RStudio®
Package Manager

RStudio Package Manager

RStudio Package Manager is a new professional product to organize and centralize R packages across your team, department, or entire organization. ***

RStudio

RStudio Package Manager

RStudio Package Manager is a new professional product to organize and centralize R packages across your team, department, or entire organization. ***

*** Not so secret: Alpha and Beta has been available for the past year**

RStudio

RStudio Package Manager

RStudio Package Manager is a new professional product to organize and centralize R packages across your team, department, or entire organization. * ***

*** Not so secret: Alpha and Beta has been available for the past year**

**** Sneak peak at the 1.0 release coming this month**

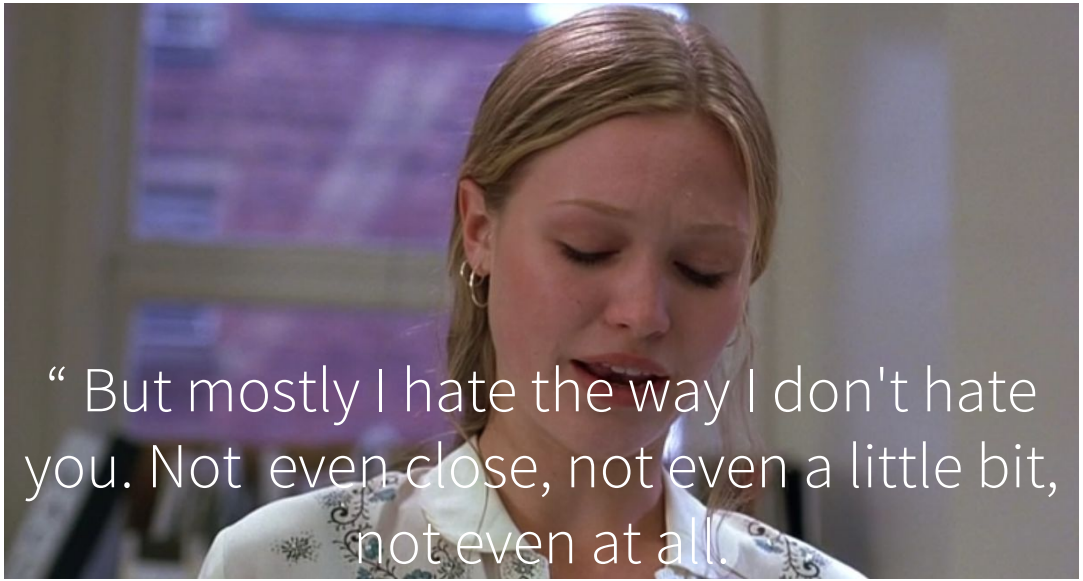
RStudio

Game Plan

- Why
- Who
- What
- Where
- How
- When

RStudio

Alternative Talk: 10 Things I Hate About R Packages



Jr. Analyst

Just hired, but learned R in college.

Has to
DISCOVER
tribal knowledge

Sr. Analyst

Built functions to connect to the company's database.

Wants to
SHARE
code without emailing files

Statistician

Submitted validated trial results to the FDA

Needs to
REPRODUCE
results, without worrying about packages

IT / Ops

Receives install and upgrade requests.

Goal is to
MAINTAIN
servers without breaking R code.

InfoSec

Enforces legal and risk policies.

Requires
SECURE
downloads that meet standards

RStudio®

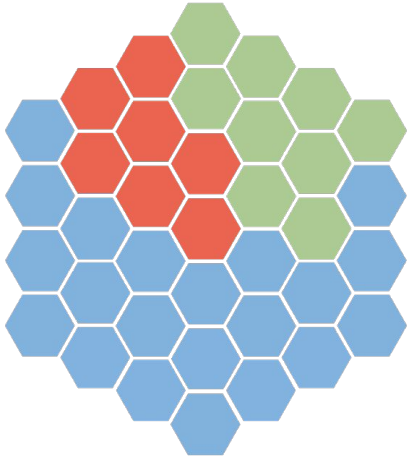
R Packages

GitHub

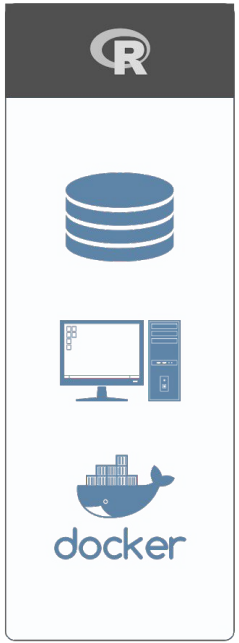
Internal

CRAN

Administrators



Users



RStudio

CRAN, GitHub, Local Tar Files

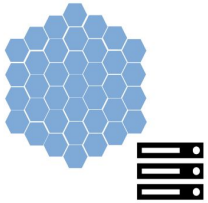
Hobbyist, Student

RStudio Package Manager

Day-to-day R User

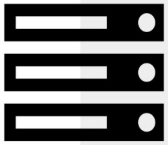
RStudio

Corporate Network



RStudio CRAN
Package Service

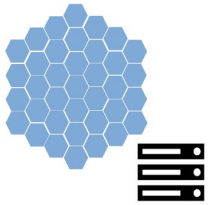
Automatic Updates
Lazy Downloads



RStudio Package
Manager “Bridge”
Server

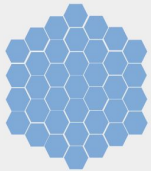
Offline Packages

Offline Network

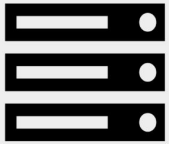


RStudio CRAN
Package Service

Manual Updates



Copy of RStudio
CRAN Service



RStudio Package
Manager Offline

Offline Packages

RStudio

CRAN

>13K

packages

~30

updates / day

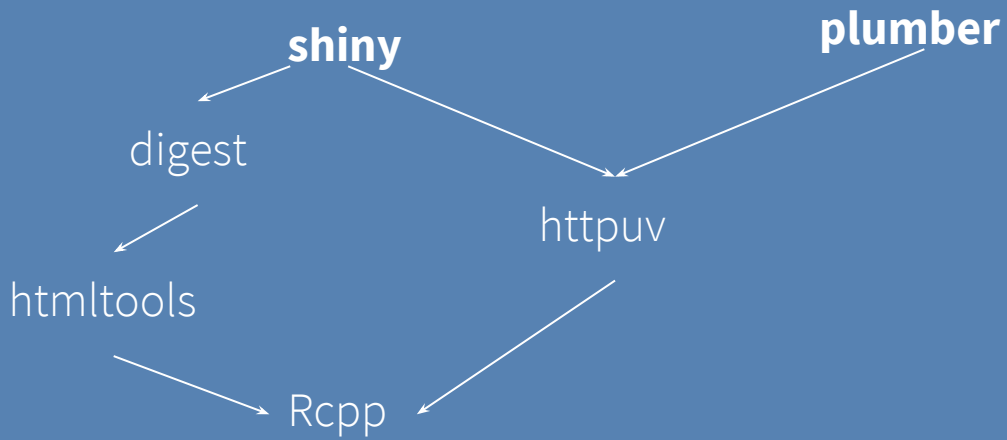
RStudio

Using Repository Versioning

```
FROM ubuntu

RUN apt-get install \
  ...

RUN R -e 'install.packages( ... )

RUN R -e 'install.packages( ... ,
                repos = "https://r-pkgs.example.com/cran/189")'


CMD <some process>
```

RStudio

Curated CRAN



RStudio

Internal Packages

devtools::install_github ?

RStudio

Summary

- **Organize** packages in a central repository
- Automatic **versioning**
- Track usage **metrics**
- **Integrated** with R, RStudio, RStudio Connect
- **CRAN, curated CRAN , local packages, Git(Hub)**

RStudio

The details…

rstudio.com/package-manager

RStudio

Questions?