarkPurple	BFH-MediumPurple	BFH-LightPurple
BFH-DarkOcher	BFH-MediumOcher	BFH-LightOcher
BFH-DarkRed	BFH-MediumRed	BFH-LightRed
BFH-Orange	BFH-Gray	

2.1.2 Package Options

The `colormode` option can be used to select the correct definitions for the output. The names match the design guideline.

`colormode=4CU` 4 colors uncoated paper (default)

`colormode=4CC` 4 colors coated paper

`colorode=RGB` RGB colors for screens or beamer presentations

`colormode=SW` grayscale for internal documents

2.2 bfhfonts

The CI guideline generally requires the Fonts Unit Slab Pro and Unit Rounded Pro. Due to license restrictions these cannot be published together with BFH-CI. BFH-CI provides fallbacks for Source Serif Pro and Nunito which will be loaded if the official fonts cannot be found. If you want to use the official fonts please have a look at the installation instructions at `https://latex.ti.bfh.ch`.

These changes have been approved by the communications department and can be used as full replacements.

`bfhfonts` will try to load fontspec and only use Type 1 fonts if pdfLaTeX is used to compile the documents.

2.3 bfhlogo

The `bfhlogo` package provides translations of the word marks of the BFH logo. Generally this package will use the base language but there's also an option to provide multi language support.

2.3.1 Package options

language= The language options accepts the self explaining values `de`, `fr`, `en`, `de_fr`, `de_fr_en`.

invert-logo-colors=true/false This option can be used to invert the logo colors. It's internally used in some poster and beamer elements.

trilingual/bilingual/monolingual These keys only exist for compatibility reasons and will be mapped to the corresponding `language=` options.

3 The base layout for text documents

The base mechanism for all text documents is provided using the `bfhlayout` package. `bfhpub` and `bfhthesis` load this package. The other bfh-classes provide the functionality differently. Please have a look at the corresponding demo files if you use want to create another document type.

`bfhpub` and `bfhthesis` will pass all their document class options to this package.

titleimage-ratio= This choice key accepts the values `12` (1:2),`13` (1:3), `23` (2:3), `34` (3:4), `56` (5:6) , `1011` (10:11). It will adjust the size of the colored area or titlegraphic on the titlepage. For `bfhthesis` some values might be forbidden if the title information takes too much space.

The value is initialized to `titleimage-ratio=12`. the value will be ignored if no titlepage is generated e. g. with `titlepage=false`.

invert-title=true/false This switch toggles the color of text & logo on the titlepage. If set to true, the base colors of titlepage (BFH-Orange/BFH-Gray) are switched.

4 Additional layout modules

To support some layout elements among all document types BFH-CI introduces the Macro

```
\LoadBFHModule{<List of Modules>}
```

These modules can be used to extend the basic mechanisms on additional elements. Currently there are 3 Modules prepared:

- tabular
- listings
- terminal
- boxes
- rules

The corresponding filenames following the structure `bfh-layout-<modulename>.cfg`. User defined modules can be added.

4.1 The table module

This module is automatically loaded by all document types beside `bfhletter.cls`.

```
\LoadBFHModule{tabular}
```

BFH-CI should used colored tabulars. It combined all necessary adjustments in the `\setupBfhTabular` macro. It will adjust the rowcolor using `xcolor`. To use the recommended tabular setup one could use:

```
\begin{table}
        \centering
\setupBfhTabular
\begin{tabular}{lll}
\rowcolor{BFH-tablehead}
Header 1&Header 2&Header3\\\hline
Content 11&Content 12&Content 13\\\hline
Content 21&Content 22&Content 23
\end{tabular}
\caption{table caption}
\label{table-label}
\end{table}
```

To simplify the usage the `bfhlayout` also provides a `bfhTabular` environment. The upper example would be equal to:

Header 1	Header 2	Header3
Content 11	Content 12	Content 13
Content 21	Content 22	Content 23

Table 1: table caption

```
\begin{table}
\begin{bfhTabular}{lll}
Header 1&Header 2&Header3\\
Content 11&Content 12&Content 13\\
Content 21&Content 22&Content 23
\end{bfhTabular}
\caption{table caption}
\label{table-label}
\end{table}
```

In case the package `tabularray` is loaded the tabular module will also implement a tblr environ to use the layout. For further usage information please have a look at the `tabularray` documentation.

```
\begin{bfhTblr}{lll}
Header 1&Header 2&Header3\\
Content 11&Content 12&Content 13\\
Content 21&Content 22&Content 23
\end{bfhTblr}
```

4.2 listings module

Loades the `listings` package and adjusts colors for the listing environments to match the CI.

4.3 terminal module

Provides some terminal mechanisms to be similar to OSX and ubuntu terminals. The mechanism is based on `tcolorbox` and either `listings` or `minted` can be used as listing engine.

The syntax was adapted from internal packages providing this functionality. Therefore the syntax for adjusting the terminal propmts is slightly different for the minted engine in contrast to listings.

The following examples show the difference.

Please pay attention to the fact that the current implementation to change the prompt needs global assignments. A reset at start of a new terminal environment might be required.

4.3.1 terminal using listings

```
student@ubuntu:~$ whoami
student
student@ubuntu:~$ sudo su

root@ubuntu:~# hostname
ubuntu
root@ubuntu:~# ssh
bob@remotehost
student@remotehost's
password:
Linux remote host
2.6.32-5-686 #1 SMP Sun Sep 23
09:49:36 UTC 2012 i686
You have mail.
Last login: Wed Oct 16
01:12:35 2012 from localhost

user@remotehost:~$ whoami
user
user@remotehost:~$ _
```

```
user@remotehost whoami
root
root@macintosh:~# hostname
ubuntu
root@macintosh:~# ssh
bob@remotehost
bob@remotehost's password:
Linux remote host
2.6.32-5-686 #1 SMP Sun Sep 23
09:49:36 UTC 2012 i686
You have mail.
Last login: Wed Oct 16
01:12:35 2012 from localhost

user@remotehost:~$ whoami
user
user@remotehost:~$ _
```

4.3.2 terminal using minted

This section is commented because minted has to be set up to use it. In case this should be used minted has been loaded before the terminal module.

4.4 boxes module

The boxes module provides box environments based on the BFH coporate identity. All of them follow the same syntax:

```
\begin{ENV_TYPE}[COLOR_OPTION]{BOX TITLE}
Some text displayed in the color box.
\end{ENV_TYPE}
```

General use of the BFH notification box environment.

```
\begin{NOTIFICATION_TYPE}
Some text displayed in the color box.
\end{NOTIFICATION_TYPE}
```

4.4.1 The general purpose box

The BFH color box using the option to set user defined color.

```
\begin{bfhBox}[BFH-MediumBlue]{\texttt{bfhBox}}
Color provided by \texttt{bfhcolors} package: \texttt{BFH-MediumBlue}
\end{bfhBox}
```

bfhBox

Color provided by `bfhcolors` package: `BFH-MediumBlue`

The box without the color option falls back to default color box in BFH medium green.

```
\begin{bfhBox}{\texttt{bfhBox}}
Color provided by \texttt{bfhcolors} package: \texttt{BFH-MediumGreen}
Default color
\end{bfhBox}
```

bfhBox

Color provided by `bfhcolors` package: `BFH-MediumGreen` Default color

4.4.2 Theme boxes

```
\begin{bfhAlertBox}
Some text to emphasis.
\end{bfhAlertBox}
```

An alert box.

```
\begin{bfhWarnBox}
Some text to emphasis.
\end{bfhWarnBox}
```

A warning box.

```
\begin{bfhNoteBox}
Some text to emphasis.
\end{bfhNoteBox}
```

A note box.

```
\begin{bfhRecycleBox}
Some text to emphasis.
\end{bfhRecycleBox}
```

A recycle box.

```
\begin{bfhReadBox}
Some text to emphasis.
\end{bfhReadBox}
```

A read box.

```
\begin{bfhProcessingBox}
Some text to emphasis.
\end{bfhProcessingBox}
```

A processing box.

4.5 rules module

The rules module adds user macros to create separation rules as described in the CI guideline.

```
\bfhRule[optional length]
```