

## [Building eXo Portal with JDK 6 and JOnAS 5.0.2](#)

Hacking eXo Portal to use JOnAS 5 and JDK 6

This page is wrote on 2008/04/09, and at this date, eXo Portal is not yet compatible with JOnAS 5. First of all, I'm neither a member of JOnAS team, nor eXo Team... just a poor lonesome "warrior" struggling for a working eXo Portal under JOnAS !

Thanks to members of each teams, and individual subscribers of the lists in helping me to do that work. The script below intends to hack some files in eXo repository, in order to make it build eXo's EAR. At this time, the EAR is build, but there's some unknown dependancies in eXo code which make the EAR deployment fails.

So some adaptation may be used on earlier versions of eXo Portal... I hope it would be soon unnecessary !

The script

See the file attached [here](#)

Its usage is :

```
install.sh <dir where installation files are> <where to work>
```

example :

```
install.sh /home/me/src /usr/exo
```

This script pretends to find in \$1 those files :

- apache-maven-2.0.8-bin.tar.bz2
- exoportal\_src.tbz2 : source files checkout from eXo SVN repository
- jdk-6u5-linux-i586.bin
- jonas-osgi-5.0.2-bin.tar.gz
- usr/exo/java/exo-working/exo-jonas/unix/eXo.sh : the file to replace further (directory tree needed)

Please note that there may be a bug if you add "/" add the end of specified directories. Script is still alpha....quickly written ... Quickly explained

Starting from [eXo WIKI](#), I've adopted another directory structure, very close from eXo's WIKI :

```
/usr/exo/ java/ exo-dependencies/ jonas repository exo-working/ exo-jonas/ java maven softs/
apache-maven-2.0.8/ eXoProjects/ jdk1.6.0_05/ jonas-osgi-5.0.2/
```

Here's a short explanation :

Directory	What's for ?
/usr/exo/java/exo-dependencies/jonas	is a symlink to /usr/exo/softs/jonas-osgi-5.0.2
/usr/exo/java/exo-dependencies/repository	is the directory where maven puts eXo's stuff while building
/usr/exo/java/exo-working/exo-jonas	is a the final directory where everything is build
/usr/exo/java/java	is a symlink to /usr/exo/softs/jdk1.6.0_05
/usr/exo/java/maven	is a symlink to /usr/exo/softs/apache-maven-2.0.8

Please note all those directories are setup in the script !

What it does ?

Please note also that at the moment, the installation script does not ends because of my lacks in Bash programming ; you must finish manually the process :

```
cd $EXO_DEST_DIR/ exobuild --product=portal --build --deploy=jonas 2>&1> exobuild.log cd
$EXO_DEST_DIR/java/exo-working/exo-jonas/bin cp $EXO_SRC_DIR/`pwd`/unix/eXo.sh unix/eXo.sh ln -s
unix/eXo.sh chmod +x eXo.sh jonas setenv unix/*.sh
```

You see that the installation scripts replace /usr/exo/java/exo-working/exo-jonas/bin/unix/eXo.sh original file by another made by my 10 fingers that you'll can find [there](#). I think this script is more convenient.

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When build finished, you'll find a working JOnAS environment in /usr/exo/java/exo-working/exo-jonas.

### Running JOnAS IS working

```
/usr/exo/java/exo-working/exo-jonas/eXo.sh start
```

BUT there is at this moment some things that I can't explain (waiting for exo mailing list's answer...)

#### First :

```
008-04-09 13:46:50,725 : QuartzScheduler.<init> : Quartz Scheduler v.1.5.0-RC2 created.
java.lang.RuntimeException: Cannot instantiate component class
org.exoplatform.services.scheduler.impl.QuartzScheduler [...] Caused by: java.lang.LinkageError:
loader constraint violation in interface itable initialization: when resolving method
"org.quartz.impl.StdScheduler.setJobFactory(Lorg/quartz/spi/JobFactory;)V" the class loader
(instance of org/ow2/easybeans/loader/EasyBeansClassLoader) of the current class,
org/quartz/impl/StdScheduler, and the class loader (instance of
org/apache/felix/framework/searchpolicy/ContentClassLoader) for interface org/quartz/Scheduler
have different Class objects for the type org/quartz/spi/JobFactory used in the signature
```

==> is it grave doctor ?

#### Second :

```
2008-04-09 13:46:59,047 : InitialContextInitializer.addPlugin : Reference bound: jdbcexo ERROR:
cannot create portal container. ServletContext:
org.apache.catalina.core.ApplicationContextFacade@48c85b java.lang.RuntimeException: Cannot
instantiate component class
org.exoplatform.services.jcr.ext.hierarchy.impl.NodeHierarchyCreatorImpl [...] Caused by:
java.lang.ClassNotFoundException: org.apache.commons.dbcp.BasicDataSourceFactory
```

==> However, commons-dbc-1.2.1.jar is in EAR's dir (/exo-jonas/deploy/exoplatform.ear/lib)

#### Third :

```
2008-04-09 11:56:11,177 : StandardContext.loadOnStartup : Servlet /portal threw load() exception
java.lang.NullPointerException at
org.exoplatform.portal.application.PortalController.init(PortalController.java:67)
```

=> while reading the code, i think it is because  
rootContainer.createPortalContainer(config.getServletContext()) did not succeed.

#### Fourth : (happened more than one time)

```
2008-04-09 11:56:11,707 : StandardContext.listenerStart : Exception sending context initialized
event to listener instance of class
org.exoplatform.services.portletcontainer.impl.servlet.PortletApplicationListener
java.lang.NoClassDefFoundError: com/sun/org/apache/xerces/internal/dom/DOMInputImpl [...] Caused
by: java.lang.ClassNotFoundException: com.sun.org.apache.xerces.internal.dom.DOMInputImpl
```

==> even if xercesImpl-2.8.1.jar would be in EAR's lib dir, DOMInputImpl's package is  
org.apache.xerces.dom (no internal). What library does it refers to ?

#### Fitfh : (happened more than one time)

```
2008-04-09 11:56:12,499 : SkinService.processMergeRecursively : Problem while merging CSS :
/skin/PortletThemes/Stylesheet.css java.lang.NullPointerException at
org.exoplatform.portal.webui.skin.SkinService.processMergeRecursively(SkinService.java:155)
```

==> The file /skin/PortletThemes/Stylesheet.css exists ?! Why BufferedReader fails ?

#### Sixth :

```
2008-04-09 11:56:15,184 : StandardContext.loadOnStartup : Servlet /cometd threw load() exception
java.lang.IncompatibleClassChangeError: Implementing class
```

==> Cometd won't work, grave ?  
So this work is still in progress !

I'll update this wiki as soon as my work will go further...

Steph33560 , le 9 avril 2008 ;)

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