

Road to install pyRserve and Rserve to connect Python and R

### Installing pyRserve for Python 3.6 or more

pip3 install pyRserve

(maybe pip instead of pip3)

### Installing Rserve for R

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+9')
```

```
42.0
```

```
>>> conn.close()
```

```
>>> conn
```

```
<Closed handle to Rserve on localhost:6311>
```

```
>>>
```

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please, [read](#)

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

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look at the example  
timeSeriesNNs  
in our Python repository at  
[http://terna.to.it/econophysics19/Python\\_examples/](http://terna.to.it/econophysics19/Python_examples/)

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an tiny interactive example in IDLE

```
a=[1,2,3,4,1,2,3,4,1,2,3,4]
b=[1,2,1,2,1,2,1,2,1,2]
```

```
conn.r.a=a
conn.r.a
```

```
conn.r.b=b
```

```
conn.r('a=as.numeric(a)')
conn.r.a
```

```
conn.r('b=as.numeric(b)')
```

```
conn.r('cor(a,b)')
```

---

**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 CPU time.