

Org-Beamer Reference Card

Fabrice Niessen

2013-02-06

Outline

- 1 Getting Started
- 2 Why L^AT_EX Beamer?
- 3 Discovering Beamer
- 4 Particular compositions
- 5 Themes
- 6 Special functionality
- 7 Org-beamer specific settings
- 8 Pictures
- 9 Table of Contents
- 10 Notes
- 11 Tips & Tricks
- 12 Documentation

Installation

- ▶ You need a beamer entry in `org-e-latex-classes`
 - Name `beamer` isn't mandatory
 - It has to match the class requested by `#+LaTeX_CLASS`:

```
(add-to-list 'org-e-latex-classes
  ("beamer"
    "\\documentclass[presentation,t]{beamer}
    [DEFAULT-PACKAGES]
    [PACKAGES]
    [EXTRA]"
    ("\\section{%s}" . "\\section*{%s}")
    ("\\subsection{%s}" . "\\subsection*{%s}")
    ("\\subsubsection{%s}" . "\\subsubsection*{%s}"))))
```

Testing the Installation

- ▶ Install L^AT_EX and the Beamer class¹

- ▶ Do

```
(require 'org-e-beamer)
```

- ▶ Use the appropriate entry in the dispatcher menu

C-c E l O Export to L^AT_EX Beamer, as PDF file and open

C-c E l P Export to L^AT_EX Beamer, as PDF file

- ▶ You can have a Beamer translation on any class, including `article`

- **C-c E l p**
 - Use given class
 - Macro `usetheme` is not inserted (`BEAMER_THEME` ignored)
 - Convert headings as **sections**
- **C-c E l P**

– Use given class

Macro `usetheme` is well inserted

Basic steps to create a Beamer presentation

- Specify beamer as document class (instead of article)

```
#+LaTeX_CLASS: beamer
```

- Optionally, override **all** the class options given in org-e-latex-classes

```
#+LaTeX_CLASS_OPTIONS: [presentation,c]
```

- Structure your L^AT_EX text using sections (= frame title)

```
* Context
```

- Place the text of the individual slides inside the sections

```
Why?
```

What is L^AT_EX Beamer?

The [L^AT_EX beamer class](#) allows you to create slides, and export them to PDF.

If you need a WYSIWYG software, don't use L^AT_EX Beamer. Use the [evil PowerPoint](#) – though, one must admit, it's more how people use it which is the problem.

Useful features

The beamer class has several useful features:

- ▶ You can easily and intuitively create sophisticated overlays.
- ▶ Finally, you can easily change the whole slide theme or only parts of it.

Useful advantages

The beamer class has several useful advantages:

- ▶ You only need a text editor and L^AT_EX to create a slideshow
- ▶ You only need a PDF reader to show it²
- ▶ Your presentation is in a light text file (+ media if present)
- ▶ There are plenty of themes readily available
- ▶ Big letters³ = less text = more easy to read / understand

You make sure that your presentation can run on any computer.

²they are nearly everywhere

³you can of course apply any L^AT_EX cosmetic modification to your text

Why Org-Beamer?

Why Org-Beamer?

Much better for Beamer. See discussion

<http://tex.stackexchange.com/questions/1264/typing-and-editing-beamer-presentations>

Examples

In the next few slides, you'll find some examples showing that everything you can do with Beamer, you can also do it with Org-Beamer.

Other good example are available on the [L^AT_EX Beamer homepage](#)^a.

^aas you can already see, you can easily add hyperlinks

First example

Headlines

► Headlines fall into three categories:

1. Sectioning elements
2. Frames (at `org-e-beamer-frame-level`)
3. Blocks

Basic steps

Use C-c C-b to **select the environment** to be used for an entry, which will set both its `:BEAMER_env:` *property* value and a *tag* (only a visual aid, it has no semantic meaning). This requires `#+startup: beamer`.

Properties in column view

► Env

Frame and layers

pause visible

Frame

- ▶ action/overlay specification
- ▶ default action/overlay specification
- ▶ option argument of the template
- ▶ frame title → for no title, simple use "*** " heading
- ▶ frame subtitle → use ** title \\ subtitle headings
- ▶ extra

Standard commands

Standard commands

agenda visible/invisible uncover alert

```
*@@e-beamer:<2->@@some emphasized text*
```

will be translated as

```
\alert<2->{some emphasized text}
```

in the L^AT_EX file, and produces:
some emphasized text
in the resultant PDF file.

Lists

Lists can be unordered:

► blond

Standard commands

Standard commands

agenda visible/invisible uncover alert

```
*@@e beamer:<2->@@some emphasized text*
```

will be translated as

```
\alert<2->{some emphasized text}
```

in the L^AT_EX file, and produces:

some emphasized text

in the resultant PDF file.

Lists

Lists can be unordered:

► blond

Démarrer une application Java ou autre

- ▶ Sectioning
- ▶ Animations
- ▶ Button {  } marche à merveille.

Note: for a **secret** section or frame (not referenced in the TOC), **don't put** a section/frame title. . . Leave it blank.

Overlays (uncover... not only)

- ▶ One item
- ▶ Another one, after one click
- ▶ Last one, after another click

Overlays (uncover... not only)

- ▶ One item
- ▶ Another one, after one click
- ▶ Last one, after another click

Overlays (uncover... not only)

- ▶ One item
- ▶ Another one, after one click
- ▶ Last one, after another click

Overlays

- ▶ One item
- ▶ Another one, after one click
- ▶ Last one, after another click

Time bomb

1. Two more to go
2. One more to go
3. Last chance...
4. BOOM!

Note: You must have a space between the number and overlay spec.

Time bomb

1. Two more to go
2. One more to go
3. Last chance...
4. BOOM!

Note: You must have a space between the number and overlay spec.

Time bomb

1. Two more to go
2. One more to go
3. Last chance...
4. BOOM!

Note: You must have a space between the number and overlay spec.

Time bomb

1. Two more to go
2. One more to go
3. Last chance...
4. BOOM!

Note: You must have a space between the number and overlay spec.

Time bomb

1. Two more to go
2. One more to go
3. Last chance...
4. BOOM!

Note: You must have a space between the number and overlay spec.

Overlays

The `XXX pause XXX` command will create an overlay wherever we place it.

A much more flexible way to create overlays is to use `.` For instance `{The dog jumped the fence.}` would display that sentence in the third and all subsequent slides in the current frame.

`only` et `uncover` qui prennent un argument entre `<>`, puis un argument normal entre `{}`, qu'elles n'affichent que sur les slides spécifiées. La différence entre les deux est qu'avec `only`, le texte est jeté, tandis qu'avec `uncover`, il occupe sa place mais est transparent. Par exemple, avec :

`\pif {paf} Abcd-Efgh {Ijklmn} ouais!`

Par défaut, le texte caché est complètement invisible. Il est possible de l'avoir en grisé en mettant un :

The `XXX pause XXX` command will create an overlay wherever we place it.

A much more flexible way to create overlays is to use `.` For instance `{The dog jumped the fence.}` would display that sentence in the third and all subsequent slides in the current frame.

`only` et `uncover` qui prennent un argument entre `<>`, puis un argument normal entre `{}`, qu'elles n'affichent que sur les slides spécifiées. La différence entre les deux est qu'avec `only`, le texte est jeté, tandis qu'avec `uncover`, il occupe sa place mais est transparent. Par exemple, avec :

`pif {paf} Abcd-Efgh Ijklmn}` ouais!

Par défaut, le texte caché est complètement invisible. Il est possible de l'avoir en grisé en mettant un :

The `XXX pause XXX` command will create an overlay wherever we place it.

A much more flexible way to create overlays is to use `.` For instance `{The dog jumped the fence.}` would display that sentence in the third and all subsequent slides in the current frame.

`only` et `uncover` qui prennent un argument entre `<>`, puis un argument normal entre `{}`, qu'elles n'affichent que sur les slides spécifiées. La différence entre les deux est qu'avec `only`, le texte est jeté, tandis qu'avec `uncover`, il occupe sa place mais est transparent. Par exemple, avec :

`pif {paf} Abcd-Efgh Ijklmn}` ouais!

Par défaut, le texte caché est complètement invisible. Il est possible de l'avoir en grisé en mettant un :

Getting Started

Why L^AT_EX
Beamer?

Discovering
Beamer

Particular
compositions

Themes

Special
functionality

Org-beamer
specific settings

Pictures

Table of Contents

Notes

Tips & Tricks

Documentation

Columns



General themes

For alternative Beamer themes, check out:

- ▶ <http://www.hartwork.org/beamer-theme-matrix/>
- ▶ <http://www.pletscher.org/writings/latex/beamerthemes.php>

... or create your own theme with

<http://titilog.free.fr/index.htm>.

With the old exporter:

```
#+BEAMER_HEADER_EXTRA: \usetheme{default}\usecolortheme{default}
```

With the new exporter:

```
#+BEAMER_THEME: mc  
#+BEAMER_COLOR_THEME: default
```

General themes

All accept **options in square brackets**.

```
#+BEAMER_THEME: [secheader]Madrid
```

produces:

```
\usetheme[secheader]{Madrid}
```

in the resultant L^AT_EX file.

Colors

```
#+BEAMER_COLOR_THEME: crane
```

produces:

```
\usecolortheme{crane}
```

in the resultant L^AT_EX file.

Fonts

`#+BEAMER_FONT_THEME:`

`#+BEAMER_INNER_THEME:`

`#+BEAMER_OUTER_THEME:`

Getting Started

Why L^AT_EX
Beamer?

Discovering
Beamer

Particular
compositions

Themes

Special
functionality

Org-beamer
specific settings

Pictures

Table of Contents

Notes

Tips & Tricks

Documentation

Special functionality



Template

Direct export to HTML (thanks to Org)

Startup: beamer

L^AT_EX class

Beamer, of course.

L^AT_EX class options

- ▶ bigger
- ▶ t specify **top** *vertical alignment* for all frames
- ▶ hyperref
- ▶ draft
- ▶ trans
- ▶ handout

Frame template

```
(setq in (org-fill-template
  "\\begin{frame}%a%A%o%T%S%x"
  (list (cons "a" (or org-beamer-action ""))
        (cons "A" (or org-beamer-defaction ""))
        (cons "o" (or org-beamer-option org-beamer-frame-defa
        (cons "x" (if org-beamer-extra (concat "\n" org-beame
        (cons "h" "%s")
        (cons "T" (if (string-match "\\S-" text)
                      "\n\\frametitle{%s}" ""))
```

Resize an image

You can **scale an image** by:

- ▶ explicitly setting its scale factor

```
#+ATTR_LaTeX: :options "scale=1.0"
```

- ▶ matching a given width or height while keeping the aspect ratio

```
#+ATTR_LaTeX: :options "width=0.95\\linewidth"
```

Note – Any backslashes inside the double quotes need to be escaped.

How to center images horizontally?

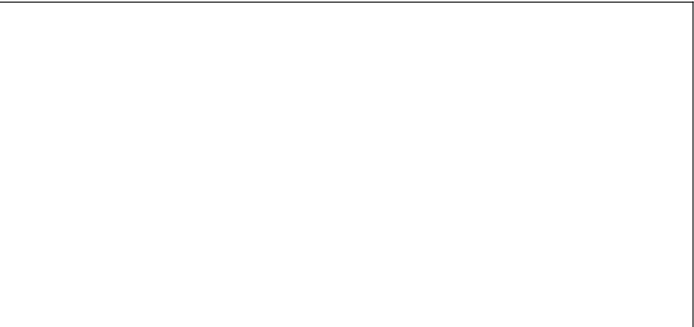
By default, images are not centered horizontally.

```
d:/Users/fni/Pictures/Dock.jpg
```

How to center images horizontally?

- Place each graphic inside a center environment

```
#+LaTeX: \begin{center}  
#+ATTR_LaTeX: width=0.5\linewidth  
[[~/Pictures/Dock.jpg]]  
#+LaTeX: \end{center}
```



d:/Users/fni/Pictures/Dock.jpg

How to center images horizontally?

► Add a caption

```
#+CAPTION: Dock  
#+ATTR_LaTeX: width=0.5\linewidth  
[[~/Pictures/Dock.jpg]]
```

d:/Users/fni/Pictures/Dock.jpg

Agenda (Outline)

To get a **table of contents** (or "Agenda" section), you need both `num` and `toc` set to `t` in your options – as the `toc:t` setting is actually ignored as you have not asked for numbering...

```
#+OPTIONS: num:t toc:t
```

Recurrent slides

Tell Beamer to insert the outline (or any other recurrent slide) at each beginning of section:

```
\AtBeginSection[]  
{  
  \begin{frame}<beamer>  
    \frametitle{Layout}  
    \tableofcontents[currentsection]  
  \end{frame}  
}
```

Here, the table of contents will be displayed, with the current section being highlighted.

Notes

Using a subtree with a `B_note` or a `B_noteNH` property would do this.

Three alternatives to tell beamer (not) to include note slides in the presentation:

```
\setbeameroptions{show notes}  
\setbeameroptions{show only notes}  
\setbeameroptions{hide notes}
```

- ▶ whatever you want to put in notes basically...
- ▶ bla bla

How to resize slides to A4 page?

See [http://tex.stackexchange.com/questions/9750/
page-size-too-small-when-using-beamer-class](http://tex.stackexchange.com/questions/9750/page-size-too-small-when-using-beamer-class)

Getting Started

Why L^AT_EX
Beamer?

Discovering
Beamer

Particular
compositions

Themes

Special
functionality

Org-beamer
specific settings

Pictures

Table of Contents

Notes

Tips & Tricks

Documentation

Agenda in 2 columns?

How to hide the subsections from the navigation sidebar?



hideothersubsections

How to make the lower left corner of my picture start exactly at the lower left corner of my slide?



You have to set it as background and insert an empty slide - then you have it.

Full frame (no title)

> That would be definitely nice. I think it is quite common that you want to > get rid of everything to have more space for a big drawing > (moreover it breaks the monotony of the layout)

There is now a "fullframe" environment.

Getting Started

Why L^AT_EX
Beamer?

Discovering
Beamer

Particular
compositions

Themes

Special
functionality

Org-beamer
specific settings

Pictures

Table of Contents

Notes

Tips & Tricks

Documentation

► `ox-beamer.el`