

Road to install pyRserve and Rserve to connect Python and R

Installing pyRserve for Mac OSX or for Linux for Python 2.7

at <http://packages.python.org/pyRserve/>
look at Quick Installation

Make sure that Numpy is installed; to install it look at the Numpy box in the Cmap.

then

```
sudo easy_install pyRserve
```

(note1)

if easy_install does not exist in your Linux box, in Ubuntu-like distribution use

```
sudo apt-get install python-setuptools
```

in other distribution, use the preferred installation procedure

(note2)

if sudo easy_install pyRserve

does not work in your Linux box, follow:

```
download pyRserve-0.5.2.tar.gz
```

```
from http://pypi.python.org/pypi/pyRserve/#downloads
```

mount the file (which is a compressed archive) and then within the new created folder

```
pyRserve-0.5.2
```

```
run
```

```
sudo python2.7 setup.py install
```

Installing pyRserve in Windows for Python 2.7

See above about Numpy

You need to have *python-setuptools* for Python 2.7 installed

from

<http://pypi.python.org/pypi/setuptools#windows>
download
setuptools-0.6c11.win32-py2.7.exe
and run it

then, in Command Prompt (the Windows program opening a black window)

```
cd \Python27\Scripts\
```

```
C:\Python27\Scripts>easy_install Numpy  
C:\Python27\Scripts>easy_install.exe pyRserve
```

Installing Rserve in Mac OSX, in Linux and in Windows for Python 2.7

Rserve is at <http://www.rforge.net/Rserve/>

Within R

```
> install.packages("Rserve")
```

you are asked for a CRAN server, chose into a list

maybe your system will ask permission to create a folder; allow it

Launching Rserve (any System)

always within R

```
>library(Rserve)  
>Rserve()  
      >Rserve(args="--no-save") in Mac OSX
```

now you can quit R

```
>q()
```

in Windows

Rserve

when executed, can ask (only once for ever) to reply to a firewall screen, with yes to all the options

Interaction between Python and R

Interactive example in the IDLE shell

```
>>> import pyRserve
>>> conn = pyRserve.connect(host="localhost")
>>> conn
<Handle to Rserve on localhost:6311>
>>> conn.r("33+2")
35.0
>>> conn.close()
>>> conn
<Closed handle to Rserve on localhost:6311>
>>>
```

most important, **read**

<http://packages.python.org/pyRserve/manual.html>

look at the example

timeSeriesNNs

in our Python repository at

http://terna.to.it/econophysics16/Python_examples/

stopping Rserve (daemon) which wait for messages to be addressed to R

in Mac, use the Monitor (is in the Utility apps) and close the process Rserve-bin.so

in Linux (via terminal) find the Rserve-bin.so process number with

ps x

suppose that the process number is 111, finally use
kill 111

in Windows find the process Rserve with Alt+Ctrl+Del
go to Windows Task Manager
and then
in Processes
stop
Rserve

ANYWAY you can have the Rserve process running in memory without
any problem; its consumes an irrelevant quota of the CPU time.