Warsztaty badawcze - raport do prezentacji o switchr

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Instalacja ładowanie odpowiednich pakietów

Pakiety **switchr** i **GRANBase** byly dostępne w CRAN, ale niestety instalacja pakiety **switchrGist** była konieczna z githuba.

```r
library(switchr)
library(switchrGist)
library(GRANBase)
```

Ładowanie i publikowanie manifestu

```r
pkg_man <- loadManifest("manforpaper.rman")
pkg_man
```

```
## A seeding manifest (SessionManifest object)
##
## Describes a cohort of 6 package versions.
## 6 packages are listed in the underlying package manifest
##
## Package versions:
##          name version
## 1 randomForest  4.6-10
## 2         nlme 3.1-120
## 3         git2r  0.10.1
## 4 latticeExtra  0.6-26
## 5      lattice 0.20-31
## 6 RColorBrewer   1.1-2
```

```r
publishManifest(pkg_man, Gist())
```

```
## [1] "https://gist.githubusercontent.com/piotrpiatyszek/8839a8ec29147d3a7ab7baac6b0d3ff9/raw/dbb40b32
```

Przełączenie się na pakiety z manifestu

Niestety zaprezentowanie tego w raporcie jest niemożliwe, ponieważ switchr odłatowywuje knitr w trakcie działania.

```r
# switchTo("CollabEnv", seed = pkg_man)
```

Tworzenie repozytorium

```
sessInfo <- parseSessionInfoString(readLines("DESeqSession.txt"))
sman <- makeSeedMan(sessInfo)
makeRepo(sman,
         basedir = file.path(tempdir(), "10.1186/gb-2010-11-10-r106"),
         repo_name = "DESeqRepo", check_test = FALSE, install_test = FALSE)
```

Started makeRepo at 2020-03-10 14:56:07

Checking for (and fixing) R version mismatch in packages installed to temp library 2020-03-10 14:56:0

Building 23 packages

Starting makeSrcDirs 2020-03-10 14:56:08

Building 27 packages

Starting buildBranchesInRepo 2020-03-10 15:12:15

Building 27 packages

Invoking package tests 2020-03-10 15:12:16

Building 26 packages

starting migrateToFinalRepo 2020-03-10 15:12:16

Built 26 packages

Completed makeRepo at 2020-03-10 15:12:17

```
## An object of class "GRANRepository"
## Slot "results":
##              name         status version          lastAttempt lastAttemptStatus
## 1     geneplotter ok - not tested  1.27.0 2020-03-10 15:12:16   ok - not tested
## 2        annotate ok - not tested  1.27.1 2020-03-10 15:12:16   ok - not tested
## 3   AnnotationDbi ok - not tested  1.11.4 2020-03-10 15:12:16   ok - not tested
## 4          gplots ok - not tested   2.8.0 2020-03-10 15:12:16   ok - not tested
## 5         caTools ok - not tested    1.10 2020-03-10 15:12:16   ok - not tested
## 6          bitops ok - not tested 1.0-4.1 2020-03-10 15:12:16   ok - not tested
## 7           gdata ok - not tested   2.8.0 2020-03-10 15:12:16   ok - not tested
## 8          gtools ok - not tested   2.6.2 2020-03-10 15:12:16   ok - not tested
## 9     latticeExtra ok - not tested  0.6-14 2020-03-10 15:12:16   ok - not tested
## 10   RColorBrewer ok - not tested   1.0-2 2020-03-10 15:12:16   ok - not tested
## 11         hexbin ok - not tested  1.22.0 2020-03-10 15:12:16   ok - not tested
## 12          edgeR ok - not tested  1.5.11 2020-03-10 15:12:16   ok - not tested
## 13          DESeq ok - not tested  1.1.12 2020-03-10 15:12:16   ok - not tested
## 14          locfit ok - not tested   1.5-6 2020-03-10 15:12:16   ok - not tested
## 15        lattice ok - not tested  0.18-8 2020-03-10 15:12:16   ok - not tested
## 16          akima ok - not tested   0.5-4 2020-03-10 15:12:16   ok - not tested
## 17        Biobase ok - not tested   2.9.0 2020-03-10 15:12:16   ok - not tested
## 18            DBI   build failed   0.2-5 2020-03-10 15:12:16      build failed
## 19      genefilter ok - not tested  1.31.2 2020-03-10 15:12:16   ok - not tested
## 20          limma ok - not tested  3.5.18 2020-03-10 15:12:16   ok - not tested
## 21        RSQLite ok - not tested   0.9-2 2020-03-10 15:12:16   ok - not tested
## 22        survival ok - not tested  2.35-8 2020-03-10 15:12:16   ok - not tested
## 23         xtable ok - not tested   1.5-6 2020-03-10 15:12:16   ok - not tested
## 24 GRANDESeqRepo ok - not tested  0.10.0 2020-03-10 15:12:16   ok - not tested
```

```
## 25         switchr ok - not tested  0.14.1 2020-03-10 15:12:16   ok - not tested
## 26        GRANBase ok - not tested  2.6.20 2020-03-10 15:12:16   ok - not tested
## 27        GRANCore ok - not tested   0.2.6 2020-03-10 15:12:16   ok - not tested
##    lastAttemptVersion           lastbuilt lastbuiltversion lastbuiltstatus
## 1              1.27.0 2020-03-10 15:12:16           1.27.0 ok - not tested
## 2              1.27.1 2020-03-10 15:12:16           1.27.1 ok - not tested
## 3              1.11.4 2020-03-10 15:12:16           1.11.4 ok - not tested
## 4               2.8.0 2020-03-10 15:12:16            2.8.0 ok - not tested
## 5                1.10 2020-03-10 15:12:16             1.10 ok - not tested
## 6             1.0-4.1 2020-03-10 15:12:16          1.0-4.1 ok - not tested
## 7               2.8.0 2020-03-10 15:12:16            2.8.0 ok - not tested
## 8               2.6.2 2020-03-10 15:12:16            2.6.2 ok - not tested
## 9              0.6-14 2020-03-10 15:12:16           0.6-14 ok - not tested
## 10               1.0-2 2020-03-10 15:12:16            1.0-2 ok - not tested
## 11             1.22.0 2020-03-10 15:12:16           1.22.0 ok - not tested
## 12             1.5.11 2020-03-10 15:12:16           1.5.11 ok - not tested
## 13             1.1.12 2020-03-10 15:12:16           1.1.12 ok - not tested
## 14               1.5-6 2020-03-10 15:12:16            1.5-6 ok - not tested
## 15              0.18-8 2020-03-10 15:12:16           0.18-8 ok - not tested
## 16               0.5-4 2020-03-10 15:12:16            0.5-4 ok - not tested
## 17              2.9.0 2020-03-10 15:12:16            2.9.0 ok - not tested
## 18               0.2-5                <NA>             <NA>            <NA>
## 19             1.31.2 2020-03-10 15:12:16           1.31.2 ok - not tested
## 20             3.5.18 2020-03-10 15:12:16           3.5.18 ok - not tested
## 21               0.9-2 2020-03-10 15:12:16            0.9-2 ok - not tested
## 22              2.35-8 2020-03-10 15:12:16           2.35-8 ok - not tested
## 23               1.5-6 2020-03-10 15:12:16            1.5-6 ok - not tested
## 24             0.10.0 2020-03-10 15:12:16           0.10.0 ok - not tested
## 25             0.14.1 2020-03-10 15:12:16           0.14.1 ok - not tested
## 26             2.6.20 2020-03-10 15:12:16           2.6.20 ok - not tested
## 27              0.2.6 2020-03-10 15:12:16            0.2.6 ok - not tested
##
## 1                                            Biocore Team c/o BioC user list <bioconductor@stat
## 2                                            Biocore Team c/o BioC user list <bioconductor@stat
## 3                                            Biocore Team c/o BioC user list <bioconductor@stat
## 4                                                             Gregory R. Warnes <gre
## 5                                             Jarek Tuszynski <jaroslaw.w.tuszyr
## 6                                                  Steve Dutky <sdutky@terp
## 7                                                     Gregory Warnes <gre
## 8                                             Gregory R. Warnes <gre
## 9                                            Deepayan Sarkar <deepayan.sarkar@
## 10                                             Erich Neuwirth <erich.neuwirth
## 11                                            Nicholas Lewin-Koh <nikko
## 12 Mark Robinson <mrobinson@wehi.edu.au>, Davis McCarthy <dmccarthy@wehi.edu.au>, Gordon Smyth <smyth
## 13                                                 Simon Anders <sand
## 14                                             Andy Liaw <andy_li
## 15                                            Deepayan Sarkar <deepayan.sarkar@
## 16                                           Albrecht Gebhardt <albrecht.gebhardt@
## 17                                            Biocore Team c/o BioC user list <bioconductor@stat
## 18                                             David A. James <daj
## 19                                            Biocore Team c/o BioC user list <bioconductor@stat
## 20                                              Gordon Smyth <smyth
## 21                                               Seth Falcon <seth@us
## 22                                            Terry Therneau <therneau.te
```

```
## 23                                                David B. Dahl <dahl@s
## 24                                      Gabriel Becker <becker.gab
## 25                                        Gabriel Becker <gabembeck
## 26                                      Gabriel Becker <becker.gab
## 27                                        Gabriel Becker <gabembeck
##     suspended building revDepOf revdepends buildReason
## 1      FALSE     TRUE                           vbump
## 2      FALSE     TRUE                           vbump
## 3      FALSE     TRUE                           vbump
## 4      FALSE     TRUE                           vbump
## 5      FALSE     TRUE                           vbump
## 6      FALSE     TRUE                           vbump
## 7      FALSE     TRUE                           vbump
## 8      FALSE     TRUE                           vbump
## 9      FALSE     TRUE                           vbump
## 10     FALSE     TRUE                           vbump
## 11     FALSE     TRUE                           vbump
## 12     FALSE     TRUE                           vbump
## 13     FALSE     TRUE                           vbump
## 14     FALSE     TRUE                           vbump
## 15     FALSE     TRUE                           vbump
## 16     FALSE     TRUE                           vbump
## 17     FALSE     TRUE                           vbump
## 18     FALSE     TRUE                           vbump
## 19     FALSE     TRUE                           vbump
## 20     FALSE     TRUE                           vbump
## 21     FALSE     TRUE                           vbump
## 22     FALSE     TRUE                           vbump
## 23     FALSE     TRUE                           vbump
## 24     FALSE     TRUE                           vbump
## 25     FALSE     TRUE                           vbump
## 26     FALSE     TRUE                           vbump
## 27     FALSE     TRUE                           vbump
##
## Slot "manifest":
## A seeding manifest (SessionManifest object)
##
## Describes a cohort of 27 package versions.
## 27 packages are listed in the underlying package manifest
##
## Package versions:
##     name            version
## 1   "geneplotter"   "1.27.0"
## 2   "annotate"      "1.27.1"
## 3   "AnnotationDbi" "1.11.4"
## 4   "gplots"        "2.8.0"
## ... "..."           "..."
## 23  "xtable"        "1.5-6"
## 24  "GRANDESeqRepo" NA
## 25  "switchr"       NA
## 26  "GRANBase"      NA
## 27  "GRANCore"      NA
##
## Slot "param":
```

```
## An object of class "RepoBuildParam"
## Slot "repo_name":
## [1] "DESeqRepo"
##
## Slot "temp_repo":
## [1] "/tmp/RtmpsY8xkW/10.1186/gb-2010-11-10-r106/DESeqRepo/tmprepo"
##
## Slot "base_dir":
## [1] "/tmp/RtmpsY8xkW/10.1186/gb-2010-11-10-r106"
##
## Slot "temp_checkout":
## [1] "/tmp/RtmpsY8xkW/10.1186/gb-2010-11-10-r106/tmpcheckout"
##
## Slot "errlog":
## [1] "/tmp/RtmpsY8xkW/10.1186/gb-2010-11-10-r106/DESeqRepo/GRANDESeqRepo-error.log"
##
## Slot "logfile":
## [1] "/tmp/RtmpsY8xkW/10.1186/gb-2010-11-10-r106/DESeqRepo/GRANDESeqRepo-full.log"
##
## Slot "tempLibLoc":
## [1] "/tmp/RtmpsY8xkW/10.1186/gb-2010-11-10-r106/DESeqRepo/LibLoc"
##
## Slot "check_warn_ok":
## [1] TRUE
##
## Slot "check_note_ok":
## [1] TRUE
##
## Slot "extra_fun":
## function (...)
## NULL
## <environment: 0x55ac375e0828>
##
## Slot "auth":
## [1] ""
##
## Slot "dest_base":
## [1] "/tmp/RtmpsY8xkW/10.1186/gb-2010-11-10-r106"
##
## Slot "dest_url":
## [1] "file:///tmp/RtmpsY8xkW/10.1186/gb-2010-11-10-r106"
##
## Slot "install_test":
## [1] FALSE
##
## Slot "check_test":
## [1] FALSE
##
## Slot "suspended":
## character(0)
##
## Slot "use_cran_granbase":
## [1] TRUE
##
```

```
## Slot "build_timeout":
## [1] 600
##
## Slot "check_timeout":
## [1] 900
##
## Slot "email_notifications":
## [1] FALSE
##
## Slot "email_opts":
## $smtp_server
## [1] "localhost"
##
## $smtp_port
## [1] 25
##
## $sender_email
## [1] "granDESeqRepo@localhost"
##
## $unsubscribers
## NULL
##
##
## Slot "repo_archive":
## [1] "/tmp/RtmpsY8xkW/10.1186/gb-2010-11-10-r106/DESeqRepo/src/contrib/Archive"
##
## Slot "repo_metadata_dir":
## [1] "/tmp/RtmpsY8xkW/10.1186/gb-2010-11-10-r106/DESeqRepo/src/contrib/Meta"
##
## Slot "make_windows_bins":
## [1] TRUE
##
## Slot "platform":
## [1] ""
##
## Slot "r_version":
## [1] ""
##
## Slot "bioc_version":
## [1] ""
##
## Slot "logfun":
## function (pkg, ...)
## {
##     loginnerfun(pkg, ..., errfile = errlogfile(repo), logfile = logfile(repo),
##         pkglog = pkg_log_file(pkg, repo))
## }
## <bytecode: 0x55ac331f25d8>
## <environment: 0x55ac375e0828>
##
## Slot "shell_init":
## character(0)
##
## Slot "archive_timing":
```

```
## [1] 2
##
## Slot "archive_retries":
## [1] 2
##
## Slot "dl_method":
## [1] "auto"
##
## Slot "shell_timing":
## numeric(0)
```

Należy zauważyć, że zbudowanie jednej z paczek nie udało się. Jednak pamiętajmy, że właśnie po to tworzymy repozytorium, by być niezależnym w przyszłości od takich problemów.

Tworzenie manifestu

```
mani <- libManifest()
mani
```

```
## A seeding manifest (SessionManifest object)
##
## Describes a cohort of 455 package versions.
## 455 packages are listed in the underlying package manifest
##
## Package versions:
##      name          version
## 1    "abind"       "1.4-5"
## 2    "acepack"     "1.4.1"
## 3    "annotate"    "1.64.0"
## 4    "AnnotationDbi" "1.48.0"
## ... "..."         "..."
## 451 "praise"       "1.0.0"
## 452 "RCurl"        "1.95-4.11"
## 453 "rpart"        "4.1-13"
## 454 "rsconnect"    "0.8.12"
## 455 "spatial"      "7.3-11"
```

```
mani2 <- makeSeedMan()
mani2
```

```
## A seeding manifest (SessionManifest object)
##
## Describes a cohort of 54 package versions.
## 54 packages are listed in the underlying package manifest
##
## Package versions:
##      name          version
## 1    "GRANBase"    "2.6.20"
## 2    "GRANCore"    "0.2.7"
## 3    "switchrGist" "0.2.4"
## 4    "switchr"     "0.14.2"
## ... "..."         "..."
## 50  "pkgconfig"    "2.0.3"
## 51  "assertthat"   "0.2.1"
```

```
## 52  "httr"       "1.4.1"
## 53  "rstudioapi" "0.11"
## 54  "R6"         "2.4.1"
```

Podsumowanie

Udało się zreprodukować kod, niestety umieszczenie wszystkiego w raporcie jest niemożliwe z uwagi na niesopoziomowy charakter zmian wprowadzanych przez paczkę.