

# Package ‘provTraceR’

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**Title** Uses Provenance to Trace File Lineage for One or more R Scripts

**Version** 1.0

**Date** 2020-08-04

**Description** Uses provenance collected by 'rdtLite' package or comparable tool to display information about input files, output files, and exchanged files for a single R script or a series of R scripts.

**Depends** R (>= 3.5)

**License** GPL-3

**Encoding** UTF-8

**LazyData** true

**Imports** provParseR (>= 0.3)

**Suggests** digest, knitr, rdt, rdtLite, rmarkdown, testthat

**Additional\_repositories** <https://end-to-end-provenance.github.io/drat/>

**URL** <https://github.com/End-to-end-provenance>

**BugReports** <https://github.com/End-to-end-provenance/provTraceR/issues>

**RoxygenNote** 7.1.0

**VignetteBuilder** knitr

**NeedsCompilation** no

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**Repository** CRAN

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prov.trace                      *File lineage functions*

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### Description

prov.trace traces file lineage from existing provenance.

prov.trace.run runs the specified script(s), collects provenance, and uses the provenance to trace file lineage.

### Usage

```
prov.trace(
  scripts,
  prov.dir = NULL,
  file.details = FALSE,
  console = TRUE,
  save = FALSE,
  save.dir = NULL,
  check = TRUE
)
```

```
prov.trace.run(
  scripts,
  prov.dir = NULL,
  file.details = FALSE,
  console = TRUE,
  save = FALSE,
  save.dir = NULL,
  check = TRUE,
  prov.tool = "rdtLite",
  details = FALSE,
  ...
)
```

### Arguments

scripts	a script name, a vector of script names, or a text file of script names (file extension = .txt)
prov.dir	provenance directory
file.details	whether to display file details
console	whether to display results in the console
save	whether to save results to the file prov-trace.txt
save.dir	where to save the results file. If NULL, use the R session temporary directory. If a period (.), use the current working directory. Otherwise use save.dir.
check	whether to check against the user's file system

<code>prov.tool</code>	provenance collection tool (rdtLite or rdt)
<code>details</code>	whether to collect fine-grained provenance
<code>...</code>	other parameters passed to the provenance collector

**Value**

string containing file lineage  
string containing file lineage

**Examples**

```
prov.dir <- system.file("testdata", package="provTraceR")  
prov.trace(c("script-1.R", "script-2.R"), prov.dir=prov.dir)
```

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