The a4wolke bundle*

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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
```

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 v1.2, dated 2014/07/28.

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 LATEX article.

```
34 \scalebox{Introduction}
35 \begin{table}
36
                                                   \centering
                                                     \begin{array}{c} \begin{array}{c} & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & \\ & & \\ & \\ & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & 
37
                                                                          fun & run \\
38
39
                                                                          run & fun \\
                                                                          fun & run \\\hline
40
41
                                                       \end{a4tabular}
                                                     \caption{fun \& run.}
43 \neq 13
44 \end{document}
45 (/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.

```
46 (*class)
47 \ProcessOptions\relax
48 \LoadClass{scrartcl}
49 \RequirePackage{scrpage2}
50 \RequirePackage{graphicx}
51 \RequirePackage{xkeyval}
52 \RequirePackage{datatool}
53 \DTLnewdb{editor}%
54 \DTLaddcolumn{editor}{name}%
55 \DTLaddcolumn{editor}{affil}%
56 \DTLnewdb{contrib}%
```

```
\DTLaddcolumn{contrib}{name}%
57
   \DTLaddcolumn{contrib}{affil}%
58
   \DTLnewdb{review}%
59
   \DTLaddcolumn{review}{name}%
60
   \DTLaddcolumn{review}{affil}%
61
   \DTLnewdb{revision}%
   \DTLaddcolumn{revision}{number}%
   \DTLaddcolumn{revision}{date}%
64
   \DTLaddcolumn{revision}{author}%
65
   \DTLaddcolumn{revision}{affil}%
66
   \DTLaddcolumn{revision}{change}%
67
68 \RequirePackage{colortbl}
69 \RequirePackage{tabularx}
70 \RequirePackage{longtable}
71 \RequirePackage[table] {xcolor}
72 \RequirePackage{lastpage}
73 \renewcommand\familydefault\sfdefault
```

3.2 Project design

```
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)
74 \definecolor{cloudblueframe}\{rgb\}\{0.176,0.667,0.882\}\%
75 \definecolor{cloudbluefill}{rgb}\{0.706, 0.812, 0.882\}%
76 \definecolor{cloudgreyfoot}{rgb}{0.651,0.651,0.651}%
77 \arrayrulecolor{cloudblueframe}%
78 \renewcommand\arraystretch{1.1}%
79 \clearscrheadings%
80 \renewcommand*\headfont{\normalfont\smallskip}
81 \renewcommand*\footfont{\normalfont\scriptsize\color{cloudgreyfoot}}
82 \setheadsepline{0.5pt}[\color{cloudblueframe}\hrulefill]
83 \lohead{\wol@meta@title}%
84 \lehead{\wol@meta@title}%
85 \lefoot{FP7-ICT-2011-8-317550-A4CLOUD}%
86 \ \texttt{\fp7-ICT-2011-8-317550-A4CLOUD} \%
88 \foot{Page^{\text{textbf}{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{c}}}}}}}}}%
89 \pagestyle{scrheadings}%
90 \defpagestyle{titlepage}{%
    {}{}{%
91
    \IfFileExists{A4cloud.pdf}%
       {\includegraphics[scale=0.6]{A4cloud}}%
       {[logo] mail stefan.berthold@kau.se for the logo image file}%
94
95
    \hfill\medskip%
96
    }%
97 }{%
    {}{}{\parbox[b]{0.75\textwidth}{\scriptsize\color{cloudgreyfoot}}%
98
      A4Cloud\\%
99
       \underline{www.a4cloud.eu}\\%
100
```

```
}\hfill%
               103
                     \parbox[b]{3cm}{\raggedleft%
               104
               105
                       \IfFileExists{seventh_framework_programme.jpg}%
                         {\includegraphics[width=28mm]{seventh_framework_programme}}%
               106
                         {[logo] mail stefan.berthold@kau.se for the logo image file}}%
               107
                    }%
               108
               109 }
                3.3
                       Front matter
         \meta \{\langle meta \ data \rangle\} defines the document's meta data.
               110 \define@cmdkeys[wol] {meta} [wol@meta@]%
               111
                    { title
                    , number
               112
               113
                     , workpackage
                     , version
               114
               115
                     , organisation
                     , dissemination
               116
                     , contractdate
               117
                    , delivery
               118
                    , status
               119
               120 }
               121 \newcommand\meta[1] {\setkeys[wol] {meta}{#1}}
\wol@maketitle preserves the original definition of the title page.
               122 \let\wol@maketitle=\maketitle
    \maketitle creates the title page.
               123 \renewcommand\maketitle{\par\noindent%
                     \newlength{\wol@headheight}\setlength{\wol@headheight}{\headheight}%
               125
                     \setlength{\headheight}{1.2in}%
               126
                     \thispagestyle{titlepage}%
                     \huge\wol@meta@title\medskip\smallskip\par\noindent\normalsize%
               127
                     \color{cloudblueframe}\rule{\textwidth}{0.5pt}\color{black}\bigskip\par\noindent%
               128
                     \bfseries Deliverable Number: \normalfont\wol@meta@number\smallskip\par\noindent%
               129
                    \bfseries Work Package: \normalfont\wol@meta@workpackage\smallskip\par\noindent%
               130
                    \bfseries Version: \normalfont\wol@meta@version\smallskip\par\noindent%
                    \bfseries Deliverable Lead Organisation: \normalfont\wol@meta@organisation\smallskip\par\no:
                    \bfseries Dissemination Level: \normalfont\wol@meta@dissemination\smallskip\par\noindent%
               133
                    \bfseries Contractual Date of Delivery (release): \normalfont\wol@meta@contractdate\smallsk:
                    \bfseries Date of Delivery: \normalfont\wol@meta@delivery\smallskip\par\noindent%
                    \bfseries Status: \normalfont\wol@meta@status\smallskip\par\noindent%
               136
               137
                     \color{cloudblueframe}\rule{\textwidth}{0.5pt}\color{black}\bigskip\bigskip\par\noindent%
               138
                    \listofeditors\bigskip\par\noindent%
                    \listofcontributors\bigskip\par\noindent%
               139
                    \listofreviewers%
               140
                     \clearpage%
               141
                     \vspace*{\stretch{1}}%
               142
                     \par\noindent\bfseries Revision table\normalfont\medskip\par\noindent%
               143
                     \tableofrevisions%
                    \vspace*{\stretch{3}}%
```

Accountability For Cloud and Other Future Internet Services\\[\baselineskip]%

101

102

FP7-ICT-2011-8-317550-A4CLOUD%

```
\setlength{\headheight}{\wol@headheight}%
                            \clearpage%
                      147
                      148 }
\wol@tableofcontents preserves the original definition of the table of contents.
                      149 \let\wol@tableofcontents=\tableofcontents
    \tableofcontents prints the table of contents and finishes the page.
                      150 \renewcommand\tableofcontents{\wol@tableofcontents\clearpage}
             \editor \{\langle editor's \ information \rangle\} may be used multiple times and once for each editor.
                      151 \define@key[wol]{editor}{name}{%
                            \DTLnewdbentry{editor}{name}{#1}}
                      153 \define@key[wol]{editor}{affiliation}{%
                            \DTLnewdbentry{editor}{affil}{#1}}
                      155 \newcommand\editor[1]{%
                           \DTLnewrow{editor}%
                            \setkeys[wol]{editor}{#1}%
                      158 }
      \listofeditors creates the list of editors.
                      159 \newcommand\listofeditors{%
                            \noindent%
                      160
                      161
                            \begin{tabularx}{\textwidth}{|X|}%
                      162
                              \rowcolor{cloudblueframe}
                      163
                              Editor\\\hline%
                      164
                              \DTLforeach*{editor}%
                      165
                                {\name=name, \affil=affil}%
                                {\DTLiffirstrow{\name{} (\affil)}{, \name{} (\affil)}}
                      166
                              \\\hline%
                      167
                            \end{tabularx}\par%
                      168
                      169 }
        \contributor \{\langle contributor's information \rangle\} may be used multiple times and once for each con-
                       tributor.
                      170 \define@key[wol]{contrib}{name}{%
                           \DTLnewdbentry{contrib}{name}{#1}}
                      172 \define@key[wol] {contrib} {affiliation} {%
                           \DTLnewdbentry{contrib}{affil}{#1}}
                      174 \newcommand\contributor[1] {%
                           \DTLnewrow{contrib}%
                            \setkeys[wol]{contrib}{#1}%
                      176
                      177 }
 \listofcontributors creates the list of contributors.
                      178 \newcommand\listofcontributors{%
                      179
                            \noindent%
                            \begin{tabularx}{\textwidth}{|X|}%
                      180
                              \rowcolor{cloudblueframe}
                      181
                              Contributors\\hline%
                      182
                              \DTLforeach*{contrib}%
                      183
                                {\name=name, \affil=affil}%
                      184
```

{\DTLiffirstrow{\name{} (\affil)}{, \name{} (\affil)}}%

185

```
\\\hline%
                    186
                          \end{tabularx}\par%
                    187
                    188 }
        \reviewer \{\langle reviewer's\ information \rangle\} may be used multiple times and once for each reviewer.
                    189 \define@key[wol]{review}{name}{%
                         \DTLnewdbentry{review}{name}{#1}}
                    191 \define@key[wol] {review} {affiliation} {%
                         \DTLnewdbentry{review}{affil}{#1}}
                    193 \newcommand\reviewer[1]{%
                          \DTLnewrow{review}%
                          \setkeys[wol]{review}{#1}%
                    196 }
\listofreviewers creates the list to reviewers.
                    197 \newcommand\listofreviewers{%
                         \noindent%
                    199
                          \begin{tabularx}{\textwidth}{|X|}%
                    200
                            \rowcolor{cloudblueframe}
                            Reviewers\\hline%
                    201
                            \DTLforeach*{review}%
                    202
                              {\name=name, \affil=affil}%
                    203
                              {\DTLiffirstrow{\name{} (\affil)}{, \name{} (\affil)}}, \name{} (\affil)}{}, \name{} (\affil)}{}, \name{} (\affil)}{}, \name{} (\affil)}{}, \name{} (\affil)
                    204
                    205
                            \end{tabularx}\par%
                    207 }
        \revision \{\langle revision\ information \rangle\}\ may be used multiple times and once for each revision.
                    208 \define@key[wol]{revision}{number}{%
                          \DTLnewdbentry{revision}{number}{#1}}
                    210 \define@key[wol]{revision}{date}{%
                         \DTLnewdbentry{revision}{date}{#1}}
                    212 \define@key[wol] {revision} {author} {%
                          \DTLnewdbentry{revision}{author}{#1}}
                    214 \define@key[wol] {revision} {affiliation} {%
                          \DTLnewdbentry{revision}{affil}{#1}}
                    216 \define@key[wol] {revision} {change} {%
                         \DTLnewdbentry{revision}{change}{#1}}
                    217
                    218 \newcommand\revision[1]{%
                         \DTLnewrow{revision}%
                         \setkeys[wol]{revision}{#1}%
                    221 }
\tableofrevisions creates the table of revisions.
                    222 \newcommand\tableofrevisions{%
                    224
                         \label{longtable} $$\left|p{34pt}|p{60pt}|p{113.81pt}|p{160.44559pt}|\right|.$
                    225
                            \rowcolor{cloudblueframe}
                            Version & Date & Author & Change Description%
                    226
                            \DTLforeach*{revision}%
                    227
                              {\num=number, \dat=date, \auth=author, \affil=affil, \change=change}%
                    228
                              {\\hline\DTLifoddrow{\rowcolor{white}}{\rowcolor{cloudbluefill}}%
                    229
                    230
                              \num & \dat & \auth{} (\affil) & \change}%
                    231
                            \\\hline%
```

```
232 \end{longtable}\par%
233 }
```

3.4 Main matter

```
a4tabular \{\langle column\ defs \rangle\}

234 \newenvironment{a4tabular}[1]{%
235 \rowcolors{2}{cloudbluefill}{}%
236 \begin{tabular}{#1}%
237 \rowcolor{cloudblueframe}%
238 }%
239 {\end{tabular}}
240 \langle / class \rangle
```