

D4Science Infrastructure - Task #2174

Dataminer and Statistical Manager packages

Feb 08, 2016 03:16 PM - Gianpaolo Coro

Status:	Closed	Start date:	Apr 04, 2016
Priority:	Normal	Due date:	
Assignee:	Gianpaolo Coro	% Done:	100%
Category:	High-Throughput-Computing	Estimated time:	0.00 hour
Target version:	UnSprintable		
Infrastructure:	Development, Production		

Description

This ticket reports the packages and the software to be installed on the Dataminer and the Statistical Manager machines. Updates to this ticket will report new packages/software.

##General##

Mono:

<https://support.d4science.org/issues/1368#change-5873>

GDAL:

```
wget http://download.osgeo.org/gdal/1.11.0/gdal1110.zip
unzip gdal1110.zip -d gdal1110
./configure --with-gdal-config=/usr/local/bin/gdal-config
```

JAGS:

<http://mcmc-jags.sourceforge.net/>

R Packages:

data.table

doBy

multcomp

mvtnorm

survival

splines

TH.data

MASS

Matrix

lattice

abind

bayesmix

coda

R2jags

R2WinBUGS

rjags

runjags

abind

coda

maptools

rjags

sp

base

boot

class

cluster

codetools

compiler

datasets

foreign

graphics

grDevices

grid

KernSmooth

lattice

MASS

Matrix

```

methods
mgcv
nlme
nnet
parallel
rpart
spatial
splines
stats
stats4
survival
tcltk
tools
utils
withr

##ICES processes##
install.packages("/root/download/Rcpp_0.9.10.tar.gz", repos = NULL, type="source")
install.packages("/root/download/plyr_1.8.tar.gz", repos = NULL, type="source")
install.packages("stringr")
install.packages("/root/download/reshape2_1.2.tar.gz", repos = NULL, type="source")
install.packages("/root/download/data.table_1.9.2.tar.gz", repos = NULL, type="source")
install.packages("R2HTML")
install.packages("multcomp")
install.packages("Matrix")
install.packages("lattice")
install.packages("snow")
install.packages("/root/download/RcppEigen_0.3.2.0.tar.gz", repos = NULL, type="source")
install.packages("minqa")
install.packages("/root/download/lme4_1.0-5.tar.gz", repos = NULL, type="source")
install.packages("/root/download/doBy_4.5-3.tar.gz", repos = NULL, type="source")
install.packages("mvtnorm")
install.packages("survival")
install.packages("data.table")
help(package=splines)
help(package=TH.data)
help(package=MASS)

##FAO processes##
install.packages("RCurl")
install.packages("digest")
install.packages("/root/download/httr_0.2.tar.gz", repos = NULL, type="source")
install.packages("memoise")
install.packages("whisker")
install.packages("evaluate")
install.packages("/root/download/devtools_1.4.1.tar.gz", repos = NULL, type="source")
require(devtools)
install_github("rsdmx", "opensdmx")
apt-get update
apt-get install libgdall-dev
apt-get install libgeos-dev
apt-get install libspatialite-dev
install.packages("rgdal")
install.packages("rgeos")
require(devtools)
install_github("RFigisGeo", "openfigis")

##Knitr##
install.packages('knitr', repos = c('http://yihui.name/xran', 'http://cran.rstudio.org'))
devtools::install_github('HenrikBengtsson/R.methodsS3')
devtools::install_github('HenrikBengtsson/R.oo')
devtools::install_github('eddelbuettel/digest')
devtools::install_github('HenrikBengtsson/R.utils')
devtools::install_github('HenrikBengtsson/R.cache')
devtools::install_github('christophergandrud/repmis')
->Install utf8x latex packages
install.packages("rworldmap", repos="http://R-Forge.R-project.org")

```

```

wget https://cran.r-project.org/src/contrib/spam_1.3-0.tar.gz
install.packages('./spam_1.3-0.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/maps_3.0.1.tar.gz
install.packages('./maps_3.0.1.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/fields_8.3-5.tar.gz
install.packages('./fields_8.3-5.tar.gz', repos = NULL, type="source")
wget http://download.r-forge.r-project.org/src/contrib/rworldmap_1.3-4.tar.gz
install.packages('./rworldmap_1.3-4.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/highlight_0.4.7.tar.gz
install.packages('./highlight_0.4.7.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/Rcpp_0.12.2.tar.gz
install.packages('./Rcpp_0.12.2.tar.gz', repos = NULL, type="source")
devtools::install_github('hadley/pryr')
devtools::install_github('cran/RColorBrewer')
wget http://cran.jellyfish.lol/src/contrib/dichromat_2.0-0.tar.gz
install.packages('./dichromat_2.0-0.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/colospace_1.2-6.tar.gz
install.packages('./colospace_1.2-6.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/munsell_0.4.2.tar.gz
install.packages('./munsell_0.4.2.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/labeling_0.3.tar.gz
install.packages('./labeling_0.3.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/scales_0.3.0.tar.gz
install.packages('./scales_0.3.0.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/gtable_0.1.2.tar.gz
install.packages('./gtable_0.1.2.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/ggplot2_2.0.0.tar.gz
install.packages('./ggplot2_2.0.0.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/jsonlite_0.9.19.tar.gz
install.packages('./jsonlite_0.9.19.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/magrittr_1.5.tar.gz
install.packages('./magrittr_1.5.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/gridExtra_2.0.0.tar.gz
install.packages('./gridExtra_2.0.0.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/viridis_0.3.1.tar.gz
install.packages('./viridis_0.3.1.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/base64enc_0.1-3.tar.gz
install.packages('./base64enc_0.1-3.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/htmltools_0.2.6.tar.gz
install.packages('./htmltools_0.2.6.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/htmlwidgets_0.5.tar.gz
install.packages('./htmlwidgets_0.5.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/plotly_2.0.16.tar.gz
install.packages('./plotly_2.0.16.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/mapdata_2.2-5.tar.gz
install.packages('./mapdata_2.2-5.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/mapplots_1.5.tar.gz
install.packages('./mapplots_1.5.tar.gz', repos = NULL, type="source")
->install the netcdf-bin linux package
wget https://cran.r-project.org/src/contrib/ncdf_1.6.9.tar.gz
install.packages('./ncdf_1.6.9.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/mnormt_1.5-3.tar.gz
install.packages('./mnormt_1.5-3.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/numDeriv_2014.2-1.tar.gz
install.packages('./numDeriv_2014.2-1.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/sn_1.3-0.tar.gz
install.packages('./sn_1.3-0.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/mclust_5.1.tar.gz
install.packages('./mclust_5.1.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/tclust_1.2-3.tar.gz
install.packages('./tclust_1.2-3.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/modeltools_0.2-21.tar.gz
install.packages('./modeltools_0.2-21.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/flexmix_2.3-13.tar.gz
install.packages('./flexmix_2.3-13.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/prabclus_2.2-6.tar.gz
install.packages('./prabclus_2.2-6.tar.gz', repos = NULL, type="source")

```

```
wget https://cran.r-project.org/src/contrib/diptest_0.75-7.tar.gz
install.packages('./diptest_0.75-7.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/DEoptimR_1.0-4.tar.gz
install.packages('./DEoptimR_1.0-4.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/robustbase_0.92-5.tar.gz
install.packages('./robustbase_0.92-5.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/kernlab_0.9-22.tar.gz
install.packages('./kernlab_0.9-22.tar.gz', repos = NULL, type="source")
wget http://cran.jellyfish.lol/src/contrib/trimcluster_0.1-2.tar.gz
install.packages('./trimcluster_0.1-2.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/fpc_2.1-10.tar.gz
install.packages('./fpc_2.1-10.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/RJSONIO_1.3-0.tar.gz
install.packages('./RJSONIO_1.3-0.tar.gz', repos = NULL, type="source")
require(devtools)
install_github('rCharts', 'ramnathv')
wget https://cran.r-project.org/src/contrib/cowplot_0.6.0.tar.gz
install.packages('./cowplot_0.6.0.tar.gz', repos = NULL, type="source")
require(devtools)
install_github("IRDTunaAtlas", "juldebar")
```

Subtasks:

Task # 3131: Create a suitable R environment on statistical-pre.d4science.org

Closed

History

#1 - Feb 08, 2016 03:17 PM - Gianpaolo Coro

Latest packages:

```
##Absence records##
wget https://cran.r-project.org/src/contrib/DBI_0.3.1.tar.gz
install.packages('./DBI_0.3.1.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/RPostgreSQL_0.4.tar.gz
install.packages('./RPostgreSQL_0.4.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/maptools_0.8-37.tar.gz
install.packages('./maptools_0.8-37.tar.gz', repos = NULL, type="source")
wget https://cran.r-project.org/src/contrib/sp_1.2-1.tar.gz
install.packages('./sp_1.2-1.tar.gz', repos = NULL, type="source")
install.packages("raster", repos="http://R-Forge.R-project.org")
```

```
#VPA Workflow
install.packages('xtable')
install.packages('reshape')
install_github("FLCore", "flr")
install_github("FLa4a", "flr")
install.packages('kobe')
install.packages('shiny')
```

#2 - Feb 15, 2016 03:41 PM - Gianpaolo Coro

- Status changed from New to In Progress

#MONO Installation ([#2173](#))

on Ubuntu 12.04.5 LTS, the following two packages are required to run EwECmd.exe

```
mono-runtime
libmono-microsoft-visualbasic10.0-cil
They can be installed, as root, with: apt-get install mono-runtime libmono-microsoft-visualbasic10.0-cil
```

#3 - Feb 16, 2016 05:41 PM - Andrea Dell'Amico

The FLA4a R package needs the following deps:

```
- gsl-bin
- libgsl0-dev
```

#4 - Feb 18, 2016 01:45 AM - Andrea Dell'Amico

- % Done changed from 0 to 80

- Infrastructure Production added

Those R packages and their dependencies are installed on all the dataminer (dev and prod) and all the statistical manager nodes.

#5 - Feb 25, 2016 12:37 PM - Gianpaolo Coro

- % Done changed from 80 to 0

#Additional Package for VPA Workflow
install.packages('ncdf4')

#6 - Feb 29, 2016 02:56 PM - Andrea Dell'Amico

Can I install it on all the servers? dataminer prod/dev, statistical prod/dev ?

#7 - Feb 29, 2016 03:19 PM - Gianpaolo Coro

They are meant for the next release/pre-release.

#8 - Mar 09, 2016 09:04 PM - Pasquale Pagano

- Tracker changed from Support to Task

#9 - Apr 08, 2016 12:08 PM - Gianpaolo Coro

#Packages for I2S processes
install.packages("readxl")

#10 - Apr 21, 2016 11:24 AM - Andrea Dell'Amico

New requests for packages on the statistical manager (and dataminer too?):

```
- lubridate  
- dplyr  
- tidyr  
- gam  
- rgl  
- readxl
```

#11 - Apr 21, 2016 11:31 AM - Gianpaolo Coro

Hi Andrea, the packages should be aligned between StatMan and Dataminer, because the latter is going to substitute the former in the next months.

#12 - Apr 21, 2016 01:22 PM - Andrea Dell'Amico

Gianpaolo Coro wrote:

Hi Andrea, the packages should be aligned between StatMan and Dataminer, because the latter is going to substitute the former in the next months.

Right, I forgot that all the statistical and dataminer playbooks share the same R packages list (there are two separate files actually, one for the production servers and one for the devel/preprod, but they are identical right now).

#13 - Apr 21, 2016 01:26 PM - Andrea Dell'Amico

I see that the rgl package needs the GL include files. All the other new packages have just been installed on the production statistical managers.

#14 - Apr 21, 2016 11:46 PM - Andrea Dell'Amico

The statistical manager nodes now have all the new modules installed.

#15 - Apr 27, 2016 06:36 PM - Gianpaolo Coro

Newly requested are:

```
install.packages("geosphere")  
install.packages("shapefiles")
```

#16 - Apr 27, 2016 06:45 PM - Andrea Dell'Amico

Questions:

- Do they need to be installed on the rstudio servers too?
- Do you want them installed on the dataminer servers immediately? I just updated the statistical-manager to satisfy the request arrived by email.

#17 - Apr 27, 2016 06:53 PM - Gianpaolo Coro

Let me explain the approach I suggest: the packages listed here should be prepared for being installed on the StatMan and Dataminer services (not on RStudio, unless explicitly requested) in the production environments.
In other words, they should be only added to the installation scripts.
The scripts should be run only when requested by a release activity.

I add the packages inhere after having already installed and checked them on the development machines, that's why I report the exact command instead of the simple package names.

#18 - Apr 27, 2016 06:56 PM - Andrea Dell'Amico

OK.

#19 - Jun 07, 2016 12:16 PM - Gianpaolo Coro

```
install.packages("rmarkdown")
```

#20 - Jun 07, 2016 05:18 PM - Gianpaolo Coro

The pandoc package for Linux is required too.

#21 - Jun 07, 2016 06:49 PM - Andrea Dell'Amico

Added both rmarkdown and pandoc to the list of packages. They will be installed at the next upgrade, or the next playbook run.

#22 - Jun 08, 2016 12:41 PM - Gianpaolo Coro

The following python packages are required:

```
numpy, matplotlib, psycopg2, scipy, scikit-learn, networkx, pandas, igraph
```

#23 - Jun 08, 2016 01:20 PM - Andrea Dell'Amico

They are the same listed on #3970 but spark, for which I'm waiting for an answer.

#25 - Jun 09, 2016 05:46 PM - Gianpaolo Coro

```
install.packages("igraph")
```

#26 - Jun 13, 2016 04:56 PM - Gianpaolo Coro

I have just updated the Dataminer installation Wiki page with the following requirement for vessels data analysis algorithms:

download the file following file (
http://thredds.research-infrastructures.eu/thredds/fileServer/public/netcdf/gebco_08_OCEANS_CLIMATOLOGY_METEOROLOGY_ATMOSPHERE.nc) under the "ecocfg" folder and rename it as "gebco_08.nc"

This is needed to be added to the installation process, although the file is quite large.

#27 - Jul 06, 2016 03:10 PM - Andrea Dell'Amico

Gianpaolo Coro wrote:

The following python packages are required:

```
numpy, matplotlib, psycopg2, scipy, scikit-learn, networkx, pandas, igraph
```

Those have been installed on all the dataminer servers.

#28 - Jul 06, 2016 04:55 PM - Gianpaolo Coro

```
install.packages("curl")  
install.packages("caret")
```

#29 - Jul 06, 2016 11:11 PM - Gianpaolo Coro

```
install.packages("httr")  
install.packages("XML")
```

#30 - Jul 18, 2016 12:22 PM - Gianpaolo Coro

Postgres and PostGIS clients are required (have been already installed on dataminer1-d):

```
apt-get install postgresql-client
```

```
apt-get install postgres
```

#31 - Jul 21, 2016 02:36 PM - Gianpaolo Coro

```
install.packages("gdata")
```

#32 - Jul 21, 2016 07:37 PM - Andrea Dell'Amico

All added to the playbook lists.

#33 - Aug 31, 2016 02:26 PM - Gianpaolo Coro

```
install.packages("earth")
```

#34 - Sep 01, 2016 11:11 AM - Gianpaolo Coro

```
install.packages("plotrix")
```

#35 - Sep 09, 2016 04:35 PM - Gianpaolo Coro

```
install.packages("igraph")
```

#36 - Oct 14, 2016 11:39 AM - Gianpaolo Coro

```
install_github("flr/FLCore")  
install_github("flr/FLash")  
install_github("flr/FLAssess")  
install_github("flr/ggplotFL")  
install.packages("GA")
```

#37 - Feb 07, 2017 09:36 AM - Gianpaolo Coro

```
install.packages("kobe")  
install_github("flr/FLRDynState")  
install_github("flr/FLBEIA")
```

#38 - Mar 08, 2017 11:28 AM - Gianpaolo Coro

```
install.packages("rstan")
```

#39 - Mar 14, 2017 11:08 AM - Gianpaolo Coro

```
install.packages("doMC")
```

#40 - Mar 14, 2017 03:24 PM - Gianpaolo Coro

```
install.packages("mefa4")
```

#41 - Apr 27, 2017 05:11 PM - Gianpaolo Coro

```
install.packages("testit")
```

#42 - May 23, 2017 11:34 AM - Gianpaolo Coro

- *Status changed from In Progress to Closed*

Since this update is going to become fully automatic, the list of packages will be maintained on SVN only:

https://svn.d4science.research-infrastructures.eu/gcube/trunk/data-analysis/RConfiguration/RPackagesManagement/r_cran_pkgs.txt
https://svn.d4science.research-infrastructures.eu/gcube/trunk/data-analysis/RConfiguration/RPackagesManagement/r_deb_pkgs.txt
https://svn.d4science.research-infrastructures.eu/gcube/trunk/data-analysis/RConfiguration/RPackagesManagement/r_github_pkgs.txt