ART
Accelerate
Reinvent
Transcend

sanofi

ART

(Analysis and Reporting Technology)

R package Validation

Edward Gillian, Hugo Bottois, Paulin Charliquart, Andre Couturier

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Goal and Context

Open-source projects can improve how clinical trials work by making them more transparent and collaborative to solve problems and define a common standard in the clinical trial ecosystem.

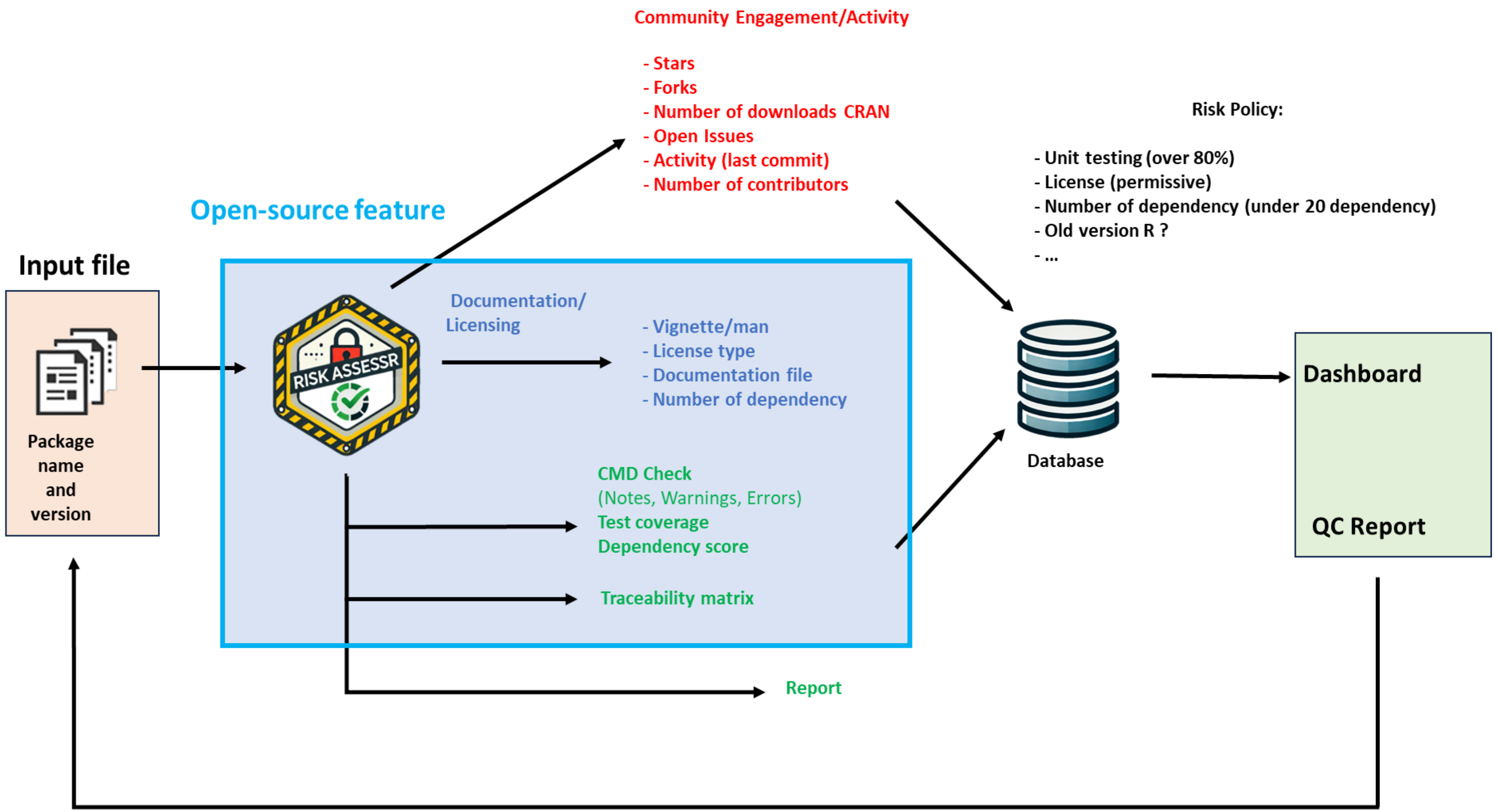
Successful open source packages such as admiral, tern and as well as collaborative initiatives (Pharmaverse, Transcellerate, Phuse) could greatly standardize and harmonize processes for different laboratories as well as allowing for faster deliverable for submission.
However, open source raises inherent challenges in terms of:

Security	**Legal**	**Operational**
- Vulnerability issues - Confidentiality concerns	- Is the source code under a non-permissive license?	- Is the package maintained by an active community? - Does it follow good practices? - Is it sustainable? - Is the pkg of good quality?

We need to use open-source projects responsibly and safely by adhering to best practices and ensure the reliability of the package being utilized by Sanofi for FDA submission.

The ART team is creating a risk validation process that allows programmers to validate packages as they progress through the various stages of development.

Package validation Workflow



Input file

Package
name
and
version

Open-source feature

Documentation/
Licensing

- Vignette/man
- License type
- Documentation file
- Number of dependency

CMD Check
(Notes, Warnings, Errors)
Test coverage
Dependency score

Traceability matrix

Report

Community Engagement/Activity

- Stars
- Forks
- Number of downloads CRAN
- Open Issues
- Activity (last commit)
- Number of contributors

Risk Policy:

- Unit testing (over 80%)
- License (permissive)
- Number of dependency (under 20 dependency)
- Old version R ?
- ...

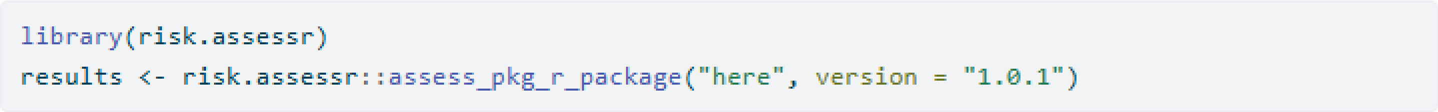
Database

Dashboard

QC Report

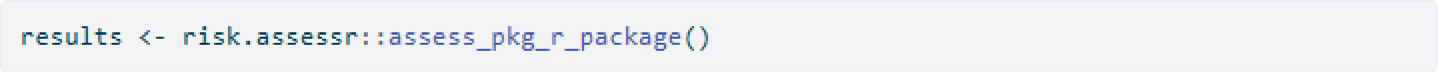
risk.assessr R package

For Open-source R package on CRAN



```
library(risk.assessr)
results <- risk.assessr::assess_pkg_r_package("here", version = "1.0.1")
```

For internal R package or any locally stored .tar R package



```
results <- risk.assessr::assess_pkg_r_package()
```

Data extraction from source code on CRAN

`tern: Create Common TLGs Used in Clinical Trials`

Table, Listings, and Graphs (TLG) library for common outputs used in clinical trials.

Version:	0.9.5
Depends:	R (≥ 3.6), rtables (≥ 0.6.8)
Imports:	broom (≥ 0.5.4), car (≥ 3.0-13), checkmate (≥ 2.1.0), cowplot (≥ 1.0.0), dplyr (≥ 1.0.0), emmeans (≥ 1.8.0), forcats (≥ 1.0.0), formatters (≥ 0.5.8), ggplot 60), methods, Rdpack (≥ 2.4), rlang (≥ 1.1.0), scales (≥ 1.2.0), stats, survival (≥ 3.2-13), tibble (≥ 2.0.0), tidyr (≥ 0.8.3), utils
Suggests:	knitr (≥ 1.42), lattice (≥ 0.18-4), lubridate (≥ 1.7.9), nestcolor (≥ 0.1.1), rmarkdown (≥ 2.19), stringr (≥ 1.4.1), svglite (≥ 2.1.2), testthat (≥ 3.1.9), withr (
Published:	2024-06-21
DOI:	10.32614/CRAN.package.tern
Author:	Joe Zhu [aut, cre], Daniel Sabanés Bové [aut], Jana Stoilova [aut], Davide Garolini [aut], Emily de la Rua [aut], Abinaya Yogasekaram [aut], Heng Wan Hoffmann-La Roche AG [cph, fnd]
Maintainer:	Joe Zhu <joe.zhu at roche.com>
BugReports:	https://github.com/insightsengineering/tern/issues
License:	Apache License 2.0
URL:	https://insightsengineering.github.io/tern/, https://github.com/insightsengineering/tern/
NeedsCompilation:	no
Language:	en-US
Materials:	README NEWS
CRAN checks:	tern results

`Documentation:`

Reference manual:	tern.pdf
Vignettes:	Missing Values in Tern Tabulation Introduction to tern Formatting Functions

`Downloads:`

Package source:	tern_0.9.5.tar.gz
Windows binaries:	r-devel: tern_0.9.5.zip, r-release: tern_0.9.5.zip, r-oldrel: tern_0.9.5.zip
macOS binaries:	r-release (arm64): tern_0.9.5.tgz, r-oldrel (arm64): tern_0.9.5.tgz, r-release (x86_64): tern_0.9.5.tgz, r-oldrel (x86_64): tern_0.9.5.tgz
Old sources:	tern archive

`Reverse dependencies:`

Reverse depends:	teal.modules.clinical, tern.gee, tern.mmrm
Reverse imports:	chevron, teal.modules.general

`Linking:`

Please use the canonical form `https://CRAN.R-project.org/package=tern` to link to this page.

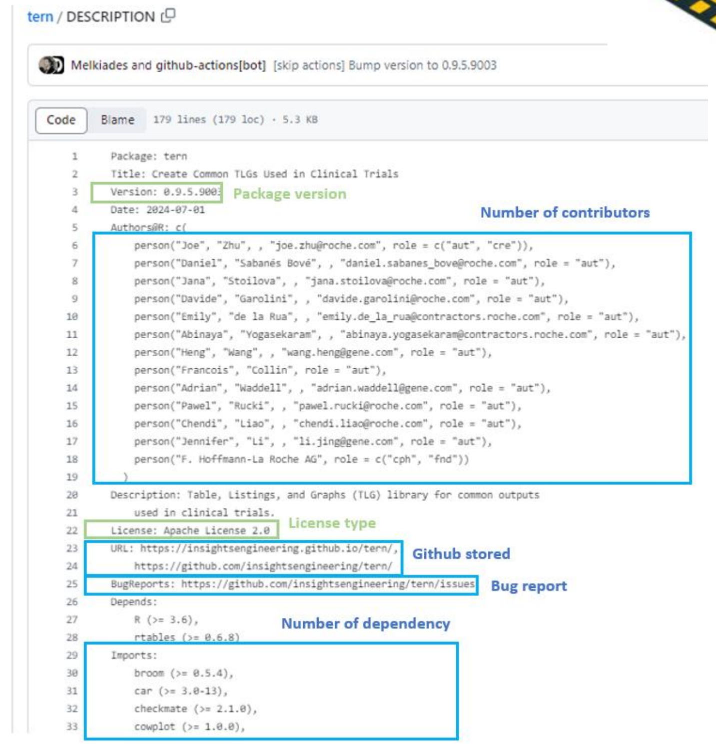
Latest version .tar file

Archived version package

Index of /src/contrib/Archive/tern

Name	Last modified	Size	Description
Parent Directory		-	
tern_0.8.3.tar.gz	2023-06-19 17:20	2.2M	
tern_0.8.4.tar.gz	2023-06-27 13:00	2.2M	
tern_0.9.0.tar.gz	2023-09-01 11:20	2.3M	
tern_0.9.3.tar.gz	2023-12-08 17:20	4.1M	
tern_0.9.4.tar.gz	2024-04-17 08:50	4.2M	

Apache Server at cran.r-project.org Port 443



tern / DESCRIPTION

Melkiades and github-actions[bot] [skip actions] Bump version to 0.9.5.9003

179 lines (179 loc) · 5.3 KB

```
Package: tern
Title: Create Common TLGs Used in Clinical Trials
Version: 0.9.5.9003
Date: 2024-07-01
Authors@R: c(
    person("Joe", "Zhu", , "joe.zhu@roche.com", role = c("aut", "cre")),
    person("Daniel", "Sabanés Bové", , "daniel.sabanes_bove@roche.com", role = "aut"),
    person("Jana", "Stoilova", , "jana.stoilova@roche.com", role = "aut"),
    person("Davide", "Garolini", , "davide.garolini@roche.com", role = "aut"),
    person("Emily", "de la Rua", , "emily.de_la_rua@contractors.roche.com", role = "aut"),
    person("Abinaya", "Yogasekaram", , "abinaya.yogasekaram@contractors.roche.com", role = "aut"),
    person("Heng", "Wang", , "wang.heng@gene.com", role = "aut"),
    person("Francois", "Collin", role = "aut"),
    person("Adrian", "Waddell", , "adrian.waddell@gene.com", role = "aut"),
    person("Pawel", "Rucki", , "pawel.rucki@roche.com", role = "aut"),
    person("Chendi", "Liao", , "chendi.liao@roche.com", role = "aut"),
    person("Jennifer", "Li", , "li.jing@gene.com", role = "aut"),
    person("F. Hoffmann-La Roche AG", role = c("cph", "fnd"))
  )
Description: Table, Listings, and Graphs (TLG) library for common outputs
    used in clinical trials.
License: Apache License 2.0
URL: https://insightsengineering.github.io/tern/,
    https://github.com/insightsengineering/tern/
BugReports: https://github.com/insightsengineering/tern/issues
Depends:
    R (>= 3.6),
    rtables (>= 0.6.8)
Imports:
    broom (>= 0.5.4),
    car (>= 3.0-13),
    checkmate (>= 2.1.0),
    cowplot (>= 1.0.0),
```

Package version

Number of contributors

License type

Github stored

Bug report

Number of dependency

tern / LICENSE

edelarua Check all URLs (#909)

13 lines (10 loc) · 565 Bytes

```
Copyright 2022 F. Hoffmann-La Roche AG

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at
```

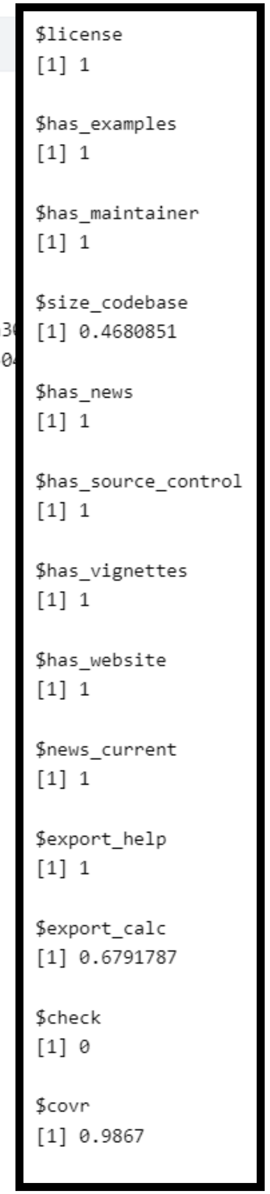
License type

- **Data extraction from .tar package source code**

risk.assessr R package

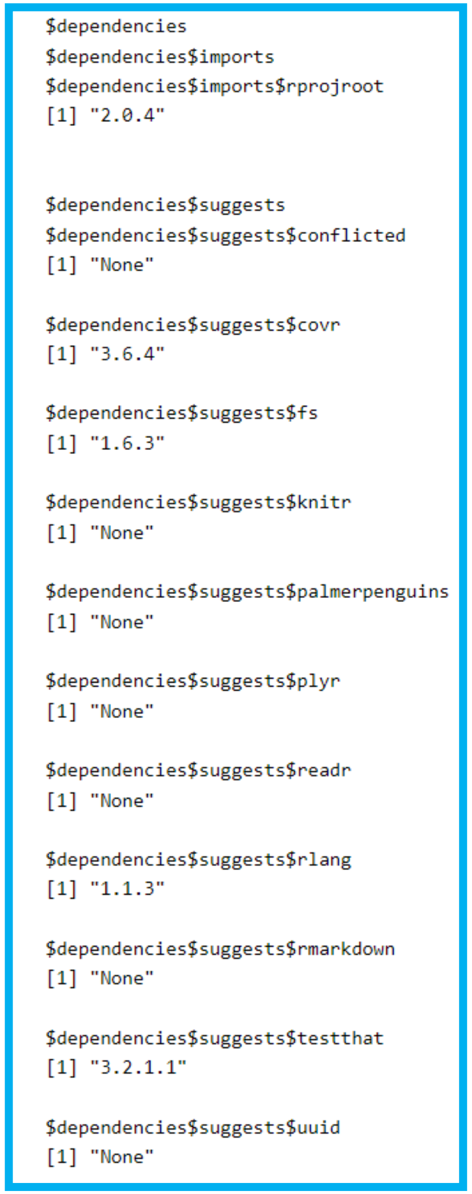
```
results$results

$pkg_name
[1] "here"

$pkg_version
[1] "1.0.1"

$pkg_source_path
  C:/Users/I0555262/AppData/Local/Temp/RtmpOc7aOz/temp_file_5a3
"C:/Users/I0555262/AppData/Local/Temp/RtmpOc7aOz/temp_file_5a30

$date_time
[1] "2024-10-29 12:08:35"

$executor
[1] ""

$sysname
[1] "Windows"

$version
[1] "build 19045"

$release
[1] "10 x64"

$machine
[1] "x86-64"

$comments
[1] " "

$has_bug_reports_url
[1] 1
```

Quality metrics

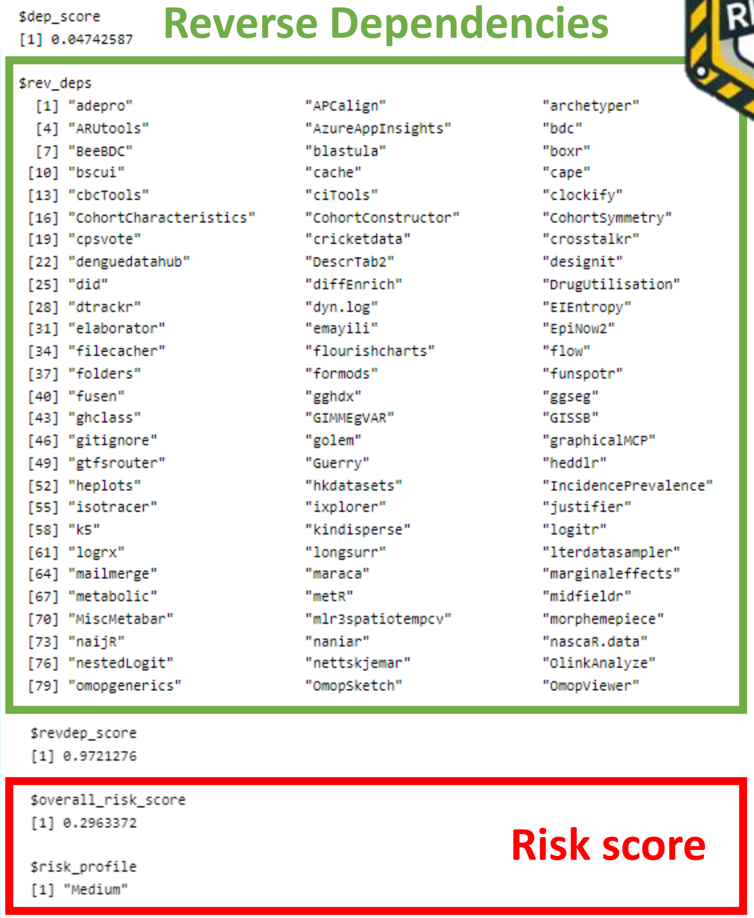


```
$license
[1] 1

$has_examples
[1] 1

$has_maintainer
[1] 1

$size_codebase
[1] 0.4680851

$has_news
[1] 1

$has_source_control
[1] 1

$has_vignettes
[1] 1

$has_website
[1] 1

$news_current
[1] 1

$export_help
[1] 1

$export_calc
[1] 0.6791787

$check
[1] 0

$covr
[1] 0.9867
```

Dependencies



```
$dependencies
$dependencies$imports
$dependencies$imports$rprojroot
[1] "2.0.4"


$dependencies$suggests
$dependencies$suggests$conflicted
[1] "None"

$dependencies$suggests$covr
[1] "3.6.4"

$dependencies$suggests$fs
[1] "1.6.3"

$dependencies$suggests$knitr
[1] "None"

$dependencies$suggests$palmerpenguins
[1] "None"

$dependencies$suggests$plyr
[1] "None"

$dependencies$suggests$readr
[1] "None"

$dependencies$suggests$rlang
[1] "1.1.3"

$dependencies$suggests$rmarkdown
[1] "None"

$dependencies$suggests$testthat
[1] "3.2.1.1"

$dependencies$suggests$uuid
[1] "None"
```



```
$dep_score
[1] 0.04742587
```

Reverse Dependencies

```
$rev_deps
 [1] "adepro"                    "APCalign"                 "archetyper"
 [4] "ARUtools"                  "AzureAppInsights"         "bdc"
 [7] "BeeBDC"                    "blastula"                 "boxr"
[10] "bscui"                     "cache"                    "cape"
[13] "cbcTools"                  "ciTools"                  "clockify"
[16] "CohortCharacteristics"     "CohortConstructor"        "CohortSymmetry"
[19] "cpsvote"                   "cricketdata"              "crosstalkr"
[22] "denguedatahub"             "DescrTab2"                "designit"
[25] "did"                       "diffEnrich"               "DrugUtilisation"
[28] "dtrackr"                   "dyn.log"                  "EIEntropy"
[31] "elaborator"                "emayili"                  "EpiNow2"
[34] "filecacher"                "flourishcharts"           "flow"
[37] "folders"                   "formods"                  "funspotr"
[40] "fusen"                     "gghdx"                    "ggseg"
[43] "ghclass"                   "GIMMEgVAR"                "GISSB"
[46] "gitignore"                 "golem"                    "graphicalMCP"
[49] "gtfsrouter"                "Guerry"                   "heddlr"
[52] "heplots"                   "hkdatasets"               "IncidencePrevalence"
[55] "isotracer"                 "ixplorer"                 "justifier"
[58] "k5"                        "kindisperse"              "logitr"
[61] "logrx"                     "longsurr"                 "lterdatasampler"
[64] "mailmerge"                 "maraca"                   "marginaleffects"
[67] "metabolic"                 "metR"                     "midfieldr"
[70] "MiscMetabar"               "mlr3spatiotempcv"         "morphemepiece"
[73] "naijR"                     "naniar"                   "nascaR.data"
[76] "nestedLogit"               "nettskjemar"              "OlinkAnalyze"
[79] "omopgenerics"              "OmopSketch"               "OmopViewer"
```

```
$revdep_score
[1] 0.9721276
```

```
$overall_risk_score
[1] 0.2963372

$risk_profile
[1] "Medium"
```

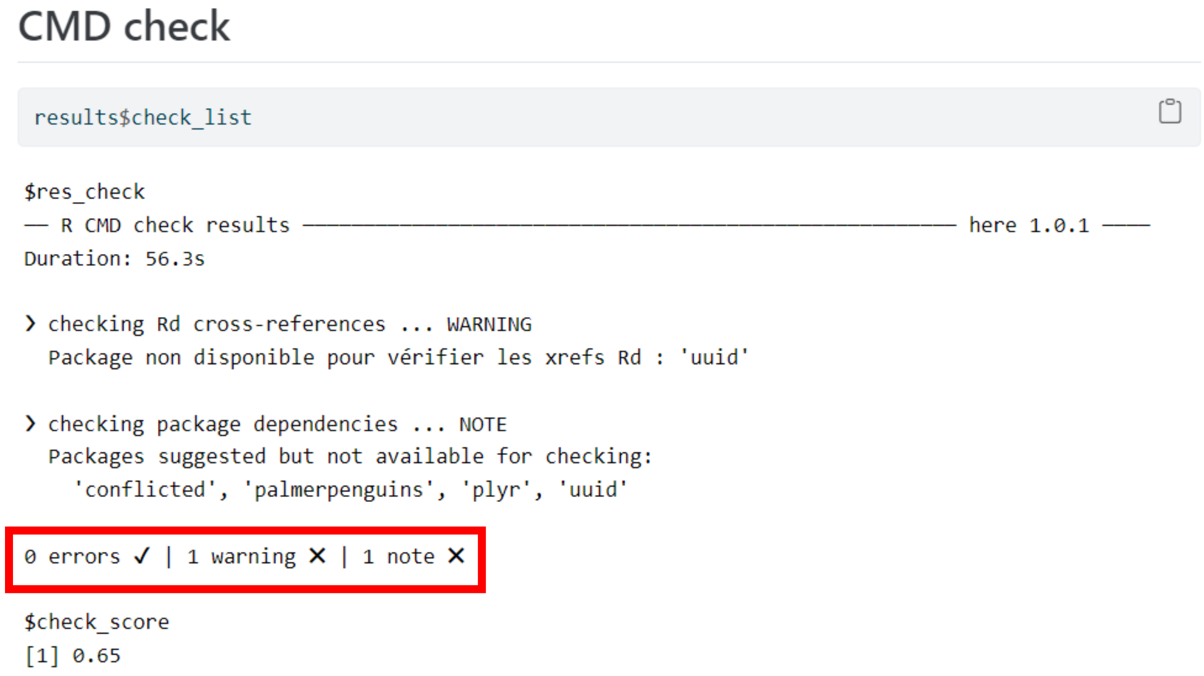
Risk score

risk.assessr R package

Test coverage

```
results$covr_list
```

```
$total_cov
[1] 0.9867

$res_cov
$res_cov$name
[1] "here"

$res_cov$coverage
$res_cov$coverage$filecoverage
     R/aaa.R  R/dr_here.R       R/here.R      R/i_am.R R/set_here.R        R/zzz.R
      100.00       100.00         100.00         95.83       100.00         100.00

$res_cov$coverage$totalcoverage
[1] 98.67


$res_cov$errors
[1] NA

$res_cov$notes
[1] NA
```

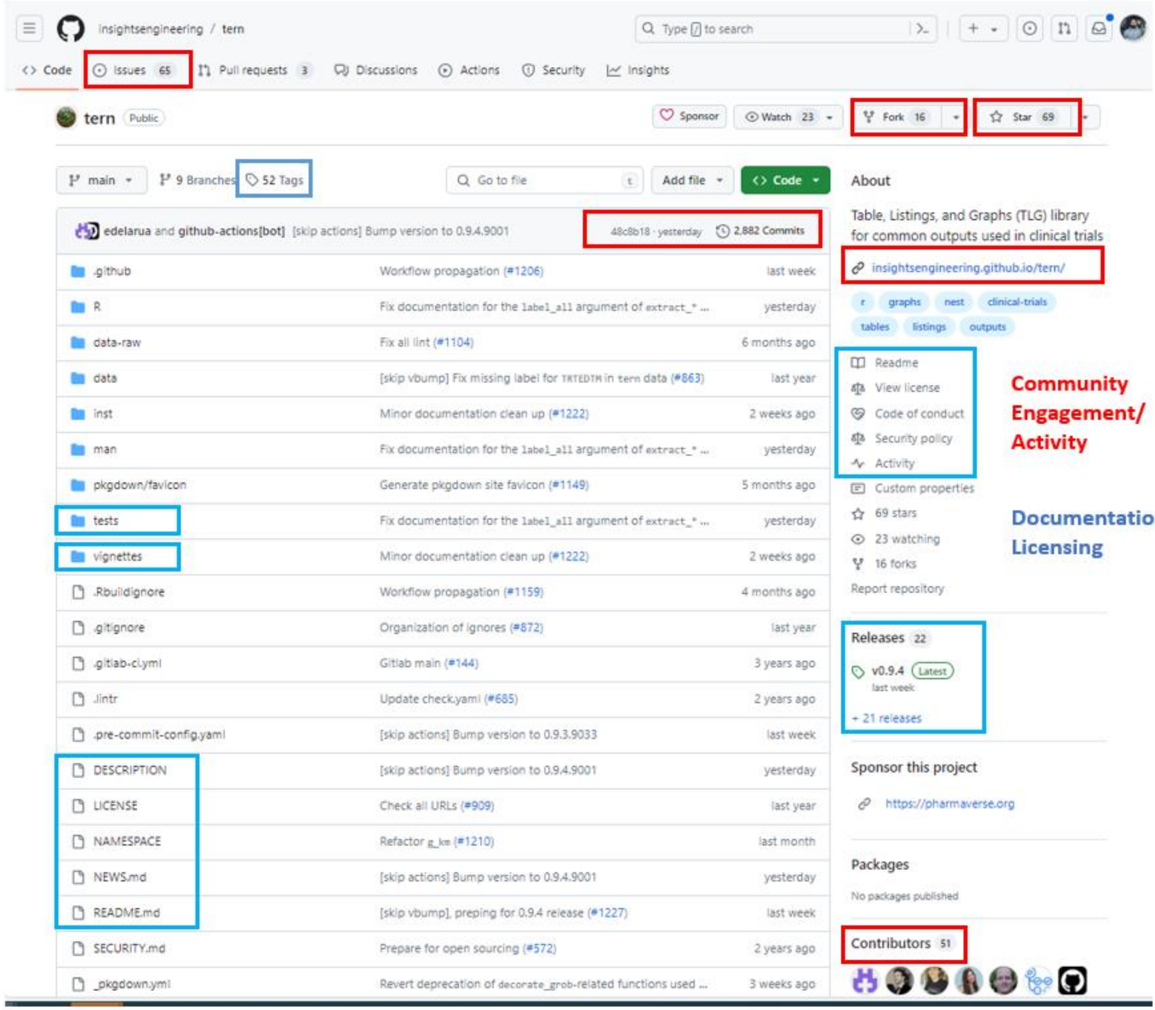


CMD check

```
results$check_list
```

```
$res_check
── R CMD check results ──────────────────────────────────────────── here 1.0.1 ────
Duration: 56.3s

❯ checking Rd cross-references ... WARNING
  Package non disponible pour vérifier les xrefs Rd : 'uuid'

❯ checking package dependencies ... NOTE
  Packages suggested but not available for checking:
    'conflicted', 'palmerpenguins', 'plyr', 'uuid'

0 errors ✓ | 1 warning ✖ | 1 note ✖

$check_score
[1] 0.65
```

Popularity and package activity



edelarua and github-actions[bot] [skip actions] Bump version to 0.9.4.9001 · 48c8b18 · yesterday · 2,882 Commits

.github	Workflow propagation (#1206)	last week
R	Fix documentation for the `label_all` argument of `extract_*` ...	yesterday
data-raw	Fix all lint (#1104)	6 months ago
data	[skip vbump] Fix missing label for `TRTEDTM` in `tern` data (#863)	last year
inst	Minor documentation clean up (#1222)	2 weeks ago
man	Fix documentation for the `label_all` argument of `extract_*` ...	yesterday
pkgdown/favicon	Generate pkgdown site favicon (#1149)	5 months ago
tests	Fix documentation for the `label_all` argument of `extract_*` ...	yesterday
vignettes	Minor documentation clean up (#1222)	2 weeks ago
.Rbuildignore	Workflow propagation (#1159)	4 months ago
.gitignore	Organization of ignores (#872)	last year
.gitlab-ci.yml	Gitlab main (#144)	3 years ago
.lintr	Update check.yaml (#685)	2 years ago
.pre-commit-config.yaml	[skip actions] Bump version to 0.9.3.9033	last week
DESCRIPTION	[skip actions] Bump version to 0.9.4.9001	yesterday
LICENSE	Check all URLs (#909)	last year
NAMESPACE	Refactor `g_km` (#1210)	last month
NEWS.md	[skip actions] Bump version to 0.9.4.9001	yesterday
README.md	[skip vbump], preping for 0.9.4 release (#1227)	last week
SECURITY.md	Prepare for open sourcing (#572)	2 years ago
_pkgdown.yml	Revert deprecation of `decorate_grob`-related functions used ...	3 weeks ago

Table, Listings, and Graphs (TLG) library for common outputs used in clinical trials

insightsengineering.github.io/tern/

https://pharmaverse.org

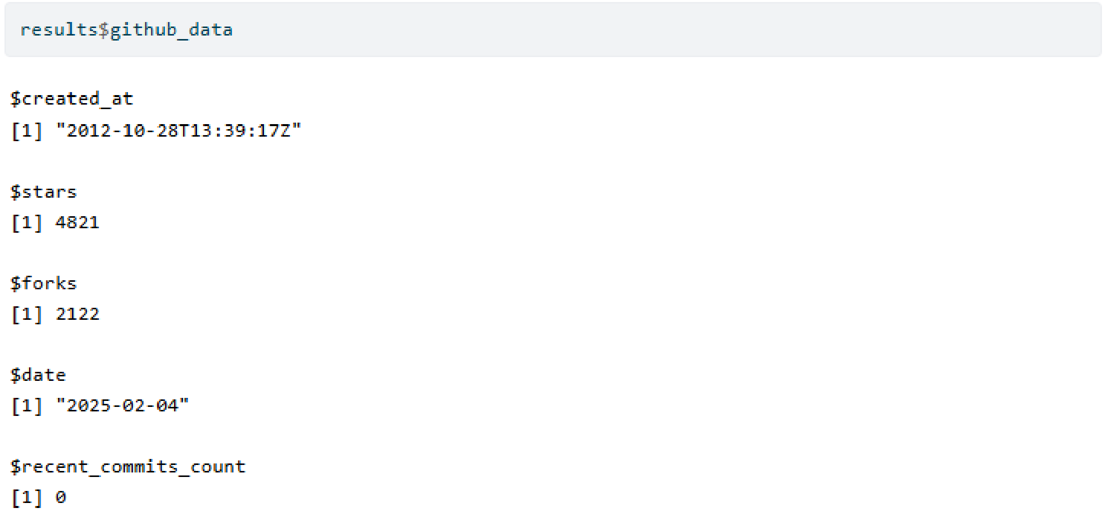
No packages published

Community Engagement/ Activity

Documentation/ Licensing

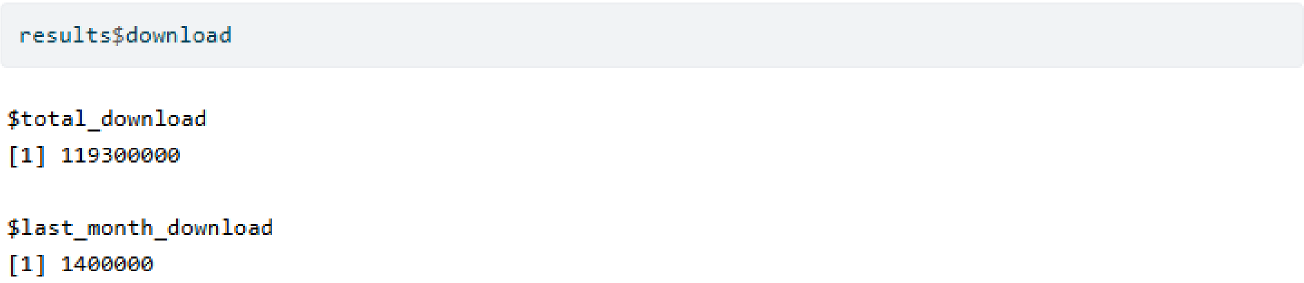
- **Data extraction from github repository and CRAN download:**
  - Stars
  - Forks
  - Last commit
  - Number of downloads (Last month, Total)

risk.assessr R package



```
results$github_data
```

```
$created_at
[1] "2012-10-28T13:39:17Z"

$stars
[1] 4821

$forks
[1] 2122

$date
[1] "2025-02-04"

$recent_commits_count
[1] 0
```

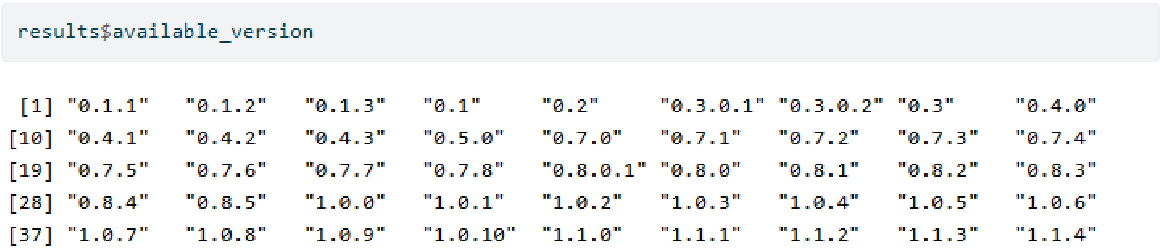


```
results$download
```

```
$total_download
[1] 119300000

$last_month_download
[1] 1400000
```

```
results$host
```

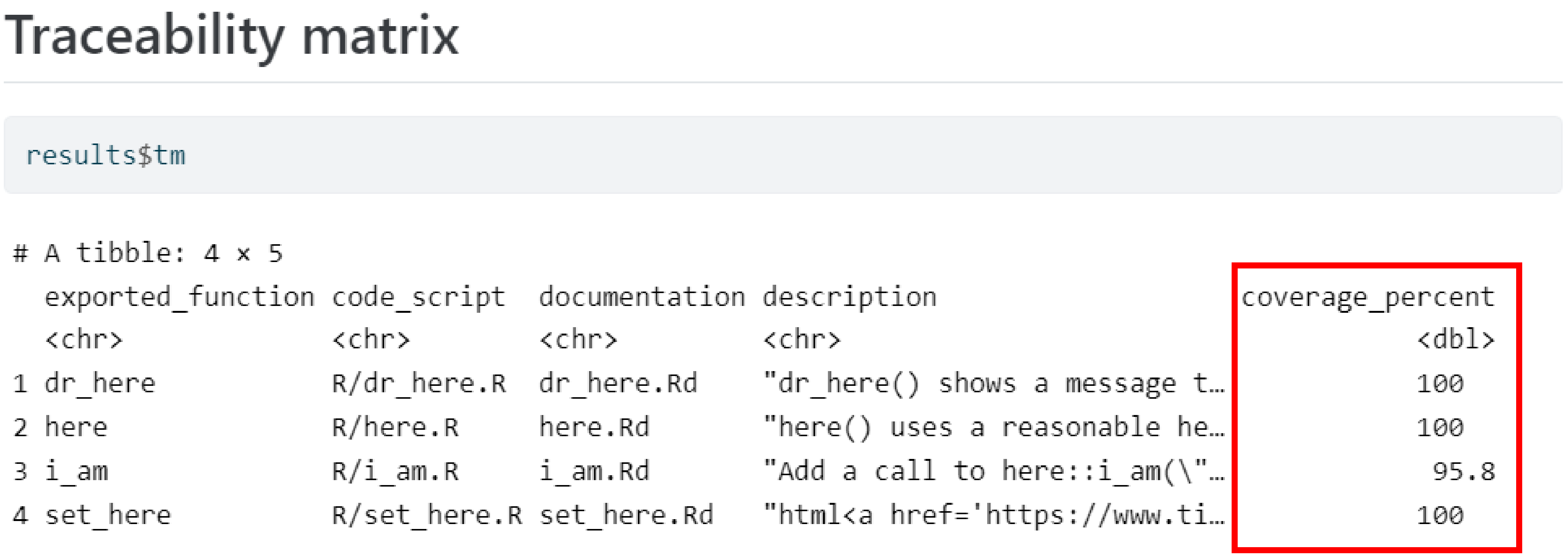
```
$github_links
[1] "https://github.com/tidyverse/dplyr"

$cran_links
[1] "https://cran.r-project.org/src/contrib/dplyr_1.1.4.tar.gz"

$internal_links
NULL

$bioconductor_links
NULL
```



```
results$available_version
```

```
 [1] "0.1.1"   "0.1.2"   "0.1.3"   "0.1"     "0.2"     "0.3.0.1" "0.3.0.2" "0.3"     "0.4.0"  
[10] "0.4.1"   "0.4.2"   "0.4.3"   "0.5.0"   "0.7.0"   "0.7.1"   "0.7.2"   "0.7.3"   "0.7.4"  
[19] "0.7.5"   "0.7.6"   "0.7.7"   "0.7.8"   "0.8.0.1" "0.8.0"   "0.8.1"   "0.8.2"   "0.8.3"  
[28] "0.8.4"   "0.8.5"   "1.0.0"   "1.0.1"   "1.0.2"   "1.0.3"   "1.0.4"   "1.0.5"   "1.0.6"  
[37] "1.0.7"   "1.0.8"   "1.0.9"   "1.0.10"  "1.1.0"   "1.1.1"   "1.1.2"   "1.1.3"   "1.1.4"  
```

risk.assessr R package



Traceability matrix

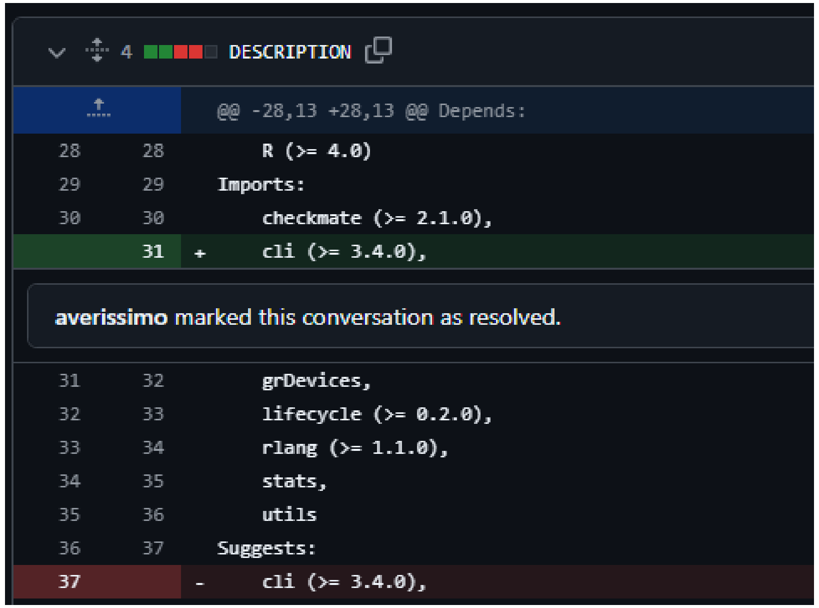
```
results$tm
```

```
# A tibble: 4 × 5
  exported_function code_script  documentation description                    coverage_percent
  <chr>             <chr>        <chr>         <chr>                                     <dbl>
1 dr_here           R/dr_here.R  dr_here.Rd    "dr_here() shows a message t…             100  
2 here              R/here.R     here.Rd       "here() uses a reasonable he…             100  
3 i_am              R/i_am.R     i_am.Rd       "Add a call to here::i_am(\"…              95.8
4 set_here          R/set_here.R set_here.Rd   "html<a href='https://www.ti…             100  
```

risk.assessr R package

CHECK PACKAGE STRUCTURE FOR IMPORTS/SUGGESTS

teal.code [v0.5.0]

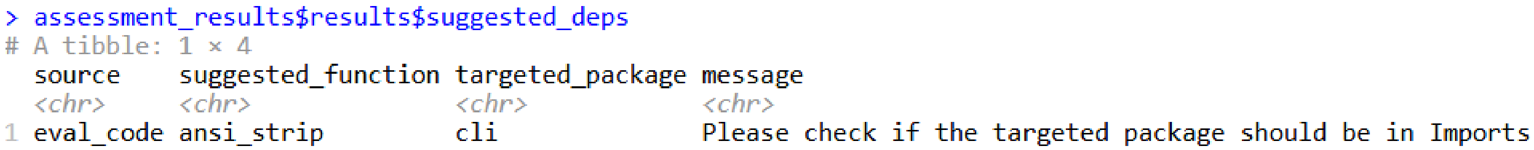


```
@@ -28,13 +28,13 @@ Depends:
        R (>= 4.0)
    Imports:
        checkmate (>= 2.1.0),
+       cli (>= 3.4.0),
```

averissimo marked this conversation as resolved.

```
        grDevices,
        lifecycle (>= 0.2.0),
        rlang (>= 1.1.0),
        stats,
        utils
    Suggests:
-       cli (>= 3.4.0),
```

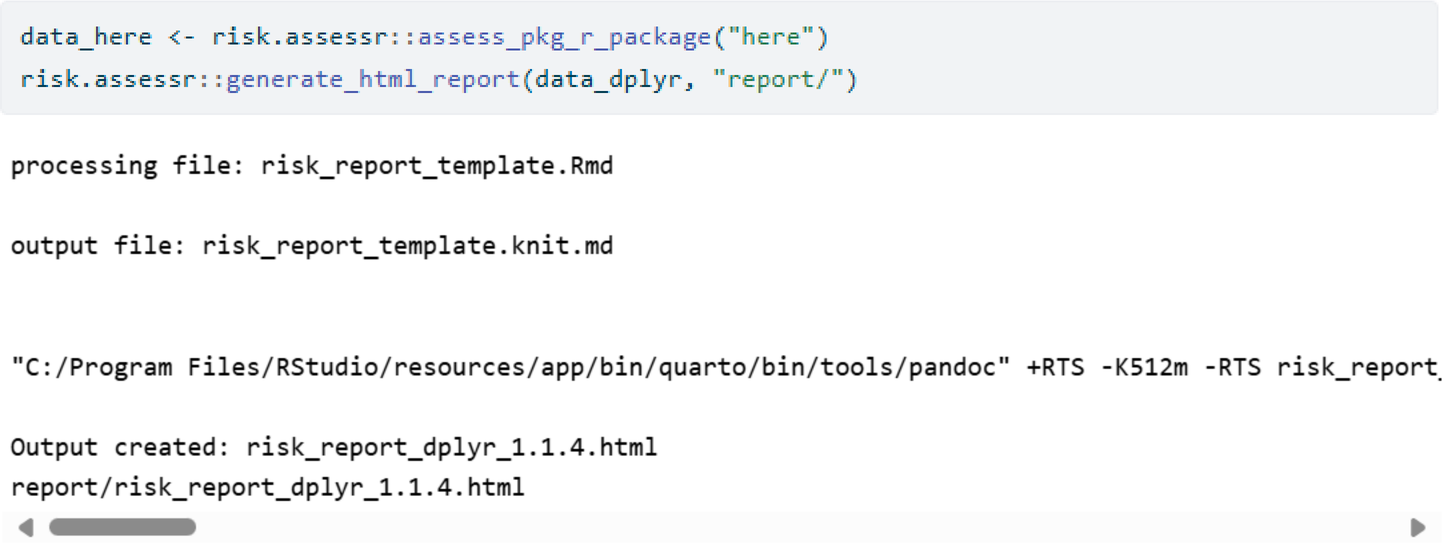
risk.assessr results for teal.code v0.5.0 identified that cli should be in **Imports** not **Suggests**



```
> assessment_results$results$suggested_deps
# A tibble: 1 × 4
  source    suggested_function targeted_package message
  <chr>     <chr>              <chr>            <chr>
1 eval_code ansi_strip         cli              Please check if the targeted package should be in Imports
```

This issue also was identified and fixed by Roche [datanames in vignettes by gogonzo · Pull Request #239 · insightsengineering/teal.code] and released in teal.code [Release v0.6.0 · insightsengineering/teal.code]

QC report generation



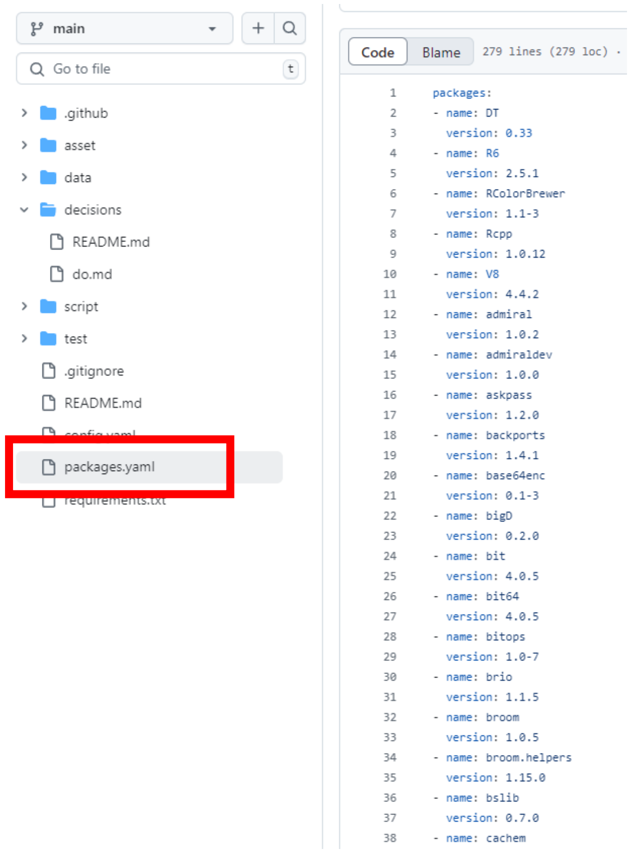
```r
data_here <- risk.assessr::assess_pkg_r_package("here")
risk.assessr::generate_html_report(data_dplyr, "report/")
```

```
processing file: risk_report_template.Rmd

output file: risk_report_template.knit.md


"C:/Program Files/RStudio/resources/app/bin/quarto/bin/tools/pandoc" +RTS -K512m -RTS risk_report_

Output created: risk_report_dplyr_1.1.4.html
report/risk_report_dplyr_1.1.4.html
```

[risk_report_dplyr_1.1.4.html]()

Package validation Workflow: DB rpackage

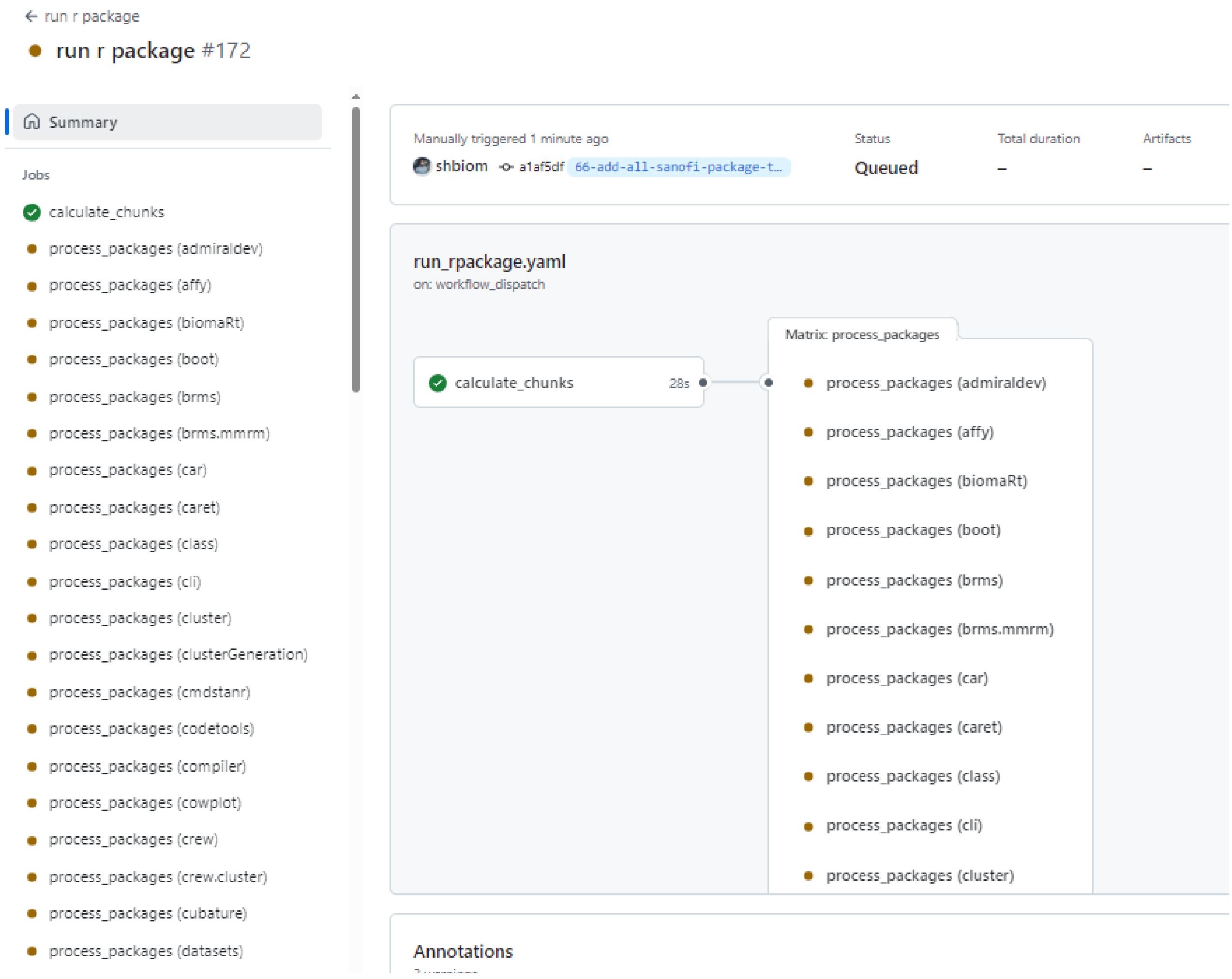
Packages.yaml



```
packages:
- name: DT
  version: 0.33
- name: R6
  version: 2.5.1
- name: RColorBrewer
  version: 1.1-3
- name: Rcpp
  version: 1.0.12
- name: V8
  version: 4.4.2
- name: admiral
  version: 1.0.2
- name: admiraldev
  version: 1.0.0
- name: askpass
  version: 1.2.0
- name: backports
  version: 1.4.1
- name: base64enc
  version: 0.1-3
- name: bigD
  version: 0.2.0
- name: bit
  version: 4.0.5
- name: bit64
  version: 4.0.5
- name: bitops
  version: 1.0-7
- name: brio
  version: 1.1.5
- name: broom
  version: 1.0.5
- name: broom.helpers
  version: 1.15.0
- name: bslib
  version: 0.7.0
- name: cachem
```

Github Action

→



Manually triggered 1 minute ago

shbiom a1af5df 66-add-all-sanofi-package-t...

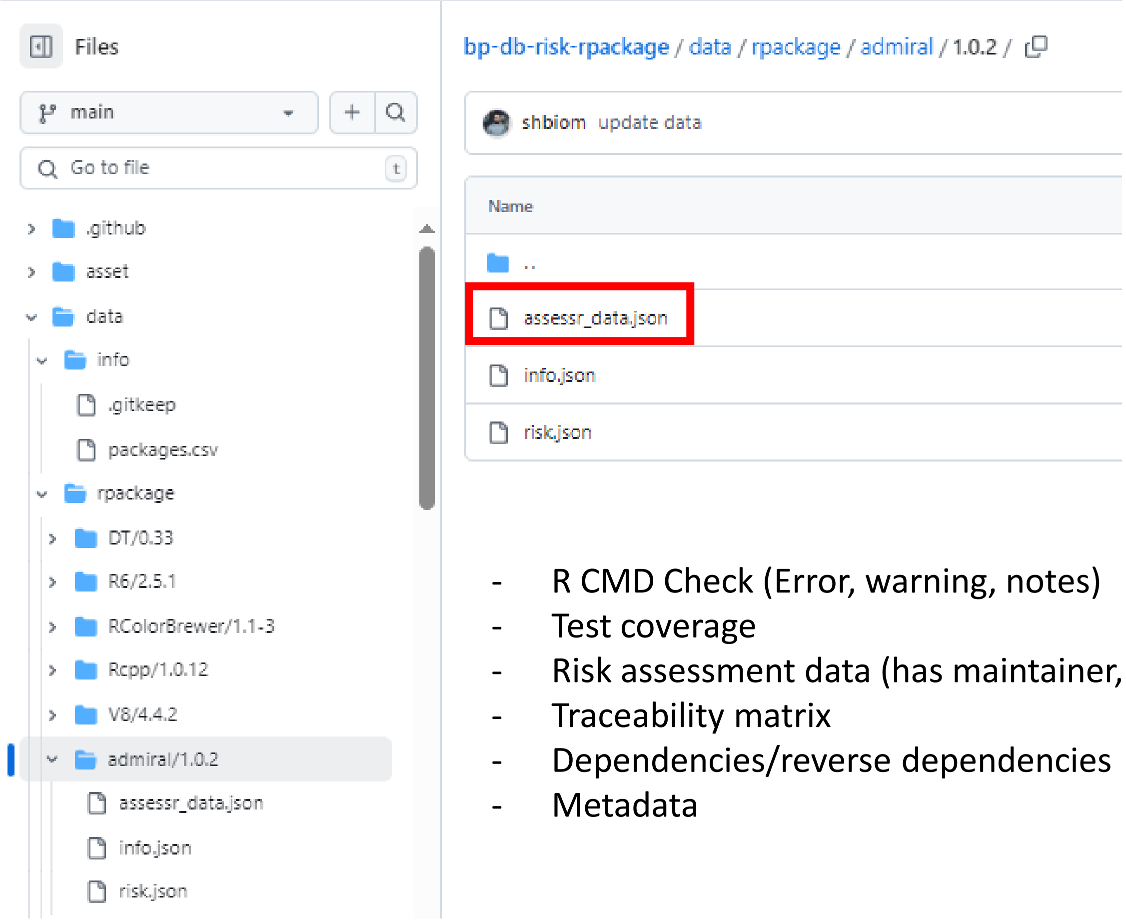
Status: Queued

Total duration: –

Artifacts: –

risk.assessr R data

DB Rpackage



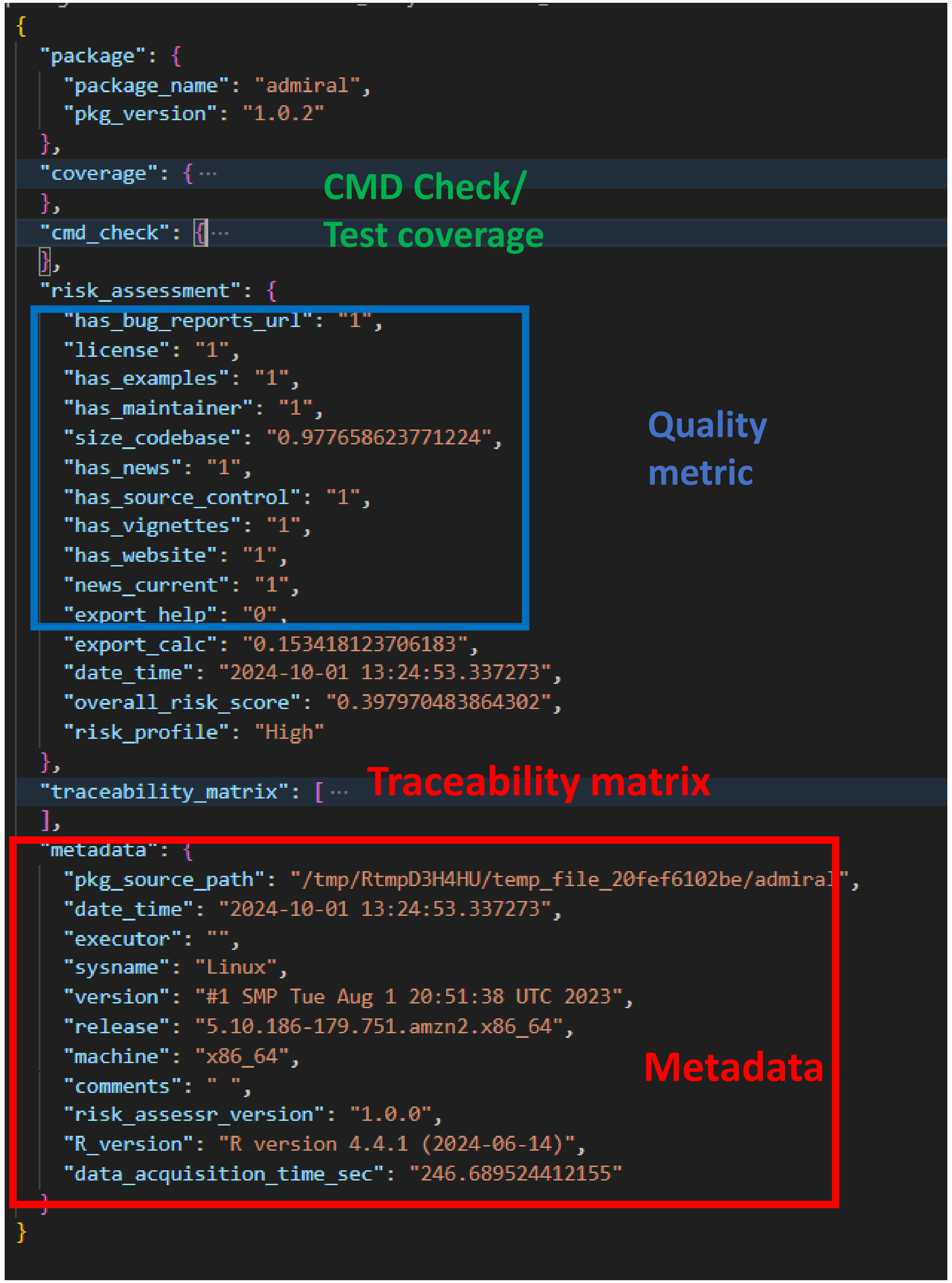
bp-db-risk-rpackage / data / rpackage / admiral / 1.0.2 /

shbiom update data

- ..
- assessr_data.json
- info.json
- risk.json

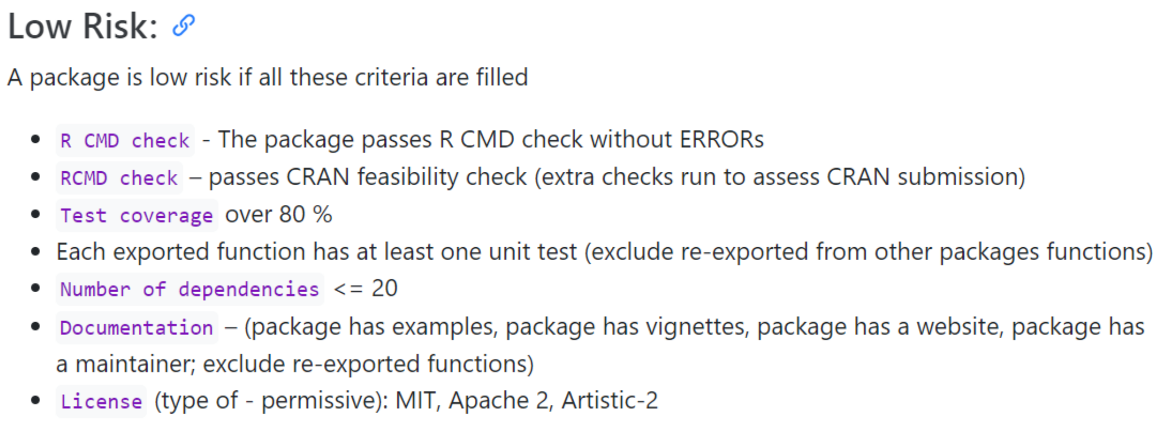
- .github
- asset
- data
  - info
    - .gitkeep
    - packages.csv
  - rpackage
    - DT/0.33
    - R6/2.5.1
    - RColorBrewer/1.1-3
    - Rcpp/1.0.12
    - V8/4.4.2
    - admiral/1.0.2
      - assessr_data.json
      - info.json
      - risk.json

- R CMD Check (Error, warning, notes)
- Test coverage
- Risk assessment data (has maintainer, has website)
- Traceability matrix
- Dependencies/reverse dependencies
- Metadata



```
{
  "package": {
    "package_name": "admiral",
    "pkg_version": "1.0.2"
  },
  "coverage": {···
  },
  "cmd_check": {···
  },
  "risk_assessment": {
    "has_bug_reports_url": "1",
    "license": "1",
    "has_examples": "1",
    "has_maintainer": "1",
    "size_codebase": "0.977658623771224",
    "has_news": "1",
    "has_source_control": "1",
    "has_vignettes": "1",
    "has_website": "1",
    "news_current": "1",
    "export_help": "0",
    "export_calc": "0.153418123706183",
    "date_time": "2024-10-01 13:24:53.337273",
    "overall_risk_score": "0.397970483864302",
    "risk_profile": "High"
  },
  "traceability_matrix": [···
  ],
  "metadata": {
    "pkg_source_path": "/tmp/RtmpD3H4HU/temp_file_20fef6102be/admiral",
    "date_time": "2024-10-01 13:24:53.337273",
    "executor": "",
    "sysname": "Linux",
    "version": "#1 SMP Tue Aug 1 20:51:38 UTC 2023",
    "release": "5.10.186-179.751.amzn2.x86_64",
    "machine": "x86_64",
    "comments": " ",
    "risk_assessr_version": "1.0.0",
    "R_version": "R version 4.4.1 (2024-06-14)",
    "data_acquisition_time_sec": "246.689524412155"
  }
}
```

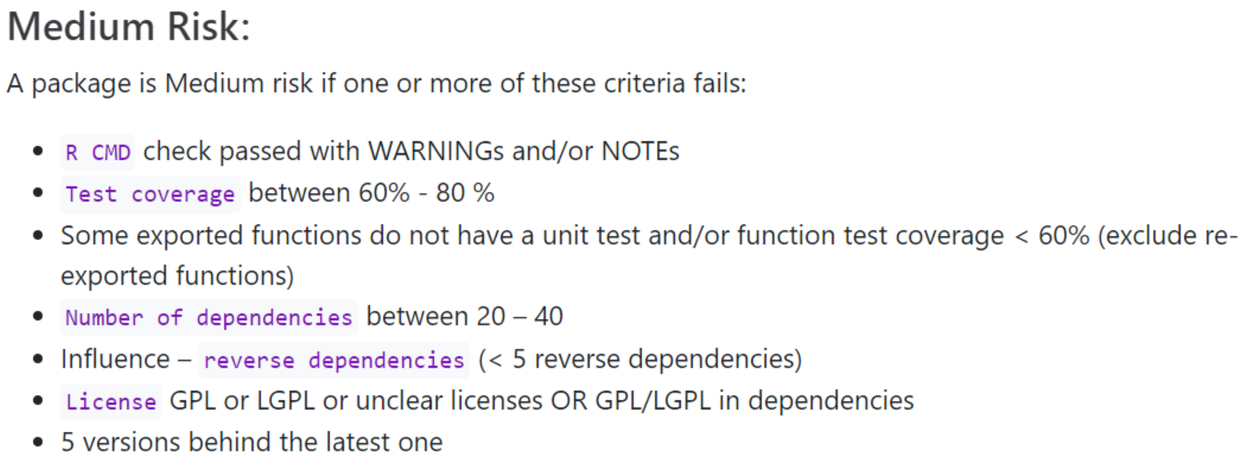
Validation policy rules (ongoing)



Low Risk:

A package is low risk if all these criteria are filled

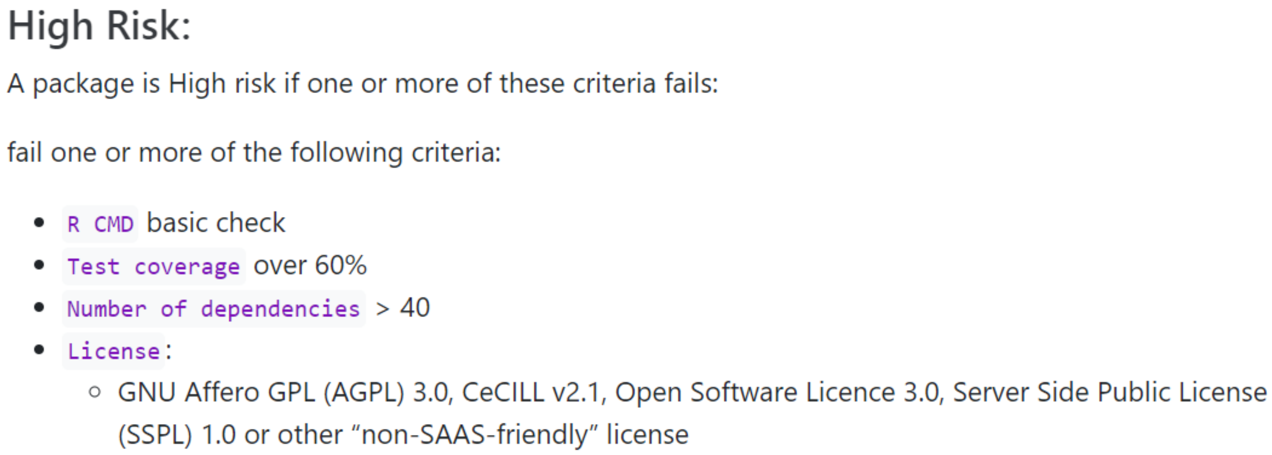
- `R CMD check` - The package passes R CMD check without ERRORs
- `RCMD check` – passes CRAN feasibility check (extra checks run to assess CRAN submission)
- `Test coverage` over 80 %
- Each exported function has at least one unit test (exclude re-exported from other packages functions)
- `Number of dependencies` <= 20
- `Documentation` – (package has examples, package has vignettes, package has a website, package has a maintainer; exclude re-exported functions)
- `License` (type of - permissive): MIT, Apache 2, Artistic-2



Medium Risk:

A package is Medium risk if one or more of these criteria fails:

- `R CMD` check passed with WARNINGs and/or NOTEs
- `Test coverage` between 60% - 80 %
- Some exported functions do not have a unit test and/or function test coverage < 60% (exclude re-exported functions)
- `Number of dependencies` between 20 – 40
- Influence – `reverse dependencies` (< 5 reverse dependencies)
- `License` GPL or LGPL or unclear licenses OR GPL/LGPL in dependencies
- 5 versions behind the latest one



High Risk:

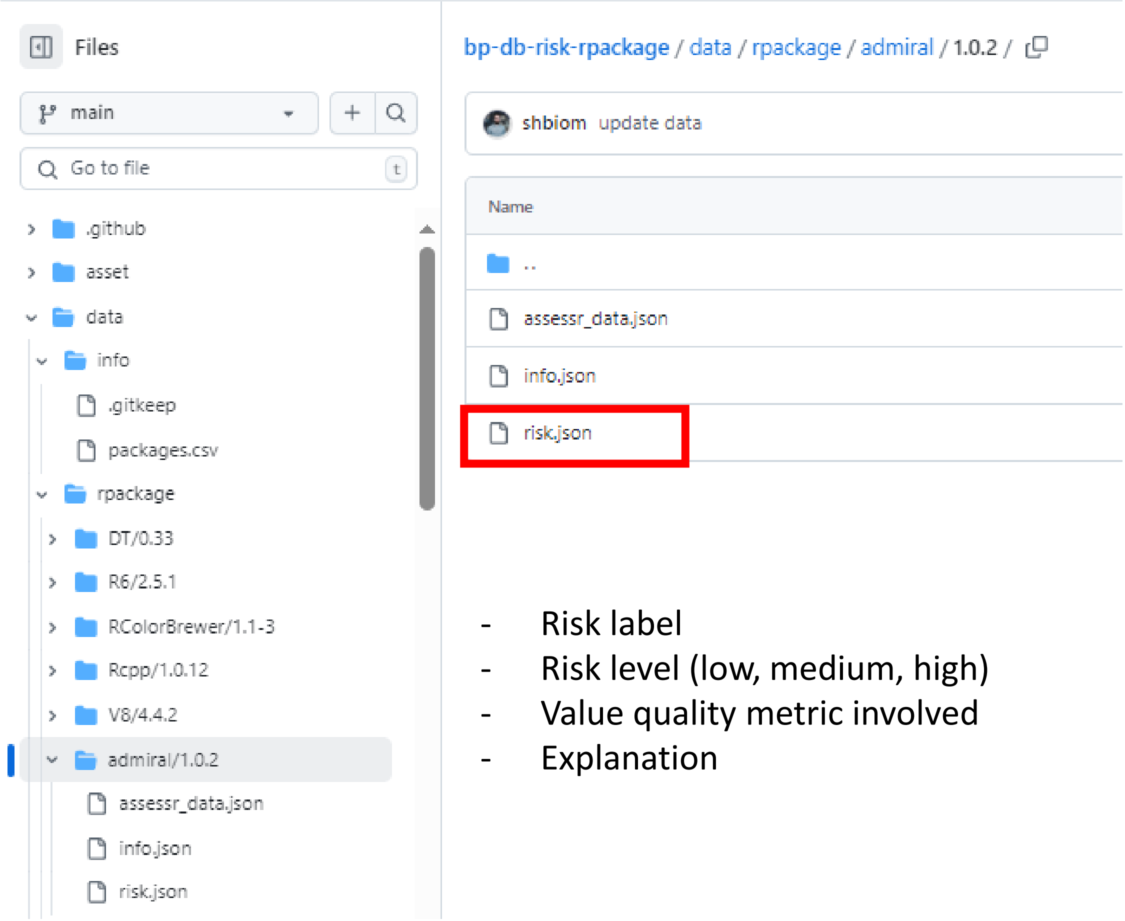
A package is High risk if one or more of these criteria fails:

fail one or more of the following criteria:

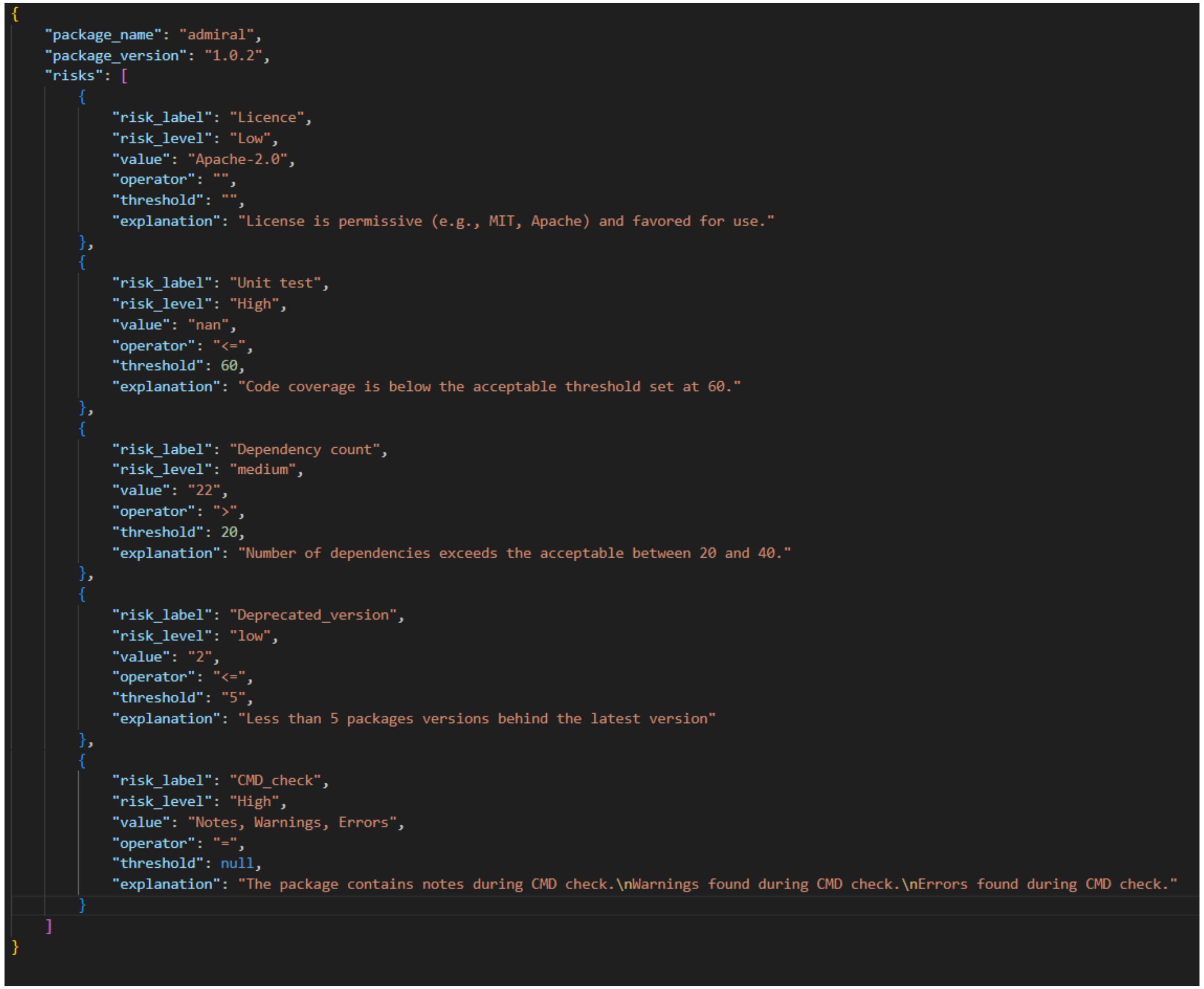
- `R CMD` basic check
- `Test coverage` over 60%
- `Number of dependencies` > 40
- `License`:
  - GNU Affero GPL (AGPL) 3.0, CeCILL v2.1, Open Software Licence 3.0, Server Side Public License (SSPL) 1.0 or other “non-SAAS-friendly” license

Risk rules

DB Rpackage



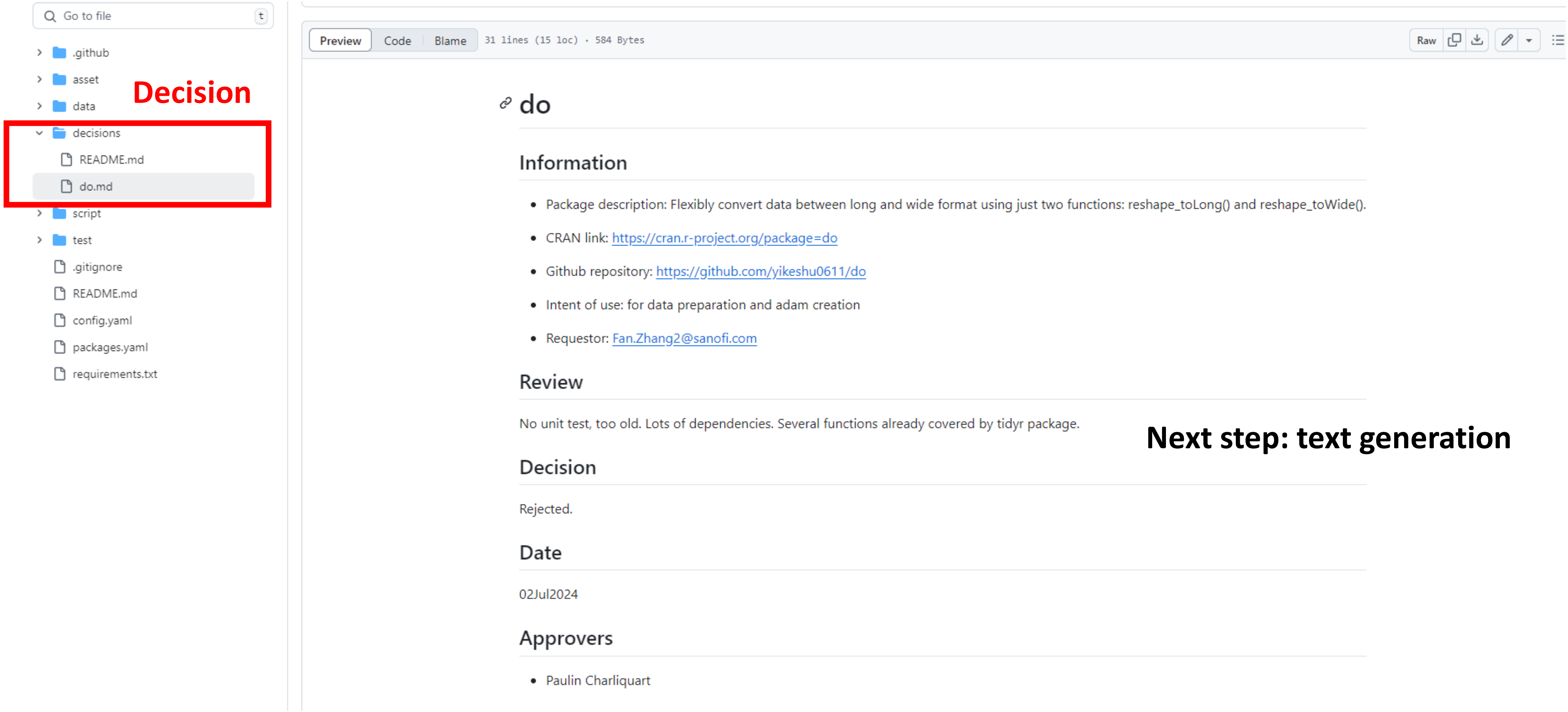
- Risk label
- Risk level (low, medium, high)
- Value quality metric involved
- Explanation



```
{
    "package_name": "admiral",
    "package_version": "1.0.2",
    "risks": [
        {
            "risk_label": "Licence",
            "risk_level": "Low",
            "value": "Apache-2.0",
            "operator": "",
            "threshold": "",
            "explanation": "License is permissive (e.g., MIT, Apache) and favored for use."
        },
        {
            "risk_label": "Unit test",
            "risk_level": "High",
            "value": "nan",
            "operator": "<=",
            "threshold": 60,
            "explanation": "Code coverage is below the acceptable threshold set at 60."
        },
        {
            "risk_label": "Dependency count",
            "risk_level": "medium",
            "value": "22",
            "operator": ">",
            "threshold": 20,
            "explanation": "Number of dependencies exceeds the acceptable between 20 and 40."
        },
        {
            "risk_label": "Deprecated_version",
            "risk_level": "low",
            "value": "2",
            "operator": "<=",
            "threshold": "5",
            "explanation": "Less than 5 packages versions behind the latest version"
        },
        {
            "risk_label": "CMD_check",
            "risk_level": "High",
            "value": "Notes, Warnings, Errors",
            "operator": "=",
            "threshold": null,
            "explanation": "The package contains notes during CMD check.\nWarnings found during CMD check.\nErrors found during CMD check."
        }
    ]
}
```

Documentation Approval decision

DB Rpackage



Decision

do

Information

- Package description: Flexibly convert data between long and wide format using just two functions: reshape_toLong() and reshape_toWide().
- CRAN link: https://cran.r-project.org/package=do
- Github repository: https://github.com/yikeshu0611/do
- Intent of use: for data preparation and adam creation
- Requestor: Fan.Zhang2@sanofi.com

Review

No unit test, too old. Lots of dependencies. Several functions already covered by tidyr package.

Decision

Rejected.

Date

02Jul2024

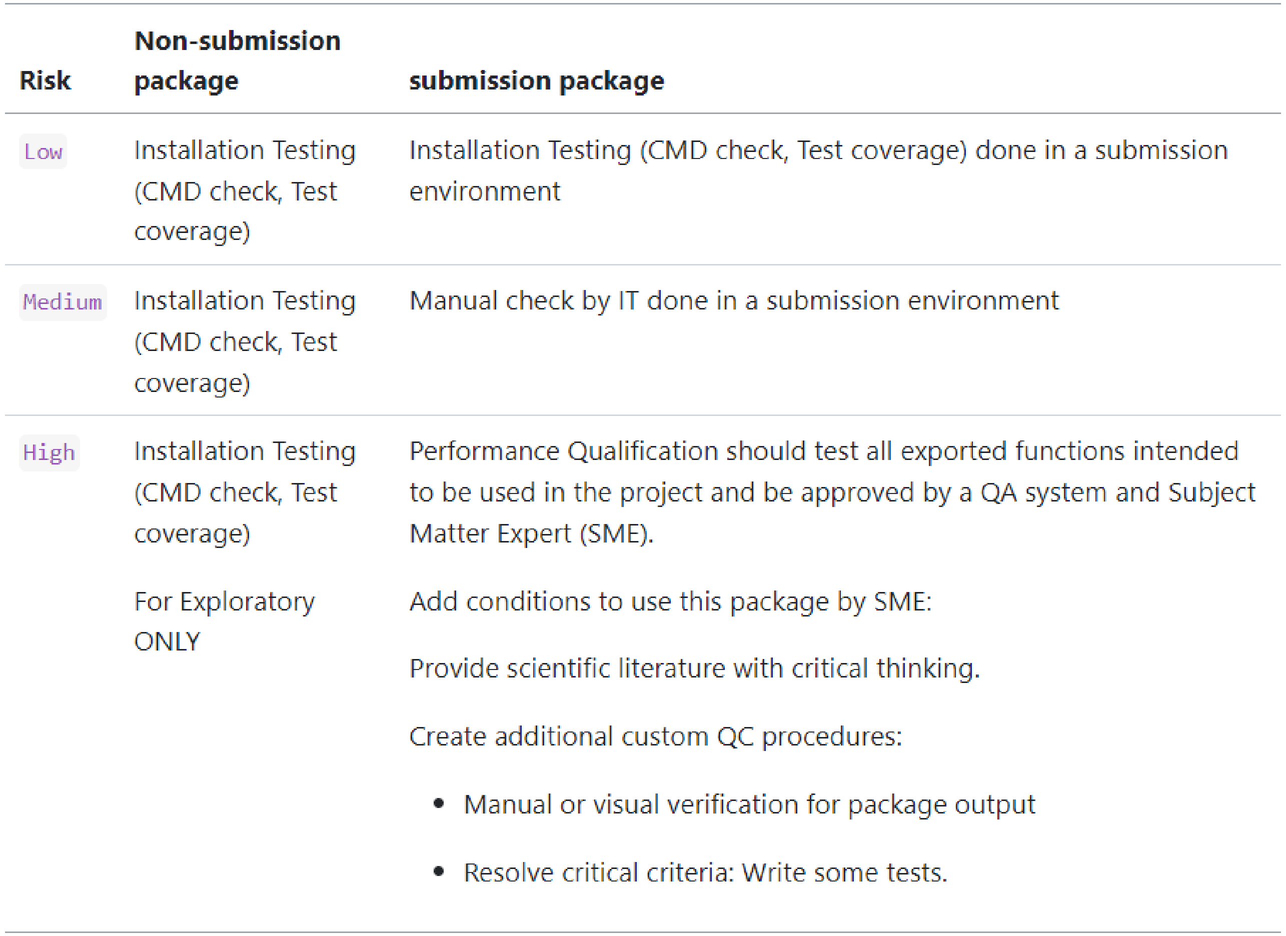
Approvers

- Paulin Charliquart

Next step: text generation

Back up slide

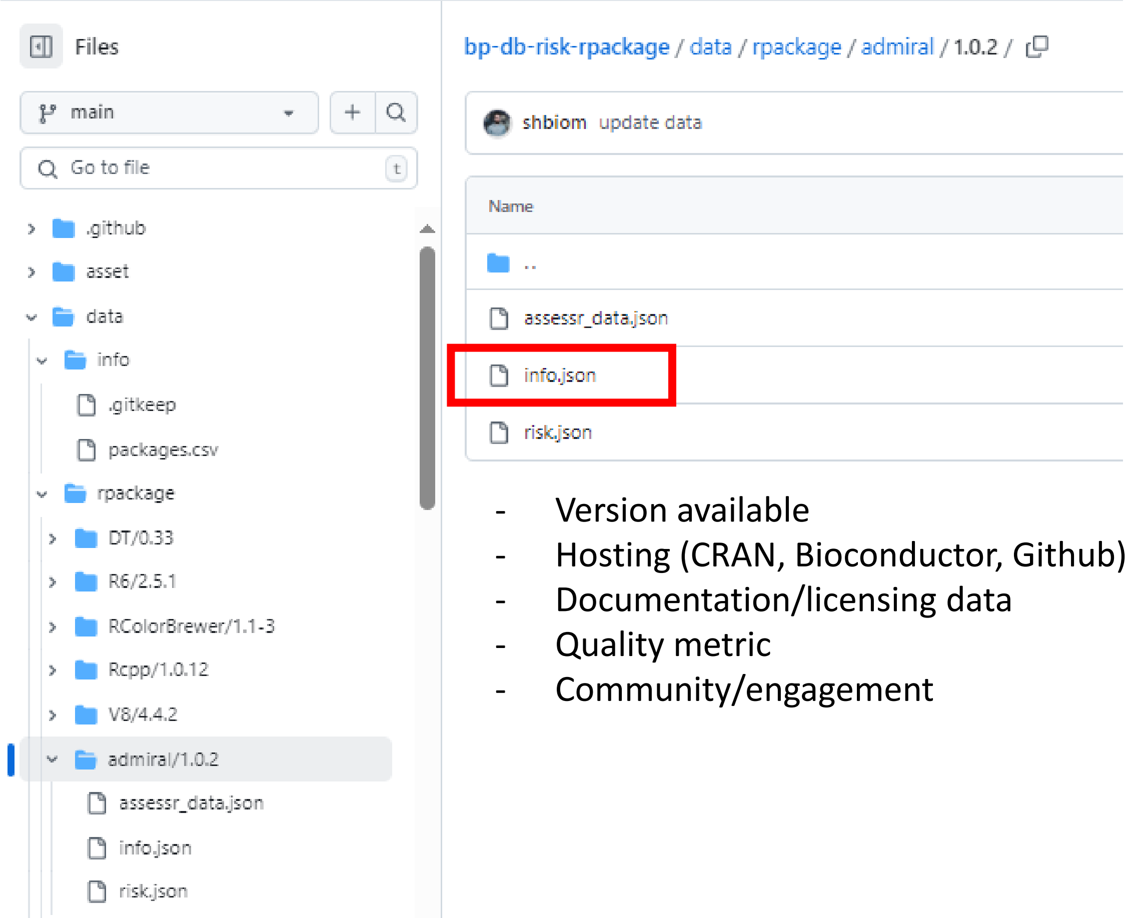
Validation policy rules



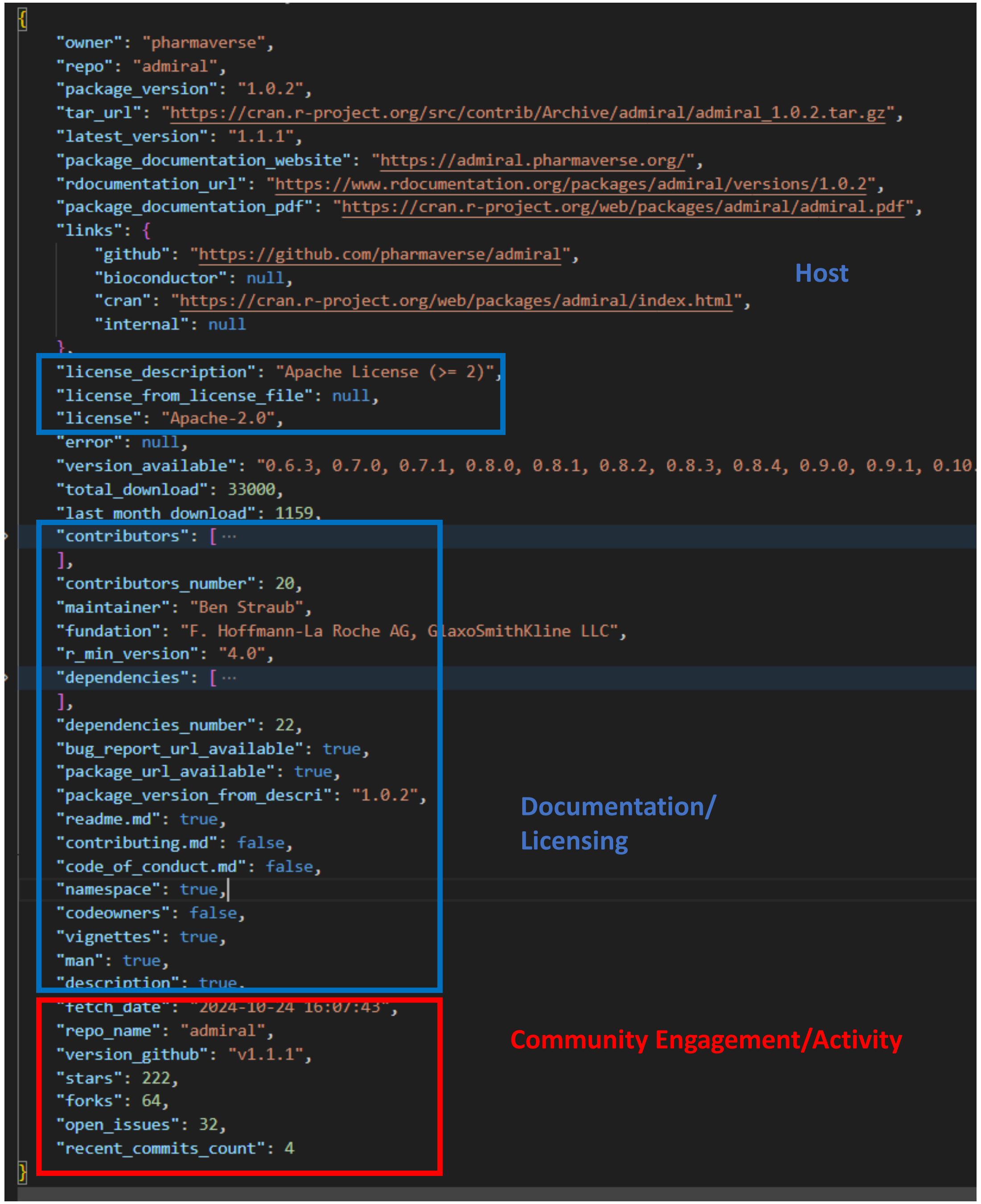
Risk	Non-submission package	submission package
`Low`	Installation Testing (CMD check, Test coverage)	Installation Testing (CMD check, Test coverage) done in a submission environment
`Medium`	Installation Testing (CMD check, Test coverage)	Manual check by IT done in a submission environment
`High`	Installation Testing (CMD check, Test coverage) For Exploratory ONLY	Performance Qualification should test all exported functions intended to be used in the project and be approved by a QA system and Subject Matter Expert (SME). Add conditions to use this package by SME: Provide scientific literature with critical thinking. Create additional custom QC procedures: • Manual or visual verification for package output • Resolve critical criteria: Write some tests.

Risk analysis API data

DB Rpackage



- Version available
- Hosting (CRAN, Bioconductor, Github)
- Documentation/licensing data
- Quality metric
- Community/engagement



```json
{
    "owner": "pharmaverse",
    "repo": "admiral",
    "package_version": "1.0.2",
    "tar_url": "https://cran.r-project.org/src/contrib/Archive/admiral/admiral_1.0.2.tar.gz",
    "latest_version": "1.1.1",
    "package_documentation_website": "https://admiral.pharmaverse.org/",
    "rdocumentation_url": "https://www.rdocumentation.org/packages/admiral/versions/1.0.2",
    "package_documentation_pdf": "https://cran.r-project.org/web/packages/admiral/admiral.pdf",
    "links": {
        "github": "https://github.com/pharmaverse/admiral",
        "bioconductor": null,
        "cran": "https://cran.r-project.org/web/packages/admiral/index.html",
        "internal": null
    },
    "license_description": "Apache License (>= 2)",
    "license_from_license_file": null,
    "license": "Apache-2.0",
    "error": null,
    "version_available": "0.6.3, 0.7.0, 0.7.1, 0.8.0, 0.8.1, 0.8.2, 0.8.3, 0.8.4, 0.9.0, 0.9.1, 0.10
    "total_download": 33000,
    "last_month_download": 1159,
    "contributors": [ ···
    ],
    "contributors_number": 20,
    "maintainer": "Ben Straub",
    "fundation": "F. Hoffmann-La Roche AG, GlaxoSmithKline LLC",
    "r_min_version": "4.0",
    "dependencies": [ ···
    ],
    "dependencies_number": 22,
    "bug_report_url_available": true,
    "package_url_available": true,
    "package_version_from_descri": "1.0.2",
    "readme.md": true,
    "contributing.md": false,
    "code_of_conduct.md": false,
    "namespace": true,
    "codeowners": false,
    "vignettes": true,
    "man": true,
    "description": true,
    "fetch_date": "2024-10-24 16:07:43",
    "repo_name": "admiral",
    "version_github": "v1.1.1",
    "stars": 222,
    "forks": 64,
    "open_issues": 32,
    "recent_commits_count": 4
}
```