

OpenEarth infrastructure - Installation on RHEL-6-x86_64

Introduction

This is a transcript from a installation session at RWS-CIV, dd. 17 Feb. 2013
Original text is attached to this page.

Prepare/Setup Yum configuration

1. Get the EPEL gpgkey:

```
https://fedoraproject.org/static/0608B895.txt
```

```
write the Public Key Block from this source to file: /etc/pki/rpm-gpg/RPM-GPG-KEY-epel
```

2. Add to Yum config:

```
echo "proxy=http://proxy.services.int-data.rws.local:3128 >>/etc/yum.conf"
```

3. Check /etc/yum.repos.d/deltares.repo:

```
[deltares]
name=deltares OpenEARTH Software
baseurl=http://al-ng001.xtr.deltares.nl/yum/CentOS/6/x86_64/OpenEarthStack
enabled=1
gpgcheck=0

[Postgres]
name=Postgres repository
baseurl=http://yum.postgresql.org/9.2/redhat/rhel-6-x86_64
enabled=1
gpgcheck=0

[epel]
name=Epel repository
baseurl=http://dl.fedoraproject.org/pub/epel/6/x86_64/
enabled=1
gpgcheck=1
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-epel
```

Database server installation (PostgreSQL/PostGIS)

[yum install postgresql92-server](#)

```

=====
Package                               Arch                               Version
Repository                            Size
=====
Installing:
 postgresql92-server                 x86_64                             9.2.6-1PGDG.rhel6
 Postgres                             3.8 M
Installing for dependencies:
 postgresql92                        x86_64                             9.2.6-1PGDG.rhel6
 Postgres                             971 k
 postgresql92-libs                   x86_64                             9.2.6-1PGDG.rhel6
 Postgres                             187 k

Transaction Summary
=====
Install      3 Package(s)

```

yum install postgres2_92

```

=====
=====
Package      Arch      Version
Repository              Size
=====
Installing:
postgis2_92    x86_64    2.1.1-1.rhel6
Postgres                      4.4 M
Installing for dependencies:
CharLS          x86_64    1.0-1.el6
epel            73 k
armadillo       x86_64    3.800.2-1.el6
epel            16 k
atlas           x86_64    3.8.4-2.el6                cl-20140211-rhel-
x86_64-server-6 2.8 M
blas           x86_64    3.2.1-4.el6                cl-20140211-rhel-
x86_64-server-6 321 k
cfitsio        x86_64    3.240-3.el6
epel            498 k
freexl         x86_64    1.0.0d-1.el6
epel            31 k
gdal-libs      x86_64    1.9.2-4.el6
Postgres       3.8 M
geos           x86_64    3.4.2-1.rhel6
Postgres       529 k
hdf5           x86_64    1.8.5.patch1-7.el6
epel            1.4 M
json-c         x86_64    0.10-2.el6
epel            24 k
lcms-libs      x86_64    1.19-1.el6                cl-20140211-rhel-
x86_64-server-6 100 k
libdap         x86_64    3.11.0-1.el6
epel            445 k
libgeotiff     x86_64    1.4.0-1.el6
Postgres       749 k
libgfortran    x86_64    4.4.7-4.el6                cl-20140211-rhel-
x86_64-server-6 265 k
libgta         x86_64    1.0.2-2.el6
epel            31 k
libspatialite  x86_64    2.4.0-0.6.RC4.el6
epel            611 k
netcdf         x86_64    4.1.1-3.el6.5
epel            4.8 M
poppler        x86_64    0.12.4-3.el6_0.1          cl-20140211-rhel-
x86_64-server-6 557 k
poppler-data   noarch    0.4.0-1.el6                cl-20140211-rhel-
x86_64-server-6 2.2 M
postgis2_92-client x86_64    2.1.1-1.rhel6
Postgres       122 k
proj           x86_64    4.8.0-2.rhel6
Postgres       172 k
unixODBC       x86_64    2.2.14-12.el6_3           cl-20140211-rhel-
x86_64-server-6 378 k
xerces-c       x86_64    3.0.1-0.20.1.el6
epel            862 k

Transaction Summary
=====
Install      24 Package(s)

```

Prepare database service

- service postgresql-9.2 initdb
- service postgresql-9.2 start
- /sbin/chkconfig postgresql-9.2 on

at		x86_64	3.1.10-43.el6_2.1	cl-20140211-rhel-
x86_64-server-6	60 k			
axis		noarch	1.2.1-7.3.el6_3	cl-20140211-rhel-
x86_64-server-6	1.5 M			
bcel		x86_64	5.2-7.2.el6	cl-20140211-rhel-
x86_64-server-6	1.4 M			
classpathx-jaf		x86_64	1.0-15.4.el6	cl-20140211-rhel-
x86_64-server-6	100 k			
classpathx-mail		noarch	1.1.1-9.4.el6	cl-20140211-rhel-
x86_64-server-6	479 k			
cvs		x86_64	1.11.23-16.el6	cl-20140211-rhel-
x86_64-server-6	712 k			
db4-cxx		x86_64	4.7.25-18.el6_4	cl-20140211-rhel-
x86_64-server-6	588 k			
db4-devel		x86_64	4.7.25-18.el6_4	cl-20140211-rhel-
x86_64-server-6	6.6 M			
ecj		x86_64	1:3.4.2-6.el6	cl-20140211-rhel-
x86_64-server-6	2.8 M			
gdbm-devel		x86_64	1.8.0-36.el6	cl-20140211-rhel-
x86_64-server-6	25 k			
gettext		x86_64	0.17-16.el6	cl-20140211-rhel-
x86_64-server-6	1.8 M			
glibc-devel		x86_64	2.12-1.132.el6	cl-20140211-rhel-
x86_64-server-6	978 k			
glibc-headers		x86_64	2.12-1.132.el6	cl-20140211-rhel-
x86_64-server-6	608 k			
jakarta-commons-collections		noarch	3.2.1-3.4.el6	cl-20140211-rhel-
x86_64-server-6	523 k			
jakarta-commons-daemon		x86_64	1:1.0.1-8.9.el6	cl-20140211-rhel-
x86_64-server-6	45 k			
jakarta-commons-dbcp		noarch	1.2.1-13.8.el6	cl-20140211-rhel-
x86_64-server-6	116 k			
jakarta-commons-discovery		noarch	1:0.4-5.4.el6	cl-20140211-rhel-
x86_64-server-6	73 k			
jakarta-commons-httpclient		x86_64	1:3.1-0.7.el6_3	cl-20140211-rhel-
x86_64-server-6	587 k			
jakarta-commons-logging		noarch	1.0.4-10.el6	cl-20140211-rhel-
x86_64-server-6	52 k			
jakarta-commons-pool		x86_64	1.3-12.7.el6	cl-20140211-rhel-
x86_64-server-6	122 k			
java-1.5.0-gcj		x86_64	1.5.0.0-29.1.el6	cl-20140211-rhel-
x86_64-server-6	146 k			
java_cup		x86_64	1:0.10k-5.el6	cl-20140211-rhel-
x86_64-server-6	197 k			
libart_lgpl		x86_64	2.3.20-5.1.el6	cl-20140211-rhel-
x86_64-server-6	65 k			
libgcj		x86_64	4.4.7-4.el6	cl-20140211-rhel-
x86_64-server-6	19 M			
libgomp		x86_64	4.4.7-4.el6	cl-20140211-rhel-
x86_64-server-6	118 k			
log4j		x86_64	1.2.14-6.4.el6	cl-20140211-rhel-
x86_64-server-6	679 k			
mx4j		noarch	1:3.0.1-9.13.el6	cl-20140211-rhel-
x86_64-server-6	1.1 M			
patch		x86_64	2.6-6.el6	cl-20140211-rhel-
x86_64-server-6	91 k			
pax		x86_64	3.4-10.1.el6	cl-20140211-rhel-
x86_64-server-6	69 k			
perl-CGI		x86_64	3.51-136.el6	cl-20140211-rhel-
x86_64-server-6	209 k			
perl-ExtUtils-MakeMaker		x86_64	6.55-136.el6	cl-20140211-rhel-
x86_64-server-6	293 k			
perl-ExtUtils-ParseXS		x86_64	1:2.2003.0-136.el6	cl-20140211-rhel-
x86_64-server-6	45 k			
perl-Test-Harness		x86_64	3.17-136.el6	cl-20140211-rhel-
x86_64-server-6	231 k			
perl-Test-Simple		x86_64	0.92-136.el6	cl-20140211-rhel-
x86_64-server-6	112 k			
perl-devel		x86_64	4:5.10.1-136.el6	cl-20140211-rhel-
x86_64-server-6	423 k			
redhat-lsb-core		x86_64	4.0-7.el6	cl-20140211-rhel-

```

x86_64-server-6          25 k
  regexp                  x86_64          1.5-4.4.el6          cl-20140211-rhel-
x86_64-server-6          105 k
  sinjdoc                  x86_64          0.5-9.1.el6          cl-20140211-rhel-
x86_64-server-6          705 k
  tomcat6-el-2.1-api        noarch          6.0.24-62.el6          cl-20140211-rhel-
x86_64-server-6          46 k
  tomcat6-jsp-2.1-api        noarch          6.0.24-62.el6          cl-20140211-rhel-
x86_64-server-6          82 k
  tomcat6-lib              noarch          6.0.24-62.el6          cl-20140211-rhel-
x86_64-server-6          2.9 M
  tomcat6-servlet-2.5-api    noarch          6.0.24-62.el6          cl-20140211-rhel-
x86_64-server-6          97 k
  wsdl4j                  noarch          1.5.2-7.8.el6          cl-20140211-rhel-
x86_64-server-6          157 k
  xml-commons-apis          x86_64          1.3.04-3.6.el6          cl-20140211-rhel-
x86_64-server-6          439 k
  xml-commons-resolver        x86_64          1.1-4.18.el6          cl-20140211-rhel-
x86_64-server-6          145 k

Transaction Summary
=====
Install      46 Package(s)

```

+ Prepare Tomcat service to start at boot time +
chkconfig tomcat6 on

Install Tomcat-admin-webapps AND THREDDDS (done here in one go...)

Currently the Deltares packages (GeoServer & GeoNetwork) contain dependencies to Tomcat Webapps Admin. The currently configured repositories do not [?](#) contain these packages. Get them from here:

```

ftp://195.220.108.108/linux/centos/6.5/os/x86_64/Packages/tomcat6-admin-webapps-6.0.24-62.el6.noarch.rpm
ftp://195.220.108.108/linux/centos/6.5/os/x86_64/Packages/tomcat6-webapps-6.0.24-62.el6.noarch.rpm
ftp://195.220.108.108/linux/centos/6.5/os/x86_64/Packages/jakarta-taglibs-standard-1.1.1-11.4.el6.noarch.rpm

```

[yum install tomcat6-admin-webapps-6.0.24-62.el6.noarch.rpm tomcat6-webapps-6.0.24-62.el6.noarch.rpm jakarta-taglibs-standard-1.1.1-11.4.el6.noarch.rpm thredds](#)

```

=====
=====
Package              Arch          Version
Repository           Size
=====
Installing:
jakarta-taglibs-standard  noarch          1.1.1-11.4.el6          /jakarta-taglibs-standard-1.1.1-
11.4.el6.noarch          467 k
thredds                noarch          4.3-25
deltares                32 M
tomcat6-admin-webapps    noarch          6.0.24-62.el6          /tomcat6-admin-webapps-6.0.24-
62.el6.noarch          62 k
tomcat6-webapps          noarch          6.0.24-62.el6          /tomcat6-webapps-6.0.24-62.el6.
noarch          1.1 M
Installing for dependencies:
apache-tomcat-apis        noarch          0.1-1.el6          cl-20140211-rhel-x86_64-server-
6          163 k
xalan-j2                noarch          2.7.0-9.8.el6          cl-20140211-rhel-x86_64-server-
6          1.8 M

Transaction Summary
=====
Install      6 Package(s)

```

GeoNetwork

GeoNetwork is to be provided from the Deltares repository; this is not available yet. Get the WAR-file from here:

http://sourceforge.net/projects/geonetwork/files/GeoNetwork_opensource/v2.10.3/geonetwork.war/download

- copy this WAR-file to: `/var/lib/tomcat6/webapps`
- `service tomcat6 restart`
- edit configuration to enable data storage in PostgreSQL:

[illegible]

GeoServer

GeoServer is to be provided from the Deltares repository; this is not available yet. Get the WAR-file from here:

<http://sourceforge.net/projects/geoserver/files/GeoServer/2.4.4/geoserver-2.4.4-war.zip/download>

- copy this WAR-file to: /var/lib/tomcat6/webapps
- service tomcat6 restart