

# Package: packageRank (via r-universe)

October 17, 2024

**Type** Package

**Title** Computation and Visualization of Package Download Counts and Percentile Ranks

**Version** 0.9.3

**Date** 2024-10-16

**Maintainer** Peter Li <lindbrook@gmail.com>

**Description** Compute and visualize the cross-sectional and longitudinal number and rank percentile of package downloads from Posit/RStudio's CRAN mirror.

**URL** <https://github.com/lindbrook/packageRank>

**BugReports** <https://github.com/lindbrook/packageRank/issues>

**Depends** R (>= 3.5)

**License** GPL (>= 2)

**Encoding** UTF-8

**Language** en-US

**LazyData** true

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**Imports** cranlogs, curl, data.table (>= 1.12.2), ggplot2, ISOCodes, memoise, pkgsearch, R.utils, RCurl, rlang, rversions, sugrants

**Suggests** knitr, rmarkdown

**NeedsCompilation** no

**Author** Peter Li [aut, cre]

**Repository** CRAN

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---

packageRank-package    *packageRank*

---

## Description

Compute and Visualize Package Download Counts and Percentile Ranks.

## Details

- Download counts via `cranDownloads()`.
- Percentiles ranks of download counts via `packageRank()` and `packageLog()`.
- Download count inflation filters.
- Availability of results via `logInfo()`.
- Reverse lookup of counts, ranks and percentile ranks.
- Data fixes for early logs and a later instance of double/triple counting of R application downloads.
- Note Sunday and Wednesday spikes in Windows R Application Nov 2022 - Mar 2023.
- Country code top-level domains, memoization and internet connection timeout problem.

## Author(s)

**Maintainer:** Peter Li <lindbrook@gmail.com>

**See Also**

Useful links:

- <https://github.com/lindbrook/packageRank>
- Report bugs at <https://github.com/lindbrook/packageRank/issues>

---

annualDownloads      *Count Total CRAN Download.*

---

**Description**

From RStudio's CRAN Mirror <http://cran-logs.rstudio.com/>

**Usage**

```
annualDownloads(start.yr = 2013, end.yr = 2023)
```

**Arguments**

start.yr	Numeric or Integer.
end.yr	Numeric or Integer.

**Note**

A way around Gateway Timeout (HTTP 504). This takes a while since it computes each year separately.

---

bioconductorDownloads      *Annual/monthly package downloads from Bioconductor.*

---

**Description**

Annual/monthly package downloads from Bioconductor.

**Usage**

```
bioconductorDownloads(packages = NULL, from = NULL, to = NULL,
  when = NULL, unit.observation = "month")
```

**Arguments**

packages	Character. Vector of package names.
from	Start date as yyyy-mm or yyyy.
to	End date as yyyy-mm or yyyy.
when	"last-year", or "year-to-date" or "ytd".
unit.observation	"year" or "month".

**Examples**

```

## Not run:
# all packages
bioconductorDownloads()

# entire history
bioconductorDownloads(packages = "clusterProfiler")

# year-to-date
bioconductorDownloads(packages = "clusterProfiler", when = "ytd")
bioconductorDownloads(packages = "clusterProfiler", when = "year-to-date")

# last 12 months
bioconductorDownloads(packages = "clusterProfiler", when = "last-year")

# from 2015 to current year
bioconductorDownloads(packages = "clusterProfiler", from = 2015)

# 2010 through 2015 (yearly)
bioconductorDownloads(packages = "clusterProfiler", from = 2010, to = 2015,
  unit.observation = "year")

# selected year (yearly)
bioconductorDownloads(packages = "clusterProfiler", from = 2015, to = 2015)

# selected year (monthly)
bioconductorDownloads(packages = "clusterProfiler", from = "2015-01", to = "2015-12")

# June 2014 through March 2015
bioconductorDownloads(packages = "clusterProfiler", from = "2014-06", to = "2015-03")

## End(Not run)

```

---

bioconductorRank      *Package download counts and rank percentiles.*

---

**Description**

From bioconductor

**Usage**

```

bioconductorRank(packages = "monocle", date = "2019-01",
  count = "download")

```

**Arguments**

packages	Character. Vector of package name(s).
date	Character. Date. yyyy-mm
count	Character. "ip" or "download".

**Value**

An R data frame.

**Examples**

```
## Not run:  
bioconductorRank(packages = "cicero", date = "2019-09")  
  
## End(Not run)
```

---

blog.data

*Blog post data.*

---

**Description**

archive.pkg\_ver  
archive.pkg\_ver.filtered  
cran.pkg\_ver  
cran.pkg\_ver.filtered  
dl.ct  
dl.ct2  
pkg.ct  
pkg.ct2  
oct.data  
cholera.data  
ggplot2.data  
VR.data  
smpl  
smpl.histories  
smpl.archive  
smpl.archive.histories  
ccode.ct  
crosstab\_2019\_10\_01  
percentiles  
top.n.oct2019  
top.n.jul2020  
download.country  
october.downloads  
july.downloads

```
cran.pkgs.oct
arch.pkgs.oct
cran.pkgs.jul
arch.pkgs.jul
pkg.history
```

**Usage**

```
blog.data
```

**Format**

A list with 29 elements.

---

countryDistribution    *Tabulate package downloads by country.*

---

**Description**

From RStudio's CRAN Mirror <http://cran-logs.rstudio.com/>

**Usage**

```
countryDistribution(date = NULL, all.filters = FALSE, ip.filter = FALSE,
  small.filter = FALSE, sequence.filter = FALSE, size.filter = FALSE,
  memoization = TRUE, multi.core = FALSE)
```

**Arguments**

date	Character. Date. "yyyy-mm-dd". NULL uses latest available log.
all.filters	Logical. Master switch for filters.
ip.filter	Logical.
small.filter	Logical. TRUE filters out downloads less than 1000 bytes.
sequence.filter	Logical.
size.filter	Logical.
memoization	Logical. Use memoization when downloading logs.
multi.core	Logical or Numeric. TRUE uses <code>parallel::detectCores()</code> . FALSE uses one, single core. You can also specify the number logical cores. Mac and Unix only.

**Value**

An R data frame.

---

countryPackage	<i>Tabulate a country's package downloads.</i>
----------------	--

---

### Description

From RStudio's CRAN Mirror <http://cran-logs.rstudio.com/>

### Usage

```
countryPackage(country = "HK", date = NULL, all.filters = FALSE,
  ip.filter = FALSE, small.filter = FALSE, sequence.filter = FALSE,
  size.filter = FALSE, sort.count = TRUE, memoization = TRUE)
```

### Arguments

country	Character. country abbreviation.
date	Character. Date. "yyyy-mm-dd". NULL uses latest available log.
all.filters	Logical. Master switch for filters.
ip.filter	Logical.
small.filter	Logical. TRUE filters out downloads less than 1000 bytes.
sequence.filter	Logical. Set to FALSE.
size.filter	Logical. Set to FALSE.
sort.count	Logical. Sort by download count.
memoization	Logical. Use memoization when downloading logs.

### Note

"US" outlier 10 min with all filters!

---

countsRanks	<i>Counts v. Rank Percentiles for 'cholera' for First Week of March 2020.</i>
-------------	---

---

### Description

Document code for blog graph.

### Usage

```
countsRanks(package = "cholera", size.filter = FALSE)
```

### Arguments

package	Character.
size.filter	Logical.



---

cranDistribution	<i>CRAN distribution (prototype).</i>
------------------	---------------------------------------

---

**Description**

From Posit's CRAN Mirror <http://cran-logs.rstudio.com/>

**Usage**

```
cranDistribution(date = NULL, all.filters = FALSE, ip.filter = FALSE,
  small.filter = FALSE, memoization = TRUE, multi.core = FALSE)
```

**Arguments**

date	Character. Date. "yyyy-mm-dd". NULL uses latest available log.
all.filters	Logical. Master switch for filters.
ip.filter	Logical.
small.filter	Logical. TRUE filters out downloads less than 1000 bytes.
memoization	Logical. Use memoization when downloading logs.
multi.core	Logical or Numeric. TRUE uses <code>parallel::detectCores()</code> . FALSE uses one, single core. You can also specify the number logical cores. Mac and Unix only.

**Value**

An R data frame.

---

cranDownloads	<i>Daily package downloads from the RStudio CRAN mirror.</i>
---------------	--

---

**Description**

Enhanced implementation of `cranlogs::cran_downloads()`.

**Usage**

```
cranDownloads/packages = NULL, when = NULL, from = NULL, to = NULL,
  check.package = TRUE, dev.mode = FALSE, fix.cranlogs = TRUE,
  pro.mode = FALSE)
```

**Arguments**

packages	A character vector, the packages to query, or NULL for a sum of downloads for all packages. Alternatively, it can also be "R", to query downloads of R itself. "R" cannot be mixed with packages.
when	last-day, last-week or last-month. If this is given, then from and to are ignored.
from	Start date as yyyy-mm-dd, yyyy-mm or yyyy.
to	End date as yyyy-mm-dd, yyyy-mm or yyyy.
check.package	Logical. Validate and "spell check" package.
dev.mode	Logical. Use validatePackage0() to scrape CRAN.
fix.cranlogs	Logical. Use RStudio logs to fix 8 dates with duplicated data in 'cranlogs' results.
pro.mode	Logical. Faster but fewer checks/features. Closer to cranlogs::cran_downloads() but with cranDownloads()'s plot method.

**Examples**

```
## Not run:
cranDownloads/packages = "HistData")
cranDownloads/packages = "HistData", when = "last-week")
cranDownloads/packages = "HistData", when = "last-month")

# January 7 - 31, 2019
cranDownloads/packages = "HistData", from = "2019-01-07", to = "2019-01-31")

# February through March 2019
cranDownloads/packages = "HistData", from = "2019-02", to = "2019-03")

# 2024 year-to-date
cranDownloads/packages = "HistData", from = 2024)

## End(Not run)
```

---

cranInflationPlot      *CRAN inflation plot.*

---

**Description**

Document code.

**Usage**

```
cranInflationPlot(dataset = "october")
```

**Arguments**

dataset      Character. "october" or "july" for October 2019 or July 2020.

---

cranMirrors	<i>Scrape CRAN Mirrors data.</i>
-------------	----------------------------------

---

**Description**

<https://cran.r-project.org/mirrors.html>

**Usage**

```
cranMirrors(description = FALSE)
```

**Arguments**

description      Logical. Mirror details.

---

currentTime	<i>Compute Current Time in Selected Time Zone.</i>
-------------	--

---

**Description**

Compute Current Time in Selected Time Zone.

**Usage**

```
currentTime(tz = "Australia/Sydney")
```

**Arguments**

tz                      Character. Local time zone. See OlsonNames() or use Sys.timezone().

---

downloadsCountry	<i>Compute Downloads by Country Code.</i>
------------------	---

---

**Description**

Compute Downloads by Country Code.

**Usage**

```
downloadsCountry(month_cran_log, multi.core = FALSE)
```

**Arguments**

month\_cran\_log      Object.

multi.core          Logical or Numeric. TRUE uses parallel::detectCores(). FALSE uses one, single core. You can also specify the number logical cores to use. Note that due to performance considerations, the number of cores defaults to one on Windows.

---

filteredDownloads	<i>Filtered package downloads from the RStudio CRAN mirror (prototype).</i>
-------------------	---

---

### Description

ip, small, sequence and size filters.

### Usage

```
filteredDownloads(packages = "HistData", date = NULL, all.filters = TRUE,
  ip.filter = FALSE, small.filter = FALSE, sequence.filter = FALSE,
  size.filter = FALSE, check.package = TRUE, memoization = TRUE,
  multi.core = FALSE)
```

### Arguments

packages	Character. Vector of package name(s).
date	Character. Date. "yyyy-mm-dd". NULL uses latest available log.
all.filters	Logical. Master switch for filters.
ip.filter	Logical.
small.filter	Logical. TRUE filters out downloads less than 1000 bytes.
sequence.filter	Logical.
size.filter	Logical.
check.package	Logical. Validate and "spell check" package.
memoization	Logical. Use memoization when downloading logs.
multi.core	Logical or Numeric. TRUE uses <code>parallel::detectCores()</code> . FALSE uses one, single core. You can also specify the number logical cores. Mac and Unix only.

---

inflationPlot	<i>Inflation plots of effects of "small" downloads and prior versions for October 2019: 'cholera', 'ggplot2', and 'VR'.</i>
---------------	---

---

### Description

Document code for blog graph.

### Usage

```
inflationPlot(package = "cholera", filter = "size",
  legend.loc = "topleft")
```

**Arguments**

package	Character.
filter	Character. Size, version, or size and version
legend.loc	Character. Location of legend.

---

inflationPlot2	<i>Inflation plots of effects of "small" downloads on aggregate CRAN downloads for October 2019 and July 2020.</i>
----------------	--

---

**Description**

Document code.

**Usage**

```
inflationPlot2(dataset = "october", filter = "small", wed = FALSE,
  subtitle = TRUE, legend.loc = "topleft")
```

**Arguments**

dataset	Character. "october" or "july" for October 2019 or July 2020.
filter	Character. "small", "ip", or "ip.small".
wed	Logical.
subtitle	Logical.
legend.loc	Character. Location of legend.

---

ipCount	<i>Count number of IP addresses.</i>
---------	--------------------------------------

---

**Description**

From RStudio's CRAN Mirror <http://cran-logs.rstudio.com/>

**Usage**

```
ipCount(date = NULL, memoization = TRUE, sort.count = TRUE)
```

**Arguments**

date	Character. Date. "yyyy-mm-dd". NULL uses latest available log.
memoization	Logical. Use memoization when downloading logs.
sort.count	Logical. Sort by download count.

---

ipDownloads	<i>Unique package download counts by IP address.</i>
-------------	--

---

**Description**

From RStudio's CRAN Mirror <http://cran-logs.rstudio.com/>

**Usage**

```
ipDownloads(date = NULL, memoization = TRUE)
```

**Arguments**

date	Character. Date. "yyyy-mm-dd". NULL uses latest available log.
memoization	Logical. Use memoization when downloading logs.

---

ipPackage	<i>Tabulate an IP's package downloads.</i>
-----------	--

---

**Description**

From RStudio's CRAN Mirror <http://cran-logs.rstudio.com/>

**Usage**

```
ipPackage(ip = 10, date = NULL, all.filters = FALSE, ip.filter = FALSE,
  small.filter = FALSE, sequence.filter = FALSE, size.filter = FALSE,
  sort.count = TRUE, memoization = TRUE, multi.core = FALSE)
```

**Arguments**

ip	Numeric. ip_id. Positive integer.
date	Character. Date. "yyyy-mm-dd". NULL uses latest available log.
all.filters	Logical. Master switch for filters.
ip.filter	Logical.
small.filter	Logical. TRUE filters out downloads less than 1000 bytes.
sequence.filter	Logical.
size.filter	Logical.
sort.count	Logical. Sort by download count.
memoization	Logical. Use memoization when downloading logs.
multi.core	Logical or Numeric. TRUE uses <code>parallel::detectCores()</code> . FALSE uses one, single core. You can also specify the number logical cores. Mac and Unix only.

**Note**

ip = 10 is a tw top-level domain on 2020-07-09.

---

localTime	<i>Compute Local Time from Coordinated Universal Time (UTC/GMT).</i>
-----------	--

---

**Description**

Compute Local Time from Coordinated Universal Time (UTC/GMT).

**Usage**

```
localTime(date = "2021-1-1", time = "12:00", tz = Sys.timezone())
```

**Arguments**

date	Character. Date "yyyy-mm-dd".
time	Character. Local time "hh:mm" or "hh:mm:ss".
tz	Character. Local time zone. See OlsonNames() or use Sys.timezone().

---

logDate	<i>Compute Effective CRAN Log Date Based on Local and UTC Time (prototype).</i>
---------	---

---

**Description**

RStudio CRAN Mirror Logs for previous day are posted at 17:00:00 UTC.

**Usage**

```
logDate(date = NULL, check.url = TRUE, tz = Sys.timezone(),
        upload.time = "17:00", warning.msg = TRUE, fix.date = TRUE)
```

**Arguments**

date	Character. Date of desired log "yyyy-mm-dd". NULL returns date of latest available log.
check.url	Logical.
tz	Character. Time zone. See OlsonNames().
upload.time	Character. UTC upload time for logs "hh:mm" or "hh:mm:ss".
warning.msg	Logical. TRUE uses warning() if the function returns the date of the previous available log.
fix.date	Logical. Fix date when directly accessing RStudio logs.

**Value**

An R date object.

---

logInfo	<i>Compute Availability, Date, Time of "Today's" Log.</i>
---------	---

---

**Description**

Also checks availability of Posit/RStudio logs and 'cranlogs' data.

**Usage**

```
logInfo(details = FALSE, tz = Sys.timezone(), upload.time = "17:00")
```

**Arguments**

details	Logical. Check available logs and results.
tz	Character. Local time zone. See OlsonNames() or use Sys.timezone().
upload.time	Character. UTC upload time for logs "hh:mm" or "hh:mm:ss".

---

monthlyLog	<i>Get CRAN logs for selected month.</i>
------------	--

---

**Description**

Compute list of log files, 'lst', for packageVersionPercent().

**Usage**

```
monthlyLog(yr.mo = "2020-07")
```

**Arguments**

yr.mo	Character. "yyyy-mm".
-------	-----------------------

**Note**

This is computationally intensive; you're downloading 30 odd files that are each around 50 MB in size (and creating a ~1.5 GB file)! Parallelization not practical; multiple attempts to connect to website causes problems. Truncates in-progress/future dates to yesterday's date. Automatically takes care of leap days (e.g., monthlyLog("2020-02")).



---

packageCountry      *Package download counts by country.*

---

### Description

From RStudio's CRAN Mirror <http://cran-logs.rstudio.com/>

### Usage

```
packageCountry(packages = "cholera", date = NULL, all.filters = FALSE,
  ip.filter = FALSE, small.filter = FALSE, sequence.filter = FALSE,
  size.filter = FALSE, sort = TRUE, na.rm = FALSE, memoization = TRUE,
  check.package = TRUE, multi.core = FALSE)
```

### Arguments

packages	Character. Vector of package name(s).
date	Character. Date. "yyyy-mm-dd". NULL uses latest available log.
all.filters	Logical. Master switch for filters.
ip.filter	Logical.
small.filter	Logical. TRUE filters out downloads less than 1000 bytes.
sequence.filter	Logical.
size.filter	Logical.
sort	Logical. Sort by download count.
na.rm	Logical. Remove NAs.
memoization	Logical. Use memoization when downloading logs.
check.package	Logical. Validate and "spell check" package.
multi.core	Logical or Numeric. TRUE uses <code>parallel::detectCores()</code> . FALSE uses one, single core. You can also specify the number logical cores. Mac and Unix only.

---

packageDistribution      *Package Download Distribution.*

---

### Description

Package Download Distribution.

### Usage

```
packageDistribution(package = "HistData", date = NULL,
  all.filters = FALSE, ip.filter = FALSE, small.filter = FALSE,
  memoization = TRUE, check.package = TRUE, multi.core = FALSE)
```

**Arguments**

package	Character. Vector of package name(s).
date	Character. Date. "yyyy-mm-dd". NULL uses latest available log.
all.filters	Logical. Master switch for filters.
ip.filter	Logical.
small.filter	Logical. TRUE filters out downloads less than 1000 bytes.
memoization	Logical. Use memoization when downloading logs.
check.package	Logical. Validate and "spell check" package.
multi.core	Logical or Numeric. TRUE uses <code>parallel::detectCores()</code> . FALSE uses one, single core. You can also specify the number logical cores. Mac and Unix only.

---

packageHistory	<i>Extract package or R version history.</i>
----------------	--

---

**Description**

Date and version of all publications.

**Usage**

```
packageHistory(package = "cholera", check.package = TRUE)
```

**Arguments**

package	Character. Vector of package names (including "R").
check.package	Logical. Validate and "spell check" package.

---

packageLog	<i>Get Package Download Logs.</i>
------------	-----------------------------------

---

**Description**

From RStudio's CRAN Mirror <http://cran-logs.rstudio.com/>

**Usage**

```
packageLog(packages = "cholera", date = NULL, all.filters = FALSE,
ip.filter = FALSE, sequence.filter = FALSE, size.filter = FALSE,
small.filter = FALSE, memoization = TRUE, check.package = TRUE,
multi.core = FALSE)
```

**Arguments**

packages	Character. Vector of package name(s).
date	Character. Date. "yyyy-mm-dd". NULL uses latest available log.
all.filters	Logical. Master switch for filters.
ip.filter	Logical.
sequence.filter	Logical.
size.filter	Logical.
small.filter	Logical. TRUE filters out downloads less than 1000 bytes.
memoization	Logical. Use memoization when downloading logs.
check.package	Logical. Validate and "spell check" package.
multi.core	Logical or Numeric. TRUE uses <code>parallel::detectCores()</code> . FALSE uses one, single core. You can also specify the number logical cores. Mac and Unix only.

**Value**

An R data frame.

---

packageRank	<i>Package download counts and rank percentiles.</i>
-------------	--

---

**Description**

From Posit/RStudio's CRAN Mirror (CDN) <http://cran-logs.rstudio.com/>

**Usage**

```
packageRank(packages = "packageRank", date = NULL, all.filters = FALSE,
  ip.filter = FALSE, small.filter = FALSE, memoization = TRUE,
  check.package = TRUE, rank.ties = TRUE, multi.core = FALSE)
```

**Arguments**

packages	Character. Vector of package name(s).
date	Character. Date. "yyyy-mm-dd". NULL uses latest available log.
all.filters	Logical. Master switch for filters.
ip.filter	Logical.
small.filter	Logical. TRUE filters out downloads less than 1000 bytes.
memoization	Logical. Use memoization when downloading logs.
check.package	Logical. Validate and "spell check" package.
rank.ties	Logical. TRUE uses competition ranking ("1224") for ties. FALSE uses nominal rank (no ties).
multi.core	Logical or Numeric. TRUE uses <code>parallel::detectCores()</code> . FALSE uses one, single core. You can also specify the number logical cores. Mac and Unix only.

**Value**

An R data frame.

**Examples**

```
## Not run:
packageRank/packages = "cholera", date = "2020-01-01")
packageRank/packages = c("h2o", "Rcpp", "rstan"), date = "2020-01-01")

## End(Not run)
```

---

packageVersionPercent *Compute data for versionPlot().*

---

**Description**

packageRank::blog.data or recompute random sample of packages.

**Usage**

```
packageVersionPercent(lst, yr.mo = "2020-07", multi.core = FALSE)
```

**Arguments**

lst	Object. List of CRAN download logs data frames. Use monthlyLog().
yr.mo	Character. "yyyy-mo". packageVersionsPercent(NULL, yr.mo)
multi.core	Logical or Numeric. TRUE uses parallel::detectCores(). FALSE uses one, single core. You can also specify the number logical cores. Mac and Unix only.

**Examples**

```
## Not run:
# To resample and recompute, set lst to NULL, specify a yr.mo:
packageVersionPercent(NULL, yr.mo = "2020-07")
```

Otherwise, you must provide a pre-computed lst of logs.

```
## End(Not run)
```

---

plot.annualDownloads *Plot method for annualDownloads().*

---

### Description

Plot method for annualDownloads().

### Usage

```
## S3 method for class 'annualDownloads'
plot(x, statistic = "count", pool = TRUE,
     log.y = FALSE, sep.y = FALSE, nrow = 3, smooth = TRUE, f = 1/4,
     span = 3/4, points = FALSE, line.col = "gray", ...)
```

### Arguments

x	object.
statistic	Character. "count" or "percent".
pool	Logical. Pool annual data into single time series.
log.y	Logical. Base 10 logarithm of y-axis.
sep.y	Logical. Separate, independent y-scales for each panel.
nrow	Numeric. Number of rows for ggplot2 facets.
smooth	Logical. Add smoother (loess).
f	Numeric. Parameter for lowess.
span	Numeric. Smoothing parameter for geom_smooth(), which uses loess.
points	Logical.
line.col	Character. Color of line
...	Additional plotting parameters.

---

plot.bioconductorDownloads  
*Plot method for bioconductorDownloads().*

---

### Description

Plot method for bioconductorDownloads().

### Usage

```
## S3 method for class 'bioconductorDownloads'
plot(x, graphics = NULL,
     count = "download", cumulative = FALSE, points = "auto",
     smooth = FALSE, f = 2/3, span = 3/4, se = FALSE, log.y = FALSE,
     r.version = FALSE, same.xy = TRUE, multi.plot = FALSE,
     legend.loc = "topleft", ...)
```

**Arguments**

x	object.
graphics	Character. NULL, "base" or "ggplot2".
count	Character. "download" or "ip".
cumulative	Logical. Use cumulative counts.
points	Character of Logical. Plot points. "auto", TRUE, FALSE. "auto" for bioconductorDownloads(unit.observation = "month") with 24 or fewer months, points are plotted.
smooth	Logical. Add stats::lowess smoother.
f	Numeric. smoother window for stats::lowess(). For graphics = "base" only; c.f. stats::lowess(f)
span	Numeric. Smoothing parameter for geom_smooth(); c.f. stats::loess(span).
se	Logical. Works only with graphics = "ggplot2".
log.y	Logical. Logarithm of package downloads.
r.version	Logical. Add R release dates.
same.xy	Logical. Use same scale for multiple packages when graphics = "base".
multi.plot	Logical. Plot all data in a single window frame.
legend.loc	Character.
...	Additional plotting parameters.

**Examples**

```
## Not run:
plot(bioconductorDownloads())
plot(bioconductorDownloads/packages = "graph")
plot(bioconductorDownloads/packages = "graph", from = 2010, to = 2015)
plot(bioconductorDownloads/packages = "graph", from = "2014-06", to = "2015-03")
plot(bioconductorDownloads/packages = c("graph", "IRanges", "S4Vectors"), from = 2018)

## End(Not run)
```

---

plot.bioconductorRank *Plot method for bioconductorRank().*

---

**Description**

Plot method for bioconductorRank().

**Usage**

```
## S3 method for class 'bioconductorRank'
plot(x, graphics = NULL, log.y = TRUE, ...)
```

**Arguments**

x	An object of class "bioconductor_rank" created by bioconductorRank().
graphics	Character. "base" or "ggplot2".
log.y	Logical. Logarithm of package downloads.
...	Additional plotting parameters.

**Value**

A base R or ggplot2 plot.

---

plot.countryDistribution

*Plot top 10 package downloads by country domain.*

---

**Description**

Plot method for countryDistribution().

**Usage**

```
## S3 method for class 'countryDistribution'
plot(x, N = 10, ...)
```

**Arguments**

x	An object of class "countryDistribution" created by countryDistribution().
N	Integer. Top N countries.
...	Additional plotting parameters.

---

plot.countsRanks

*Plot method for countsRanks().*

---

**Description**

Plot method for countsRanks().

**Usage**

```
## S3 method for class 'countsRanks'
plot(x, ...)
```

**Arguments**

x	object.
...	Additional plotting parameters.

---

plot.cranDistribution *Plot method for cranDistribution()*.

---

### Description

Plot method for cranDistribution().

### Usage

```
## S3 method for class 'cranDistribution'  
plot(x, type = "count", ...)
```

### Arguments

x	An object of class "cranDistribution" created by cranDistribution().
type	Character. "histogram" or "count".
...	Additional plotting parameters.

### Value

A base R plot.

---

plot.cranDownloads *Plot method for cranDownloads()*.

---

### Description

Plot method for cranDownloads().

### Usage

```
## S3 method for class 'cranDownloads'  
plot(x, statistic = "count", graphics = "auto",  
     points = "auto", log.y = FALSE, smooth = FALSE, se = FALSE,  
     f = 1/3, span = 3/4, package.version = FALSE, r.version = FALSE,  
     population.plot = FALSE, population.seed = as.numeric(Sys.Date()),  
     multi.plot = FALSE, same.xy = TRUE, legend.location = "topleft",  
     ip.legend.location = "topright", r.total = FALSE, dev.mode = FALSE,  
     unit.observation = "day", multi.core = FALSE, ...)
```



**Arguments**

x	object.
statistic	Character. "count" or "cumulative".
graphics	Character. "auto", "base" or "ggplot2".
points	Character of Logical. Plot points. "auto", TRUE, FALSE.
log.y	Logical. Logarithm of package downloads.
smooth	Logical. Add smoother.
se	Logical. Works only with graphics = "ggplot2".
f	Numeric. smoother window for stats::lowess(). For graphics = "base" only; c.f. stats::lowess(f)
span	Numeric. Smoothing parameter for geom_smooth(); c.f. stats::loess(span).
package.version	Logical. Add latest package release dates.
r.version	Logical. Add R release dates.
population.plot	Logical. Plot population plot.
population.seed	Numeric. Seed for sample in population plot.
multi.plot	Logical.
same.xy	Logical. Use same scale for multiple packages when graphics = "base".
legend.location	Character.
ip.legend.location	Character. Location of in-progress legend.
r.total	Logical.
dev.mode	Logical. Use packageHistory0() to scrape CRAN.
unit.observation	Character. "year", "month", "week", or "day".
multi.core	Logical or Numeric. TRUE uses parallel::detectCores(). FALSE uses one, single core. You can also specify the number logical cores. Mac and Unix only.
...	Additional plotting parameters.

**Value**

A base R or ggplot2 plot.

**Examples**

```
## Not run:
plot(cranDownloads/packages = c("Rcpp", "rlang", "data.table"))
plot(cranDownloads/packages = c("Rcpp", "rlang", "data.table"), when = "last-month")
plot(cranDownloads/packages = "R", from = "2020-01-01", to = "2020-01-01")
plot(cranDownloads/packages = "R", from = 2020)

## End(Not run)
```

---

plot.packageDistribution

*Plot method for packageDistribution().*

---

### Description

Plot method for packageDistribution().

### Usage

```
## S3 method for class 'packageDistribution'  
plot(x, ...)
```

### Arguments

x                    An object of class "packageDistribution" created by packageDistribution().  
...                   Additional plotting parameters.

---

plot.packageRank

*Plot method for packageRank() and packageRank0().*

---

### Description

Plot method for packageRank() and packageRank0().

### Usage

```
## S3 method for class 'packageRank'  
plot(x, graphics = NULL, log.y = TRUE, ...)
```

### Arguments

x                    An object of class "packageRank" created by packageRank().  
graphics             Character. "base" or "ggplot2".  
log.y                Logical. Logarithm of package downloads.  
...                   Additional plotting parameters.

### Value

A base R or ggplot2 plot.

**Examples**

```
## Not run:
plot(packageRank(packages = "HistData", date = "2020-01-01"))
plot(packageRank(packages = c("h2o", "Rcpp", "rstan"), date = "2020-01-01"))

## End(Not run)
```

---

```
plot.packageVersionPercent
```

*Plot method for packageVersionPercent().*

---

**Description**

Plot method for packageVersionPercent().

**Usage**

```
## S3 method for class 'packageVersionPercent'
plot(x, ...)
```

**Arguments**

x	An object of class "packageVersionPercent".
...	Additional plotting parameters.

---

```
plot.weeklyDownloads Plot method for weeklyDownloads().
```

---

**Description**

Plot method for weeklyDownloads().

**Usage**

```
## S3 method for class 'weeklyDownloads'
plot(x, statistic = "percent",
     aggregation = "day", typical.value = "mean", nrow = 3L, ...)
```

**Arguments**

x	object.
statistic	Character. "count" or "percent".
aggregation	Character. "week" or "day".
typical.value	Character. "mean" or "median".
nrow	Numeric. Number of rows for ggplot2 facets.
...	Additional plotting parameters.

**Examples**

```
## Not run:  
plot(weeklyDownloads())  
plot(weeklyDownloads(n = 9), aggregation = "week")  
  
## End(Not run)
```

---

plotDownloadsCountry *Plot Compute Downloads by Country Code.*

---

**Description**

Plot Compute Downloads by Country Code.

**Usage**

```
plotDownloadsCountry()
```

---

plotTopCountryCodes *Plot Top N Downloads by Country Code.*

---

**Description**

Plot Top N Downloads by Country Code.

**Usage**

```
plotTopCountryCodes(dataset = "october", second.place = FALSE)
```

**Arguments**

dataset           Character.  
second.place      Logical. Annotate second place country.

---

```
print.bioconductorDownloads
```

*Print method for bioconductorDownloads().*

---

### **Description**

Print method for bioconductorDownloads().

### **Usage**

```
## S3 method for class 'bioconductorDownloads'  
print(x, ...)
```

### **Arguments**

x	object.
...	Additional parameters.

---

```
print.bioconductorRank
```

*Print method for bioconductorRank().*

---

### **Description**

Print method for bioconductorRank().

### **Usage**

```
## S3 method for class 'bioconductorRank'  
print(x, ...)
```

### **Arguments**

x	An object of class "bioconductor_rank" created by bioconductorRank()
...	Additional parameters.

---

```
print.countryDistribution
```

*Print method for countryDistribution().*

---

**Description**

Print method for countryDistribution().

**Usage**

```
## S3 method for class 'countryDistribution'  
print(x, N = 10, ...)
```

**Arguments**

x	object.
N	Integer. Top N countries.
...	Additional parameters.

---

```
print.cranDistribution
```

*Print method for cranDistribution().*

---

**Description**

Print method for cranDistribution().

**Usage**

```
## S3 method for class 'cranDistribution'  
print(x, ...)
```

**Arguments**

x	object.
...	Additional parameters.

---

`print.cranDownloads`    *Print method for cranDownloads().*

---

### **Description**

Print method for cranDownloads().

### **Usage**

```
## S3 method for class 'cranDownloads'  
print(x, ...)
```

### **Arguments**

`x`                    object.  
`...`                 Additional parameters.

---

`print.packageDistribution`  
                          *Print method for packageDistribution().*

---

### **Description**

Print method for packageDistribution().

### **Usage**

```
## S3 method for class 'packageDistribution'  
print(x, ...)
```

### **Arguments**

`x`                    An object of class "packageDistribution" created by packageDistribution()  
`...`                 Additional parameters.

---

```
print.packageRank      Print method for packageRank().
```

---

**Description**

Print method for packageRank().

**Usage**

```
## S3 method for class 'packageRank'
print(x, ...)
```

**Arguments**

x                    An object of class "packageRank" created by packageRank()  
 ...                  Additional parameters.

---

```
queryCount             Query download count.
```

---

**Description**

Query download count.

**Usage**

```
queryCount(count = 1, date = NULL, all.filters = FALSE,
            ip.filter = FALSE, small.filter = FALSE, memoization = TRUE,
            multi.core = FALSE)
```

**Arguments**

count                Numeric or Integer. whole number.  
 date                 Character. Date. "yyyy-mm-dd". NULL uses latest available log.  
 all.filters         Logical. Master switch for filters.  
 ip.filter            Logical.  
 small.filter        Logical. TRUE filters out downloads less than 1000 bytes.  
 memoization         Logical. Use memoization when downloading logs.  
 multi.core          Logical or Numeric. TRUE uses parallel::detectCores(). FALSE uses one, single core. You can also specify the number logical cores. Mac and Unix only.

**Value**

An R data frame.



---

queryPackage	<i>Query package name.</i>
--------------	----------------------------

---

**Description**

Query package name.

**Usage**

```
queryPackage(package = "packageRank", date = NULL, all.filters = FALSE,
             ip.filter = FALSE, small.filter = FALSE, memoization = TRUE,
             multi.core = FALSE)
```

**Arguments**

package	Character..
date	Character. Date. "yyyy-mm-dd". NULL uses latest available log.
all.filters	Logical. Master switch for filters.
ip.filter	Logical.
small.filter	Logical. TRUE filters out downloads less than 1000 bytes.
memoization	Logical. Use memoization when downloading logs.
multi.core	Logical or Numeric. TRUE uses <code>parallel::detectCores()</code> . FALSE uses one, single core. You can also specify the number logical cores. Mac and Unix only.

**Value**

An R data frame.

---

queryPercentile	<i>Percentile-rank query.</i>
-----------------	-------------------------------

---

**Description**

Percentile-rank query.

**Usage**

```
queryPercentile(percentile = 50, lo = NULL, hi = NULL, date = NULL,
               all.filters = FALSE, ip.filter = FALSE, small.filter = FALSE,
               memoization = TRUE, multi.core = FALSE)
```

**Arguments**

percentile	Numeric. 50 uses median().
lo	Integer.
hi	Integer
date	Character. Date. "yyyy-mm-dd". NULL uses latest available log.
all.filters	Logical. Master switch for filters.
ip.filter	Logical.
small.filter	Logical. TRUE filters out downloads less than 1000 bytes.
memoization	Logical. Use memoization when downloading logs.
multi.core	Logical or Numeric. TRUE uses <code>parallel::detectCores()</code> . FALSE uses one, single core. You can also specify the number logical cores. Mac and Unix only.

**Value**

An R data frame.

---

queryRank	<i>Rank query.</i>
-----------	--------------------

---

**Description**

Rank query.

**Usage**

```
queryRank(num.rank = 1, rank.ties = FALSE, date = NULL,
  all.filters = FALSE, ip.filter = FALSE, small.filter = FALSE,
  memoization = TRUE, multi.core = FALSE)
```

**Arguments**

num.rank	Numeric or Integer.
rank.ties	Logical. TRUE uses ties. FALSE does not.
date	Character. Date. "yyyy-mm-dd". NULL uses latest available log.
all.filters	Logical. Master switch for filters.
ip.filter	Logical.
small.filter	Logical. TRUE filters out downloads less than 1000 bytes.
memoization	Logical. Use memoization when downloading logs.
multi.core	Logical or Numeric. TRUE uses <code>parallel::detectCores()</code> . FALSE uses one, single core. You can also specify the number logical cores. Mac and Unix only.

**Value**

An R data frame.

---

rLog	<i>Get R Application Download Logs.</i>
------	---

---

**Description**

From RStudio's CRAN Mirror <http://cran-logs.rstudio.com/>

**Usage**

```
rLog(date = NULL)
```

**Arguments**

date	Character. Date. "yyyy-mm-dd". NULL uses last available log.
------	--

---

rstudio.logs	<i>Eight RStudio Download Logs to Fix Duplicate Logs Errors in 'cran-logs'.</i>
--------------	---

---

**Description**

October 6-8, 2012; October 11, 2012; December 26-28; and January 1, 2013.

**Usage**

```
rstudio.logs
```

**Format**

```
date
time
size
r_version
r_arch
r_os
package
version
country
ip_id
```

---

summary.bioconductorDownloads

*Summary method for bioconductorDownloads().*

---

### Description

Summary method for bioconductorDownloads().

### Usage

```
## S3 method for class 'bioconductorDownloads'  
summary(object, ...)
```

### Arguments

object	Object.
...	Additional parameters.

---

summary.bioconductorRank

*Summary method for bioconductorRank().*

---

### Description

Summary method for bioconductorRank().

### Usage

```
## S3 method for class 'bioconductorRank'  
summary(object, ...)
```

### Arguments

object	Object. An object of class "bioconductor_rank" created by bioconductorRank()
...	Additional parameters.

### Note

This is useful for directly accessing the data frame.

---

```
summary.cranDistribution  
    Summary method for cranDistribution().
```

---

**Description**

Five number (+ mean) summary of download count distribution

**Usage**

```
## S3 method for class 'cranDistribution'  
summary(object, ...)
```

**Arguments**

object            An object of class "cranDistribution" created by cranDistribution().  
...                Additional plotting parameters.

**Value**

A base R vector

---

```
summary.cranDownloads Summary method for cranDownloads().
```

---

**Description**

Summary method for cranDownloads().

**Usage**

```
## S3 method for class 'cranDownloads'  
summary(object, ...)
```

**Arguments**

object            Object.  
...                Additional parameters.

**Note**

This is useful for directly accessing the data frame.

---

summary.packageRank     *Summary method for packageRank().*

---

### Description

Summary method for packageRank().

### Usage

```
## S3 method for class 'packageRank'
summary(object, ...)
```

### Arguments

object             Object. An object of class "packageRank" created by packageRank()  
 ...                Additional parameters.

### Note

This is useful for directly accessing the data frame.

---

topCountryCodes     *Compute Top N Downloads by Country Code.*

---

### Description

Compute Top N Downloads by Country Code.

### Usage

```
topCountryCodes(month_cran_log, top.n = 5L, multi.core = FALSE)
```

### Arguments

month\_cran\_log     Object.  
 top.n               Integer.  
 multi.core         Logical or Numeric. TRUE uses parallel::detectCores(). FALSE uses one, single core. You can also specify the number logical cores to use. Note that due to performance considerations, the number of cores defaults to one on Windows.

---

utc	<i>Compute Coordinated Universal Time (UTC/GMT) for Your Local Time.</i>
-----	--

---

**Description**

Compute Coordinated Universal Time (UTC/GMT) for Your Local Time.

**Usage**

```
utc()
```

---

utc0	<i>Compute Coordinated Universal Time (UTC/GMT) for Specified Local Time.</i>
------	---

---

**Description**

Compute Coordinated Universal Time (UTC/GMT) for Specified Local Time.

**Usage**

```
utc0(date = "2020-01-01", time = "12:00:00", tz = "Europe/Vienna")
```

**Arguments**

date	Character. Date "yyyy-mm-dd".
time	Character. Local time "hh:mm" or "hh:mm:ss".
tz	Character. Local time zone. See OlsonNames() or use Sys.timezone().

---

versionPlot	<i>Version Plot.</i>
-------------	----------------------

---

**Description**

Document code for blog graph.

**Usage**

```
versionPlot()
```

---

weeklyDownloads      *Sample Weekly CRAN Downloads Data.*

---

**Description**

From RStudio's CRAN Mirror <http://cran-logs.rstudio.com/>

**Usage**

```
weeklyDownloads(start.yr = 2013, n = 50, multi.core = FALSE)
```

**Arguments**

<code>start.yr</code>	Numeric or Integer.
<code>n</code>	Numeric or Integer. Number of weeks (samples).
<code>multi.core</code>	Logical or Numeric. TRUE uses <code>parallel::detectCores()</code> . FALSE uses one, single core. You can also specify the number logical cores. Mac and Unix only.



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