The a4wolke bundle*

Stefan Berthold stefan.berthold@kau.se

September 16, 2013

1 Introduction

The a4wolke bundle provides LATEX classes for creating documents with a layout similar to the one used in the A4Cloud project. The latest version can be obtained from

http://github.com/ZjMNZHgG5jMXw/a4wolke .

2 Usage

This template can be found in a4template.tex. The document declaration starts with defining the meta data.

```
1 (*template)
2 \documentclass{a4wolke}
3 \usepackage[scaled=0.92]{helvet}
                 = Document title
4 \neq 1
      , number
                       = MS:X-1.1
      , workpackage
                      = WP:X-1
6
      , version
                       = 0.1
      , organisation = Partner
      , dissemination = CO
      , contractdate = dd/mm/yyyy
11
      , delivery
                       = dd/mm/yyyy
       , status
                       = template
12
13 }
```

An editor can be declared by using the macro \editor. More editors can be added by repeatedly declaring one editor.

```
14 \cdot 14 \cdot 15 , affiliation = editor's affiliation 16
```

A contributor can be declared by using the macro \contributor. More contributors can be added by repeatedly declaring one contributor.

```
17 \contributor{ name = author's name
18 , affiliation = author's affiliation
19 }
```

^{*}This document corresponds to a 4wolke v1.0, dated 2013/09/12.

A reviewer can be declared by using the macro \reviewer. More reviewers can be added by repeatedly declaring one reviewer.

```
20 \reviewer{ name = reviewer's name
21 , affiliation = reviewer's affiliation
22 }
```

A revision can be declared by using the macro \revision. More revisions can be added by repeatedly declaring one revision.

```
23 \revision{ number = 0.1

24 , date = dd/mm/yyyy

25 , author = author

26 , affiliation = affiliation

27 , change = change description.

28 }
```

The document body starts with inserting the lists and tables of contributors, reviewers, revisions, and contents.

```
29 \begin{document}
30 \maketitle
31 \section*{Executive Summary}
32 \clearpage
33 \tableofcontents
The rest of the document may be written as any other IATEX article.
34 \section{Introduction}
35 \end{document}
36 \( / \template \)
```

3 Implementation

3.1 Class options and dependencies

Class options are neither parsed nor passed to the underlying scrartcl class. All macros are derived from the standard scrartcl class.

```
38 \ProcessOptions\relax
39 \LoadClass{scrartcl}
40 \RequirePackage{scrpage2}
41 \RequirePackage{graphicx}
42 \RequirePackage{xkeyval}
43 \RequirePackage{datatool}
    \DTLnewdb{editor}%
44
    \DTLaddcolumn{editor}{name}%
45
   \DTLaddcolumn{editor}{affil}%
46
   \DTLnewdb{contrib}%
47
   \DTLaddcolumn{contrib}{name}%
   \DTLaddcolumn{contrib}{affil}%
   \DTLnewdb{review}%
    \DTLaddcolumn{review}{name}%
51
    \DTLaddcolumn{review}{affil}%
52
    \DTLnewdb{revision}%
53
    \DTLaddcolumn{revision}{number}%
54
    \DTLaddcolumn{revision}{date}%
55
    \DTLaddcolumn{revision}{author}%
```

```
\DTLaddcolumn{revision}{affil}%
           \DTLaddcolumn{revision}{change}%
       59 \RequirePackage{colortbl}
       60 \RequirePackage{tabularx}
       61 \RequirePackage{xcolor}
       62 \RequirePackage{lastpage}
       63 \renewcommand\familydefault\sfdefault
             Project design
       3.2
       Arial, 10 (normal)
       Arial, 8 (footer)
       RGB: 45, 170, 225 (frame, title page rulers)
       RGB: 180, 207, 225 (alternative filling)
       RGB: 166, 166, 166 (footer)
       64 \ensuremath{\mbox{\mbox{$\sim$}}} \{0.176, 0.667, 0.882\}\%
       65 \definecolor{cloudbluefill}{rgb}{0.706,0.812,0.882}%
       66 \definecolor{cloudgreyfoot}{rgb}{0.651,0.651,0.651}%
       67 \arrayrulecolor{cloudblueframe}%
       68 \renewcommand\arraystretch{1.1}%
       69 \clearscrheadings%
       70 \renewcommand*\headfont{\normalfont\smallskip}
       71 \renewcommand*\footfont{\normalfont\scriptsize\color{cloudgreyfoot}}
       72 \setheadsepline{0.5pt}[\color{cloudblueframe}\hrulefill]
       73 \lohead{\wol@meta@title}%
       74 \lower 14 \
       75 \lefoot{FP7-ICT-2011-8-317550-A4CLOUD}%
       76 \lofoot{FP7-ICT-2011-8-317550-A4CLOUD}%
       77 \refoot{Page~\textbf{\thepage}~of~\textbf{\pageref{LastPage}}}}%
       78 \rofoot{Page^\textbf{\thepage}^of^\textbf{\pageref{LastPage}}}}% \
       79 \pagestyle{scrheadings}%
       80 \defpagestyle{titlepage}{%
          {}{\\includegraphics[scale=0.6]{A4cloud}\\hfill\\medskip}\%
       82 }{%
       83
          {}{}{\parbox[b]{0.75\textwidth}{\scriptsize\color{cloudgreyfoot}%
       84
             A4Cloud\\%
             \verb|\underline{www.a4cloud.eu}|\|
       85
             Accountability For Cloud and Other Future Internet Services\\[\baselineskip]%
       86
             FP7-ICT-2011-8-317550-A4CLOUD%
       87
          }\hfill%
       88
           \parbox[b]{\scm}{\raggedleft\includegraphics[width=28mm]{seventh_framework_programme}}%
       89
          }%
       90
       91 }
       3.3
             Front matter
\meta \{\langle meta \ data \rangle\}\ defines the document's meta data.
```

92 \define@cmdkeys[wol]{meta}[wol@meta@]%

93 { title 94 , number

95

, workpackage

, version

```
, organisation
                      97
                           , dissemination
                      98
                           , contractdate
                      99
                          , delivery
                      100
                           , status
                      101
                      102 }
                      103 \newcommand\meta[1] {\setkeys[wol] {meta} {#1}}
      \wol@maketitle preserves the original definition of the title page.
                      104 \let\wol@maketitle=\maketitle
          \maketitle creates the title page.
                      105 \renewcommand\maketitle{\par\noindent%
                           \newlength{\wol@headheight}\setlength{\wol@headheight}{\headheight}%
                      107
                           \setlength{\headheight}{1.2in}%
                      108
                           \thispagestyle{titlepage}%
                     109
                           \huge\wol@meta@title\medskip\smallskip\par\noindent\normalsize%
                           \color{cloudblueframe}\rule{\textwidth}{0.5pt}\color{black}\bigskip\par\noindent%
                     110
                           \bfseries Deliverable Number: \normalfont\wol@meta@number\smallskip\par\noindent%
                     111
                     112
                           \bfseries Work Package: \normalfont\wol@meta@workpackage\smallskip\par\noindent%
                     113
                           \bfseries Version: \normalfont\wol@meta@version\smallskip\par\noindent%
                     114
                           \bfseries Deliverable Lead Organisation: \normalfont\wol@meta@organisation\smallskip\par\no:
                           \bfseries Dissemination Level: \normalfont\wol@meta@dissemination\smallskip\par\noindent%
                           \bfseries Contractual Date of Delivery (release): \normalfont\wol@meta@contractdate\smallsk:
                     117
                           \bfseries Date of Delivery: \normalfont\wol@meta@delivery\smallskip\par\noindent%
                           \bfseries Status: \normalfont\wol@meta@status\smallskip\par\noindent%
                     118
                           \color{cloudblueframe}\rule{\textwidth}{0.5pt}\color{black}\bigskip\bigskip\par\noindent%
                     119
                           \listofeditors\bigskip\par\noindent%
                     120
                     121
                           \listofcontributors\bigskip\par\noindent%
                          \listofreviewers%
                     122
                           \clearpage%
                     123
                     124
                           \vspace*{\stretch{1}}%
                           \par\noindent\bfseries Revision table\normalfont\medskip\par\noindent%
                          \tableofrevisions%
                     126
                           \vspace*{\stretch{3}}%
                      127
                      128
                           \setlength{\headheight}{\wol@headheight}%
                      129
                           \clearpage%
                     130 }
\wol@tableofcontents preserves the original definition of the table of contents.
                     131 \let\wol@tableofcontents=\tableofcontents
   \tableofcontents prints the table of contents and finishes the page.
                     132 \renewcommand\tableofcontents{\wol@tableofcontents\clearpage}
             \editor \{\langle editor's\ information \rangle\} may be used multiple times and once for each editor.
                     133 \define@key[wol]{editor}{name}{%
                     134 \DTLnewdbentry{editor}{name}{#1}}
                     135 \define@key[wol]{editor}{affiliation}{%
                          \DTLnewdbentry{editor}{affil}{#1}}
                      137 \newcommand\editor[1]{%
                          \DTLnewrow{editor}%
                           \setkeys[wol]{editor}{#1}%
                      139
                      140 }
```

```
\listofeditors creates the list of editors.
                      141 \newcommand\listofeditors{%
                            \noindent%
                      142
                            \begin{tabularx}{\textwidth}{|X|}%
                      143
                              \rowcolor{cloudblueframe}
                      144
                      145
                              Editor\\\hline%
                      146
                              \DTLforeach*{editor}%
                       147
                                 {\name=name, \affil=affil}%
                                 {\DTLiffirstrow{\name{} (\affil)}{, \name{} (\affil)}}, \name{} (\affil)}{}, \name{} (\affil)}{}, \name{} (\affil)}{}, \name{} (\affil)}{}, \name{} (\affil)
                      148
                      149
                               \\\hline%
                            \end{tabularx}\par%
                      150
                      151 }
       \contributor \{\langle contributor's information \rangle\} may be used multiple times and once for each con-
                      152 \define@key[wol] {contrib} {name} {%
                       153 \DTLnewdbentry{contrib}{name}{#1}}
                       154 \define@key[wol]{contrib}{affiliation}{%
                           \DTLnewdbentry{contrib}{affil}{#1}}
                       156 \newcommand\contributor[1]{%
                           \DTLnewrow{contrib}%
                            \setkeys[wol]{contrib}{#1}%
                      158
                      159 }
\listofcontributors creates the list of contributors.
                       160 \newcommand\listofcontributors{%
                            \noindent%
                            \begin{tabularx}{\textwidth}{|X|}%
                       162
                              \rowcolor{cloudblueframe}
                      163
                              Contributors\\hline%
                      164
                               \DTLforeach*{contrib}%
                      165
                                 {\name=name, \affil=affil}%
                      166
                                 {\DTLiffirstrow{\name{} (\affil)}{, \name{} (\affil)}}%
                       167
                      168
                              \\\hline%
                            \end{tabularx}\par%
                      170 }
           \reviewer \{\langle reviewer's\ information \rangle\} may be used multiple times and once for each reviewer.
                      171 \define@key[wol] {review} {name} {%
                           \DTLnewdbentry{review}{name}{#1}}
                      173 \define@key[wol]{review}{affiliation}{%
                            \DTLnewdbentry{review}{affil}{#1}}
                      175 \newcommand\reviewer[1]{%
                            \DTLnewrow{review}%
                            \setkeys[wol]{review}{#1}%
                       177
                      178 }
   \listofreviewers creates the list to reviewers.
                      179 \newcommand\listofreviewers{%
                            \noindent%
                      181
                            \begin{tabularx}{\textwidth}{|X|}%
                       182
                              \rowcolor{cloudblueframe}
                       183
                              Reviewers\\\hline%
```

```
\DTLforeach*{review}%
                                                                                                                184
                                                                                                                                                                         {\name=name, \affil=affil}%
                                                                                                                185
                                                                                                                                                                         {\DTLiffirstrow{\name{} (\affil)}{, \name{} (\affil)}}, \name{} (\affil)}{}, \name{} (\affil)}{}, \name{} (\affil)}{}, \name{} (\affil)}{}, \name{} (\affil)}{}, \name{} (\affil)}{}, \name{} (\affil)
                                                                                                                186
                                                                                                                187
                                                                                                                                                            \\\hline%
                                                                                                                                                \end{tabularx}\par%
                                                                                                                188
                                                                                                                 189 }
                                                \revision \{\langle revision\ information \rangle\} may be used multiple times and once for each revision.
                                                                                                                190 \define@key[wol] {revision} {number} {%
                                                                                                                                               \DTLnewdbentry{revision}{number}{#1}}
                                                                                                                192 \define@key[wol]{revision}{date}{%
                                                                                                                                               \DTLnewdbentry{revision}{date}{#1}}
                                                                                                                 194 \define@key[wol] {revision} {author} {%
                                                                                                                                               \DTLnewdbentry{revision}{author}{#1}}
                                                                                                                 196 \define@key[wol] {revision} {affiliation} {%
                                                                                                                                               \DTLnewdbentry{revision}{affil}{#1}}
                                                                                                                 198 \define@key[wol]{revision}{change}{%
                                                                                                                199
                                                                                                                                               \DTLnewdbentry{revision}{change}{#1}}
                                                                                                                200 \newcommand\revision[1]{%
                                                                                                                201
                                                                                                                                              \DTLnewrow{revision}%
                                                                                                                202
                                                                                                                                              \setkeys[wol]{revision}{#1}%
                                                                                                                203 }
\tableofrevisions creates the table of revisions.
                                                                                                                204 \newcommand\tableofrevisions{\%
                                                                                                                                            \noindent%
                                                                                                               205
                                                                                                                                               \begin{array}{ll} \begin{array}{ll} \begin{array}{ll} \begin{array}{ll} \begin{array}{ll} \begin{array}{ll} \begin{array}{ll} \end{array} & \end{array} & \begin{array}{ll} \end{array} & \end{array} & \begin{array}{ll} \end{array} & \end{array} & \begin{array}{ll} \end{array} & \begin{array}{ll} \end{array} & \end{array} & \begin{array}{ll} \end{array} & \end{array} & \begin{array}{ll} \end{array} & \begin{array}{ll} \end{array} & \end{array} & \end{array} & \begin{array}{ll} \end{array} & \end{array} & \end{array} & \begin{array}{ll} \end{array} & \end{array} & \begin{array}{ll} \end{array} & \end{array} & \begin{array}{ll} \end{array} & \end{array} & \begin{array}{ll} \end{array} & \end{array} & \end{array} & \begin{array}{ll} \\ & \end{array} & \end{array} & \begin{array}{ll} \\ & \end{array} & \end{array} & \begin{array}{ll} \end{array} & \end{array} & \begin{array}{ll} \end{array} & \end{array} & \begin{array}{ll} \\ & \end{array} & \end{array} & \begin{array}{ll} \end{array} & \end{array} & \end{array} & \begin{array}{ll} \\ & \end{array} & \end{array} & \begin{array}{ll} \end{array} & \end{array} & \begin{array}{ll} \\ & \end{array} & \end{array} & \end{array} & \begin{array}{ll} \\ & \end{array} & \end{array} & 
                                                                                                               206
                                                                                                                                                            \rowcolor{cloudblueframe}
                                                                                                               207
                                                                                                                                                           Version & Date & Author & Change Description%
                                                                                                                208
                                                                                                                                                            \DTLforeach*{revision}%
                                                                                                                209
                                                                                                                                                                         {\num=number, \dat=date, \auth=author, \affil=affil, \change=change}%
                                                                                                                210
                                                                                                                211
                                                                                                                                                                         {\\\hline\DTLifoddrow{\rowcolor{white}}{\rowcolor{cloudbluefill}}%
                                                                                                               212
                                                                                                                                                                         \num & \dat & \auth{} (\affil) & \change}%
                                                                                                                                                            \\\hline%
                                                                                                               213
                                                                                                                                                \end{tabularx}\par%
                                                                                                               214
                                                                                                               215 }
                                                                                                                                                           Main matter
                                                             a4table
                                                                                                                216 \newenvironment{a4table}{}{}
                                                                                                                217 (/class)
```