

Validation Report for Demo Environment Validation

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1 Release details

1.1 Package Information

1.1.1 Change Log

Version	Effective Date	Activity Description
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
	R	4.0.2
session	devtools	2.4.3
	dplyr	1.0.7
	kableExtra	1.3.4
	knitr	1.36
	magrittr	2.0.1
	riskmetric	0.1.1
	stringr	1.4.0
	usethis	2.1.3
	valtools	0.4.0.9000

1.2 Authors

1.2.1 Requirements

Requirement ID	Editor	Edit Date
IQ	Eli Miller	2021-12-14
OQ	Eli Miller	2021-12-14

1.2.2 Test Case Authors

Test Case ID	Editor	Edit Date
IQ-cases	Eli Miller	2021-12-14
OQ-cases	Eli Miller	2021-12-14

1.2.3 Test Code Authors

Test Code ID	Editor	Edit Date
1.1	Eli Miller	2021-12-07
1.2	Eli Miller	2021-12-07
1.3	Eli Miller	2021-12-07
1.4	Eli Miller	2021-12-07
2.1	Eli Miller	2021-12-08
2.2	Eli Miller	2021-12-07
2.3	Eli Miller	2021-12-07

1.3 Traceability

Requirement Name	Requirement ID	Test Case Name	Test Cases
Requirement 1	1.1	IQ-cases	1.1
	1.2		1.2
	1.3		1.3
	1.4		1.4
Requirement 2	2.1	OQ-cases	2.1
	2.2		2.2
	2.3		2.3

2 Risk Assessment

2.1 Requirement Assessments

Requirement Name	Requirement ID	Risk Assessment
IQ	1.1	Low Risk
	1.2	Low Risk
	1.3	Low Risk
	1.4	Low Risk
OQ	2.1	Med Risk
	2.2	Low Risk
	2.3	High Risk

2.2 Package Assessments

This table displays the riskmetric score of the `dplyr` and `Tplyr` packages. Other packages can be added as needed.

Package

riskmetric.Scores

Tplyr

0.5069247

dplyr

0.3079477

3 Validation

Installation Qualification

- 1.1: The R installation was installed with tests
- 1.2: The R installation tests complete successfully
- 1.3: The tests for {dplyr} run as expected
- 1.4: The tests for {Tplyr} run as expected.

IQ Testing Steps

- Setup: Load in `dplyr` and `Tplyr` packages.
- 1.1: A directory named `tests` exists in the R installation directory.
- 1.2: The function `tools::testInstalledBasic()` returns a 0
- 1.3: The function `tools::testInstalledPackage("dplyr")` returns a 0
- 1.4: the function `tools::testInstalledPackage("Tplyr")` returns a 0

```
#> Warning: package 'testthat' was built under R version 4.0.5
```

Test	Results	Pass/Fail
1.1.1	As expected	Pass
1.2.1	As expected	Pass
1.3.1	As expected	Pass
1.4.1	As expected	Pass

Operational Qualification

- 2.1: The system must have the ability to work with the system png device
- 2.2: {dplyr} can count correctly
- 2.3: {Tplyr} table objects can be created successfully

OQ Testing Steps

- Setup: Load in `dplyr` and `Tplyr` packages.
- 2.1: The system was compiled to support the png engine.
- 2.2: Using the `dplyr::count` function, verify that the `mtcars` dataset has n=15 for gear=3, n=12 for gear=4, and n=5 for gear=5.
- 2.3: Using `Tplyr::tplyr_table` create a table with the `mtcars` dataset as the target and `gear` as the target variable.

Test	Results	Pass/Fail
2.1.1	As expected	Pass
2.2.1	As expected	Pass
2.3.1	As expected	Pass

3.1 Installed System Packages

Package	Version
base	4.0.2
boot	1.3-25
class	7.3-17
cluster	2.1.0
codetools	0.2-16
compiler	4.0.2
datasets	4.0.2
dplyr	1.0.2
foreign	0.8-80
glue	1.4.2
graphics	4.0.2
grDevices	4.0.2
grid	4.0.2
KernSmooth	2.23-17
lattice	0.20-41
MASS	7.3-51.6
Matrix	1.2-18
methods	4.0.2
mgcv	1.8-31
nlme	3.1-148
nnet	7.3-14
parallel	4.0.2
RAppArmor	3.2.2
rpart	4.1-15
spatial	7.3-12
splines	4.0.2
stats	4.0.2
stats4	4.0.2
survival	3.1-12
tcltk	4.0.2
tidyselect	1.1.0
tools	4.0.2
utils	4.0.2