# Validation Report for Demo Environment Validation

## Eli Miller

### 2022 - 02 - 15

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## 1 Release details

### 1.1 Package Information

### 1.1.1 Change Log

Version	Effective Date	Activity Description
1.1	2022-01-12	Update with new directory structure
1.0	2021-12-08	Validation release notes for version 1.0

### 1.1.2 Validation Environment

Type	Resource	Version Detail
system	OS	Ubuntu 18.04.5 LTS
system	R	4.0.2
	devtools	2.4.3
	dplyr	1.0.7
	kableExtra	1.3.4
	knitr	1.36
	magrittr	2.0.1
session	renv	0.14.0
	riskmetric	0.1.1
	stringr	1.4.0
	testthat	3.1.1
	usethis	2.1.3
	valtools	0.4.0.9000

### 1.2 Authors

### 1.2.1 Requirements

Requirement ID	Editor	Edit Date
1	Eli Miller	2022-01-12
2	Eli Miller	2022-02-15

### 1.2.2 Test Case Authors

Test Case ID	Editor	Edit Date
1	Eli Miller	2022-01-12
2	Eli Miller	2022-01-12

### 1.2.3 Test Code Authors

Test Code ID	Editor	Edit Date
1	Eli Miller	2021-12-07
2	Eli Miller	2021-12-07

### 1.3 Traceability

Requirement Name	Requirement ID	Test Case Name	Test Cases
	1.1		1.1
Requirement 1	1.2	1	1.2
	1.3		1.3
Requirement 2	2.1	2	2.1
rtequirement 2	2.2	2	2.1

### 2 Risk Assessment

### 2.1 Requirement Assessments

Requirement Name	Requirement ID	Risk Assessment
	1.1	Low Risk
1	1.2	Low Risk
	1.3	Low Risk
2	2.1	Low Risk

### 2.2 Package Assessments

This table displays the risk metric score of the  $\tt dplyr$  and  $\tt Tplyr$  packages. Other packages can be added as needed.

Package	riskmetric.Scores
Tplyr	0.5010679
dplyr	0.3293779

### 3 Validation

#### 3.1 R Base

### 3.1.1 R Base Requirements

- 1.1: The R installation was installed with tests
- 1.2: The R installation tests complete successfully
- 1.3: The system must have the ability to work with the system png device

#### 3.1.2 Setup Instructions

None

#### 3.1.3 R Base Test Cases

- 1.1: A directory named tests exists in the R installation directory.
- 1.2: The function tools::testInstalledBasic() returns a 0
- 1.3: The system was compiled to support the png engine.

#### 3.1.4 R Base Test Code Results

Test	Results	Pass/Fail
1.1	As expected	Pass
1.2	As expected	Pass
1.3	As expected	Pass

### 3.2 Tplyr

#### 3.2.1 Tplyr Requirements

• 2.1: Population data can be specified by the user

#### 3.2.2 Setup Instructions

• Load in Tplyr packages.

### 3.2.3 Tplyr Test Cases

- 2.1: Verify target dataset in table is the same as specified
- 2.2: Verify treatment variable in table is same as specified

Test	Results	Pass/Fail
2.1	As expected	Pass
2.2	As expected	Pass

#### 3.2.4 Tplyr Test Results

#### 3.3 Installed System Packages

```
Diagnostics Report [renv 0.14.0]
_____
# Session Info ===========
R version 4.0.2 (2020-06-22)
Platform: x86_64-pc-linux-gnu (64-bit)
Running under: Ubuntu 18.04.5 LTS
Matrix products: default
       /usr/lib/x86_64-linux-gnu/openblas/libblas.so.3
LAPACK: /usr/lib/x86_64-linux-gnu/libopenblasp-r0.2.20.so
locale:
[1] LC_CTYPE=C.UTF-8
                            LC_NUMERIC=C
                                                   LC_TIME=C.UTF-8
 [4] LC_COLLATE=C.UTF-8
                            LC_MONETARY=C.UTF-8
                                                  LC_MESSAGES=C.UTF-8
                            LC_NAME=C
[7] LC_PAPER=C.UTF-8
                                                   LC ADDRESS=C
[10] LC_TELEPHONE=C
                            LC_MEASUREMENT=C.UTF-8 LC_IDENTIFICATION=C
attached base packages:
[1] tools
                        graphics grDevices datasets utils
                                                               methods
/87 base
other attached packages:
[1] rlang_0.4.12
                         Tplyr_0.4.4
                                             testthat_3.1.1
[4] renv 0.14.0
                                             dplyr 1.0.7
                         riskmetric 0.1.1
[7] stringr_1.4.0
                         devtools_2.4.3
                                             usethis_2.1.3
[10] magrittr 2.0.1
                         kableExtra 1.3.4
                                             knitr 1.36
[13] valtools_0.4.0.9000
loaded via a namespace (and not attached):
[1] httr_1.4.2
                         pkgload_1.2.4
                                             tidyr_1.1.4
[4] jsonlite_1.7.2
                         viridisLite_0.4.0
                                             assertthat_0.2.1
[7] BiocManager_1.30.16 triebeard_0.3.0
                                             urltools_1.7.3
[10] yaml_2.2.1
                         remotes_2.4.2
                                             sessioninfo_1.2.2
[13] pillar_1.6.4
                         backports_1.4.0
                                             glue_1.5.1
                         rvest_1.0.2
[16] digest_0.6.29
                                             colorspace_2.0-2
                                            purrr_0.3.4
[19] htmltools_0.5.2
                         pkgconfig_2.0.3
[22] scales_1.1.1
                         webshot_0.5.2
                                             processx_3.5.2
[25] svglite_2.0.0
                         whisker_0.4
                                             tibble_3.1.6
[28] generics_0.1.1
                         ellipsis_0.3.2
                                             cachem_1.0.6
[31] withr_2.4.3
                         cranlogs_2.1.1
                                             lazyeval_0.2.2
[34] cli_3.1.0
                         crayon 1.4.2
                                             memoise_2.0.1
[37] evaluate_0.14
                         ps_1.6.0
                                             fs_1.5.1
[40] fansi_0.5.0
                         forcats_0.5.1
                                            xm12_1.3.3
```

```
[43] pkgbuild_1.2.1
                          prettyunits_1.1.1
                                              lifecycle_1.0.1
[46] munsell_0.5.0
                          callr 3.7.0
                                              rex 1.2.1
[49] compiler_4.0.2
                          covr_3.5.1
                                              systemfonts_1.0.3
[52] rstudioapi_0.13
                          rmarkdown 2.11
                                              waldo 0.3.1
[55] roxygen2_7.1.2
                          curl_4.3.2
                                              R6_2.5.1
[58] safetyData_1.0.0
                          lubridate_1.8.0
                                              fastmap_1.1.0
[61] utf8_1.2.2
                          rprojroot_2.0.2
                                              desc_1.4.0
[64] stringi 1.7.6
                          whoami 1.3.0
                                              Rcpp 1.0.7
[67] vctrs 0.3.8
                          tidyselect_1.1.1
                                              xfun 0.29
# Project ==========================
Project path: "~/GitHub/Environment-Demo"
# Status ============
# Packages ===
                Library Source
                                 Lockfile Source Path Dependency
                1.30.16
                          RSPM
                                  1.30.16
                                            RSPM
                                                 [1]
                                                         indirect
BiocManager
                                                  [2]
KernSmooth
                2.23-17
                          CRAN
                                     <NA>
                                            <NA>
                                                             <NA>
MASS
               7.3-51.6
                          CRAN
                                     <NA>
                                            <NA>
                                                  [2]
                                                             <NA>
Matrix
                 1.2-18
                          CRAN
                                     <NA>
                                            <NA>
                                                  [2]
                                                             <NA>
R.6
                  2.5.1
                          RSPM
                                    2.5.1
                                            RSPM [1]
                                                         indirect
RColorBrewer
                  1.1-2
                          RSPM
                                    1.1-2
                                            RSPM [1]
                                                         indirect
                  1.0.7
                          RSPM
                                    1.0.7
                                            RSPM [1]
                                                         indirect
Rcpp
                  0.4.4
                          CRAN
                                    0.4.4
                                            CRAN
                                                  [1]
                                                           direct
Tplyr
askpass
                    1.1
                          RSPM
                                      1.1
                                            RSPM [1]
                                                         indirect
assertthat
                  0.2.1
                          RSPM
                                    0.2.1
                                            RSPM /17
                                                         indirect
backports
                  1.4.0
                          RSPM
                                    1.4.0
                                            RSPM [1]
                                                         indirect
                  0.1-3
                          RSPM
                                                         indirect
base64enc
                                    0.1 - 3
                                            RSPM
                                                  Γ17
boot
                 1.3-25
                          CRAN
                                            <NA>
                                                  [2]
                                                             <NA>
                                     <NA>
                                                         indirect
brew
                  1.0-6
                          RSPM
                                    1.0 - 6
                                            RSPM [1]
                  1.1.3
                          RSPM
                                    1.1.3
                                            RSPM [1]
                                                         indirect
brio
cachem
                  1.0.6
                          RSPM
                                    1.0.6
                                            RSPM
                                                  [1]
                                                         indirect
                                            RSPM [1]
callr
                  3.7.0
                          RSPM
                                    3.7.0
                                                         indirect
                 7.3-17
                          CRAN
                                     <NA>
                                            <NA>
                                                  [2]
                                                             <NA>
class
                                                  [1]
cli
                  3.1.0
                          RSPM
                                    3.1.0
                                            RSPM
                                                         indirect
                  0.7.1
                          RSPM
                                    0.7.1
                                            RSPM
                                                  [1]
                                                         indirect
clipr
cluster
                  2.1.0
                          CRAN
                                     <NA>
                                            <NA>
                                                  [2]
                                                             <NA>
                 0.2-16
                                                             <NA>
codetools
                          CRAN
                                     <NA>
                                            <NA>
                                                  [2]
colorspace
                  2.0-2
                          RSPM
                                    2.0-2
                                            RSPM [1]
                                                         indirect
                    1.7
                                            RSPM [1]
commonmark
                          RSPM
                                      1.7
                                                         indirect
covr
                  3.5.1
                          RSPM
                                    3.5.1
                                            RSPM [1]
                                                         indirect
                  0.4.2
                          RSPM
                                    0.4.2
                                            RSPM /17
                                                         indirect
cpp11
                  2.1.1
                          RSPM
                                    2.1.1
                                            RSPM
                                                  Γ17
                                                         indirect
cranlogs
crayon
                  1.4.2
                          RSPM
                                    1.4.2
                                            RSPM [1]
                                                         indirect
credentials
                  1.3.2
                          RSPM
                                    1.3.2
                                            RSPM [1]
                                                         indirect
curl
                  4.3.2
                          RSPM
                                    4.3.2
                                            RSPM [1]
                                                         indirect
desc
                  1.4.0
                          RSPM
                                    1.4.0
                                            RSPM [1]
                                                         indirect
devtools
                  2.4.3
                          RSPM
                                    2.4.3
                                            RSPM [1]
                                                           direct
diffobj
                  0.3.5
                          RSPM
                                    0.3.5
                                            RSPM [1]
                                                         indirect
                                                  [1]
digest
                 0.6.29
                          RSPM
                                   0.6.29
                                            RSPM
                                                         indirect
dplyr
                  1.0.7
                          RSPM
                                    1.0.7
                                            RSPM
                                                  [1]
                                                           direct
ellipsis
                  0.3.2
                          RSPM
                                    0.3.2
                                            RSPM
                                                  [1]
                                                         indirect
```

evaluate	0.14	RSPM	0.14	RSPM	[1]	indirect
fansi	0.5.0	RSPM	0.5.0	RSPM	[1]	indirect
farver	2.1.0	RSPM	2.1.0	RSPM	[1]	indirect
fastmap	1.1.0	RSPM	1.1.0	RSPM	[1]	indirect
forcats	0.5.1	RSPM	0.5.1	RSPM	[1]	indirect
foreign	0.8-80	CRAN	<na></na>	<na></na>	[2]	<na></na>
fs	1.5.1	RSPM	1.5.1	RSPM	[1]	indirect
generics	0.1.1	RSPM	0.1.1	RSPM	[1]	indirect
gert	1.4.3	RSPM	1.4.3	RSPM	[1]	indirect
gh	1.3.0	RSPM	1.3.0	RSPM	[1]	indirect
gitcreds	0.1.1	RSPM	0.1.1	RSPM	[1]	indirect
glue	1.5.1	RSPM	1.5.1	RSPM	[1]	indirect
grDevices	<na></na>	<na></na>	<na></na>	<na></na>	[2]	indirect
graphics	<na></na>	<na></na>	<na></na>	<na></na>	[2]	indirect
highr	0.9	RSPM	0.9	RSPM	[1]	indirect
htmltools	0.5.2	RSPM	0.5.2	RSPM	[1]	indirect
httr	1.4.2	RSPM	1.4.2	RSPM	[1]	indirect
ini	0.3.1	RSPM	0.3.1	RSPM	[1]	indirect
jquerylib	0.1.4	RSPM	0.1.4	RSPM	[1]	indirect
jsonlite	1.7.2	RSPM	1.7.2	RSPM	[1]	indirect
kableExtra	1.3.4	RSPM	1.3.4	RSPM	[1]	direct
knitr	1.36	RSPM	1.36	RSPM	[1]	direct
labeling	0.4.2	RSPM	0.4.2	RSPM	[1]	indirect
lattice	0.20-41	CRAN	<na></na>	<na></na>	[2]	<na></na>
	0.20 41	RSPM	0.2.2	RSPM	[1]	indirect
lazyeval	1.0.1	RSPM	1.0.1	RSPM	[1]	indirect
lifecycle						
lubridate	1.8.0	RSPM	1.8.0	RSPM	[1]	indirect
magrittr	2.0.1	RSPM	2.0.1	RSPM	[1]	direct
markdown	1.1	RSPM	<na></na>	<na></na>	[1]	<na></na>
memoise	2.0.1	RSPM	2.0.1	RSPM	[1]	indirect
methods	<na></na>	<na></na>	<na></na>	<na></na>	[2]	indirect
mgcv	1.8-31	CRAN	<na></na>	<na></na>	[2]	<na></na>
mime	0.12	RSPM	0.12	RSPM	[1]	indirect
munsell	0.5.0	RSPM	0.5.0	RSPM	[1]	indirect
nlme	3.1-148	CRAN	<na></na>	<na></na>	[2]	<na></na>
nnet	7.3-14	CRAN	<na></na>	<na></na>	[2]	<na></na>
openssl	1.4.5	RSPM	1.4.5	RSPM	[1]	indirect
pillar	1.6.4	RSPM	1.6.4	RSPM	[1]	indirect
pkgbuild	1.2.1	RSPM	1.2.1	RSPM	[1]	indirect
pkgconfig	2.0.3	RSPM	2.0.3	RSPM	[1]	indirect
pkgload	1.2.4	RSPM	1.2.4	RSPM	[1]	indirect
praise	1.0.0	RSPM	1.0.0	RSPM	[1]	indirect
prettyunits	1.1.1	RSPM	1.1.1	RSPM	[1]	indirect
processx	3.5.2	RSPM	3.5.2	RSPM	[1]	indirect
ps	1.6.0	RSPM	1.6.0	RSPM	[1]	indirect
purrr	0.3.4	RSPM	0.3.4	RSPM	[1]	indirect
rappdirs	0.3.3	RSPM	0.3.3	RSPM	[1]	indirect
rcmdcheck	1.4.0	RSPM	1.4.0	RSPM	[1]	indirect
rematch2	2.1.2	RSPM	2.1.2	RSPM	[1]	indirect
remotes	2.4.2	RSPM	2.4.2	RSPM	[1]	indirect
renv	0.14.0	CRAN	0.14.0	RSPM	[1]	direct
rex	1.2.1	RSPM	1.2.1	RSPM	[1]	indirect
riskmetric	0.1.1		0.1.1 (		[1]	direct
					2 -3	221000

rlang	0.4.12	RSPM	0.4.12	RSPM	[1]	direct	
rmarkdown	2.11	RSPM	2.11		[1]	direct	
roxygen2	7.1.2		7.1.2	RSPM	[1]	indirect	
rpart	4.1-15	CRAN	<na></na>	<na></na>	[2]	<na></na>	
rprojroot	2.0.2		2.0.2	RSPM	[1]	indirect	
rstudioapi	0.13		0.13	RSPM	[1]	indirect	
rversions	2.1.1	RSPM	2.1.1	RSPM	[1]	indirect	
rvest	1.0.2	RSPM	1.0.2	RSPM	[1]	indirect	
safetyData	1.0.0	RSPM	<na></na>	<na></na>	[1]	direct	
scales	1.1.1	RSPM	1.1.1	RSPM	[1]	indirect	
selectr	0.4-2	RSPM	0.4-2	RSPM	[1]	indirect	
sessioninfo	1.2.2	RSPM	1.2.2	RSPM	[1]	indirect	
spatial	7.3-12	CRAN	<na></na>	<na></na>	[2]	<na></na>	
stats	<na></na>	<na></na>	<na></na>	<na></na>	[2]	indirect	
stringi	1.7.6	RSPM	1.7.6	RSPM	[1]	indirect	
stringr	1.4.0	RSPM	1.4.0	RSPM	[1]	direct	
survival	3.1-12	CRAN	<na></na>	<na></na>	[2]	<na></na>	
svglite	2.0.0	RSPM	2.0.0	RSPM	[1]	indirect	
sys	3.4	RSPM	3.4		[1]	indirect	
systemfonts	1.0.3	RSPM	1.0.3	RSPM	[1]	indirect	
testthat	3.1.1	RSPM	3.1.1	RSPM	[1]	direct	
tibble	3.1.6	RSPM	3.1.6	RSPM	[1]	indirect	
tidyr	1.1.4	RSPM	1.1.4		[1]	indirect	
tidyselect	1.1.1	RSPM	1.1.1	RSPM	[1]	indirect	
tinytex	0.36	RSPM	0.36	RSPM	[1]	indirect	
tools	<na></na>	<na></na>	<na></na>	<na></na>	[2]	direct	
triebeard	0.3.0	RSPM	0.3.0	RSPM	[1]	indirect	
urltools	1.7.3		1.7.3		[1]	indirect	
usethis	2.1.3		2.1.3	RSPM	[1]	indirect	
utf8	1.2.2	RSPM	1.2.2	RSPM	[1]	indirect	
utils	1.2.2 <na></na>	<na></na>	1.2.2 <na></na>	<na></na>	[2]	indirect	
valtools			0.4.0.9000		[1]	direct	
vctrs	0.4.0.3000	RSPM	0.3.8	RSPM	[1]	indirect	
viridisLite	0.3.0	RSPM	0.3.0	RSPM	[1]	indirect	
		RSPM	0.4.0		[1]		
waldo	0.3.1		0.5.1	RSPM		indirect	
webshot	0.5.2	RSPM		RSPM	[1]	indirect	
whisker	0.4	RSPM	0.4	RSPM	[1]	indirect	
whoami	1.3.0	RSPM	1.3.0	RSPM	[1]	indirect	
withr	2.4.3	RSPM	2.4.3		[1]	indirect	
xfun	0.29		0.29			indirect	
xm12	1.3.3		1.3.3		[1]	indirect	
xopen	1.0.0		1.0.0			indirect	
yaml	2.2.1		2.2.1		[1]	indirect	
zip	2.2.0	RSPM	2.2.0	RSPM	[1]	indirect	
[1]: /home/eli.miller/GitHub/Environment-Demo/renv/library/R-4.0/x86_64-pc-linux-gnu [2]: /tmp/RtmpaaiN70/renv-system-library							
# User Profile ====================================							
[no R packages referenced in user profile							
- 1 0							
# Settings =	.========						
# Settings ====================================							
LISC OI O							

```
$ external.libraries : chr(0)
 $ ignored.packages
                           : chr(0)
 $ package.dependency.fields: chr [1:3] "Imports" "Depends" "LinkingTo"
$ r.version
$ snapshot.type
$ use cache
                      : chr(0)
                       : chr "implicit"
 $ use.cache
                          : logi TRUE
 $ vcs.ignore.library
                         : logi TRUE
 $ vcs.ignore.local
                          : logi TRUE
# Options ===========
List of 8
                                     : chr [1:6] "datasets" "utils" "grDevices" "graphics" ...
$ defaultPackages
 $ download.file.method
 $ download.file.extra
                                     : NULL
 $ install.packages.compile.from.source: NULL
 $ pkgType
                                     : chr "source"
                                     : Named chr [1:2] "https://atorus-rspm.eastus2.cloudapp.azure.co
 $ repos
 ..- attr(*, "names")= chr [1:2] "CRAN" "atorus-latest"
 $ renv.consent
                                     : logi TRUE
 $ renv.verbose
                                     : logi TRUE
# Environment Variables ========
                           = /home/eli.miller
LANG
                          = C.UTF-8
MAKE
                           = make
R LIBS
                           = /home/eli.miller/GitHub/Environment-Demo/renv/library/R-4.0/x86_64-pc-lin
R_LIBS_SITE
R_LIBS_USER
                           = /home/eli.miller/GitHub/Environment-Demo/renv/library/R-4.0/x86_64-pc-lin
RENV_DEFAULT_R_ENVIRON = <NA>
RENV_DEFAULT_R_ENVIRON_USER = <NA>
RENV_DEFAULT_R_LIBS
                         = <NA>
RENV_DEFAULT_R_LIBS_SITE
RENV_DEFAULT_R_LIBS_USER = ~/R/x86_64-pc-linux-gnu-library/4.0
RENV_DEFAULT_R_PROFILE = <NA>
RENV_DEFAULT_R_PROFILE_USER = <NA>
RENV_PROJECT
                           = /home/eli.miller/GitHub/Environment-Demo
# PATH =============
- /home/eli.miller/bin
- /opt/anaconda3/condabin
- /usr/local/sbin
- /usr/local/bin
- /usr/sbin
- /usr/bin
- /sbin
- /bin
- /snap/bin
- /bin
- /opt/R/3.6.2/bin/
- /usr/lib/rstudio-server/bin/postback
# Cache ==========
There are a total of 152 package(s) installed in the renv cache.
```

Cache path: "~/.local/share/renv/cache/v5/R-4.0/x86\_64-pc-linux-gnu"