

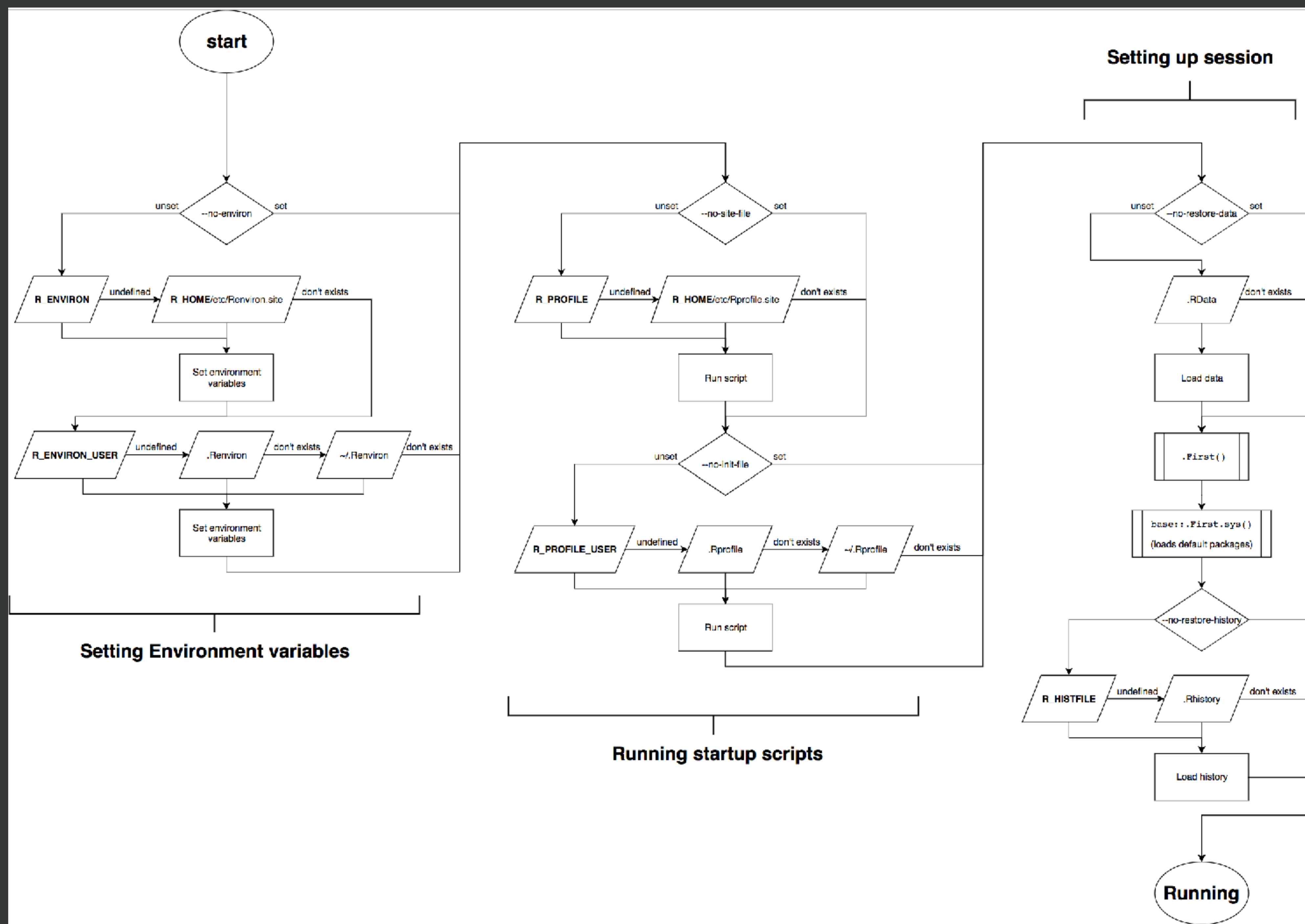
R Startup / configuration

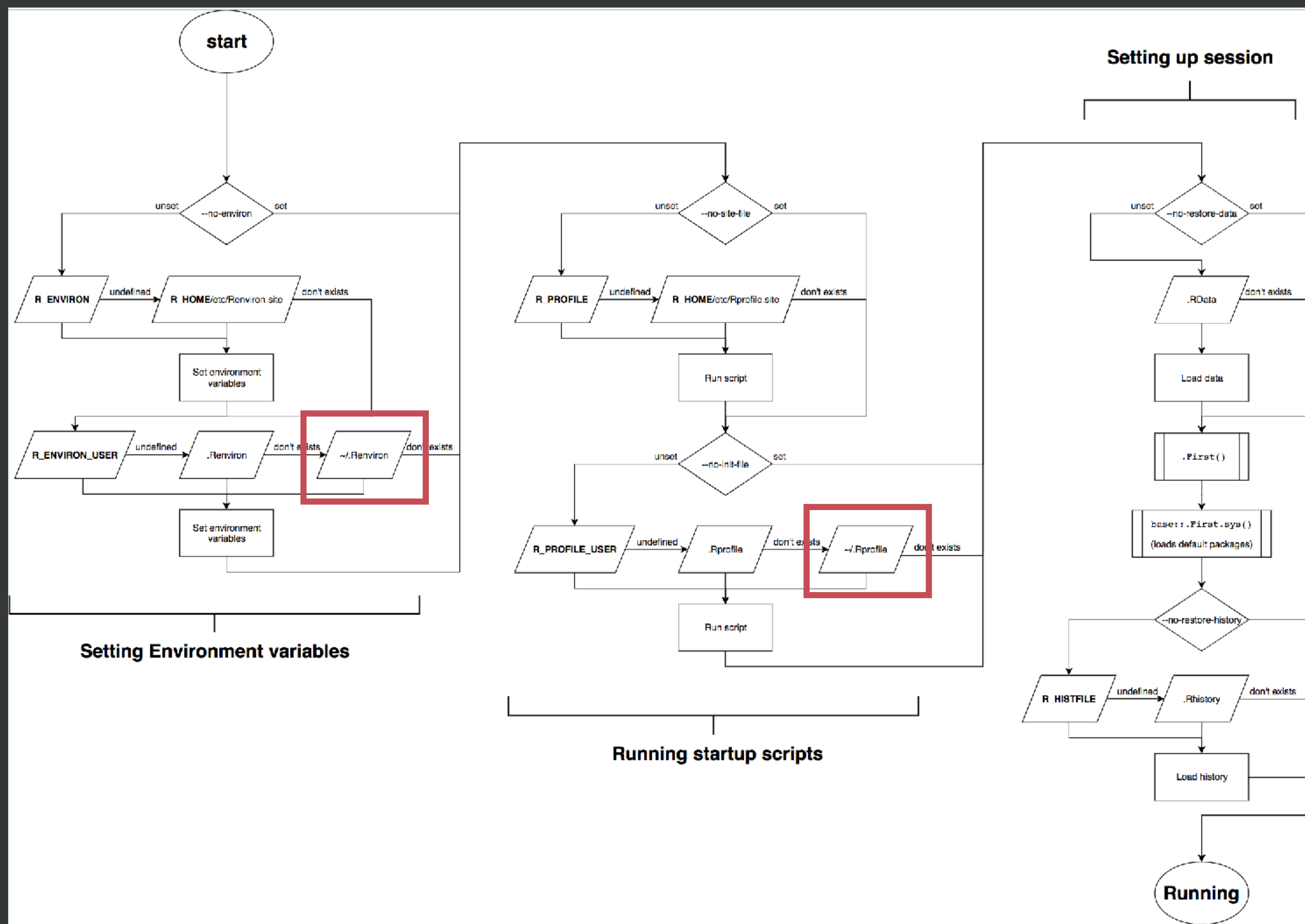
Jim Hester
RStudio

 @jimhester

 @jimhester_

<https://whattheyforgot.org/r-startup.html>





Dotfiles

<https://dotfiles.github.io/>

`.Renviron`

`.Rprofile`

GitHub search for filename: `.Rprofile`.

.Renviron

R specific environment vars

API keys

not R code

R_HISTSIZE=100000

GITHUB_PAT=abc123

R_LIBS_USER=~ /R/%p/%v

<https://whattheyforgot.org/activities/12-startup-01.R>

.Rprofile

helpers you use *interactively*

runs on *every* session

- .Set a default CRAN mirror
- Write a welcome message
- Customize their R prompt
- Change options, screen width, numeric display
- Load frequently used packages (but be very careful)
- Aliases / shortcuts for frequently used functions

Common pitfalls

```
options(stringsAsFactors = FALSE)
```

```
library(tidyverse)
```

```
f <- dplyr::filter
```

```
library(ggplot2)
```

```
theme_set(theme_bw())
```

If something appears in a script,
should *not* be in .Rprofile

Exceptions

```
library(usethis)
```

```
library(devtools)
```

```
s <- summary
```

```
h <- utils::head
```

```
options(repos = c(CRAN = "https://cran.rstudio.org"))
```

```
if (interactive()) {  
  options(width = 120)  
}
```

<https://whattheyforgot.org/activities/12-startup-02.R>

Maintaining R

Jim Hester
RStudio












 @jimhester

 @jimhester_

<https://whattheyforgot.org/maintaining-r.html>

Upgrading packages

Update Packages

	Package	Installed	Available	NEWS
<input type="checkbox"/>	ape	5.1	5.2	
<input type="checkbox"/>	BiocManager	1.30.1	1.30.2	
<input type="checkbox"/>	conflicted	0.1.0.9000	1.0.0	
<input checked="" type="checkbox"/>	doParallel	1.0.11	1.0.14	
<input type="checkbox"/>	ggribes	0.5.0	0.5.1	
<input checked="" type="checkbox"/>	igraph	1.1.0	1.2.2	
<input type="checkbox"/>	magic	1.5-8	1.5-9	
<input checked="" type="checkbox"/>	mockery	0.4.1	0.4.1.1	
<input type="checkbox"/>	pROC	1.12.1	1.13.0	
<input type="checkbox"/>	rematch2	2.0.0.9000	2.0.1	
<input type="checkbox"/>	sm	2.2-5.5	2.2-5.6	

Select AllSelect None












Install UpdatesCancel

Upgrading packages

```
update.packages("pkgname")
```

```
devtools::upgrade_packages("pkgname")
```

Upgrading all packages

Update Packages				
	Package	Installed	Available	NEWS
<input checked="" type="checkbox"/>	ape	5.1	5.2	
<input checked="" type="checkbox"/>	BiocManager	1.30.1	1.30.2	
<input checked="" type="checkbox"/>	conflicted	0.1.0.9000	1.0.0	
<input checked="" type="checkbox"/>	doParallel	1.0.11	1.0.14	
<input checked="" type="checkbox"/>	ggribges	0.5.0	0.5.1	
<input checked="" type="checkbox"/>	igraph	1.1.0	1.2.2	
<input checked="" type="checkbox"/>	magic	1.5-8	1.5-9	
<input checked="" type="checkbox"/>	mockery	0.4.1	0.4.1.1	
<input checked="" type="checkbox"/>	pROC	1.12.1	1.13.0	
<input checked="" type="checkbox"/>	rematch2	2.0.0.9000	2.0.1	
<input checked="" type="checkbox"/>	sm	2.2-5.5	2.2-5.6	
<div><div>Select All</div><div>Select None</div><div>Install Updates</div><div>Cancel</div></div>				

devtools::upgrade_packages(TRUE)

Downgrading packages

devtools: Tools to Make Developing R Packages Easier

Collection of package development tools.

Version: 1.13.6
Depends: R (≥ 3.0.2)
Imports: [httr](#) (≥ 0.4), [utils](#), [tools](#), [methods](#), [memoise](#) (≥ 1.0.0), [whisker](#), [digest](#), [rsconnect](#)
Suggests: [curl](#) (≥ 0.9), [crayon](#), [testthat](#) (≥ 1.0.2), [BiocInstaller](#), [Rcpp](#) (≥ 0.10.0), [R6](#)
Published: 2018-06-27
Author: Hadley Wickham [aut], Jim Hester [aut, cre], Winston Chang [aut], RStudio [cre]
Maintainer: Jim Hester <james.hester@rstudio.com>
BugReports: <https://github.com/r-lib/devtools/issues>
License: [GPL-2](#) | [GPL-3](#) [expanded from: [GPL](#) (≥ 2)]
URL: <https://github.com/r-lib/devtools>
NeedsCompilation: no
Materials: [README NEWS](#)
CRAN checks: [devtools results](#)

Downloads:

Reference manual: [devtools.pdf](#)
Vignettes: [Devtools dependencies](#)
Package source: [devtools_1.13.6.tar.gz](#)
Windows binaries: r-devel: [devtools_1.13.6.zip](#), r-release: [devtools_1.13.6.zip](#), r-oldrel: [devtools_1.13.6.zip](#)
OS X binaries: r-release: [devtools_1.13.6.tgz](#), r-oldrel: [devtools_1.13.6.tgz](#)
Old sources: [devtools archive](#)

google: cran devtools

old sources: devtools archive

```
devtools::install_version("devtools", "1.13.3")
```

Transferring libraries across R versions

OK If patch: 3.5.0 -> 3.5.1

NOT OK If minor: 3.4.3 -> 3.5.0

Have R handle automatically

```
R_LIBS_USER=~/.Library/R/%v/library
```

```
R_LIBS_USER=~/.R/win-library/x.y
```

```
fs::dir_create(Sys.getenv("R_LIBS_USER"))
```



```
# Install new version of R (lets say 3.5.0 in this example)
```

```
# Create a new directory for the version of R
```

```
fs::dir_create("~/Library/R/3.5/library")
```

```
# Re-start R so the .libPaths are updated
```

```
# Lookup what packages were in your old package library
```

```
pkgs <- installed.packages("~/Library/R/3.4/library") %>%  
  tibble::as_tibble()
```

```
# Filter these packages as needed
```

```
# Install the packages in the new version
```

```
install.packages(pkgs$Package)
```