

PROGRAMMING R

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INTRODUCTION

- Why R?
 - ▶ Easy, coz' it's free.
- Officially speaking:
 - ▶ R is a freely available language and environment for statistical computing and graphics which provides a wide variety of statistical and graphical techniques: linear and nonlinear modeling, statistical tests, time series analysis, classification, clustering, etc.

INSTALLATION

- Download and Install R



The Comprehensive R Archive Network

Download and Install R

Precompiled binary distributions of the base system and contributed packages, **Windows and Mac** users most likely want one of these versions of R:

- [Download R for Linux](#)
- [Download R for \(Mac\) OS X](#)
- [Download R for Windows](#)

R is part of many Linux distributions, you should check with your Linux package management system in addition to the link above.

Source Code for all Platforms

Windows and Mac users most likely want to download the precompiled binaries listed in the upper box, not the source code. The sources have to be compiled before you can use them. If you do not know what this means, you probably do not want to do it!

- The latest release (2013-05-16, Good Sport) [R-3.0.1.tar.gz](#), read [what's new](#) in the latest version.
- Sources of [R alpha and beta releases](#) (daily snapshots, created only in time periods before a planned release).
- Daily snapshots of current patched and development versions are [available here](#). Please read about [new features and bug fixes](#) before filing corresponding feature requests or bug reports.
- Source code of older versions of R is [available here](#).
- Contributed extension [packages](#)

Questions About R

- If you have questions about R like how to download and install the software, or what the license terms are, please read our [answers to frequently asked questions](#) before you send an email.

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[Contributed](#)

INSTALLATION

- Click [install R for the first time](#).

R for Windows

Subdirectories:

base	Binaries for base distribution (managed by Duncan Murdoch). This is what you want to install R for the first time .
contrib	Binaries of contributed packages (managed by Uwe Ligges). There is also information on third party software available for CRAN Windows services and corresponding environment and make variables.
Rtools	Tools to build R and R packages (managed by Duncan Murdoch). This is what you want to build your own packages on Windows, or to build R itself.

- The latest version is always on the top.

R-3.0.1 for Windows (32/64 bit)

[Download R 3.0.1 for Windows](#) (52 megabytes, 32/64 bit)

[Installation and other instructions](#)

[New features in this version](#)

If you want to double-check that the package you have downloaded exactly matches the package distributed by R, you can compare the [md5sum](#) of the .exe to the [true fingerprint](#). You will need a version of md5sum for windows: both [graphical](#) and [command line versions](#) are available.

INSTALLATION

- After saving the file on the Desktop, double-click on the icon for the file to run it.
- You will be asked what language to install it in - choose English.
- Click all the “Next”s to install (during the process, you can choose the installation folder by yourself or just default), until you see “Completing the R for Windows Setup Wizard”.

INSTALLATION

- Install packages: Packages>Install Package(s)
- choose website: Taiwan>NTU website **(recommended, or you'll regret for those wasted time like I did!)**

EDITORS FOR R

- Basic code editors provided by Rguis
- RStudio: GUI-based IDE for R (**recommended**)
- Vim-R-Tmux: R working environment based on vim and tmux
- Emacs (ESS add-on package)
- gedit and Rgedit
- RKWard
- Eclipse
- Tinn-R
- Notepad++ (NppToR)

PROGRAMMING

- Most important instruction for beginner:

please get familiar with Google: [R] `your_syntax / problem`

- Introduction to R

REFERENCES

- [R for Mac OS X FAQ](#)
- [R for Windows FAQ](#)
- [The R Manuals](#)
- [Getting started with R](#)
- Welcome to a Little Book of R for Time Series!
- [Programming in R](#)
- [R 學習筆記](#)
- R_Note
- You can find the materials in R TA session [here](#)