公共運輸
Public Transport

軟體安裝與資料申請說明

2022.11
葉家榮

國立陽明交通大學
NATIONAL YANG MING CHIAO TUNG UNIVERSITY

R 軟體安裝

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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 (Debian, Fedora/Redhat, Ubuntu)
- Download R for macOS
- **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 (2022-10-31, Innocent and Trusting) R-4.2.2.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).

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R for Windows

Subdirectories:

base	Binaries for base distribution. This is what you want to **install R for the first time**.
contrib	Binaries of contributed CRAN packages (for R >= 3.4.x).
old contrib	Binaries of contributed CRAN packages for outdated versions of R (for R < 3.4.x).
Rtools	Tools to build R and R packages. This is what you want to build your own packages on Windows, or to build R itself.

Please do not submit binaries to CRAN. Package developers might want to contact Uwe Ligges directly in case of questions / suggestions related to Windows binaries.

R for macOS

This directory contains binaries for a base distribution and packages to run on macOS. Releases for old Mac OS X systems (through Mac OS X 10.5) and PowerPC Macs can be found in the old directory.

Note: Although we take precautions when assembling binaries, please use the normal precautions with downloaded executables.

Package binaries for R versions older than 3.2.0 are only available from the CRAN archive so users of such versions should adjust the CRAN mirror setting (https://cran-archive.r-project.org) accordingly.

R 4.2.2 "Innocent and Trusting" released on 2022/10/31

Please check the integrity of the downloaded package by checking the signature:
pkgutil --check-signature R-4.2.2.pkg
in the *Terminal* application. If Apple tools are not avaiable you can check the SHA1 checksum of the downloaded image:
openssl sha1 R-4.2.2.pkg

Latest release:

R-4.2.2-arm64.pkg (notarized and signed)
SHA1-hash: c3bb657ca6912b9b98e254f6343a365da26848f (ca. 86MB) for M1 and higher Macs only!

R 4.2.2 binary for macOS 11 (**Big Sur**) and higher, **Apple silicon arm64** build, signed and notarized package. Contains R 4.2.2 framework, R.app GUI 1.79 for Apple silicon Macs (M1 and higher), Tcl/Tk 8.6.12 X11 libraries and Texinfo 6.8.
Important: this version does NOT work on older Intel-based Macs - see below for Intel version.

R-4.2.2 for Windows

Download R-4.2.2 for Windows (76 megabytes, 64 bit)
README on the Windows binary distribution
New features in this version

This build requires UCRT, which is part of Windows since Windows 10 and Windows Server 2016. On older systems, UCRT has to be installed manually from here.

If you want to double-check that the package you have downloaded matches the package distributed by CRAN, you can compare the md5sum of the .exe to the fingerprint on the master server.

R 軟體安裝

RStudio 安裝

posit

RStudio®

- 集成開發環境（IDE）
- 協助 R 軟體編寫原始碼
- 支援圖形用戶界面工具（GUI）

Step 2:
Install RStudio Desktop

DOWNLOAD RSTUDIO DESKTOP FOR WINDOWS

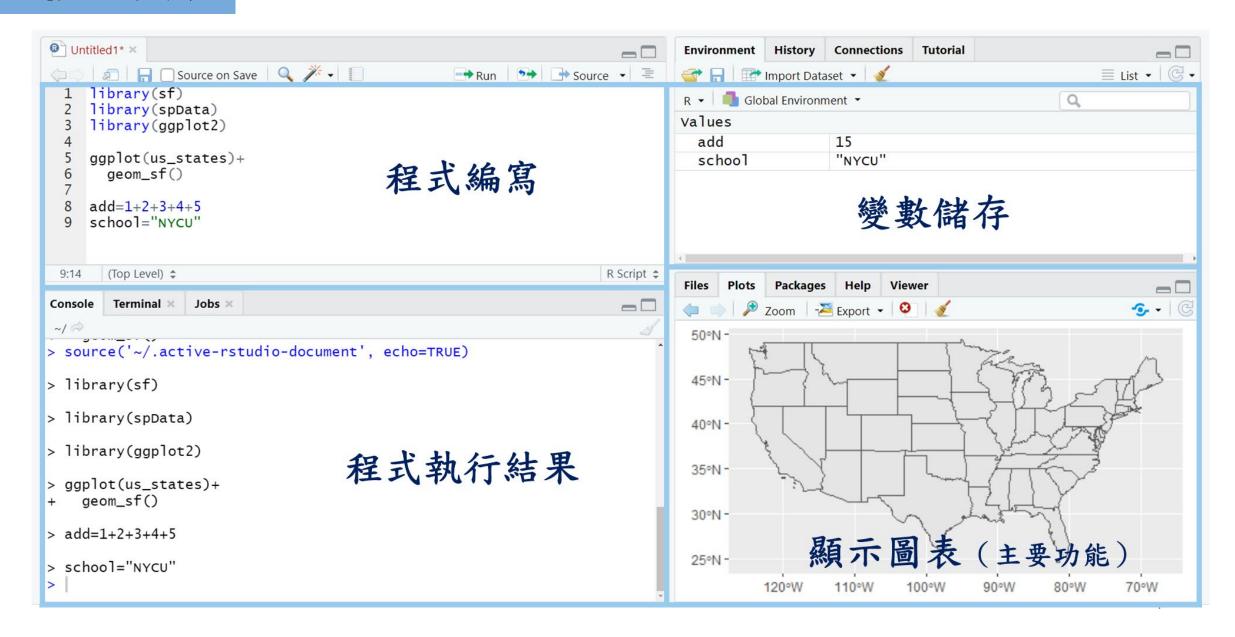Size: 190.49MB | SHA-256: B38BF925 | Version: 2022.07.2+576 | |
Released: 2022-09-21

OS	Download	Size	SHA-256
Windows 10/11	RSTUDIO-2022.07.2-576.EXE ⤓	190.49MB	B38BF925
macOS 10.15+	RSTUDIO-2022.07.2-576.DMG ⤓	224.49MB	35028D02

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R 軟體安裝

程式編寫

變數儲存

程式執行結果

顯示圖表（主要功能）

TDX API 金鑰申請

TDC 運輸資料流通服務
Transport Data eXchange

意見反應　會員登入　註冊

資料服務 ▾　開發指引 ▾　示範成果　資料市集 ▾　服務監控 ▾　關於平臺 ▾　來源資料管理 ▾　圖臺及資料工具 ▾

會員註冊

⌂ / 會員註冊

一般會員

【適用對象】
1. 個人身份
2. 私人企業

【使用規範】
1. 可使用任何合法的電子郵件帳號進行註冊
2. 可註冊至多三把API金鑰
3. 可查詢資料服務
4. 部份資料服務需開通存取權限後才可使用
5. 可申請下載歷史資料

申請註冊

學研單位

【適用對象】
1. 公私立大專院校所屬教職人員、學生
2. 公立學研機構所屬研究人員

【使用規範】
1. 需使用學研單位所屬電子郵件帳號(帶有edu或org域名)進行註冊
2. 可註冊至多三把API金鑰
3. 可查詢資料服務
4. 部份資料服務需開通存取權限後才可使用
5. 可申請下載歷史資料

申請註冊

公部門會員

【適用對象】
1. 中央政府機關
2. 交通部及部屬機關
3. 地方政府機關

【使用規範】
1. 需使用公部門所屬電子郵件帳號(帶有gov域名)進行註冊
2. 可註冊至多三把API金鑰
3. 可查詢資料服務
4. 部份資料服務需開通存取權限後才可使用
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申請註冊

TDX API 金鑰申請

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API金鑰

金鑰內容

務必保存 API 金鑰

Client Id *   YOUR-ID

Client Secret *   YOUR-SECRET   重新產生

金鑰名稱 *   研究用

狀態 *   啟用

認識 R 語言

參考以下網站，先行認識 R 的基本物件，以及 dplyr 套件！

https://chiajung-yeh.github.io/R-Code-Sharing/R_Preliminary/R_Preliminary.html