Seminar FAQ — Version 2.1

Denis GIROU — `Denis.Girou@idris.fr`

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Disclaimer: *This file is my own and doesn't engage Timothy VAN ZANDT at all. Errors and misunderstandings are mine...*

Contents

1 Documentation

1.1 Distribution

The source of Seminar is available on `CTAN/macros/latex/contrib/other/seminar`, including the `seminar.bug` file. The `seminar.bg2` file is available here on the Seminar Web page, with comments on *Seminar bugs list*.

1.2 Web page

Courtesy to TUG, there is a Web page devoted to Seminar on `http://www.tug.org/applications/Seminar`. All documentations related to Seminar can be found there. Actual maintener of this page is Denis Girou.

1.3 User's Guide

By Timothy van Zandt. The source of this user's guide is included in the distribution as `sem-user.tex`.

1.4 FAQ

By Denis Girou. This file. The PostScript version include result of examples, that are not shown in the HTML version.

1.5 Seminar chapter of the LaTeX Graphics Companion

LaTeX Graphics Companion by Michel Goossens, Sebastian Rahtz and Frank Mittelbach, Addison Wesley, 1997, section 9.4, pages 338-345.

1.6 Préparer des transparents avec Seminar

Préparer des transparents avec Seminar by Michel GOOSSENS and Sebastian RAHTZ, Cahiers GUTenberg, number 16, April 1994, pages 71-82 (*in french*).

1.7 Réaliser des transparents en LaTeX avec la classe de documents Seminar

Réaliser des transparents en LaTeX avec la classe de documents Seminar by Jalel CHERGUI and Denis GIROU, Internal note of CNRS/IDRIS, 24 pages, Version 3.4, December 1996 (*in french*).

Note that a lot of commands described are only local and not distributed. But this document show some examples of useful functionnalities and show some other interesting personalizations of slides.

2 Status

Seminar is frozen since the end of 1993, as Timothy VAN ZANDT was required by other kind of activities. Seminar was minimally adapted to LaTeX2ε in 1994 by Sebastian RAHTZ, who transform the old style file in a document class. But the internal mechanisms of Seminar (mainly for *shipout* of the pages) and it documentation were not upgraded.

There are some solutions or workarounds for specific problems with LaTeX2ε and with some actual versions of other packages ('longtable' for the moment) in the *Seminar bugs list* and the related file `seminar.bg2`

Nevertheless, Seminar is heavily used in the LaTeX communauty and is actively supported. Report any problem either to the `comp.text.tex` newsgroup or personaly to myself or to Sebastian RAHTZ.

A version of Seminar better integrated with LaTeX2ε and with known bugs corrections included (from actual `seminar.bug` and `seminar.bg2` files) is planned for 1998.

3 How to choose the orientation of the slides?

We assume here that the 'semcolor' package is loaded (it's different without).

By default (i.e. without the portrait option) the slide environment define a landscape orientation (US usage) with horizontal text and the `slide*` environment a landscape orientation with vertical text. Take care in this case to use a landscape option when formatting the resulting file (for instance `-t landscape` with `dvips`).

With the portrait option, the `slide*` environment define a portrait orientation (european usage) with horizontal text and the slide environment a portrait orientation with vertical text (for instance useful to show a table larger than the width of the slide).

Note that if you ask for vertical (rotated) text, only the material inside the frame is rotated but not the headers and footers (see section 13.8).

Example *without* the `portrait` option (landscape orientation by default):

```
\documentclass{seminar}

\usepackage{semcolor}
\input{seminar.bug}

\begin{document}

\begin{slide}
  The slide environment WITHOUT the portrait option.
\end{slide}

\begin{slide*}
  The slide* environment WITHOUT the portrait option.
\end{slide*}
```

```

\end{document}
```

(a) slide environment *without* the portrait option

(b) slide* environment *without* the portrait option

Figure 1: Orientation of slides (*without* the portrait option

with the `portrait` option:

```
\documentclass[portrait]{seminar}

\usepackage{semcolor}
\input{seminar.bug}

\begin{document}

\begin{slide}
  The slide environment WITH the portrait option.
\end{slide}

\begin{slide*}
  The slide* environment WITH the portrait option.
\end{slide*}

\end{document}
```

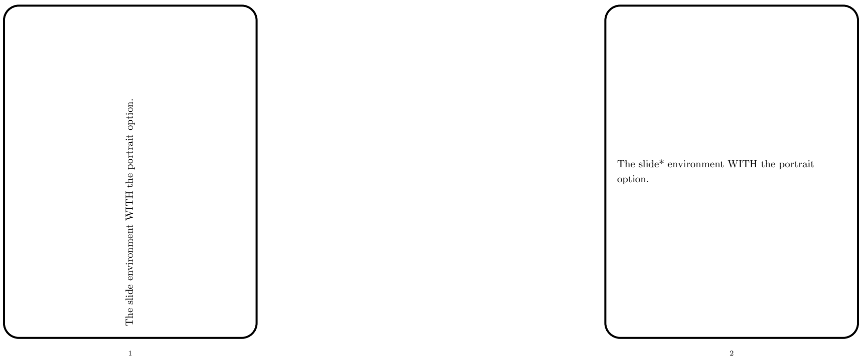
4 How to change the dimensions of the slides?

To do a global change, we must inscrease or decrease the `\slidewidth` and/or `\slideheight` values.

To do a local change, we can define the dimensions of the chosen slide as parameter of the `slide` or `slide*` environment.

Example:

```
\documentclass[a4,portrait]{seminar}

\input{seminar.bug}

\begin{document}

% Default size of the frame
\begin{slide*}
```



(a) slide environment *with* the portrait option (b) slide* environment *with* the portrait option

Figure 2: Orientation of slides (*with* the portrait option)

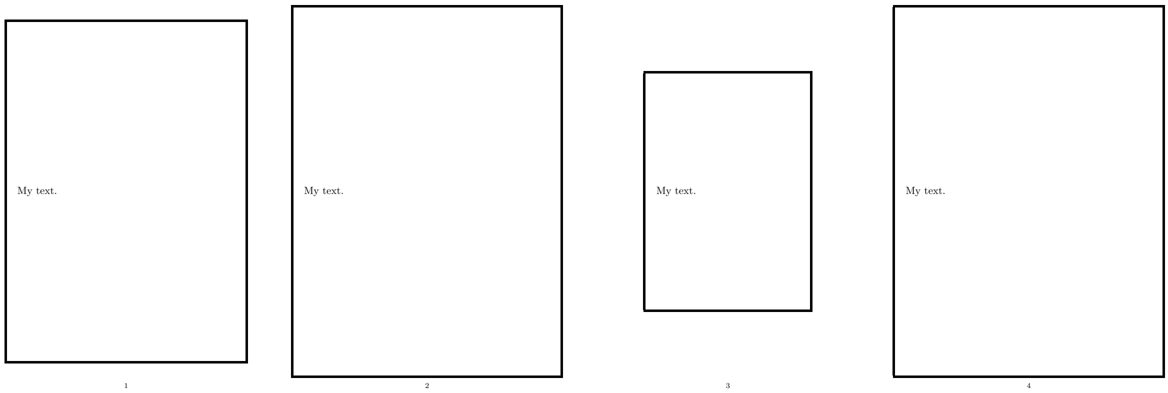
```
  My text.
\end{slide*}

% Global change of the frame size
\addtolength{\slidewidth}{2cm}
\addtolength{\slideheight}{2cm}
\begin{slide*}
  My text.
\end{slide*}

% Local change of the frame size
% [height,width] in portrait mode
% [width,height] in landscape mode
\begin{slide*}[15cm,10cm]
  My text.
\end{slide*}

% We return to the preceding size
\begin{slide*}
  My text.
\end{slide*}

\end{document}
```

5 How to change the frame style?

5.1 With the 'fancybox' package

Using the `\slideframe` macro, you can choose a `single`, `oval`, `shadow` or `double` frame.

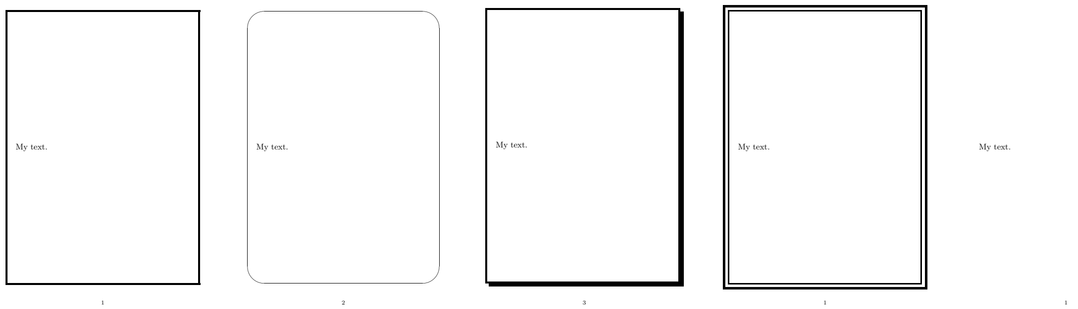
```
\documentclass[a4,portrait]{seminar}

\input{seminar.bug}
```



(a) Default size (b) Global change of size (c) Local change of size (d) Preceding size

Figure 3: Dimensions of slides

```

\usepackage{fancybox}

\begin{document}

% \slideframe{plain} is the default with fancybox.sty
\begin{slide*}
  My text.
\end{slide*}

\slideframe{oval}
\begin{slide*}
  My text.
\end{slide*}

\slideframe{shadow}
\begin{slide*}
  My text.
\end{slide*}

\slideframe{double}
\begin{slide*}
  My text.
\end{slide*}

\slideframe{none}
\begin{slide*}
  My text.
\end{slide*}

\end{document}
```



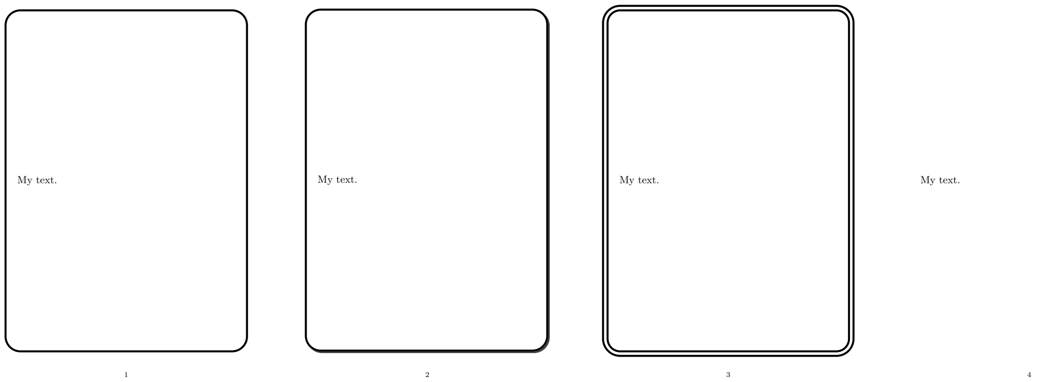
(a) Default frame with 'fancybox' (plain) (b) oval frame (c) shadow frame (d) double frame (e) no frame

Figure 4: Frames with 'fancybox'

5.2 With the 'semcolor' package

This package use itself PSTricks and is the most powerful solution. Using the `\slideframe` macro, you can choose a `scplain` (default), `scshadow` or `scdouble` frame (but it offers also other possibilities, like to change the width and the color of the lines and to color also the background — see section 8).

```
\documentclass[a4,portrait]{seminar}

\usepackage[dvips]{pstcol} % To use the standard 'color' package with Seminar
\usepackage{semcolor}
\input{seminar.bug}

\begin{document}

% \slideframe{scplain} is the default with semcolor.sty
\begin{slide*}
  My text.
\end{slide*}

\slideframe{scshadow}
\begin{slide*}
  My text.
\end{slide*}

\slideframe{scdouble}
\begin{slide*}
  My text.
\end{slide*}

\slideframe{none}
\begin{slide*}
  My text.
\end{slide*}

\end{document}
```



(a) Default frame with ‘semcolor’ (scplain)

(b) scshadow frame

(c) scdouble frame

(d) no frame

Figure 5: Frames with ‘semcolor’

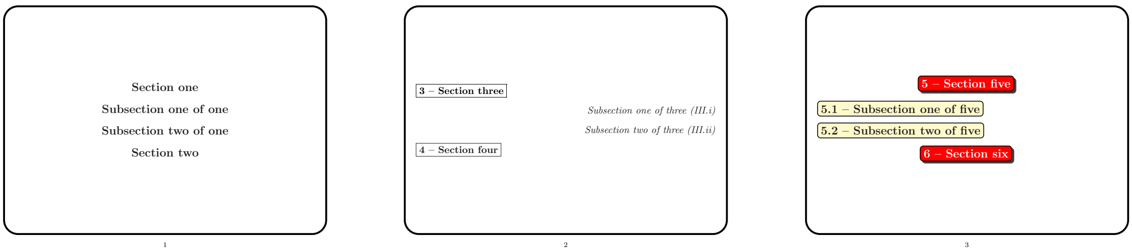
6 How to personalize the section and subsection formats?

Using the ‘slidesec’ package (there are several bugs related to it — see the *Seminar bugs list* and the related file `seminar.bg2`), you can use the `\slideheading` and `\slidesubheading` macros to define in slides something like sections and subsections for other documents.

Redefine the `\makeslideheading` and `\makeslidesubheading` macros to change the way they are formatted. Here is an example (generally you have to define your own format and to put it in the `seminar.con` file):

```
\documentclass[a4]{seminar}

\usepackage[dvips]{pstcol} % To use the standard ‘color’ package with Seminar
\usepackage{semcolor}
\usepackage{slidesec}
\input{seminar.bug}
\input{seminar.bg2} % See the Seminar bugs list

\definecolor{LemonChiffon}{rgb}{1.,0.98,0.8}

\begin{document}

\begin{slide}
  \slideheading{Section one}
    \slidesubheading{Subsection one of one}
    \slidesubheading{Subsection two of one}
  \slideheading{Section two}
\end{slide}

\renewcommand{\makeslideheading}[1]{%
\framebox{\textbf{\theslidesection{} -- #1}}}
\renewcommand{\makeslidesubheading}[1]{%
\begin{flushright}
  \textit{#1 (\Roman{slidesection}.\roman{slidesubsection})}
\end{flushright}}
```

```

\begin{slide}
  \slideheading{Section three}
    \slidesubheading{Subsection one of three}
    \slidesubheading{Subsection two of three}
  \slideheading{Section four}
\end{slide}

\renewcommand{\makeslideheading}[1]{%
\begin{center}
\psshadowbox[framearc=0.4,fillstyle=solid,fillcolor=red]{%
\large\textbf{\textcolor{white}{\theslidesection{} -- #1}}}
\end{center}}
\renewcommand{\makeslidesubheading}[1]{%
\psframebox[framearc=0.4,fillstyle=solid,fillcolor=LemonChiffon]{%
\large\textbf{\theslidesubsection{} -- #1}}\par}

\begin{slide}
  \slideheading{Section five}
    \slidesubheading{Subsection one of five}
    \slidesubheading{Subsection two of five}
  \slideheading{Section six}
\end{slide}

\end{document}
```



(a) Default format (b) Personal format (c) Another personal format

Figure 6: Personalization of section and subsection formats

7 How to put material in the background?

7.1 How to write a text in the background?

With the ‘fancybox’ package, we can easily put any text in the background of some or all slides. We can use all LaTeX commands to build it (tabular environment, color macros, insertion of graphics, etc.).

Example (here we use the ‘color’ package to define the color of the text and the ‘graphics’ one to scale and rotate it):

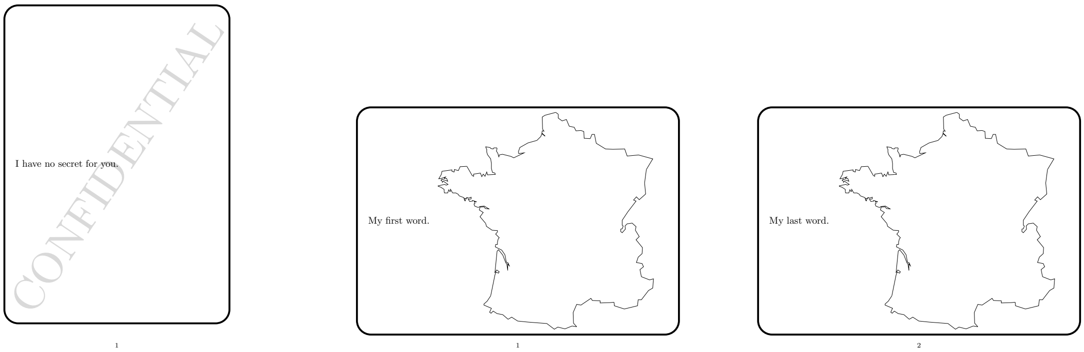
```
\documentclass[a4,portrait]{seminar}

```

```
\usepackage[dvips]{pstcol} % To use the standard ‘color’ package with Seminar
\usepackage{semcolor}
\input{seminar.bug}

\usepackage[dvips]{graphics}

\usepackage{fancybox}

\definecolor{LightGray}{gray}{0.85}

\newslideframe{BackgroundText}{%
  \boxput{\rotatebox{56}{\scalebox{4.5}{%
    \textcolor{LightGray}{CONFIDENTIAL}}}}{#1}}
\slideframe*{BackgroundText}

\begin{document}

\begin{slide*}
  I have no secret for you.
\end{slide*}

\end{document}
```

7.2 How to put a picture in the background?

Just using normally the ‘graphics’/‘graphicx’ package in conjunction with the ‘fancybox’ one, with the `\slideframe*` macro. Nevertheless take care that the picture will be loaded for *each* slide, so that the resulting file can be very huge (look at the discussion in section 14).

```
\documentclass[a4]{seminar}

\usepackage{semcolor}
\input{seminar.bug}

\usepackage[dvips]{graphicx}
\usepackage{fancybox}

\newslideframe{IMAGE}{%
  \boxput{\rput(1,0){\includegraphics[scale=0.4]{france}}}{#1}}
\slideframe*{IMAGE}

\begin{document}

\begin{slide}
  My first word.
\end{slide}

\begin{slide}
  My last word.
\end{slide}

\end{document}
```



(a) Background text (b) Background image (c) Background image

Figure 7: Background material

8 How to use colors?

8.1 How to use the standard 'color' package?

By default, Seminar used the PSTricks package to define and manage colors. However, today the standard 'color' package is a better solution to support color with LaTeX. But if we want to use this package with PSTricks also or with the 'semcolor' package (which load PSTricks), we must take care to some incompatibilities between 'color' and PSTricks. To solve them, the 'pstcol' package written by David Carlisle must be loaded in place of both 'color' and PSTricks (load it before 'semcolor' if you need this one too).

Example:

```
\documentclass[a4,portrait]{seminar}

\usepackage[dvips]{pstcol} % To use the standard 'color' package with Seminar
\usepackage{semcolor}
\input{seminar.bug}

\definecolor{Blue}{rgb}{0.,0.,1.}
\definecolor{Pink}{rgb}{1.,0.75,0.8}

\begin{document}

\begin{slide*}
  Written in \textcolor{Pink}{pink}
  and now with my own \textcolor{Blue}{blue}.
\end{slide*}

\end{document}
```

8.2 How to change the background color of the slides?

With the `\slideframe` macro.

See the following example (here we also define an optional parameter to change the frame color too, and another required one for the foreground color):

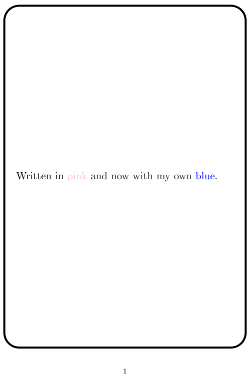


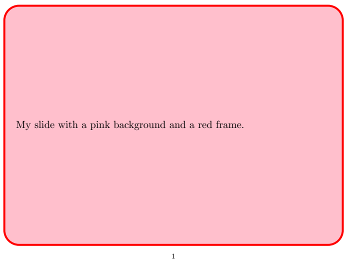
Figure 8: Usage of standard ‘color’ package

```
\documentclass[a4]{seminar}

\usepackage[dvips]{pstcol} % To use the standard ‘color’ package with Seminar
\usepackage{semcolor}
\input{seminar.bug}

\newcommand{\SlideColours}[3][black]{%
% #1 = frame line color (optional, default=black),
% #2 = foreground color, #3 = background color
\slideframe[\psset{linecolor=#1,fillcolor=#3,fillstyle=solid}]{scplain}
\color{#2}}

\definecolor{Pink}{rgb}{1.,0.75,0.8}

\begin{document}

\SlideColours[red]{black}{Pink}
\begin{slide}
  My slide with a pink background and a red frame.
\end{slide}

\SlideColours{white}{red}
\begin{slide}
  My slide with a red background and a white text.
\end{slide}

\end{document}
```

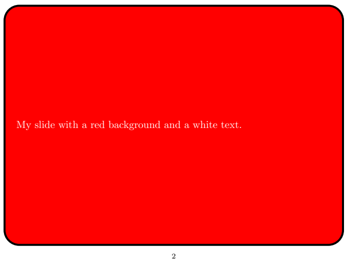
8.3 How to have a gradient color background instead of a uniform one?

Easily with the ‘semcolor’ and ‘gradient’ (available in the PSTricks distribution) packages. Look at the following example:

```
\documentclass[a4,portrait]{seminar}

\usepackage[dvips]{pstcol} % To use the standard ‘color’ package with Seminar
```



(a) Pink background color and red frame



(b) Red background color and white foreground color

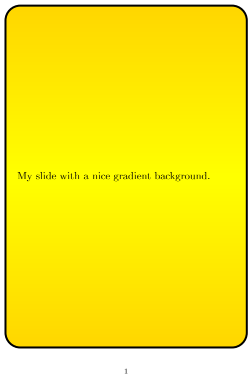
Figure 9: Background and foreground colors

```
\usepackage{semcolor}
\input{seminar.bug}

\usepackage{pst-grad}

\definecolor{Gold}{rgb}{1.,0.84,0.}
\slideframe[\psset{fillstyle=gradient,gradmidpoint=0.5,
                   gradbegin=Gold,gradend=yellow}]{scplain}

\begin{document}

\begin{slide*}
  My slide with a nice gradient background.
\end{slide*}

\end{document}
```

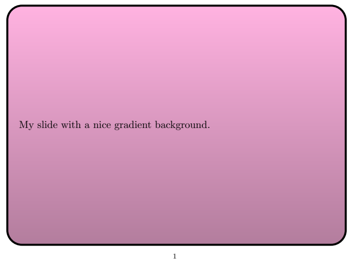
We can also define the beginning and ending colors according to the HSB (*Hue, Saturation, Brightness*) mode, which is often easier to manage exactly the gradient:

```
\documentclass[a4]{seminar}

\usepackage[dvips]{pstcol} % To use the standard ‘color’ package with Seminar
\usepackage{semcolor}
\input{seminar.bug}

\usepackage{pst-ghsb}

\definecolor{RedA}{hsb}{0.9,0.3,0.7}
\definecolor{RedB}{hsb}{0.9,0.3,1}
\slideframe[\psset{fillstyle=gradient,gradientHSB=true,gradmidpoint=0,
                   gradbegin=RedA,gradend=RedB}]{scplain}

\begin{document}

\begin{slide}
  My slide with a nice gradient background.
\end{slide}
```

```

\end{document}
```



(a) Gradient background color with ‘pst-grad’



(b) Gradient background color with ‘pst-ghsb’

Figure 10: Gradient background colors

8.4 Improved color usage

Both usage of Seminar, PSTricks and the ‘color’ package give full access to color effects (see usage of the ‘fancyhdr’ package in section 9.1).

```
\documentclass[a4,portrait]{seminar}

\usepackage[dvips]{pstcol} % To use the standard ‘color’ package with Seminar
\usepackage{semcolor}
\input{seminar.bug}
\input{seminar.bg2} % See the Seminar bugs list

\usepackage{pst-grad}

% To define headers and footers
\usepackage{fancyhdr}
% Definitions of the logos of IDRIS and CNRS with PSTricks
\usepackage{LogosID}

% Headers and footers personalization using the ‘fancyhdr’ package
\fancyhf{} % Clear all fields
\fancyhead[R]{\thepage}
\newcommand{\Header}[1]{%
  \fancyhead[C]{{\Large\textbf{\textcolor{red}{#1}}}}}
\fancyfoot[L]{\raisebox{-2.8mm}{\scalebox{0.3}{\LogoIDRISName}}}
\makeatletter
\newcommand{\Footer}[2]{%
  \fancyfoot[R]{{\scriptsize\textbf{#1} \@date}\\[-1.5mm]
               {\tiny\textbf{#2}}}}

```

```
% Redefinition of the head line separator to have a double one
\def\headrule{%
\if@fancyplain\headrulewidth\plainheadrulewidth\fi
\vskip 0.6mm
\hrule\@height\headrulewidth\@width\headwidth \vskip 0.25mm
\hrule\@height\headrulewidth\@width\headwidth \vskip -1.5mm}
\makeatother

% We change the width of header and footer rules
\renewcommand{\headrulewidth}{0.15mm}
\renewcommand{\footrulewidth}{0.15mm}

% To center horizontally the headers and footers (see seminar.bug)
\renewcommand{\headwidth}{\textwidth}

% To adjust the frame length to the header and footer ones
\autoslidemarginstrue

% Definition of new colors
\definecolor{Beige}   {rgb}{0.96,0.96,0.86}
\definecolor{Gold}    {rgb}{1.,0.84,0.}
\definecolor{MyYellow}{rgb}{1.,0.84,0.8}

\slideframe[\psset{fillstyle=gradient,gradbegin=MyYellow,gradend=Gold,
                   gradmidpoint=1}]{scplain}

\date{Juin 1997}
\Footer{\textcolor{blue}{MPI} -- \textcolor{green}{Version 1.8} --}
       {\textcolor{red}{J.Chergui,I.Dupays,D.Girou,S.Requena}}

\begin{document}

\slidepagestyle{fancy}

\Header{MPI}
\begin{slide*}
  \centerline{\psframebox[fillstyle=solid,fillcolor=red,framearc=.3,
                          framesep=2mm]{\Large\bfseries\color{yellow}%
                Message Passing Interface}}
  \vspace{2cm}
  \centerline{\psframebox[fillstyle=solid,fillcolor=Beige,
                          framearc=.3]{\bfseries%
              \begin{tabular}{c}
                Jalel \textsc{Chergui}\\
                Isabelle \textsc{Dupays}\\
                Denis \textsc{Girou}\\
                Stéphane \textsc{Requena}\\[0.8mm]
                {\small\texttt{<Prénom.Nom@idris.fr>}}
              \end{tabular}}}
\end{slide*}

\end{document}

```

```
\documentclass[a4,portrait]{seminar}

\usepackage[dvips]{pstcol} % To use the standard ‘color’ package with Seminar
\usepackage{semcolor}
\input{seminar.bug}
\input{seminar.bg2} % See the Seminar bugs list

\usepackage{pst-ghsb}

% To define headers and footers
\usepackage{fancyhdr}
% Definitions of the logos of IDRIS and CNRS with PSTricks
\usepackage{LogosID}

% Headers and footers personalization using the ‘fancyhdr’ package
\fancyhf{} % Clear all fields
\fancyhead[R]{\thepage}
\newcommand{\Header}[1]{%
  \fancyhead[C]{{\Large\textbf{\textcolor{red}{#1}}}}}
\fancyfoot[L]{\raisebox{-2.8mm}{\scalebox{0.3}{\LogoIDRISName}}}
\makeatletter
\newcommand{\Footer}[2]{%
  \fancyfoot[R]{{\scriptsize\textbf{#1} \@date}\\[-1.5mm]
               {\tiny\textbf{#2}}}}

% Redefinition of the head line separator to have a double one
\def\headrule{%
\if@fancyplain\headrulewidth\plainheadrulewidth\fi
\vskip 0.6mm
\hrule\@height\headrulewidth\@width\headwidth \vskip 0.25mm
\hrule\@height\headrulewidth\@width\headwidth \vskip -1.5mm}
\makeatother

% We change the width of header and footer rules
\renewcommand{\headrulewidth}{0.15mm}
\renewcommand{\footrulewidth}{0.15mm}

% To center horizontally the headers and footers (see seminar.bug)
\renewcommand{\headwidth}{\textwidth}

% To adjust the frame length to the header and footer ones
\autoslidemarginstrue

% Definition of new colors
\definecolor{ColorA}   {hsb}{0.2,0.2,1}
\definecolor{ColorB}   {hsb}{0.2,0.2,0.8}
\definecolor{LightCyan}{rgb}{0.88,1.,1.}

\slideframe[\psset{linecolor=red,fillstyle=gradient,gradientHSB=true,
                   gradmidpoint=0,gradangle=45,
                   gradbegin=ColorA,gradend=ColorB}]{scplain}

\date{Juin 1997}
\Footer{\textcolor{blue}{MPI} -- \textcolor{green}{Version 1.8} --}
```

```
      {\textcolor{red}{J.Chergui,I.Dupays,D.Girou,S.Requena}}

\begin{document}

\slidepagestyle{fancy}

\Header{MPI}
\begin{slide*}
  \centerline{\psdblframebox[fillstyle=solid,fillcolor=yellow,framearc=.3,
                              framesep=2mm]{\Large\bfseries\color{red}%
                \begin{tabular}{c}
                  MPI\\
                  \rule{6.5cm}{0.6mm}\\
                  Message Passing Interface
                \end{tabular}}}
  \vspace{2cm}
  \centerline{\psshadowbox[fillstyle=solid,fillcolor=LightCyan,
                           framearc=.3]{\bfseries%
              \begin{tabular}{c}
                Jalel \textsc{Chergui}\\
                Isabelle \textsc{Dupays}\\
                Denis \textsc{Girou}\\
                Stéphane \textsc{Requena}\\[0.8mm]
                {\small\texttt{<Prénom.Nom@idris.fr>}}
              \end{tabular}}}
\end{slide*}

\end{document}

```

9 How to personalize the headers and footers?

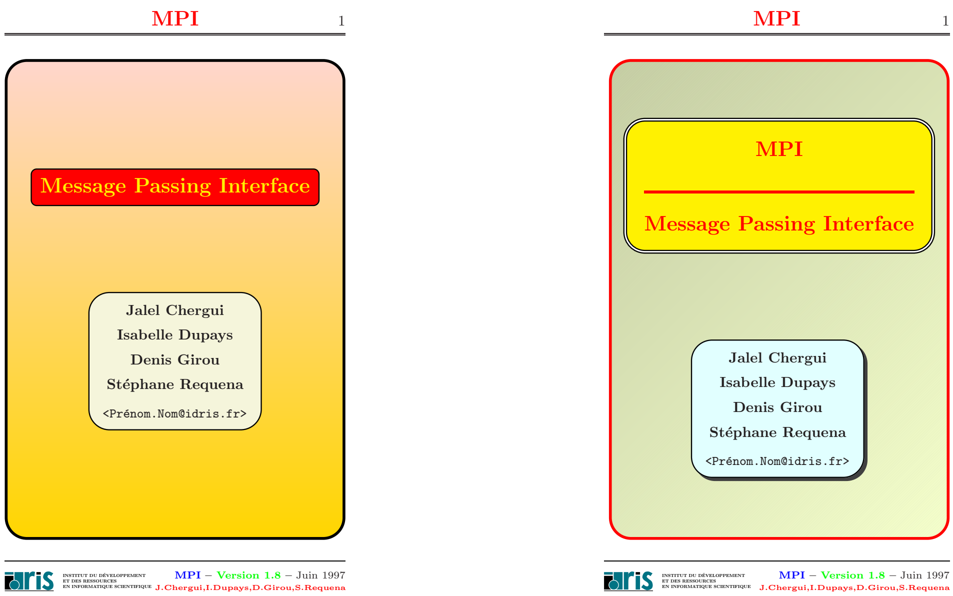
9.1 With the ‘fancyhdr’ package

You can define your own headers and footers for slides and notes (you can have different ones for these) using the `\newpagestyle` command (see the Seminar documentation, page 26).

For more sophisticate needs, you can use the ‘fancyhdr’ package from Piet van Oostrum (just take care to change the page style — using the `\pagestyle` or `\slidepagestyle` macro — *after* the `\begin{document}`).

Here is an example with ‘fancyhdr’ (see also the examples in section 8.4):

```
\documentclass[a4,portrait]{seminar}

\input{seminar.bug}
\usepackage{fancyhdr}

% Headers and footers personalization using the ‘fancyhdr’ package
\fancyhf{} % Clear all fields
\renewcommand{\headrulewidth}{0.2mm}
\renewcommand{\footrulewidth}{0.2mm}
\fancyhead[C]{\Large\textbf{Using Seminar and ‘fancyhdr’}}
\fancyfoot[L]{\tiny\thedate}
\fancyfoot[C]{\small My organization}
```

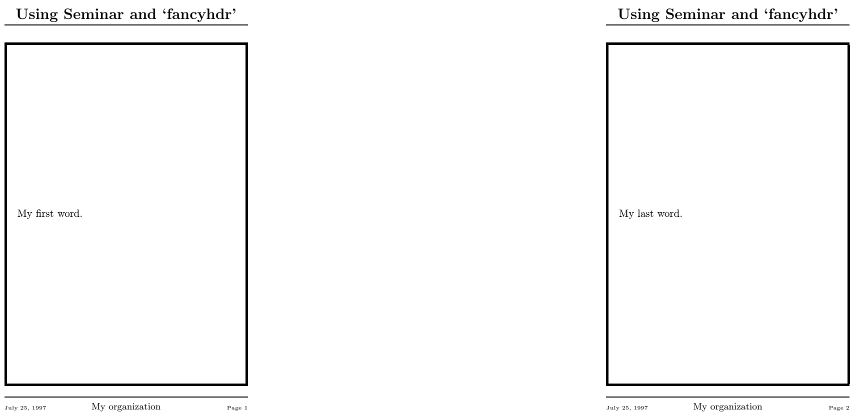


(a) (b)

Figure 11: Full color usage

```
\fancyfoot[R]{\tiny Page \theslide}

% To avoid that the headers be too close of the top of the page
\renewcommand{\slidetopmargin}{2cm}

% To center horizontally the headers and footers (see seminar.bug)
\renewcommand{\headwidth}{\textwidth}

% To adjust the frame length to the header and footer ones
\autoslidemarginstrue

\begin{document}

\pagestyle{fancy}

\begin{slide*}
  My first word.
\end{slide*}

\begin{slide*}
  My last word.
\end{slide*}

\end{document}
```

To put a logo on each slide, somewhere on the header or the footer, and expecting that you have your logo as an Encapsulated PostScript file (or at least a PostScript one with the BoundingBox defined), with the standard ‘graphicx’ package loaded, do something like:
`\fancyfoot[L]{\includegraphics[scale=0.3]{MyLogo}}`



(a) (b)

Figure 12: Headers and footers with ‘fancyhdr’

Nevertheless, take care that this can generate a huge file! (see the discussion in section 14).

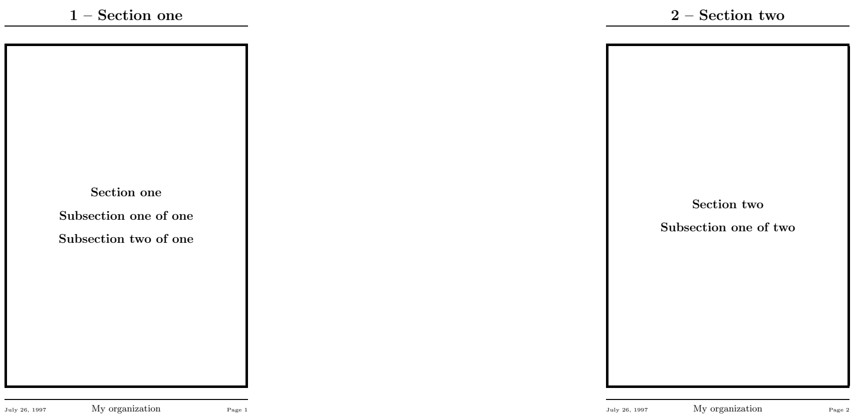
9.2 How to put automatically the section title in the header?

Using the ‘slidesec’ package (there are several bugs related to it — see the *Seminar bugs list* and the related file `seminar.bg2`), you can use the `\slideheading` and `\slidesubheading` macros to define in slides something like sections and subsections for other documents (see section 6).

To have the name of the current section in the slide header or footer, just use the `\theslideheading` macro (`\theslidesection` contain the section counter):

```
\documentclass[a4,portrait]{seminar}

\usepackage{slidesec}
\input{seminar.bug}
\input{seminar.bg2} % See the Seminar bugs list

\usepackage{fancyhdr}

% Headers and footers personalization using the ‘fancyhdr’ package
\fancyhf{} % Clear all fields
\renewcommand{\headrulewidth}{0.2mm}
\renewcommand{\footrulewidth}{0.2mm}
\fancyhead[C]{\Large\textbf{\theslidesection{} -- \theslideheading}}
\fancyfoot[L]{\tiny\thedate}
\fancyfoot[C]{\small My organization}
\fancyfoot[R]{\tiny Page \theslide}

% To avoid that the headers be too close of the top of the page
\renewcommand{\slidetopmargin}{2cm}

% To center horizontally the headers and footers (see seminar.bug)
\renewcommand{\headwidth}{\textwidth}

% To adjust the frame length to the header and footer ones
\autoslidemarginstrue
```

```

\begin{document}

\pagestyle{fancy}

\begin{slide*}
  \slideheading{Section one}
    \slidesubheading{Subsection one of one}
    \slidesubheading{Subsection two of one}
\end{slide*}

\begin{slide*}
  \slideheading{Section two}
    \slidesubheading{Subsection one of two}
\end{slide*}

\end{document}
```



(a) (b)

Figure 13: Section titles in the header

9.3 How to put the header and footer inside the frame?

Some people don't like to have the header and footer outside the frame or want to have with Seminar the same layout they had previously with other software.

It is not a direct functionality of Seminar, which expect the header and footer outside the frame, but we can have it with little work. Of course, it is possible with 'fancyhdr', redefining the position of various fields. But it is also possible using the 'fancybox' package. First, we can increase the global width of the slide, as the reserved size for header/footer will be unused (`\slideheight` for landscape mode and `\slidewidth` for portrait mode). Second, we must reduce the size of the text, because it will contain also the header and footer, using the `\extraslideheight` macro. Then we can define the fields of our header and footer with the `\newslideframe` macro, validating them with the `\slideframe*` macro.

Here is an example:

```
\documentclass[a4,portrait]{seminar}

```

```
\usepackage[dvips]{pstcol} % To use the standard ‘color’ package with Seminar
\usepackage{semcolor}

\input{seminar.bug}

\usepackage{fancybox}

% Increase slide height (\slidewidth in portrait mode) but reduce text height
\addtolength{\slidewidth}{2.5cm}
\extraslideheight{-1.8cm}

% Header and footer inside the frame
\newslideframe{HeaderLeft}{%
\boxput(-0.92,0.93){\makebox[0cm][l]{\Large\Title}}{#1}}
\newslideframe{HeaderRight}{%
\boxput(0.92,0.93){\makebox[0cm][r]{\footnotesize\thedate}}{#1}}
\newslideframe{HeaderRule}{\boxput(0,0.88){\rule{8.1cm}{2pt}}{#1}}
\newslideframe{FooterRule}{\boxput(0,-0.88){\rule{8.1cm}{2pt}}{#1}}
\newslideframe{Footer}{\boxput(0,-0.94){\Large My organization}{#1}}

\slideframe*{HeaderLeft}
\slideframe*{HeaderRight}
\slideframe*{HeaderRule}
\slideframe*{FooterRule}
\slideframe*{Footer}

\slidepagestyle{empty}

\begin{document}

\providecommand{\Title}{My Title}
\begin{slide*}
  In fact, I have nothing to say...
\end{slide*}

\end{document}
```

It is more tricky if we want to fill these areas with colors. It cannot be done automatically, as these areas are not defined as *objects*. But we can do it by hand, using some PSTricks macros. Of course, values must be adjusted in each case (if we change the slide dimensions, if we use another framing mode, etc.) and it require a little patience to found the good ones. Nevertheless, it is a kind of job that is require few time and normally we use the same slide layout for all or main part of our slide documents. Do not forget too that it is typically the kind of definitions that you must not put in the files themselves, as in our examples, but in the `seminar.con` configuration file.

Here is an example for the previous case (we must take care of the order of the `\slideframe*` calls):

```
\documentclass[a4,portrait]{seminar}

\usepackage[dvips]{pstcol} % To use the standard ‘color’ package with Seminar
\usepackage{semcolor}

\input{seminar.bug}

\usepackage{fancybox}

```

```latex
% Increase slide height (\slidewidth in portrait mode) but reduce text height
\addtolength{\slidewidth}{2.5cm}
\extraslideheight{-1.8cm}

% Header and footer inside the frame
\newslideframe{HeaderLeft}{%
\boxput(-0.92,0.93){%
\pscustom*[linecolor=yellow]{%
  \psarcn(0.445,-0.18){0.765}{180}{90}
  \rlineto(6.28,0)
  \psarcn(7.13,-0.18){0.765}{90}{0}}
\makebox[0cm][l]{\Large\Title}}{#1}}
\newslideframe{HeaderRight}{%
\boxput(0.92,0.93){\makebox[0cm][r]{\footnotesize\thedate}}{#1}}
\newslideframe{HeaderRule}{\boxput(0,0.88){\rule{8.1cm}{2pt}}{#1}}
\newslideframe{FooterRule}{\boxput(0,-0.88){\rule{8.1cm}{2pt}}{#1}}
\newslideframe{Footer}{%
\boxput(0,-0.94){
\pscustom*[linecolor=magenta]{%
  \moveto(-1.67,0.5)
  \rlineto(5.1,0)
  \psarcn(5.1,0.5){0.735}{0}{270}
  \rlineto(-5.1,0)
  \psarcn(-1.67,0.5){0.735}{270}{180}}
\Large My organization}{#1}}

\slideframe*{HeaderRight}
\slideframe*{HeaderRule}
\slideframe*{HeaderLeft}
\slideframe*{FooterRule}
\slideframe*{Footer}

\slidepagestyle{empty}

\begin{document}

\providecommand{\Title}{My Title}
\begin{slide*}
  In fact, I have nothing to say...
\end{slide*}

\end{document}
```

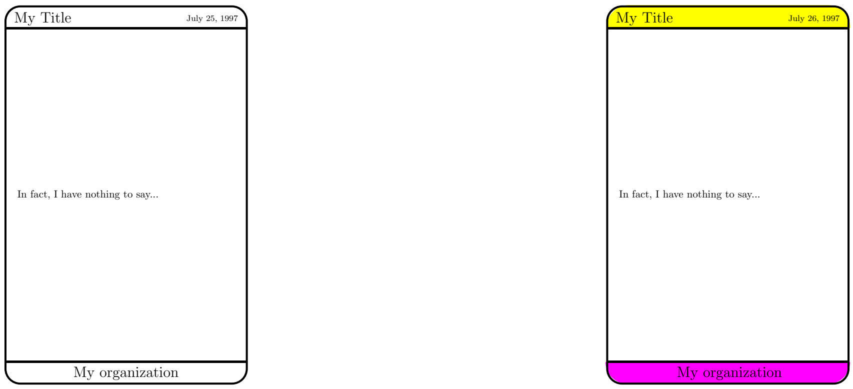
10 How to manage notes with the slides?

10.1 How to define personal notes?

Put the notes outside the `slide/slide*` environments or use the note environment.

If you don't want the headers and footers for the notes, use `\slidepagestyle{fancy}` instead of `\pagestyle{fancy}`.

Example (there is a bug in the note environment that we must correct defining `\@savsf` — see the *Seminar bugs list*):



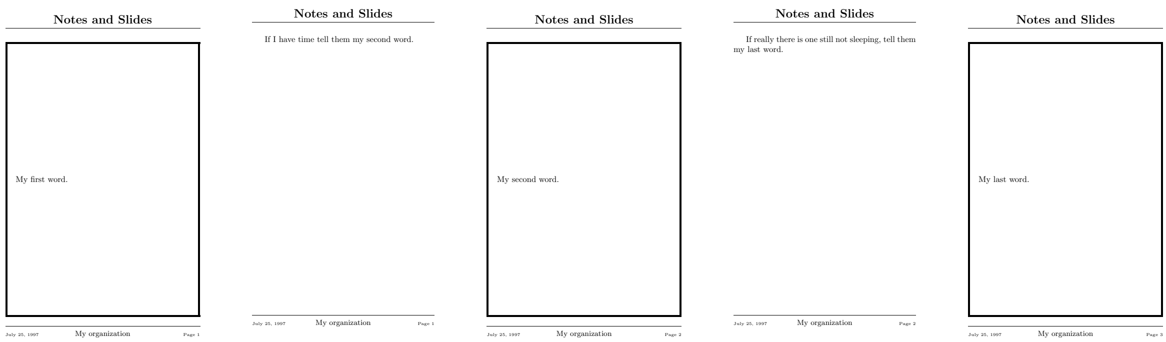
(a) Basic way

(b) With colors filling

Figure 14: Header and footer inside the frame slide

```
\documentclass[a4,portrait]{seminar}

\input{seminar.bug}
\input{seminar.bg2} % See the Seminar bugs list

\usepackage{fancyhdr}

% Headers and footers personalization using the ‘fancyhdr’ package
\fancyhf{} % Clear all fields
\renewcommand{\headrulewidth}{0.2mm}
\renewcommand{\footrulewidth}{0.2mm}
\fancyhead[C]{\Large\textbf{Notes and Slides}}
\fancyfoot[L]{\tiny\thedate}
\fancyfoot[C]{\small My organization}
\fancyfoot[R]{\tiny Page \theslide}

% To avoid that the headers be too close of the top of the page
\renewcommand{\slidetopmargin}{2cm}

% To center horizontally the headers and footers (see seminar.bug)
\renewcommand{\headwidth}{\textwidth}

% To adjust the frame length to the header and footer ones
\autoslidemarginstrue

\begin{document}

\pagestyle{fancy}

\begin{slide*}
  My first word.
\end{slide*}

```

```
If I have time tell them my second word.

\begin{slide*}
  My second word.
\end{slide*}

\begin{note}
  If really there is one still not sleeping, tell them my last word.
\end{note}

\begin{slide*}
  My last word.
\end{slide*}

\end{document}
```



(a) Slide (b) Notes (c) Slide (d) Notes environment (e) Slide

Figure 15: Notes and slides

10.2 How to generate the slides only?

Use the **slidesonly** option for the seminar class (for instance `\documentclass[a4,portrait,slidesonly]{seminar}`).

But if you want the headers and footers, replace `\pagestyle{fancy}` by:

```
\begin{allversions*}
  \pagestyle{fancy}
\end{allversions*}
```

10.3 How to generate the notes only?

Use the **notesonly** option for the Seminar class (for instance `\documentclass[a4,portrait,notesonly]{seminar}`).

But if you want the headers and footers, replace `\pagestyle{fancy}` by:

```
\begin{allversions*}
  \pagestyle{fancy}
\end{allversions*}
```

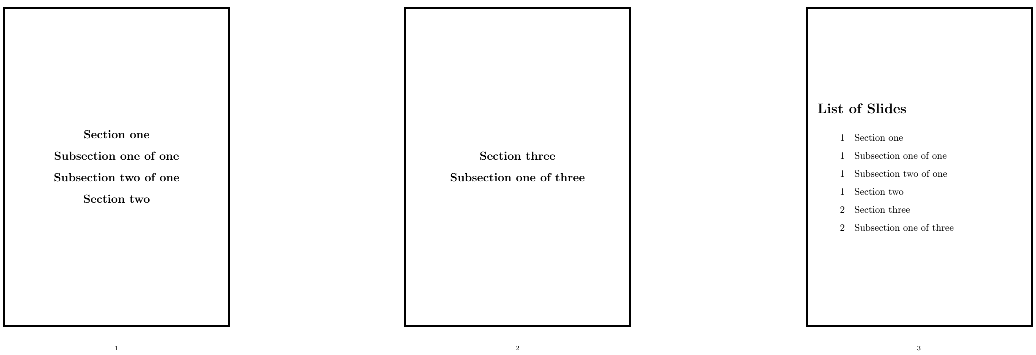
11 How to have a list of slides?

11.1 How to generate a list of slides (similar to a table of contents)?

Use the ‘slidesec’ package (there are several bugs related to it — see the *Seminar bugs list* and the related file `seminar.bg2`)

Example (it must be compiled twice to format the list of slides):

```
\documentclass[a4,portrait]{seminar}

\usepackage{slidesec}
\input{seminar.bug}
\input{seminar.bg2} % See the Seminar bugs list

\begin{document}

\begin{slide*}
  \slideheading{Section one}
    \slidesubheading{Subsection one of one}
    \slidesubheading{Subsection two of one}
  \slideheading{Section two}
\end{slide*}

\begin{slide*}
  \slideheading{Section three}
    \slidesubheading{Subsection one of three}
\end{slide*}

\begin{slide*}
  \listofslides
\end{slide*}

\end{document}
```



(a) Slide (b) Slide (c) List of slides

Figure 16: List of slides

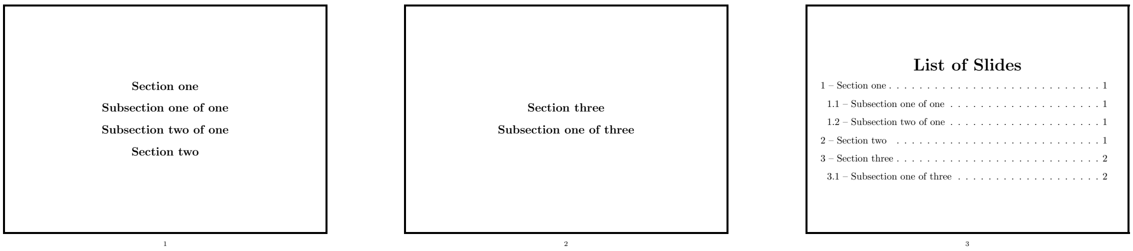
11.2 How to personalize the format for the list of slides?

Redefine the `\listofslides` macro (don't forget that the `seminar.con` file is the way to personalize the Seminar configuration for yourself or for your laboratory or institution — don't insert this kind of definitions in each of your files!)

Example (here we print the entry number of the section or subsection, we put dots between labels and slide numbers and we indent the subsection entries — the file must be compiled twice):

```
\documentclass[a4]{seminar}

\usepackage{slidesec}
\input{seminar.bug}
\input{seminar.bg2} % See the Seminar bugs list

% Personalization of the format of the list of slides
\makeatletter
\def\listofslides{%
  \centerline{\LARGE\textbf{List of Slides}}%
  \def\l@slide##1##2##3{%
    \slide@dottedcline{##1 -- ##2}{\slidenumberline{##3}}}%
  \def\l@subslide##1##2##3{%
    \slide@dottedcline{\ \ ##1 -- ##2}{\slidenumberline{##3}}}%
  \@startlos}

% To change formatting of subslides in list of slides (whole numerotation)
\def\slide@subheading[#1]#2{%
  \stepcounter{slidesubsection}%
  \addtocontents{los}{\protect\l@subslide
    {\the\c@slidesection.\the\c@slidesubsection}{\ignorespaces#1}{\@SCTR}}%
  \gdef\theslidesubheading{#1}%
  \def\@tempa{#2}%
  \ifx\@tempa\@empty\else
    {\edef\@currentlabel{\csname p@slidesubsection\endcsname
      \theslidesubsection}\makeslidesubheading{#2}}%
  \fi}

% To avoid Overfull messages on each line of the list...
\def\slide@dottedcline{\@dottedtocline{1}{0.3em}{1.5em}}
\makeatother

\begin{document}

\begin{slide}
  \slideheading{Section one}
    \slidesubheading{Subsection one of one}
    \slidesubheading{Subsection two of one}
  \slideheading{Section two}
\end{slide}

\begin{slide}
  \slideheading{Section three}
    \slidesubheading{Subsection one of three}
\end{slide}

\begin{slide}
```

```
  \listofslides
\end{slide}

\end{document}
```



(a) Slide (b) Slide (c) Personalized list of slides

Figure 17: Personalization of list of slides

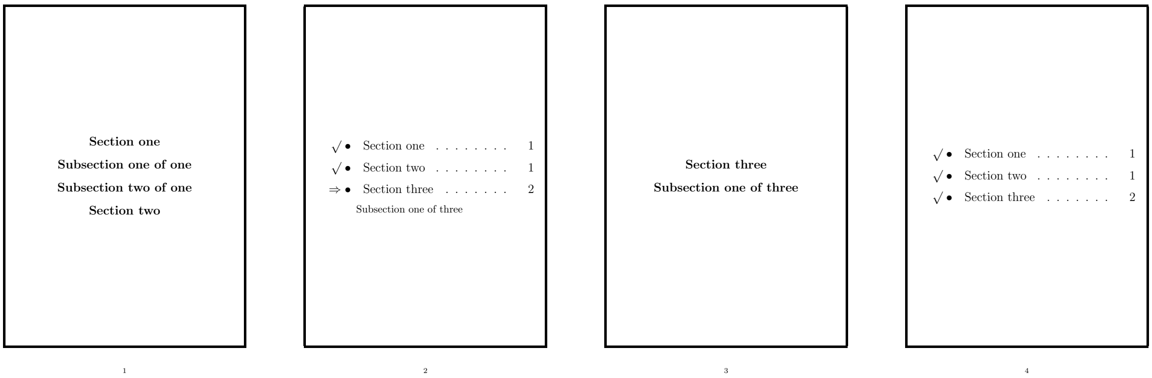
11.3 How to generate a list showing the position of the slides in the presentation?

The macro `\Slidecontents` generate a list of the slides (using the entries defined with `\slideheading` and `\slidesubheading`) to show the preceding slides and the following ones. The `\slidesubheading` entries of the preceding ones are omitted. And, of course, you can generate several lists inside the file, to show respective positions in the talk.

Example (it must be compiled twice):

```
\documentclass[a4,portrait]{seminar}

\usepackage{slidesec}
\input{seminar.bug}
\input{seminar.bg2} % See the Seminar bugs list

\begin{document}

\begin{slide*}
  \slideheading{Section one}
    \slidesubheading{Subsection one of one}
    \slidesubheading{Subsection two of one}
  \slideheading{Section two}
\end{slide*}

\begin{slide*}
  \Slidecontents
\end{slide*}

\begin{slide*}
  \slideheading{Section three}
    \slidesubheading{Subsection one of three}
\end{slide*}

```

```
\begin{slide*}
  \Slidecontents
\end{slide*}

\end{document}
```



(a) Slide (b) Position of slides (c) Slide (d) Position of slides

Figure 18: List of slides

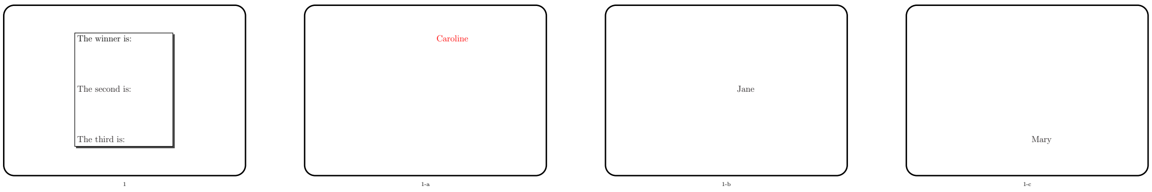
12 How to generate overlays?

12.1 How to generate some special slides which must overlaid?

With the overlay environment defined in the ‘semlayer’ package.

Example (we will generate here four slides):

```
\documentclass[a4,12pt]{seminar}

\usepackage[dvips]{pstcol} % To use the standard ‘color’ package with Seminar
\usepackage{semcolor}
\usepackage{semlayer}
\input{seminar.bug}

\begin{document}

\begin{slide}
  \centerline{\psshadowbox{\shortstack[l]{%
    The winner is: \begin{overlay}{1}{\textcolor{red}{Caroline}}\end{overlay}\\[2cm]
    The second is: \begin{overlay}{2}{Jane}\end{overlay}\\[2cm]
    The third  is: \begin{overlay}{3}{Mary}\end{overlay}}}}
\end{slide}

\end{document}
```



(a) Main slide (b) Overlay 1 (c) Overlay 2 (d) Overlay 3

Figure 19: Overlays

12.2 How to have cumulative overlays?

Traditional overlays are useful for projectors, but if you don't use physical slides and project them directly from a computer on a screen or a wall, you must be able to generate slides which add each time the material of all the preceding overlays (idea first suggested by Tomer Kol).

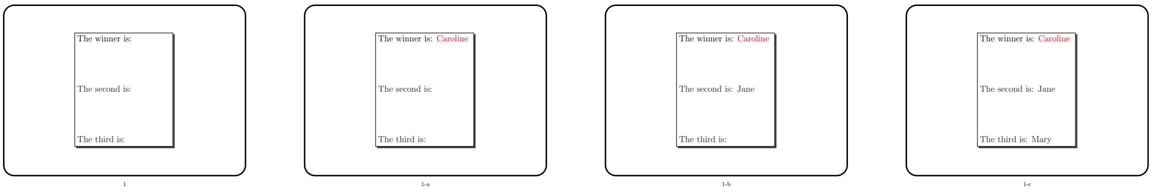
Solution is not difficult, modifying the way PSTricks (which manage the overlays for Seminar) work:

```
\documentclass[a4,12pt]{seminar}

\usepackage[dvips]{pstcol} % To use the standard ‘color’ package with Seminar
\usepackage{semcolor}
\usepackage{semlayer}
\input{seminar.bug}

% For overlays, to force to print all preceding ones
\makeatletter
\def\pst@initoverlay#1{%
\pst@Verb{%
/BeginOL {dup (all) eq exch TheOL le or {IfVisible not {Visible
/IfVisible true def} if} {IfVisible {Invisible /IfVisible false def} if}
ifelse} def
\tx@InitOL /TheOL (#1) def}}
\makeatother

\begin{document}

\begin{slide}
  \centerline{\psshadowbox{\shortstack[l]{%
    The winner is: \begin{overlay}{1}{\textcolor{red}{Caroline}}\end{overlay}\\[2cm]
    The second is: \begin{overlay}{2}{Jane}\end{overlay}\\[2cm]
    The third  is: \begin{overlay}{3}{Mary}\end{overlay}}}}
\end{slide}

\end{document}
```

13 Miscelleanous

13.1 How to indent the paragraphs?

By default, they are not. Redefine `\slideparindent` for that, for instance `\renewcommand{\slideparindent}{5mm}`



(a) Main slide (b) Overlay 1 (c) Overlay 2 (d) Overlay 3

Figure 20: Cumulative overlays

13.2 How to justify the lines on the right side?

By default, they are not. Use `\raggedslides[0mm]` for that.

13.3 How to not center vertically the text in the slides?

By default, they are. Use `\centerslidesfalse` to change that.

13.4 How to change the slide number to a specific value?

Define the value of the slide counter (to the specific value less 1).

Example:

```
\documentclass[a4,portrait]{seminar}

\input{seminar.bug}

\renewcommand{\slideparindent}{5mm}

\raggedslides[0mm]

\centerslidesfalse

\begin{document}

\setcounter{slide}{34}
% Must be slide number 35
\begin{slide*}
  My text with some non default formatting options.
\end{slide*}

\end{document}
```

13.5 How to generate only some slides inside all the file?

With the `\onlyslides` macro. For instance `\onlyslides{11-16,25}`.

13.6 How to split the LaTeX file in several ones?

Just using the standard LaTeX mechanism with the `\input` macro, which allow too to input files selectively with the `\includeonly` macro. Nevertheless all files to include must imperatively finish with the `\endinput` macro.

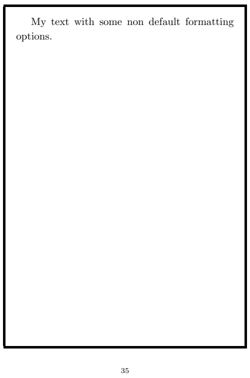


Figure 21: Various non default formatting options and choice of slide number

```
\documentclass[a4,portrait]{seminar}

\input{seminar.bug}

\begin{document}

\input{Slides-Part1.tex}

\input{Slides-Part2.tex}

\end{document}
```

With for contents of `Slides-Part1.tex` and `Slides-Part2.tex`:

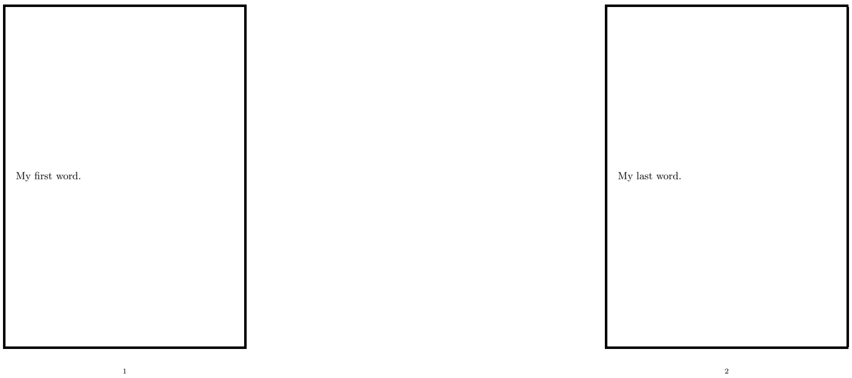
```
\begin{slide*}
  My first word.
\end{slide*}

\endinput
```

```
\begin{slide*}
  My last word.
\end{slide*}

\endinput
```

13.7 How to avoid magnification of external files included and picture environments?

Seminar perform automatically a magnification on all material put in the slide environments. This is greatly efficient because this allow to use exactly the same things that can be used elsewhere in article or report documents, but nevertheless it can be a problem in special cases, like inclusion of external files and picture environments.

For inclusion of external files, Seminar has the `\epsfslidesize` macro to keep *normal* size of the files. Unfortunately, this doesn't work any more with LaTeX2ε. There is a workaround in the file `seminar.bg2` for the macro `\includegraphics` of the 'graphicx' package (it is not done for the 'graphics'



(a) (b)

Figure 22: LaTeX file split in several ones

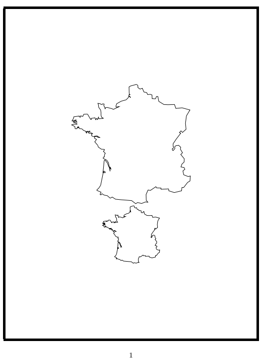
package). So, when `seminar.bg2` is loaded, the `\epsfslidesize` macro work as specified in the Seminar documentation, if the parameters `width`, `height` or `totalheight` are used.

```
\documentclass[portrait]{seminar}

\input{seminar.bug}
\input{seminar.bg2}

\usepackage[dvips]{graphicx}

\begin{document}

\begin{slide*}

% Magnified size
\centerline{\includegraphics[width=5cm]{france}}

% Initial size
\epsfslidesize
\centerline{\includegraphics[width=5cm]{france}}

\end{slide*}

\end{document}
```

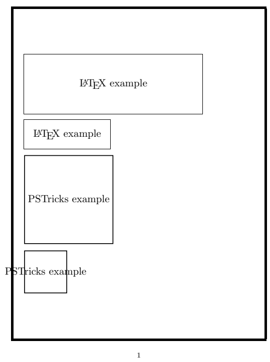
And for picture environments, as the LaTeX or the PSTricks ones, we have just to use the (undocumented...) `\inverseslidesmag` macro.

```
\documentclass[portrait]{seminar}

\input{seminar.bug}

\usepackage{pstricks}

\begin{document}
```

```

\begin{slide*}

%%%% LaTeX example

% Magnified size
\setlength{\unitlength}{1cm}
\framebox(6,2){\LaTeX{} example}

% Initial size
\setlength{\unitlength}{\inverseslidesmag\unitlength}
\framebox(6,2){\LaTeX{} example}

%%%% PSTricks example

% Magnified size
\begin{pspicture}(3,3)
  \psframe(3,3)\rput(1.5,1.5){PSTricks example}
\end{pspicture}

% Initial size
\psset{unit=\inverseslidesmag\psunit}
\begin{pspicture}(3,3)
  \psframe(3,3)\rput(1.5,1.5){PSTricks example}
\end{pspicture}

\end{slide*}

\end{document}
```



(a) External file included



(b) Picture environments

Figure 23: To avoid magnification of external files included and picture environments

13.8 How to rotate the headers with the text itself?

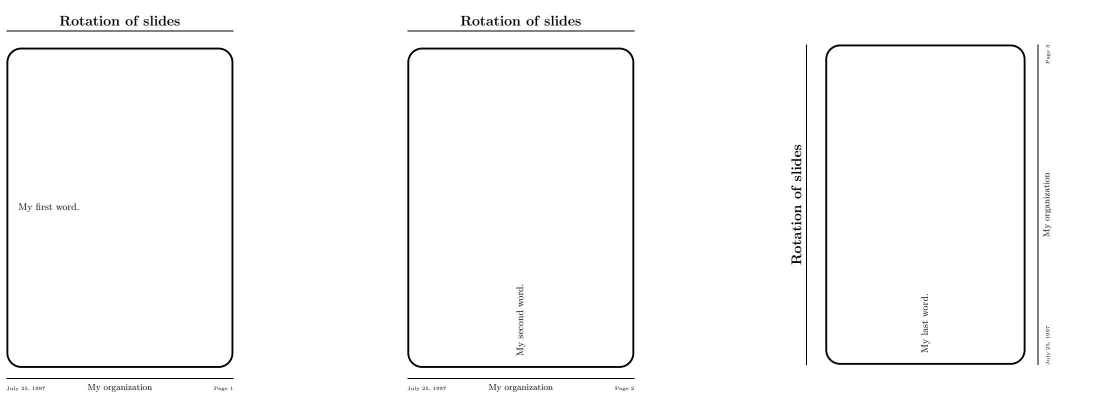
By instance, in portrait mode, you can rotate the text with the slide environment, using the 'semcolor' package (see question 3). To rotate also the headers, use the `\rotateheaderstrue` command before.

Example:

```
\documentclass[a4,portrait]{seminar}

\usepackage{semcolor}
\input{seminar.bug}

\usepackage{fancyhdr}

% Headers and footers personalization using the 'fancyhdr' package
\fancyhf{} % Clear all fields
\renewcommand{\headrulewidth}{0.2mm}
\renewcommand{\footrulewidth}{0.2mm}
\fancyhead[C]{\Large\textbf{Rotation of slides}}
\fancyfoot[L]{\tiny\thedate}
\fancyfoot[C]{\small My organization}
\fancyfoot[R]{\tiny Page \theslide}

% To avoid that the headers be too close of the top of the page
\renewcommand{\slidetopmargin}{2cm}

% To center horizontally the headers and footers (see seminar.bug)
\renewcommand{\headwidth}{\textwidth}

% To adjust the frame length to the header and footer ones
\autoslidemarginstrue

\begin{document}

\pagestyle{fancy}

\begin{slide*}
  My first word.
\end{slide*}

\begin{slide}
  My second word.
\end{slide}

\rotateheaderstrue
\addtolength{\slideheight}{-2cm} % To adjust vertical position
\begin{slide}
  My last word.
\end{slide}

\end{document}
```

13.9 How to change the inter row space?

For that, just redefine the `\slidestretch` command before a `slide` or `slide*` environment. But if you want to change it inside a slide, you must call the macro `\slidebox@restore` too.



(a) Slide

(b) Rotated slide

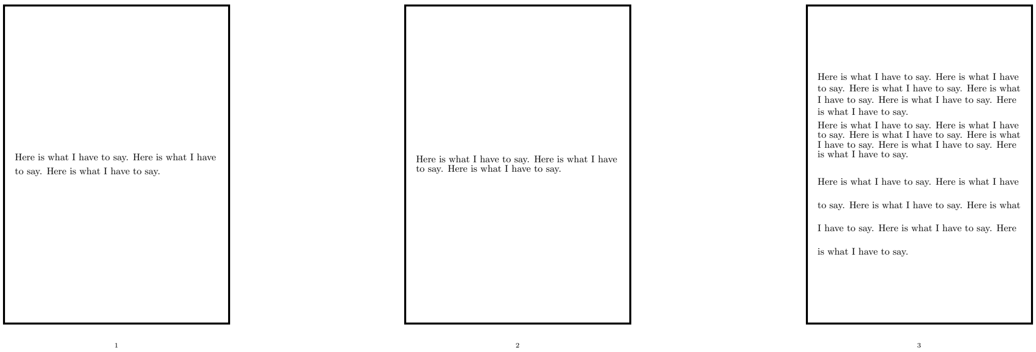
(c) Rotated slide and header / footer

Figure 24: Header / footer rotation

Example:

```
\documentclass[a4,portrait]{seminar}

\input{seminar.bug}

\begin{document}

\begin{slide*}
  Here is what I have to say.
  Here is what I have to say.
  Here is what I have to say.
\end{slide*}

\renewcommand{\slidestretch}{0.5}
\begin{slide*}
  Here is what I have to say.
  Here is what I have to say.
  Here is what I have to say.
\end{slide*}

\renewcommand{\slidestretch}{1}
\begin{slide*}
  Here is what I have to say.
  Here is what I have to say.
  Here is what I have to say.
  Here is what I have to say.
  Here is what I have to say.
  Here is what I have to say.

\renewcommand{\slidestretch}{0.5}
\makeatletter\slidebox@restore\makeatother
  Here is what I have to say.
  Here is what I have to say.
  Here is what I have to say.
```

```
  Here is what I have to say.
  Here is what I have to say.
  Here is what I have to say.

\renewcommand{\slidestretch}{2}
\makeatletter\slidebox@restore\makeatother
  Here is what I have to say.
  Here is what I have to say.
  Here is what I have to say.
  Here is what I have to say.
  Here is what I have to say.
  Here is what I have to say.
\end{slide*}

\end{document}
```



(a) Default inter row space

(b) Globally modified inter row space

(c) Modified inter row space inside slide

Figure 25: Change of the inter row space

13.10 How to prepare handouts with several slides per page?

One frequent need is to be able to give a paper copy of the slides to people, or to put an electronic version on a Web server. And problem is, as the slides are by nature printed with big fonts, that there are few informations by page and numberous pages.

There are several solutions, at various stages, to automatically reduce the size of the pages and to put 2 or 4 logical ones on each physical page. You can act at `tex` level (using the `article` style option or the `\twoup[n]` command of Seminar), at the dvi level (for instance with dvips) or at the PostScript level. In this case you can use the `pstops` utility (`CTAN/support/psutils`) or with an easier interface and other possibilities `psnup` (`CTAN/support/psutils`) or `mpage` (for instance `ftp://sunsite.unc.edu/pub/Linux/system/printing/mpage24.tgz`).

14 Known problems

- See the `seminar.bug` file (and it comments) delivered in Seminar distribution and the *Seminar bugs list* with the related file `seminar.bg2`

- One frequent need is to insert a company or university logo on each slide. If you have for instance a PostScript file, it's easy to do using the standard 'graphics'/'graphicx' package. Nevertheless, take care that it can generate very huge files. For instance, if your file logo has a size of 30 KB (which is reasonable), a file with 100 *empty* slides will have 3 MB! It will be more difficult to print and difficult to transfer by email or Web link, even in compressed mode.

  For that, you can look at the section 9 (*Including an EPS File Multiple Times*) of the excellent document of Keith Reckdahl *Using EPS Graphics in LaTeX2ε Documents*, available in `CTAN/info/epslatex.ps`, or you can consider to draw your logo with a TeX computational graphic package, like AlDraTeX, MetaPost, PSTricks, XY-pic, etc. (see the *LaTeX Graphics Companion*).

15 Thanks

For comments, suggestions and bug reports, I would like to thank (alphabetic order):

- Tomer Kol, `tkol@psl-palm.technion.ac.il`
- Bhaskar Manda, `bhaskar@or4.me.uiuc.edu`
- Axel Thimm, `thimm@physik.fu-berlin.de`
- Fabrice Veerse, `veerse@cnrm.meteo.fr`

Comments to (put the word *Seminar* in the subject, please): `Denis.Girou@idris.fr`