Forensim Installation note

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1 Install the R software

- Go to http://www.cran.r-project.org/
- Dependent on which operating system you use, click on one of the links:
 - Download R for Linux
 - Download R for MacOSX
 - Download R for Windows
- For Windows, simply follow the link Install R for the first time
- Click the link "Download R 2.15.1 for Windows", run the file and the installation program will start.
- Click on R-2.15.1.exe to install the set-up file
- After installation, a blue colored icon appears on your desktop, click on the icon to launch an (R session (Figure 1).



Figure 1: An R session (Windows)

A note for Mac users Some modules in Forensim rely on Tcl/Tk language (e.g. LRmix, Hbsimu...). The Tcl/Tk distribution is provided separately for Maxc OS system, and you will need to download it. Go to: http://cran.r-project.org/ bin/macosx/tools/ and download the tcltk-8.5.5-x11.dmg file and install it on your system.

Once ${\bf Q}$ is downloaded on your system, you have to download Forensim and its dependencies.

2 Install the Forensim package

The latest version of Forensim is 3.2, and it is compatible with R version 2.15.0 and later versions. If your computer is connected to the Internet, follow Option 1, otherwise, follow Option 2.

2.1 Option1: install the packages directly from the R environment

Follow these steps:

- 1. Open R
- 2. type the following command in the R console:

```
> install.packages('forensim')
```

This automatically opens a list of 'CRAN mirrors' from which you can install Forensim. You can choose a mirror that it is close to you, thus if you are in France, you can choose Lyon, or if you are in the Netherlands, you can choose Amsterdam (Figure 2).



Figure 2: Install packages from the CRAN repository.

To make the Forensim package fully functional in R you need some additional packages. Repeat the previous step for all the following packages:

1. tcltk2

2. tkrplot.

The forensim package is now ready to be used!

2.2 Option2: manual installation

It is possible to install Forensim and its dependencies manually, this is useful if you do not have a connextion to Internet, so you can first load the relevant files and then install them into your computer. Forensim and its dependencies can be found on the CRAN website http://www.cran.r-project.org. In the left menu, under 'Software', click the link 'Packages', then click on 'Table of available packages, sorted by name'. Search for the Forensim package. Click the link with the appropriate file. If you use windows it is the one next to Windows binary, for the Forensim package, it is the forensim_3.2.zip file. Save the file into your working folder. Do not unzip the file, as this is the required format for R packages. To make the Forensim package fully functional in R you need some additional packages. Repeat the previous step for all the following packages:

- $1. \ tcltk2$
- 2. tkrplot.

These two packages are needed to enable the correct display of the LRmix module. All downloaded packages now need to be activated in R. Follow these steps:

- Open R
- Install packages using the R function install.packages:

> install.packages('forensim_3.2.zip', repos=NULL)

Do this for every downloaded package. Change the information within the quotation marks according to each package. The forensim package is now ready to be used!

Tip for windows users Download all the zip files in the same folder, then click on the Packages tab: install packages from zip files. It is possible to select all the packages at once, and install them at the same time (Figure 3).



Figure 3: Package installation under Windows.