

R Installation

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Ubuntu 14.04 Server

R Core

Since Ubuntu 14.04 ships with R v3.0.x, and we need the latest and greatest release, we will install the official CRAN repository from <https://cran.r-project.org/> following the instructions at <https://cran.r-project.org/bin/linux/ubuntu/>

First, uninstall the R version 3.0.x

```
sudo apt-get remove --purge r-base-core
sudo apt-get autoremove
```

Then add the Swedish R CRAN mirror to apt sources

```
sudo su -c 'echo "deb http://ftp.acc.umu.se/mirror/CRAN/bin/linux/ubuntu trusty/" >
/etc/apt/sources.list.d/r-core.list'
```

Also - according to the documentation, check that Ubuntu backports is enabled in apt to compile certain R packages. The file */etc/apt/sources.list* should contain the lines uncommented.

```
deb http://fi.archive.ubuntu.com/ubuntu/ trusty-backports main restricted universe multiverse
deb-src http://fi.archive.ubuntu.com/ubuntu/ trusty-backports main restricted universe multiverse
```

Finally, add the secure APT key

```
sudo apt-key adv --keyserver keyserver.ubuntu.com --recv-keys E084DAB9
sudo apt-get update
```

Then, install R

```
sudo apt-get install r-base r-base-devs
```

Global R Packages

Then, install some useful packages for all users

```
sudo apt-get install libpq-dev      # Needed for RPostgreSQL
sudo apt-get install libssh2-1-dev  # Needed for git2r
sudo apt-get install libxml2-dev    # Needed for xml2

sudo R

install.packages(c("openxlsx", "RPostgreSQL", "roxygen2"))
install.packages("devtools") # Will imply lots of dependencies
```

Every user can install his/her individual packages in addition to the global ones. These packages will be installed under *~/R/x86_64-pc-linux-gnu-library/3.2/*.

RStudio Server

Following the instructions from <https://www.rstudio.com/products/rstudio/download-server/>, issue

```
sudo apt-get install gdebi-core
wget https://download2.rstudio.org/rstudio-server-0.99.486-amd64.deb
sudo gdebi rstudio-server-0.99.486-amd64.deb
```

The server is now installed. Users can log in with their *ktpanalytics.vsshp.net* Linux account on <http://ktpanalytics.vsshp.net:8787/>.

RStudio server status can be checked and changed from the command line with

```
sudo rstudio-server status
sudo rstudio-server stop
sudo rstudio-server start
```

Shiny Server

Download file from <https://www.rstudio.com/products/shiny/download-server/>

Then, install shiny package as root

```
sudo R
install.packages("shiny")
```

Download shiny server and install Shiny Server

```
wget https://download3.rstudio.org/ubuntu-12.04/x86_64/shiny-server-1.4.0.756-amd64.deb
sudo dpkg -i shiny-server-1.4.0.756-amd64.deb
```

Or, alternatively with gdebi

```
sudo apt-get install gdebi-core
sudo gdebi shiny-server-1.4.0.756-amd64.deb
```