

RAISE Tools Installation Guide for Linux

Anne Haxthausen
IMM, DTU

February 3, 2010

This guide explains how to install and set up for Linux the RAISE tools developed at UNU/IIST. The guide has been tested to work for Ubuntu 7.04.

Assumptions

It is assumed that you have also installed emacs, one of the newer versions (e.g. 110.54) of New Jersey ML (the packages `smlnj` and `libsmlnj-smlnj`), and \LaTeX . (In the E-databar this is already done.)

Installation

Users in the E databar at DTU can skip steps 1-2 and go directly to step 3, below.

Installation of `rsltc` and associated emacs support is done as follows:

1. Download the file `rsltc_2.5.1-1_i386.deb` from the Tools folder in the course file sharing under CampusNet or <http://www.iist.unu.edu/newrh/III/3/1/docs/rsltc/linux/>.

2. As root execute the command `pkg -i rsltc_2.5.1-1_i386.deb`.

This results in:

- The `rsltc` binary in `/usr/bin`. Ensure that `/usr/bin` is on your PATH. (This is probably the case – otherwise add it.)
 - Files for \LaTeX (`rslenv.sty`) in a directory that is known by LaTeX (probably `/usr/share/texmf/tex/latex/rsltc`).
 - Files for emacs (`rsl-mode.el`, `rsltc.el`, `rslconvert.el` and `tokenise.el`) in a directory that is on the emacs load path (probably `/usr/share/emacs/site-lisp`).
 - A directory `/usr/share/rsltc` with files needed by `rsltc` for translation to SML and other languages.
3. To set up emacs for supporting for type checking and \LaTeX formatting RSL specifications for Linux, add the following lines (that can be found in the file `emacsLinux.txt` from the Tools folder in the course file sharing under CampusNet) to your `.emacs` file:

```

;;; Facilities for RSL support

;; Loading files for RSL support (rslconvert loads tokenise):
(load "rsltc.el")
(load "rsl-mode.el")
(load "rslconvert.el")

;; Function for converting RSL formulae in ascii syntax to latex
;; The formulae are placed between \RSLatex and \endRSLatex

(defun rsl2latex ()
  "Do rslatex on buffer"
  (interactive)
  (do-latex))

;; Function for undoing the above conversion

(defun latex2rsl ()
  "Undo rslatex on buffer"
  (interactive)
  (undo-latex))

;; Setting up function keys
;; Pressing f2 invokes 'do-latex' on the whole buffer
;; Pressing f3 invokes 'undo-latex' on the whole buffer

(global-set-key [f2] 'rsl2latex)
(global-set-key [f3] 'latex2rsl)

```

The tool `rsltc` can now be run from `emacs`, i.e. you can among others syntax and type check the current `emacs` buffer. Furthermore, you can include RSL specifications in \LaTeX documents.