

SAP How-to Guide

Mobility

SAP Sybase365 Mobiliser

HTG - Set up a Stand-alone Mobiliser Development and Runtime Environment on Fedora

provided by SAP Rapid Innovation Group – RIG

Applicable Releases:

Mobiliser 5.1 SP2

Linux platform

Simmaco Ferriero

Senior Specialist @ Rapid Innovation Group (RIG)

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Document History

Document Version	Authored By	Description
1.1	Simmaco Ferriero	Source code have been reformatted and some errors have been corrected
1.0	Simmaco Ferriero	First release of this guide

Typographic Conventions

Type Style	Description
Example Text	Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options.
	Cross-references to other documentation
Example text	Emphasized words or phrases in body text, graphic titles, and table titles
Example text	File and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.
Example text	User entry texts. These are words or characters that you enter in the system exactly as they appear in the documentation.
<Example text>	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.
EXAMPLE TEXT	Keys on the keyboard, for example, F2 or ENTER.

Icons

Icon	Description
	Caution
	Important
	Note
	Recommendation or Tip
	Example

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1. Business Scenario

When a customer or a SAP Partner wants to enhance the Mobiliser source code, it's necessary to set up a development environment containing all the needed resources. In this guide, we will see how to set up a server containing all the needed components for development and how to configure the client part to start enhancing the code. We have also included in this guide a setup for a very basic run-time environment. The reader can choose to follow either the path for the run-time environment or the path for the development environment.

2. Background Information

A lot of technologies will be involved in this walkthrough: we will talk about Apache Maven, CollabNet Subversion, Jenkins and Eclipse. It would be appreciated if the reader of this document would already have knowledge about these components: it would definitely speed up the execution of all the steps. However, we will try to give some very basic information about each one of the components involved, mainly we will look into what they do and how they integrate with other components.

For our scope, we are going to configure a virtual machine equipped with:

- Linux Fedora 18 - 64bit
- At least 2 GB of memory (4 GB recommended)
- 50 GB of free space on the disk

We have chosen Fedora Linux because this Linux distribution is very close to Red Hat, which is one of the supported SAP distributions. Fedora is also free of charge, so it's very easy to download and to use it.

We will need a database sever for this Mobiliser installation: for our guide we have chosen to use Sybase Adaptive Server Enterprise, but of course you can use any of the other two database server platforms: Oracle or DB2.

All the steps described here can be done on a 32bit system, paying attention to download the required software specific for that version.

2.1 What is...?

Before starting, here's a short introduction to all the main software components we are covering in this paper.

2.1.1 Apache Maven

Apache Maven is a software project management and comprehension tool. Based on the concept of a project object model (POM), Maven can manage a project's build, reporting and documentation from a central piece of information.

Maven uses an XML file to describe the software project being built, its dependencies on other external modules and components, the build order, directories, and required plug-ins. It comes with pre-defined targets for performing certain, well-defined tasks such as compilation of code and its packaging. Maven dynamically downloads Java libraries and Maven plug-ins from one or more repositories such as the Maven 2 Central Repository. This local cache of downloaded artifacts can

also be updated with artifacts created by local projects. Public repositories can also be updated. This is an example of POM.XML file:

```
<project>
  <!-- model version is always 4.0.0 for Maven 2.x POMs -->
  <modelVersion>4.0.0</modelVersion>

  <!-- project coordinates, i.e. a group of values which
      uniquely identify this project -->

  <groupId>com.mycompany.app</groupId>
  <artifactId>my-app</artifactId>
  <version>1.0</version>

  <!-- library dependencies -->

  <dependencies>
    <dependency>

      <!-- coordinates of the required library -->

      <groupId>junit</groupId>
      <artifactId>junit</artifactId>
      <version>3.8.1</version>

      <!-- this dependency is only used for running and compiling tests -->
      <scope>test</scope>

    </dependency>
  </dependencies>
</project>
```

When you run the command “mvn package” in the same folder where this POM is, the package is build and all the dependencies are downloaded from the repositories and linked to the project.

2.1.2 CollabNet Subversion Edge

Subversion is an open source version control system. Founded in 2000 by CollabNet, Inc., the Subversion project and software have seen incredible success over the past decade. Subversion has enjoyed and continues to enjoy widespread adoption in both the open source arena and the corporate world. There are many distributions of it, but we will use the one from CollabNet called Subversion Edge. This particular version includes a web server and a user interface so it's relatively easy to configure and to manage. Other distributions are mainly based on command line tools.

2.1.3 Jenkins

Jenkins is an open source integration tool written in Java. The project was derived from Hudson. Jenkins provides continuous integration services for software development mainly in Java. It's a server-based system running on Apache Tomcat. It supports a lot of version control systems and among these there is the one we have chosen, CollabNet Subversion Edge. It allows you to build software package automatically, by scheduling builds with any frequency and collecting the results.

2.1.4 Eclipse

Eclipse is an integrated development environment (IDE) that allows developer to create their applications with many programming languages like Java, Python and so on. It's particularly used for Java and Android development. There are many distributions of it. For the purpose of this paper, we are using the Juno distribution, but even Indigo is acceptable.

3. Prerequisites

Here it is a list of all the software components and settings that are needed throughout this guide.

- A Linux VM with Fedora 18 64bit installed
- A working Internet connection so that the VM is able to download and install some further needed components

In this guide we will use the following naming convention:

Variable	Description	Value in this document
TERM	Linux Terminal console	Shortcut on the desktop
<server_name>	The name of the machine where you install the software.	mobfedora
<ase_server_name>	The name of the ASE server	aseserver
<repository_name>	The name of the repository inside Subversion	custom
<local_user_path>	The Windows path for the current user profile	/home/mobiliser
<temp>	Temp folder	/home/mobiliser/Temp

4. Step-by-Step Procedure

Our guide will go through some steps that we can organize in 4 different groups:

- COMMON MANDATORY STEPS
- RUN-TIME ENVIRONMENT
- DEVELOPMENT ENVIRONMENT
- OPTIONAL STEPS

The first group is common to both the two paths presented here in this document. You need to perform these steps no matter if you are going to build a run-time or a development environment.

Then you can choose which way to follow:

- if you want to install just a run-time environment, you need just to complete the first two groups;
- if you want to install a development environment, you need to implement the first and the third groups;

You can have both run-time and development environment installed on the same machine, but in this case you have to pay attention, because the Mobiliser database in this case could be the same.

This is the complete list of steps:

- COMMON MANDATORY STEPS:
 1. Install Open Java JDK
 2. Install the database server
 3. Download the Mobiliser 5.1 package
- RUN-TIME ENVIRONMENT:
 1. Install the Mobiliser database
 2. Install the Mobiliser components
 3. Start Money and Web Mobiliser
- DEVELOPMENT ENVIRONMENT:
 1. Install Apache Maven
 2. Install Sonatype Nexus
 3. Install CollabNet Subversion
 4. Upload Mobiliser source code to Subversion
 5. Build Mobiliser source code with Maven
 6. Mobiliser database installation
 7. Mobiliser installation
 8. Installing Jenkins
 9. Installing Eclipse
- OPTIONAL STEPS:
 1. Squirrel Tool
 2. SOAP UI Tool

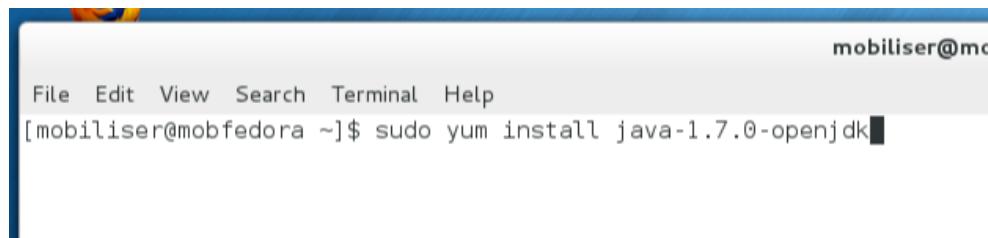
4.1 Common mandatory steps

4.1.1 Install Open Java JDK

The first operation to perform is to install Java JDK. We will use the Open JDK version because it perfectly satisfies our needs. The version we are going to install is version 7.

1. In order to install OpenJDK, open a TERM window and run the following command:

```
sudo yum install java-1.7.0-openjdk
```



mobiliser@mobfedora ~]\$ sudo yum install java-1.7.0-openjdk

2. It's possible that on your system Java is already installed; if it's so, you should receive the message

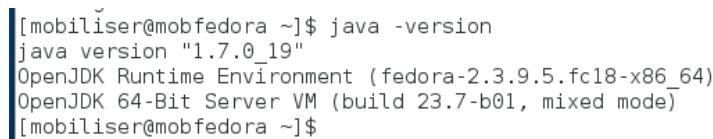


mobiliser@mobfedora ~]\$ sudo yum install java-1.7.0-openjdk
Loaded plugins: langpacks, presto, refresh-packagekit
Package 1:java-1.7.0-openjdk-1.7.0.19-2.3.9.5.fc18.x86_64 already installed and latest version
Nothing to do
[mobiliser@mobfedora ~]\$

3. You can check the Java version by the following command

```
java -version
```

and you should get a screen like this



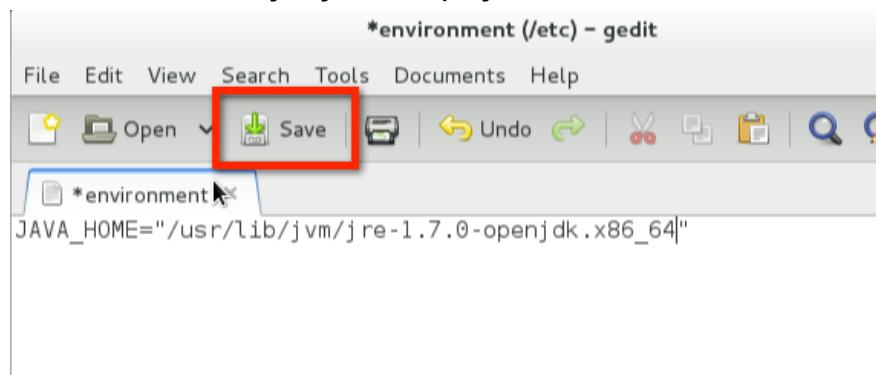
[mobiliser@mobfedora ~]\$ java -version
java version "1.7.0_19"
OpenJDK Runtime Environment (fedora-2.3.9.5.fc18-x86_64)
OpenJDK 64-Bit Server VM (build 23.7-b01, mixed mode)
[mobiliser@mobfedora ~]\$

4. We need to set now the **JAVA_HOME** variable. Run the command

```
sudo gedit /etc/environment
```

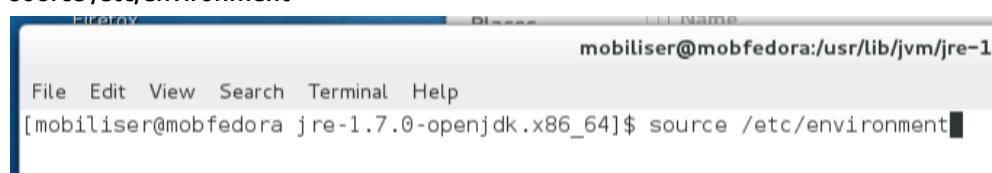
5. Add the following line, save and exit.

```
JAVA_HOME="/usr/lib/jvm/jre-1.7.0-openjdk.x86_64"
```



6. Apply the changes immediately:

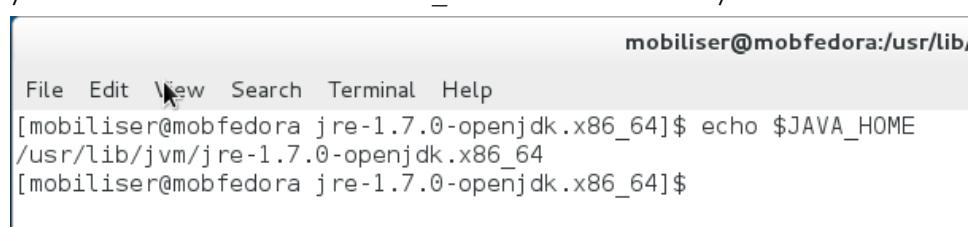
```
source /etc/environment
```



7. Now if you type

```
cd $JAVA_HOME
```

you should be able to access the `JAVA_HOME` folder successfully.



4.1.2 Install the database server

You may choose several DB platforms for Mobiliser, like Oracle, ASE, DB2, Postgres and so on. The one that we will examine here is Sybase Adaptive Server Enterprise (ASE) Developer Edition.

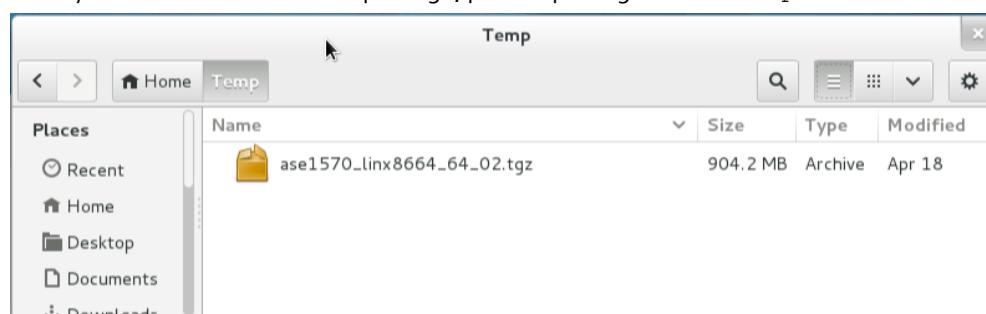
1. Sybase ASE Developer Edition can be downloaded from the following web site:

<https://sybase.subscribenet.com/control/sybs/download?element=4305221>

We are using here the 15.7 release. It's recommended that you use at least this version in order to have the same installation procedure.

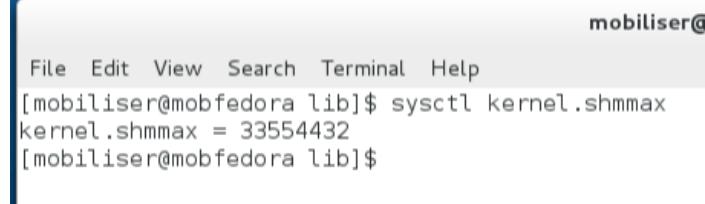
The screenshot shows the Sybase Product Download Center interface. On the left, there's a sidebar with links for Software (Product List, Product Search, Order History), Licenses, Administration (Account Members, Change Password, Email Preferences, Download Preferences), Information (FAQs, User's Manual), and Language (English, Español (Spanish), Français (French), 日本語 (Japanese), 한국어 (Korean), 中文 (Chinese)). The main content area is titled 'Product Download' and shows information for 'ASE Developer Edition 15.7 Linux x86-64 64-bit'. It includes a note: "***NOTE*** You must use the GNU version of the tar utility to uncompress .tgz files." Below this are tabs for License Keys, Download Log, Notes, Notification Log, and Restrict Access. Two download options are shown: 'CD - Getting Started with ASE 15.7' and 'DVD - ASE 15.7 Linux x86-64 64-bit'. Both options provide 'FTP Download' and 'HTTPS Download' buttons, along with 'Advanced Download Options' and 'Estimated Times and Details' links. A red box highlights the 'DVD' download section.

2. Once you have downloaded the package, put the package in the <temp> folder



3. Before starting with the installation, we need to perform some preliminary steps. Check the size of the shared memory

```
sysctl kernel.shmmax
```



```
mobiliser@mobfedora lib]$ sysctl kernel.shmmax
kernel.shmmax = 33554432
[mobiliser@mobfedora lib]$
```

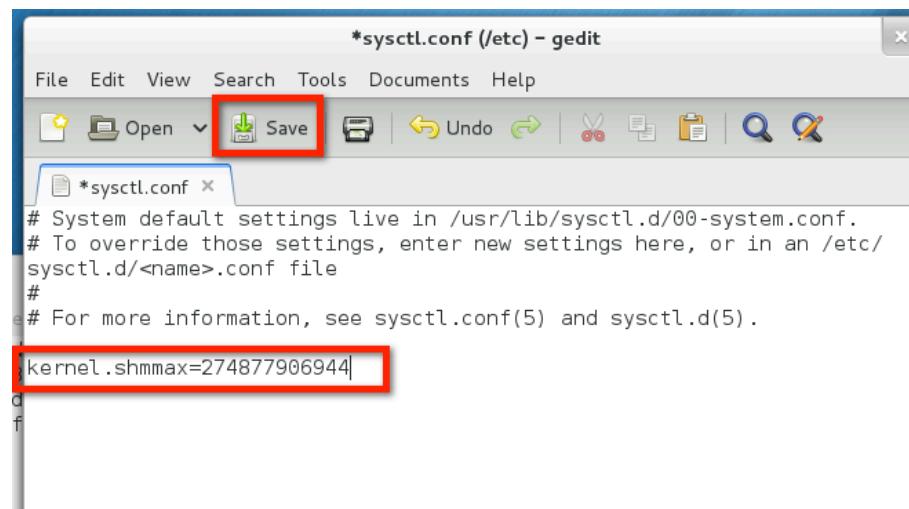
4. If this is too low as in this case, change it with the command

```
sudo gedit /etc/sysctl.conf
```

5. Add the line

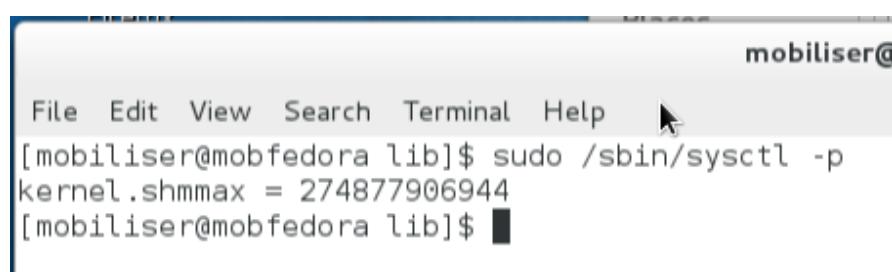
```
kernel.shmmax=274877906944
```

to the file, then save the file.



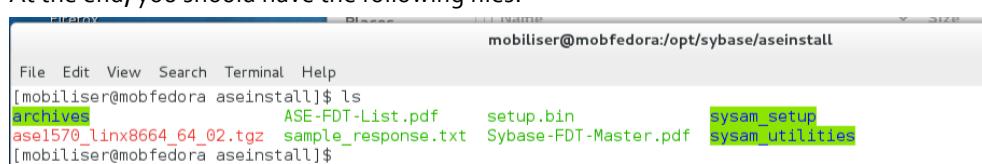
6. Apply the changes

```
sudo /sbin/sysctl -p
```



```
mobiliser@mobfedora lib]$ sudo /sbin/sysctl -p
kernel.shmmax = 274877906944
[mobiliser@mobfedora lib]$
```

7. Install some missing libraries
sudo yum install glibc.i686
8. Create two further folders which will be used by the new user we are going to add to the system
sudo mkdir -p /opt/sybase
sudo mkdir -p /var/sybase
9. Create a new user group named "sybase" and then add a new user "sybase" to this group. This new user will have as his home directory the folder /opt/sybase, which is the folder were we are going to install the ASE server
sudo groupadd sybase
sudo useradd -g sybase -d /opt/sybase sybase
(if you receive the message that the directory already exists, simply ignore it)
10. Change the password to the "sybase" user; we are using the password "sybase"
sudo passwd sybase
(if you receive the warning that it's a BAD PASSWORD, simply ignore it; we are using a very simple password just for testing purpose)
11. Change the permissions for the two created folders
sudo chown -R sybase:sybase /opt/sybase
sudo chown -R sybase:sybase /var/sybase
12. Create the temporary installation folder in the "sybase" home
sudo mkdir -p /opt/sybase/aseinstall
13. Copy the installation package from <temp> in this new folder
sudo cp /home/mobiliser/Temp/ase1570_linx8664_64_02.tgz /opt/sybase/aseinstall/
14. Go in the installation folder
cd /opt/sybase/aseinstall/
15. Extract the package
sudo tar xvzf ase1570_linx8664_64_02.tgz
16. At the end, you should have the following files:



```
mobiliser@mobiliser:~/opt/sybase/aseinstall
File Edit View Search Terminal Help
[mobiliser@mobiliser aseinstall]$ ls
archives          ASE-FDT-List.pdf      setup.bin
ase1570_linx8664_64_02.tgz  sample_response.txt  Sybase-FDT-Master.pdf
sysam_setup        sysam_utilities
[mobiliser@mobiliser aseinstall]$
```

17. Delete the original .tgz file
sudo rm ase1570_linx8664_64_02.tgz

18. Reboot the server

```
sudo reboot
```

19. After reboot, open a TERM window again and enable the graphic display for all the users:

```
xhost +
```

You should get the following message:

```
[mobiliser@mobfedora aseinstall]$ xhost +
access control disabled, clients can connect from any host
[mobiliser@mobfedora aseinstall]$
```

20. Log with the "sybase" user:

```
su - sybase
```

```
[mobiliser@mobfedora aseinstall]$ su - sybase
Password:
-bash-4.2$ ls
aseinstall
-bash-4.2$
```

21. Go in the installation folder:

```
cd aseinstall
```

```
-bash-4.2$ cd aseinstall/
-bash-4.2$ ls
archives ASE-FDT-List.pdf setup.bin sysam_setup
ase1570_linux8664_64_02.tgz sample_response.txt Sybase-FDT-Master.pdf sysam_utilities
-bash-4.2$
```

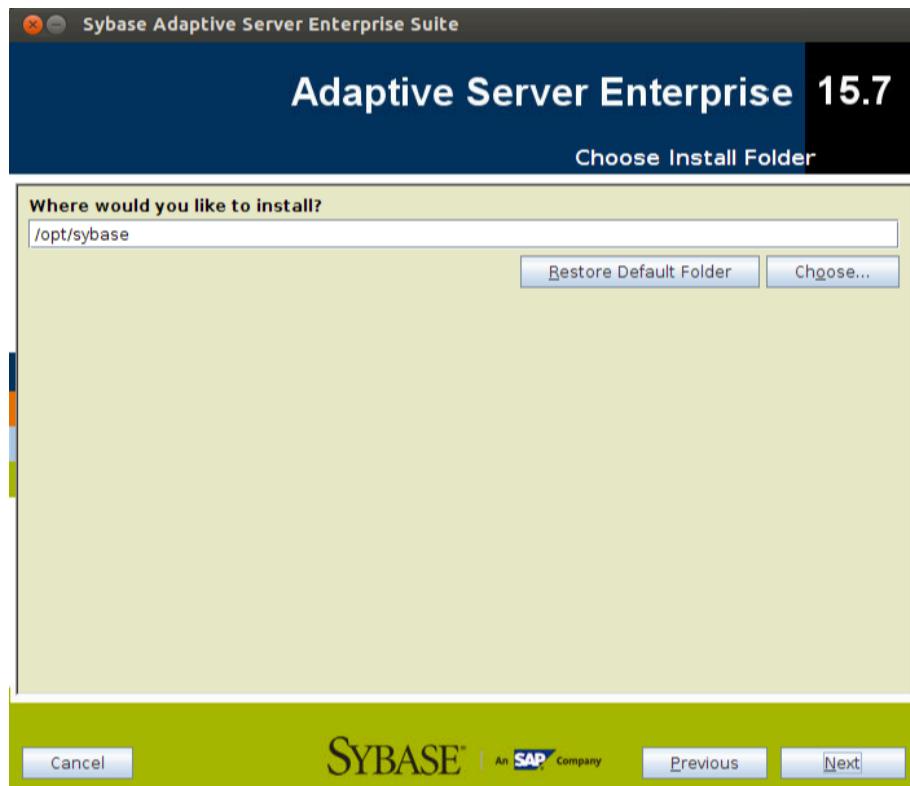
22. Start the installation, by specifying the location of your JVM

```
./setup.bin LAX_VM /usr/bin/java
```

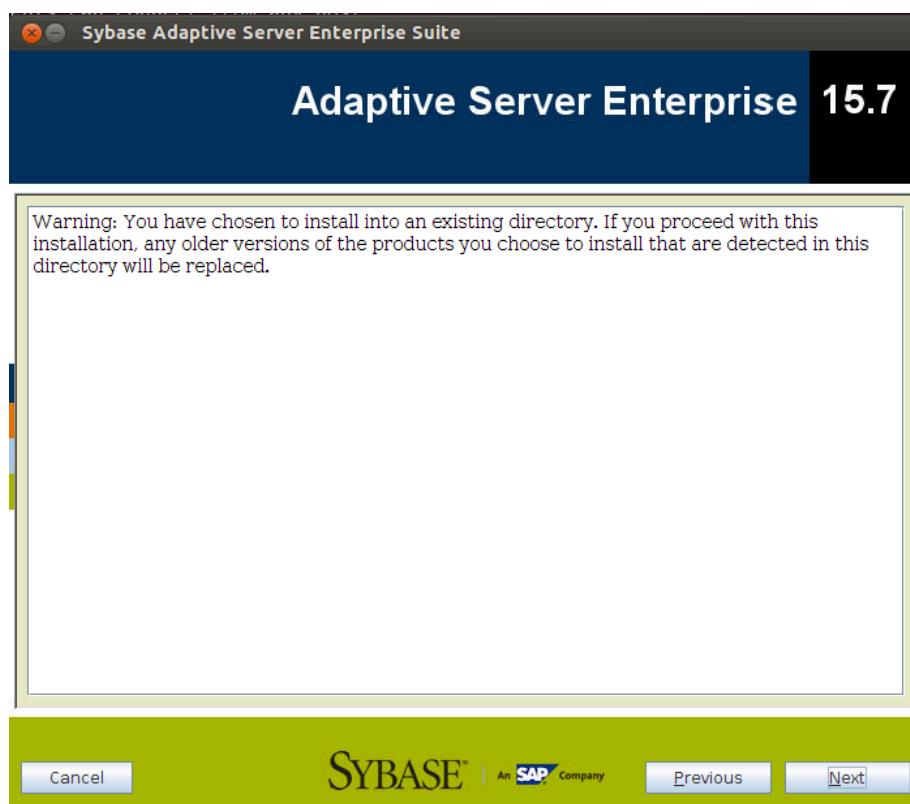
23. The installation starts: simply click on **Next**



24. Provide the path where you want to install ASE. In our case we are leaving all by default. We will use the /opt/sybase path



25. Click on **Next**



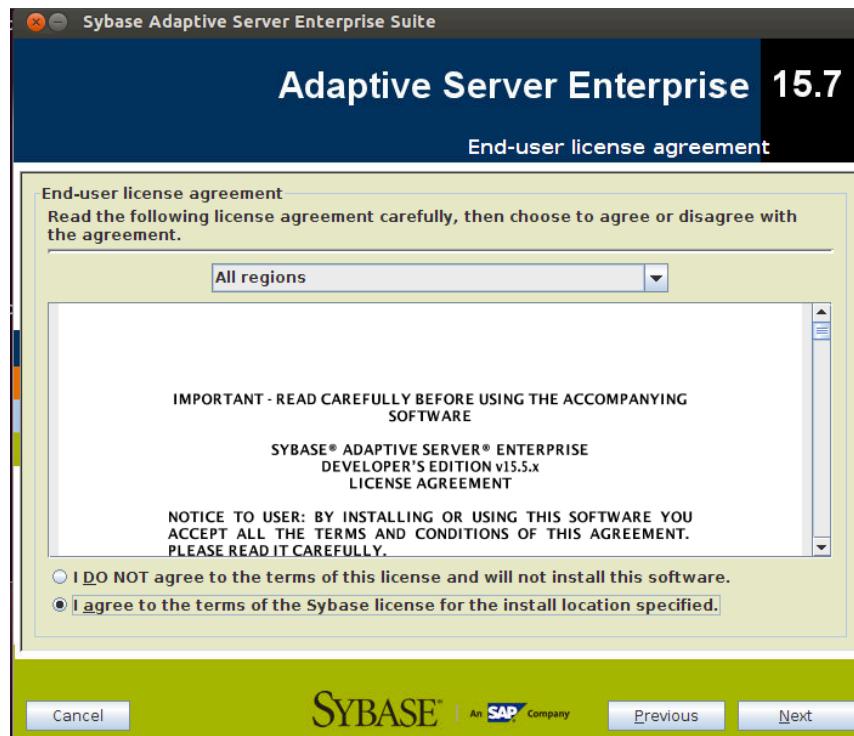
26. You have 3 choices now. Let's continue with the **Typical** installation: it's enough for our intents



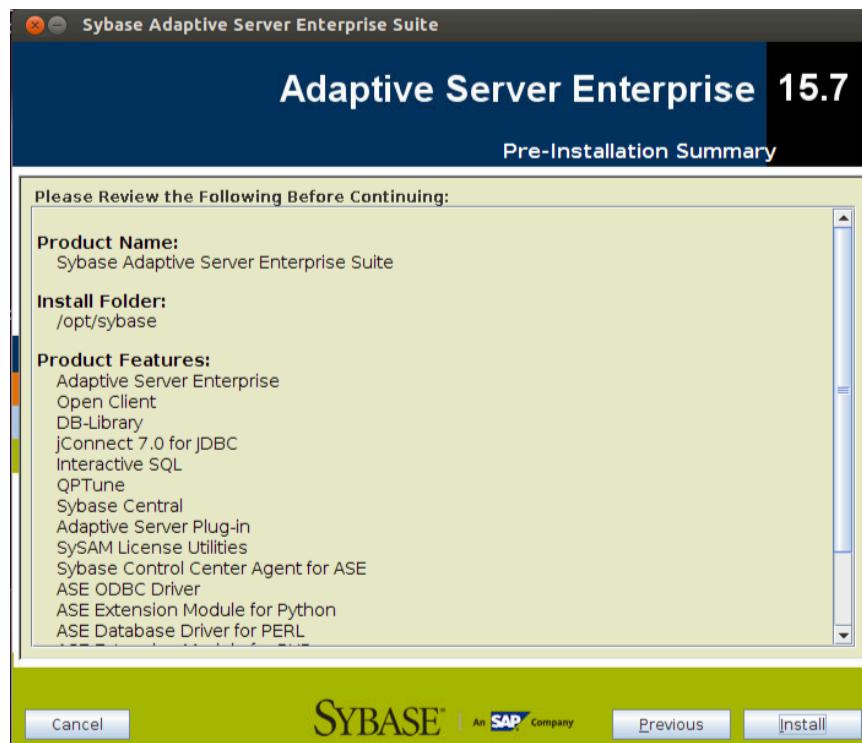
27. Now you are requested to choose which kind of license you have for this installation. In our case we want to install the Free Developer Edition of ASE, so let's choose the second option and click on **Next**



29. Agree to the license agreement and click on **Next**



30. You will get a summary of the installation options. Click on **Install**



31. You may want to store the ASE passwords after connecting to servers. Since we do not have some particular security restrictions in this guide, we will leave it as enabled. Click on **Next**



32. We just need the Adaptive Server and optionally a Backup Server. Remove the unneeded checkmarks and click on **Next**



33. For the scope of this guide we can leave quite all the options by default. Maybe you just want to change the name of the server. We are going to use "aseserver" and we will also change the name of the output log. It's preferable that you set the Default Character Set and the Default Sort Order to UTF so that the installation can also be used for languages based on UTF-8 charset.

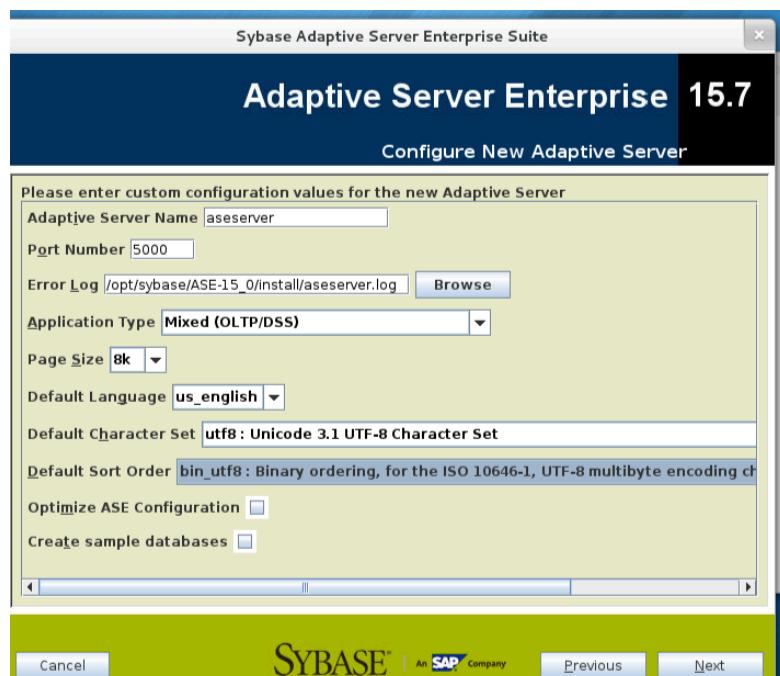
An important parameter to change is the **Page Size** from the default of 4k to 8k. This value will allow the indexes to work properly. It is MANDATORY to set it to 8k.

Optionally you can also change the sort order. In this case we are using the "bin_iso_1" sort order. This sort order will set the database server as case sensitive. So a table or a field named "mytable" or "myfield" are different from other objects named "MYTABLE" or "MYFIELD".

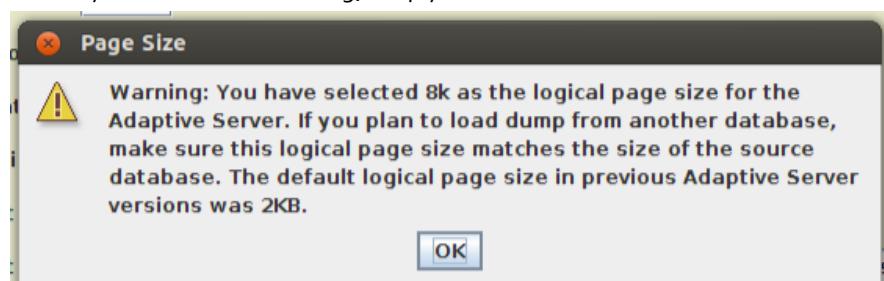
Note

Pay attention: all these parameters CANNOT easily changed afterwards.

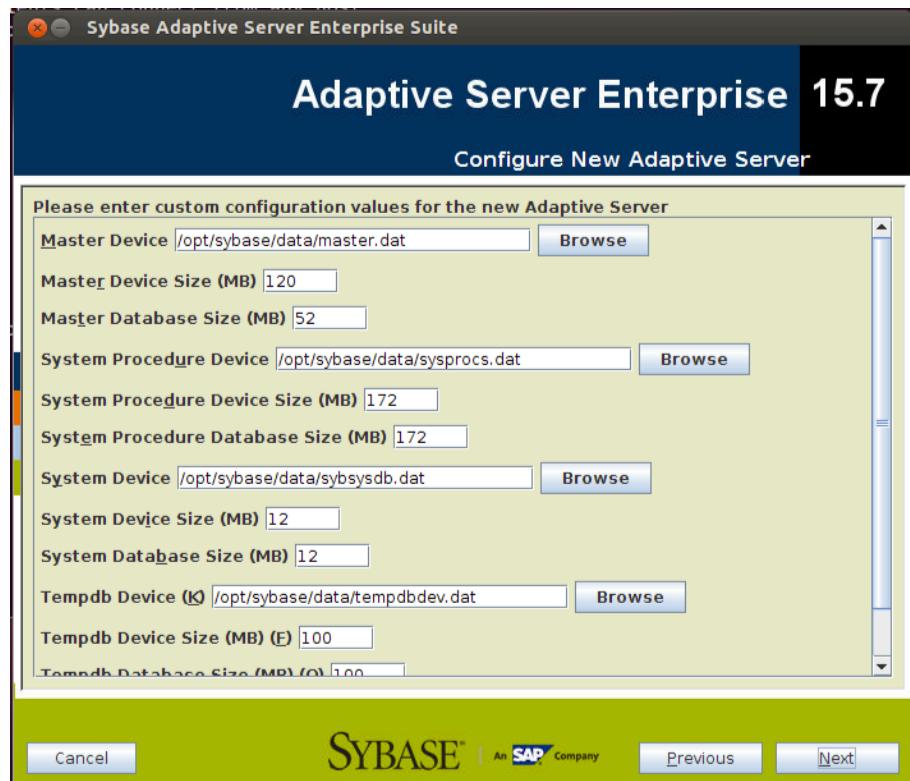
The installation procedure automatically installs the DB on the port 5000. When finished, click on **Next**



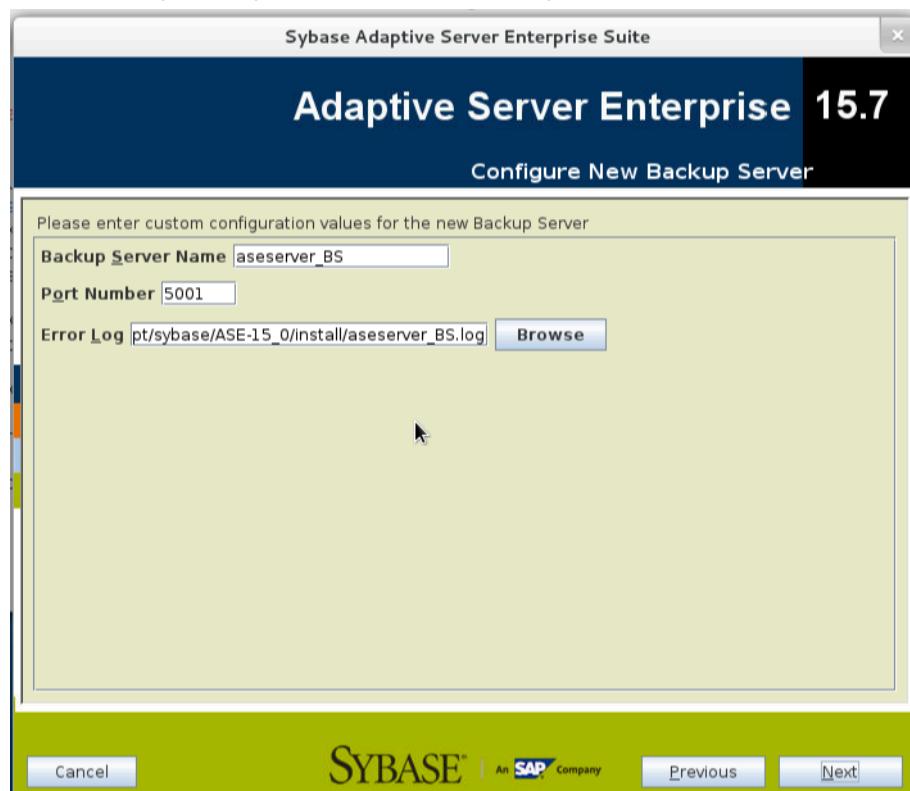
34. In case you receive this warning, simply click on **OK**



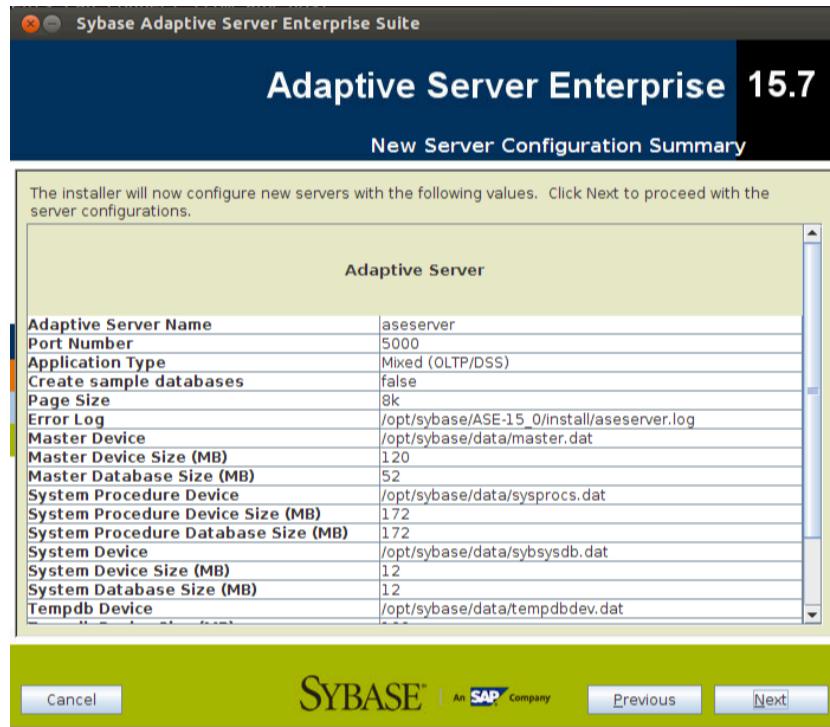
35. Click on **Next**



36. For the backup server you can leave the default options. Click on **Next**



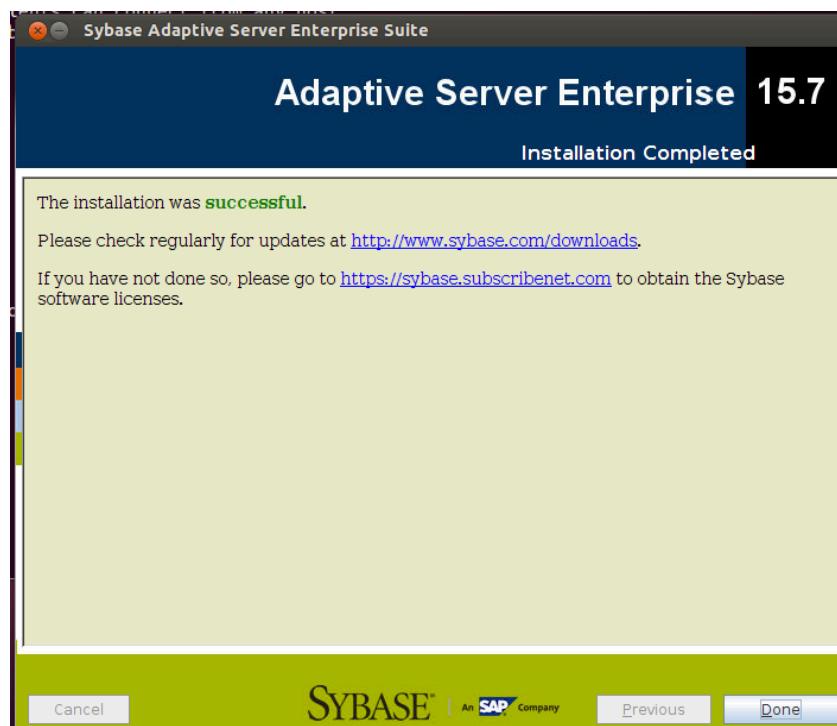
37. Click on **Next** at this summary and the installation will begin



38. The installation starts, you have to wait until it's finished



39. The installation is finished, click on **Done**



40. Run the command

exit

to go back to the "mobiliser" user.

41. We need to add some variables to the startup script, so that they are available when the "mobiliser" user logs in:

sudo gedit /etc/profile

42. Add this line to the end of the file and save it:

. /opt/sybase/SYBASE.sh

(Notice the space after the ".")

```

File Edit View Search Tools Documents Help
Open Save Undo Redo Cut Copy Paste Find Replace
*profile x
# /usr/share/doc/setup-*/uidgid file
if [ $UID -gt 199 ] && [ "`id -gn`" = "`id -un`" ]; then
    umask 002
else
    umask 022
fi

for i in /etc/profile.d/*.sh ; do
    if [ -r "$i" ]; then
        if [ "${#*i}" != "$-" ]; then
            . "$i"
        else
            . "$i" >/dev/null
        fi
    fi
done

unset i
. /opt/sybase/SYBASE.sh

```

43. Run the profile in order to apply the changes immediately:

. /etc/profile

(Notice the space after the ".")

44. Now if you type

echo \$SYBASE

you should get the correct path assigned to this variable

```
File Edit View Search Terminal Help
[mobiliser@mobfedora ~]$ sudo gedit /etc/profile
[sudo] password for mobiliser:
[mobiliser@mobfedora ~]$ . /etc/profile
[mobiliser@mobfedora ~]$ echo $SYBASE
/opt/sybase
[mobiliser@mobfedora ~]$
```

45. We want now to start the ASE server automatically when the machine starts. For this reason we need to install the server as a service. Create a new file called "sybase" in the <temp> folder
gedit /home/mobiliser/Temp/sybase

46. When the editor shows up, copy and paste in the editor windows the following text

```

#!/bin/sh
#
# chkconfig: 2345 20 80
# Startup script for Sybase ASE
#
# description: Sybase Adaptive Server Enterprise
# is a SQL database server.
# processname: dataserver

SYBASE=/opt/sybase
SERVER=aseserver

# Source environment variables.
. $SYBASE/SYBASE.sh

# Find the name of the script
NAME=`basename $0`

# For SELinux we need to use 'runuser' not 'su'
if [ -x /sbin/runuser ]
then
SU=runuser
else
SU=su
fi

start() {
SYBASE_START="$Starting ${NAME} service: "
$SU sybase -c ". $SYBASE/SYBASE.sh; $SYBASE/$SYBASE_ASE/install/startserver \
-f $SYBASE/$SYBASE_ASE/install/RUN_${SERVER} > /dev/null"
ret=$?
if [ $ret -eq 0 ]
then
echo "$SYBASE_START Success."
else
echo "$SYBASE_START Failed!"
exit 1
fi
}
stop() {
echo -n $"Stopping ${NAME} service: "
$SU sybase -c ". $SYBASE/SYBASE.sh; isql -S $SERVER -U sa -P '' < \
$SYBASE/$SYBASE_ASE/upgrade/shutdown.sql > /dev/null"
ret=$?
if [ $ret -eq 0 ]
then
echo "Success."
else
echo "Failed!"
exit 1
fi
}
restart() {
stop
start
}
case "$1" in
start)
start
;;
stop)
stop
;;
restart)
restart
;;
*)
echo $"usage: $0 {start|stop|restart}"
exit 1
esac
exit 0

```



47. You need just to pay attention to the SYBASE path and to the SERVER name in case you have something different for these two variables. Once you have finished, save the file

```
*sybase (~/Temp) - gedit
File Edit View Search Tools Documents Help
Open Save Undo Redo Cut Copy Paste Find Replace
*sybase
#!/bin/sh
#
# chkconfig: 2345 20 80
# Startup script for Sybase ASE
#
# description: Sybase Adaptive Server Enterprise
# is a SQL database server.
# processname: dataserver
#
SYBASE=/opt/sybase
SERVER=aseserver
#
# Source environment variables.
. $SYBASE/SYBASE.sh
#
# Find the name of the script
NAME=`basename $0`
#
# For SELinux we need to use 'runuser' not 'su'
if [ -x /sbin/runuser ]
...
Plain Text Tab Width: 8 Ln 78, Col 1 INS
```

48. Copy the sybase file to the /etc/init.d folder
sudo cp /home/mobiliser/Temp/sybase /etc/init.d

49. Make the sybase file executable
sudo chmod +x /etc/init.d/sybase

50. Install the ASE server as a service
sudo chkconfig --add sybase

51. Check if the service is correctly installed
sudo chkconfig
(you should see on the row "sybase", the flags 2,3,4,5 set to "on")

```
mobiliser@mobiliser:~$ sudo chkconfig
File Edit View Search Terminal Help
[mobiliser@mobiliser ~]$ sudo chkconfig
Note: This output shows SysV services only and does not include native
systemd services. SysV configuration data might be overridden by native
systemd configuration.

ebtables      0:off  1:off  2:off  3:off  4:off  5:off  6:off
iscsi        0:off  1:off  2:off  3:on   4:on   5:on   6:off
iscsid       0:off  1:off  2:off  3:on   4:on   5:on   6:off
livesys      0:off  1:off  2:off  3:on   4:on   5:on   6:off
livesys-late  0:off  1:off  2:off  3:on   4:on   5:on   6:off
netconsole    0:off  1:off  2:off  3:off  4:off  5:off  6:off
network      0:off  1:off  2:off  3:off  4:off  5:off  6:off
sybase       0:off  1:off  2:on   3:on   4:on   5:on   6:off
vmware-tools 0:off  1:off  2:on   3:on   4:on   5:on   6:off
vmware-tools-thinprint 0:off  1:off  2:on   3:on   4:on   5:on   6:off
[mobiliser@mobiliser ~]$
```

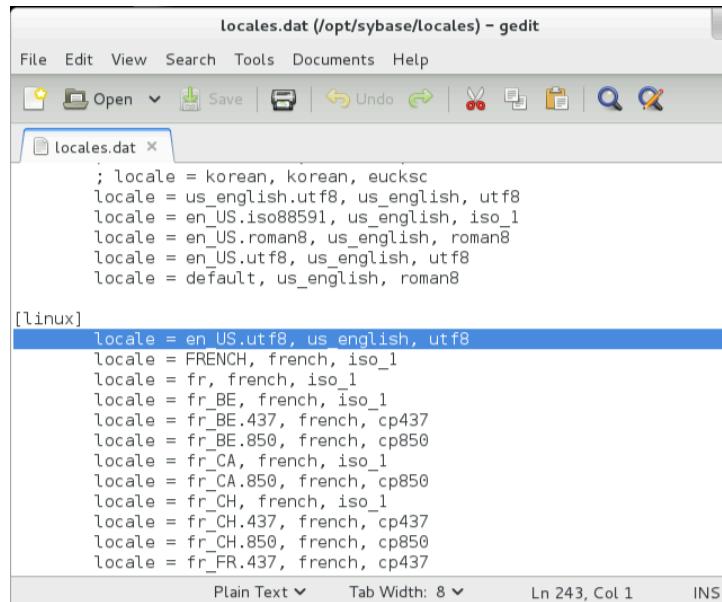
52. You need to add a string to your locales.dat file in the sybase folder

```
sudo gedit /opt/sybase/locales/locales.dat
```

53. Add the line

```
locale = en_US.utf8, us_english, utf8
```

to this file in the Linux section and save the file



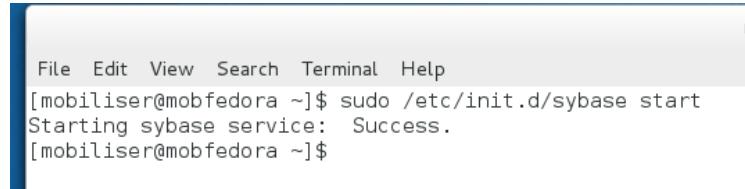
```
locales.dat (/opt/sybase/locales) - gedit
File Edit View Search Tools Documents Help
Open Save Undo Redo Cut Copy Paste Find Replace
locales.dat x
; locale = korean, korean, eucksc
locale = us_english.utf8, us_english, utf8
locale = en_US.iso88591, us_english, iso_1
locale = en_US.roman8, us_english, roman8
locale = en_US.utf8, us_english, utf8
locale = default, us_english, roman8

[linux]
locale = en_US.utf8, us_english, utf8
locale = FRENCH, french, iso_1
locale = fr, french, iso_1
locale = fr_BE, french, iso_1
locale = fr_BE.437, french, cp437
locale = fr_BE.850, french, cp850
locale = fr_CA, french, iso_1
locale = fr_CA.850, french, cp850
locale = fr_CH, french, iso_1
locale = fr_CH.437, french, cp437
locale = fr_CH.850, french, cp850
locale = fr_FR.437, french, cp437

Plain Text Tab Width: 8 Ln 243, Col 1 INS
```

54. Finally you can start it

```
sudo service sybase start
```



```
File Edit View Search Terminal Help
[mobiliser@mobfedora ~]$ sudo /etc/init.d/sybase start
Starting sybase service: Success.
[mobiliser@mobfedora ~]$
```

55. If you want to check that the DB answers to your query, you can use the "isql" tool

```
isql -S<ase_server_name> -Usa -P
```

(in this example it's **isql -Saseserver -Usa -P**)

```
[mobiliser@mobfedora ~]$ isql -Saseserver -Usa -P
1> ■
```

56. At the "1>" prompt, type

```
select @@servername
```

57. At the "2>" prompt, type the string

```
go
```

58. You should get the name of the server.

```
mobi
File Edit View Search Terminal Help
[mobiliser@mobfedora ~]$ isql -Saseserver -Usa -P
1> select @@servername
2> go
-----
aseserver
(1 row affected)
1> █
```

4.1.3 Download the Mobiliser 5.1 package

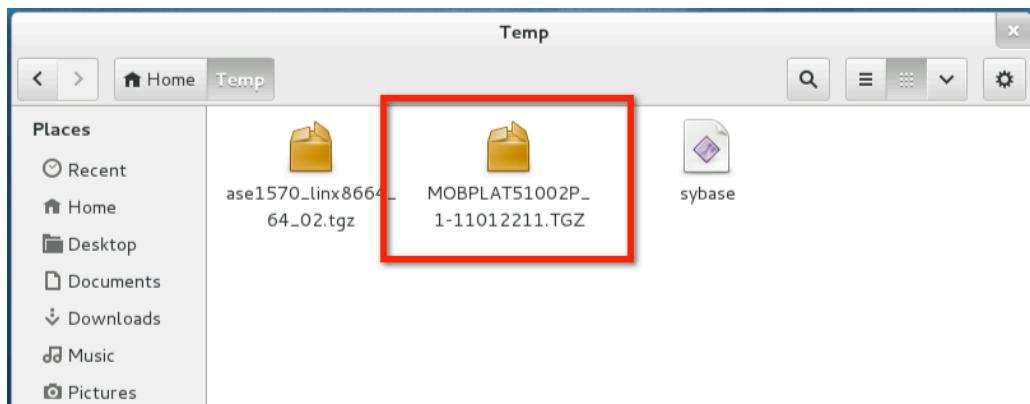
1. Go on the SMP <http://service.sap.com/swdc>
2. Follow the path:
SAP Software Download Center → Support Packages and Patches → Browse our Download Catalog → Sybase Products → Sybase Mobiliser Platform → Sybase Mobiliser Platform 5.1 → Support Packages and Patches → #OS independent

RELATED TOPICS FOR SYBASE MOBILISER PLATFORM 5.1

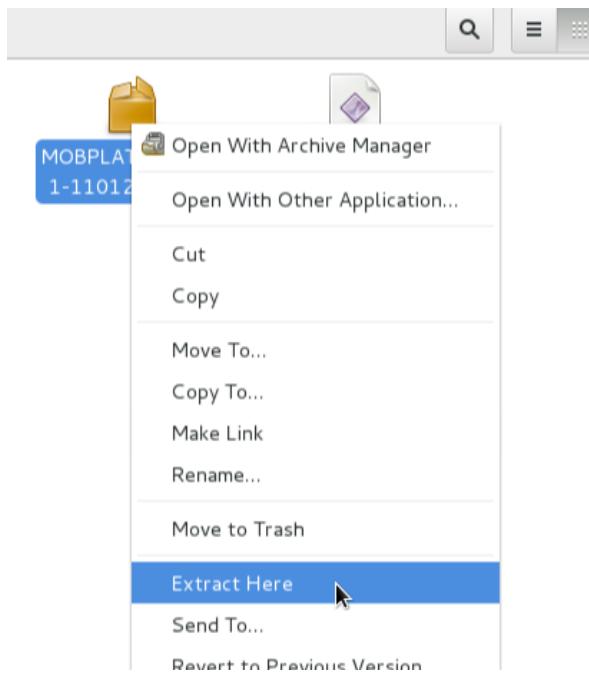
- [Installations and Upgrades](#)
- [Product Availability, Maintenance Dates & Supported Platforms](#)

File Type	Download Object	Title	Info	File Size [kb]	Last Changed
TGZ	MOBPLAT51001P_2-11012211.TGZ	EBF 21035: 5.1 SP01 PL02	Info	420307	27.03.2013
TGZ	MOBPLAT51002P_1-11012211.TGZ	EBF 21330: 5.1 SP02 PL01	Info	386687	15.05.2013
TGZ	MOBPLAT51002_0-11012211.TGZ	EBF 21113: 5.1 SP02 PL00	Info	416032	01.04.2013

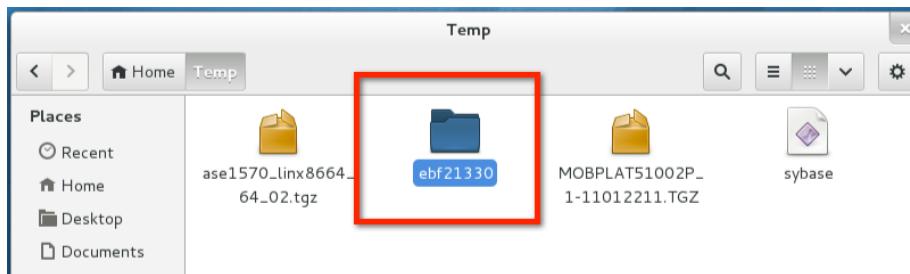
3. Download the package MOBPLAT51002P_1-11012211.TGZ and copy it on the server in a temporary folder as <temp>



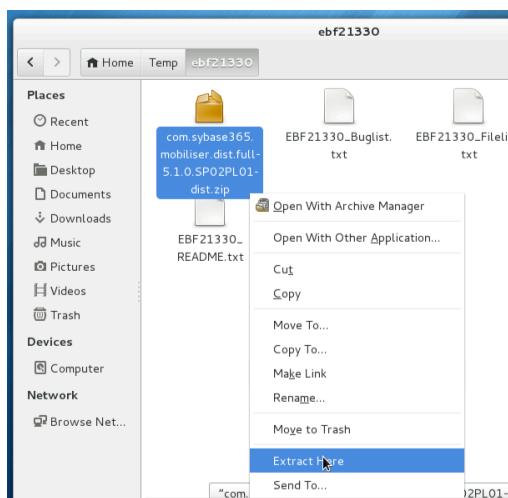
4. Right click on this package and select **Extract Here**



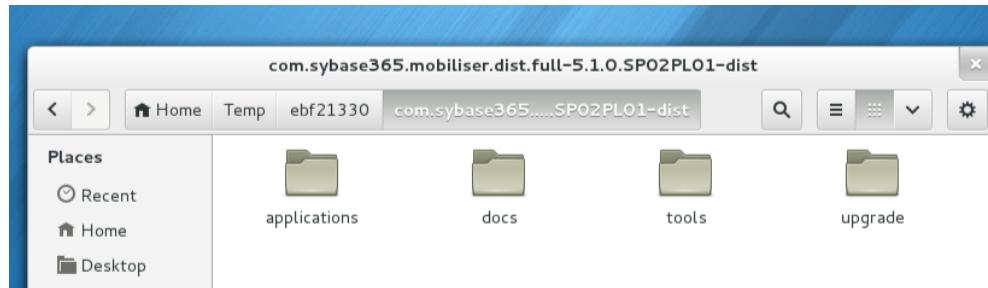
5. You will get a new folder named ebfxxxxx Go inside this folder



6. You will see another zip file named com.sybase365.mobiliser.dist.full-5.1.0.SP02PL01-dist.zip. Right click on it and chose **Extract Here**



7. You will get a new folder. In this folder you have all the Mobiliser material needed for this document.



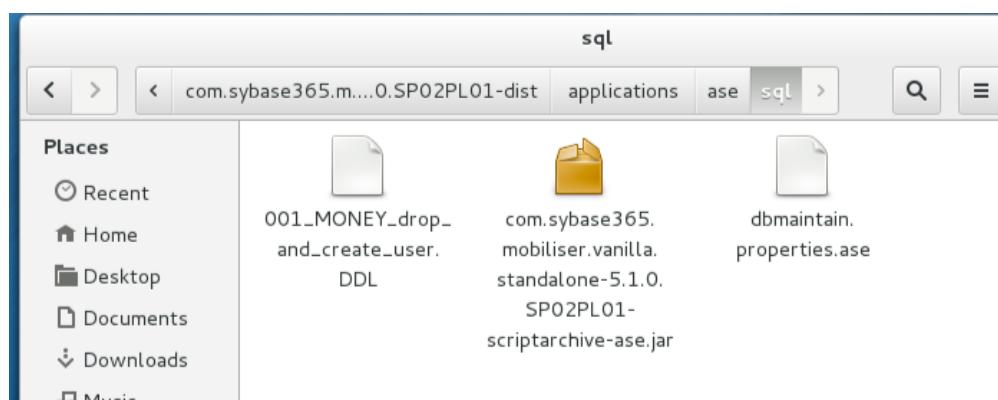
4.2 Run-time environment

If you are here, it means that you have chosen to follow the path to install just the run-time environment. Before installing and running Mobiliser we need to setup first its database. The next sections will guide you through the complete configuration of your Mobiliser installation.

4.2.1 Install the Mobiliser database

- For the Mobiliser database installation phase we will work mainly in the folder
`<temp>/ebf21330/com.sybase365.mobiliser.dist.full-5.1.0.SP02PL01-dist/applications/ase/sql`

All the operations that we are going to do in this section will be performed through a TERM window.



- Open a TERM console
- Go in the folder mentioned above
`cd /home/mobiliser/Temp/ebf21330/com.sybase365.mobiliser.dist.full-5.1.0.SP02PL01-dist/applications/ase/sql/`
- Execute the DDL script in order to create the new device for the database
`isql -S<ase_server_name> -Usa -P -i001_MONEY_drop_and_create_user.DDL`
 (in this example it's:
`isql -Saseserver -Usa -P -i001_MONEY_drop_and_create_user.DDL)`

5. If the operation is successful, you should receive the following screen

```
mobiliser@mobfedora:~/Temp/ebf21330/com.sybase365.mobiliser.dist.full-5.1.0.SP02PL01-
File Edit View Search Terminal Help
Type
-----
-----
-----
enable functionality group
  0          0
  1
  1
switch
dynamic
(1 row affected)
Configuration option changed. ASE need not be rebooted since the option is
dynamic.
Changing the value of 'enable functionality group' does not increase the amount
of memory Adaptive Server uses.
(return status = 0)
New user added.
(return status = 0)
(1 row affected)
[mobiliser@mobfedora sql]$
```

6. Copy the dbmaintain.properties.ase file to a new file named dbmaintain.properties

```
cp dbmaintain.properties.ase dbmaintain.properties
```

7. Edit the dbmaintain.properties file

```
gedit dbmaintain.properties
```

8. Change the database URL by replacing the "localhost" string with the <server_name> string (in this example it is "mobfedora"), set to true all the 3 parameters in the picture (promptBeforeDrop, alwaysDrop, fromScratch.enable) and save the file.

```
dbmaintain.properties x
database.0ialect=psybase

database.driverClassName=com_sybase_idbc4.jdbc.SybDriver
database.url=jdbc:sybase:Tds:mobfedora:5000/mobr5
database.userName=mobr5
database.schemaNames=mobr5
database.password=paybox

#Must be set if the driver is not packaged inside the scriptarchive or is present on the
#e.g. /path/to/ driver.jar
database.driverLocation=/path/to/ driver.jar

# Comma separated list of locations where database scripts can be found. This list may contain
# archive files.
dbMaintainer.script.locations=scripts

#Indicates if a prompt should appear before clearing any data (default=true)
dbMaintainer.promptBeforeDrop=true
#Indicates if the db should be purged no matter if there were changes or not
dbMaintainer.alwaysDrop=true

### DbMaintainer configuration ###

# Indicates the database can be recreated from scratch if needed. If set to true, the data
# from scratch in case of an irregular script update. Following are irregular script update cases:
# - A script that was already executed has been modified
# - A new script has been added with an index number lower than the one of an already executed script
# - An script that was already executed has been removed or renamed
#
# If set to false, the dbmaintain will give an error if one of these situations occurs
dbMaintainer.fromScratch.enable=true
```

9. Execute the creation script by issuing the following command

```
java -jar com.sybase365.mobiliser.vanilla.standalone-5.1.0.SP02PL01-scriptarchive-ase.jar
dbmaintain.properties
```

10. Answer "Y"

```
[mobiliser@mobfedora sql]$ java -jar com.sybase365.mobiliser.vanilla.standalone-5.1.0.SP02PL01-scriptarchive-ase.jar dbmaintain.properties
Using dbmaintain.properties from directory that the jar is in /home/mobiliser/Temp/ebf21330/com.sybase365.mobiliser.dist.full-5.1.0.SP02PL01-dist/applications/ase/sql/dbmaintain.properties

#####
You have the option "dbMaintainer.fromScratch.enabled" set to true. If there are
any updates in your scripts all Objects in that schema will be DROPPED. If this is not
your intention please update your dbmaintain.properties file and set the parameter to
false, then this message will disappear. Are you sure you want to continue? (y/n)
#####

Dry Run Result:
*****
The database is updated for the first time. The database is cleared to be sure that we start with a clean database
The database is cleared, and all database scripts are executed.
*****
```

```
#####
The dry run above indicates what changes will be performed. Continue? y/n
#####
```

12. The script finished successfully

```
Executing script sql/105_COUPON/005_COUPON_DATA/001_UMGR_PRIVILEGES_ROLES.sql
Executing script sql/105_COUPON/005_COUPON_DATA/002_COUPON_DATA.sql
Executing script sql/106_WORKFLOW/002_DATA/005_activities.ase.create.engineedata.sql
Executing script sql/108_MBANKING/002_DATA/000_MBANKING_DATA.sql
Executing script sql/108_MBANKING/002_DATA/010_MBANKING_USERS.sql
Executing script sql/108_MBANKING/002_DATA/020_MBANKING_ALERTS_MSG_TEMPLATES.sql
Executing script sql/108_MBANKING/002_DATA/031_MBANKING_ALERTS_DATA.sql
Executing script sql/108_MBANKING/002_DATA/030_MBANKING_TOPUP_DATA.sql
Executing script sql/108_MBANKING/003_PREFS/001_MBANKING_PREFS.sql
Executing script sql/108_MBANKING/003_PREFS/002_MBANKING_ALERTS_PREFS.sql
Executing script sql/108_MBANKING/003_PREFS/003_MBANKING_ALERTS_PREFS.sql
The database has been updated successfully.
Creating data source. Driver: com.sybase.jdbc4.jdbc.SybDriver, url: jdbc:sybase:Tds:mobfedora:5000/mobr5, user: mobr5, password: <not shown>
Executed scripts table "mobr5"."DBMAINTAIN_MOBILISER" doesn't exist yet or is invalid. A new one is created automatically.
The database is up to date
[mobiliser@mobfedora sql]$
```

13. Now we need to update the passwords in the Mobiliser database. By default they are not set, so we are going to set the same standard password, which is "secret", for all the service users in Mobiliser. Let's create a new blank file

gedit updateMobiliser.sql

14. Copy the following script and paste it in the editor window. Save and close the file

```
USE mobr5
GO
UPDATE MOB_CUSTOMERS_CREDENTIALS SET STR_CREDENTIAL
='{SHA}euA1VLAw6SpS257g2qRawNn0718='
WHERE ID_CUSTOMER = 100
GO
UPDATE MOB_PREFERENCES SET STR_VALUE = '{AES-128-
PBKDF2}5i06buFt6t+nuo6AvD3bLhnjhf7rmDC5AkhXIDkywwQ='
WHERE ID_PREFERENCE = 402
GO
UPDATE MOB_PREFERENCES SET STR_VALUE = '{AES-128-
PBKDF2}2paqrFkmErN0+k7fxg+jX/c5psPmYJK1RODVQG1BF8U='
WHERE ID_PREFERENCE = 426
GO
UPDATE MOB_CREDENTIAL_POLICIES SET INT_DAYS_PASSWORD_TIMEOUT = 0
GO
```

15. Let's execute this file on the Mobiliser DB

```
isql -Saseserver -Umobr5 -Ppaybox -iupdateMobiliser.sql
```

16. You should get the following result

```
[mobiliser@mobfedora sql]$ isql -Saseserver -Umobr5 -Ppaybox -iupdateMobiliser.sql
(1 row affected)
(1 row affected)
(1 row affected)
(4 rows affected)
[mobiliser@mobfedora sql]$ █
```

17. Your Mobiliser database has been successfully installed. Should you need to browse your database and take a tour inside of it, you can use the Squirrel SQL Client. This tool is widely described at the end of this paper in the section of optional steps.

4.2.2 Install the Mobiliser components

1. Go to the folder where you have extracted the main Mobiliser package
`cd /home/mobiliser/Temp/ebf21330/com.sybase365.mobiliser.dist.full-5.1.0.SP02PL01-dist/applications/ase`

2. Create a new folder in a proper place (we are choosing the /opt folder) which will contain the complete Mobiliser suite
`sudo mkdir -p /opt/mobiliser`

3. Copy Money Mobiliser from the extracted package to the new destination
`sudo cp -R money/ /opt/mobiliser/`

4. Remove the unneeded bundle com.sybase365.org.quartz.oracle-1.6.2.jar because it's related to an installation based on Oracle DB
`sudo rm /opt/mobiliser/money/bundles/o1-fragments/com.sybase365.org.quartz.oracle-1.6.2.jar`

5. Go to the upper folder
`cd ..`

6. Copy the Web Portal folder from the extracted package in the <temp> folder to the new destination

```
sudo cp -R web /opt/mobiliser/
```

7. Go in the folder <temp>/ebf21330/com.sybase365.mobiliser.dist.full-5.1.0.SP02PL01-dist/tools

```
cd /home/mobiliser/Temp/ebf21330/com.sybase365.mobiliser.dist.full-5.1.0.SP02PL01-dist/tools
```

```
[mobiliser@mobfedora tools]$ ls
com.sybase365.mobiliser.dist.project-5.1.0.SP02PL01-customization.zip
com.sybase365.mobiliser.dist.tools-5.1.0.SP02PL01.jar
com.sybase365.mobiliser.dist.was-5.1.0.SP02PL01-dist.zip
[com.sybase365.mobiliser.ui.web.application-5.1.0.SP02PL01.war]
com.sybase365.mobiliser.ui.web.wicketutils-5.1.0.SP02PL01.jar
com.sybase365.mobiliser.utilcodegen.annotations-0.3.jar
uir dependencies.properties
mobcodegen-maven-plugin-0.3.jar
[mobiliser@mobfedora tools]$
```

8. Copy the file com.sybase365.mobiliser.ui.web.application-5.1.0.SP02PL01.war to the web/webapps folder in your Mobiliser installation and rename it as ROOT.war

```
sudo cp com.sybase365.mobiliser.ui.web.application-5.1.0.SP02PL01.war
/opt/mobiliser/web/webapps/ROOT.war
```

```
[mobiliser@mobfedora webapps]$ ls
host-manager manager portal ROOT ROOT.war
[mobiliser@mobfedora webapps]$
```

9. Mark as executable all the .sh files in the /opt/mobiliser/money/bin folder
sudo chmod +x /opt/mobiliser/money/bin/*.sh

10. Mark as executable all the .sh files in the /opt/mobiliser/web/bin folder
sudo chmod +x /opt/mobiliser/web/bin/*.sh

11. Change the owner to this new tree of folders by assigning it the "mobiliser" user
sudo chown -R mobiliser /opt/mobiliser/

12. Go inside the /opt/mobiliser

cd /opt/mobiliser

```
[mobiliser@mobfedora ase]$ ls
patch sql
[mobiliser@mobfedora ase]$ cd ..
[mobiliser@mobfedora applications]$ ls
ase ibm jms oracle proxy web
[mobiliser@mobfedora applications]$ sudo mv web /opt/mobiliser/
[mobiliser@mobfedora applications]$ ls
ase ibm jms oracle proxy
[mobiliser@mobfedora applications]$ sudo chown -R mobiliser /opt/mobiliser/
[mobiliser@mobfedora applications]$ cd /opt/mobiliser/
[mobiliser@mobfedora mobiliser]$ ls
money web
[mobiliser@mobfedora mobiliser]$ █
```

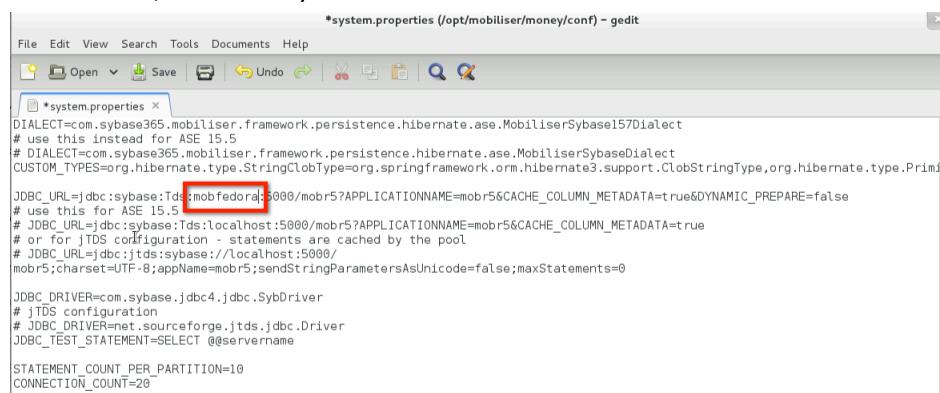
13. Navigate to the subfolder money/conf

cd money/conf

14. Edit the system properties

gedit system.properties

15. Change the name of the server from "localhost" to your <server_name> (in this example it's "mobfedora"). When done, save the file and exit.



16. Go in the cfgbackup folder

cd /opt/mobiliser/money/conf/cfgbackup

17. Edit the file
com.sybase365.mobiliser.framework.persistence.jdbc.bonecp.pool.properties
gedit com.sybase365.mobiliser.framework.persistence.jdbc.bonecp.pool.properties

18. Do the following changes, save the file and exit.

```
*com.sybase365.mobiliser.framework.persistence.jdbc.bonecp.pool.properties (/opt/mobilise..onf/cfgbackup) - gedit

File Edit View Search Tools Documents Help

[Open Save Undo Redo Home Find Go To Properties Search]

* *com.sybase365.mobiliser.framework.persistence.jdbc.bonecp.pool.properties *

# configuration statement for BoneCP connection pool
statementTimeout=${JDBC_TEST_STATEMENT}
driverClass=${JDBC_DRIVER}
jdbcUrl=${JDBC_URL}
username=mobr5
password={enc}ns0VN/2Kv4askDeZlY+DHKYDseo0Jd5C8CJNlkpQLA=
idleConnectionTestPeriodInMinutes=2
idleMaxAgeInSeconds=100
maxConnectionsPerPartition=${STATEMENT_COUNT_PER_PARTITION}
minConnectionsPerPartition=1
partitionCount=3
acquireIncrement=1
statementsCacheSize=${STATEMENT_CACHE_SIZE}
releaseHelperThreads=3
connectionTimeoutInMs=10000
initSQL=${BONECP_INIT_SQL}

<-- SELECT @@servername
<-- com.sybase.jdbc.JdbcDriver
<-- jdbc:sybase:Tds:mobfedora:5000/mobr5?APPLICATIONNAME=mobr5&CACHE_METADATA=true

<-- 10

<-- 100

<-- set string_rtruncation on
```

19. Your final file should look like the following. You need to pay attention just to replace the "localhost" string on the `jdbcUrl` with the correct `<server_name>` (in this example it's "mobfedora")

```
# configuration for BoneCP connection pool
connectionTestStatement=SELECT @@servername
driverClass=com.sybase.jdbc4.jdbc.SybDriver
jdbcUrl=jdbc:sybase:Tds:mobfedora:5000/mobr5?APPLICATIONNAME=mobr5&CACHE_COLUMN_META
DATA=true
username=mobr5
password={enc}nsoVN/2Kv4askDeZiY+DH8KYDseo0Jd5C8CJN1KpG1A=
idleConnectionTestPeriodInMinutes=2
idleMaxAgeInSeconds=100
maxConnectionsPerPartition=10
minConnectionsPerPartition=1
partitionCount=2
acquireIncrement=1
statementsCacheSize=100
releaseHelperThreads=3
connectionTimeoutInMs=10000
initSQL=set string_rtruncation on
```

20. Edit the file
com.sybase365.mobiliser.util.report.crystalreports.properties
qedit com.sybase365.mobiliser.util.report.crystalreports.properties

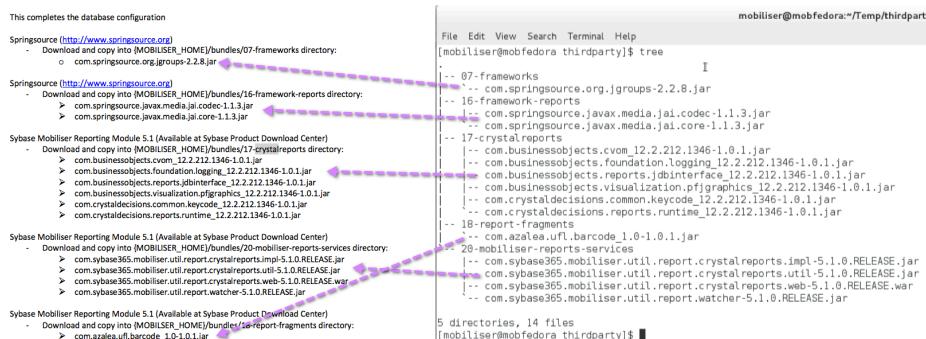
21. Do the following changes, save the file and exit.

```
*com.sybase365.mobiliser.util.report.crystalreports.properties (/opt/mobiliser/money/conf/cfgbackup) - gedit
File Edit View Search Tools Documents Help
Open Save Undo Redo Cut Copy Paste Find Replace
* *com.sybase365.mobil...alreports.properties *
# Default configuration for report app
jdbc.user=mobr5
jdbc.password={enc}nsoVN/2Kv4askDeZiY+DH8KYDseo0Jd5C8CJNlKpG1A=
jdbc.driver=com.sybase.jdbc4.jdbc.SybDriver
jdbc.url=jdbc:sybase:Tds:mobfedora:5000/mobr5?APPLICATIONNAME=mobr5&CACHE_COLUMN_METADATA=true
content.type=text/html;charset=UTF-8
```

22. Your final file should look like the following. You need to pay attention just to replace the "localhost" string on the **jdbcUrl** with the correct <server_name> (in this example it's "mobfedora")

```
# Default configuration for report app
jdbc.user=mobr5
jdbc.password={enc}nsoVN/2Kv4askDeZiY+DH8KYDseo0Jd5C8CJNlKpG1A=
jdbc.driver=com.sybase.jdbc4.jdbc.SybDriver
jdbc.url=jdbc:sybase:Tds:mobfedora:5000/mobr5?APPLICATIONNAME=mobr5&CACHE_COLUMN_METADATA=true
content.type=text/html;charset=UTF-8
```

23. As a final step you need to download some missing third party components (bundles), which are not any longer provided within the Mobiliser package. The list of these components is in the installation guide; for your comfort I'm putting it here below. I've already downloaded all these components and I'm assuming to have them in a "thirdparty" subfolder located in my <temp> folder on the Linux server.



24. Go in the **thirdparty** folder, where you have collected all the required bundles according to the schema at the previous point
cd /home/mobiliser/Temp/thirdparty

25. Copy all the required bundles into the destination bundles folder /opt/mobiliser/money/bundles
sudo cp -R * /opt/mobiliser/money/bundles/

26. Your Mobiliser installation is finished

4.2.3 Start Money and Web Mobiliser

- Now that all the things are in place, we can start Mobiliser. The main Mobiliser package is "Money" and we are going to start it first. Open a TERM window, go to the folder /opt/mobiliser/money

```
cd /opt/mobiliser/money
```

- Run the command

```
bin/startup.sh
```

- All the required variables are set and shown

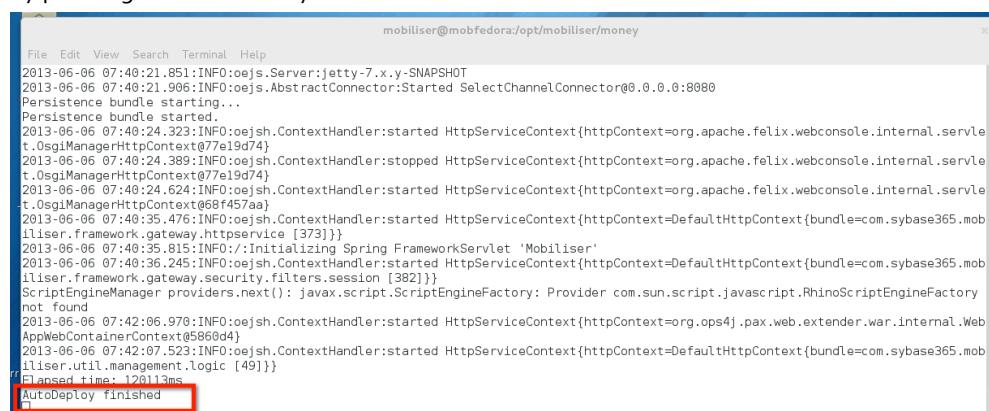
```
[mobiliser@mobfedora money]$ bin/startup.sh
Using MOBILISER_BASE:  /opt/mobiliser/money
Using MOBILISER_HOME:  /opt/mobiliser/money
Using MOBILISER_TMPDIR: /opt/mobiliser/money/temp
Using JRE_HOME:        /usr/lib/jvm/jre-1.7.0-openjdk.x86_64
Using CLASSPATH:       /opt/mobiliser/money/bundles/com.sybase365.mobiliser.vanilla.scripts-5.1.0.SP02PL01.jar:/opt/
bundles/org.apache.felix.main-4.0.3.jar
Using MOBILISER_PID:   /opt/mobiliser/money/bin/mobiliser.pid
[mobiliser@mobfedora money]$
```

- If you want to see the status of this process and if you want to know when it's finished, you can run the command

```
tail -f logs/felix.out
```

```
[mobiliser@mobfedora money]$ tail -f logs/felix.out
2013-06-06 07:40:21.851:INFO:oejs.Server:jetty-7.x.y-SNAPSHOT
2013-06-06 07:40:21.906:INFO:oejs.AbstractConnector:Started SelectChannelConnector@0.0.0.0:8080
Persistence bundle starting...
Persistence bundle started.
2013-06-06 07:40:24.323:INFO:oejsh.ContextHandler:started HttpServiceContext{httpContext=org.apache.felix.webconsole.interr
t.OsgiManagerHttpContext@77e19d74}
2013-06-06 07:40:24.389:INFO:oejsh.ContextHandler:stopped HttpServiceContext{httpContext=org.apache.felix.webconsole.interr
t.OsgiManagerHttpContext@77e19d74}
2013-06-06 07:40:24.624:INFO:oejsh.ContextHandler:started HttpServiceContext{httpContext=org.apache.felix.webconsole.interr
t.OsgiManagerHttpContext@68f457aa}
2013-06-06 07:40:35.476:INFO:oejsh.ContextHandler:started HttpServiceContext{httpContext=DefaultHttpContext{bundle=com.syba
iliser.framework.gateway.httpservice [373]}}
2013-06-06 07:40:35.815:INFO:/:Initializing Spring FrameworkServlet 'Mobiliser'
2013-06-06 07:40:36.245:INFO:oejsh.ContextHandler:started HttpServiceContext{httpContext=DefaultHttpContext{bundle=com.syba
iliser.framework.gateway.security.filters.session [382]}}
```

- A lot of messages are written in this log. As soon as you see the message "AutoDeploy finished", it means that Mobiliser is now started and you can play with it. You can also exit from this log simply by pressing the CTRL-C key combination.



6. A first test to do, in order to check that Mobiliser is fully working is to open the internet browser and run the following URL

http://<server_name>:8080/mobiliser/customer/Customer.wsdl

(in this example it is <http://mobfedora:8080/mobiliser/customer/Customer.wsdl>)

If Mobiliser is successfully started, you should get the customer's schema:

```

<wsdl:definitions targetNamespace="http://mobiliser.sybase365.com/money/customer">
  <wsdl:types>
    <xsd:schema attributeFormDefault="unqualified" elementFormDefault="unqualified" jxb:extensionBindingPrefixes="xjc"
      jxb:version="2.0" targetNamespace="http://mobiliser.sybase365.com/framework/contract/v5_0/base">
      <xsd:annotation>
        <xsd:appinfo>
          <jxb:schemaBindings>
            <jxb:package name="com.sybase365.mobiliser.framework.contract.v5_0.base"/>
          </jxb:schemaBindings>
        </xsd:appinfo>
        <xjc:serializable uid="1"/>
      </xsd:annotation>
      <xsd:documentation>
        The XML Schema for mobiliser requests. Version: $HeadURL: http://optimus.sybase.com/svn/mobiliser/m5/framework
        /tags/com.sybase365.mobiliser.framework-5.1.0.SP02PL01/contract/src/main/resources/com/sybase365/mobiliser/framework/contract
        /xsd/base-5.0.xsd $
      </xsd:documentation>
    </xsd:schema>
  </wsdl:types>
  <wsdl:message name="strSmall">
    <xsd:restriction base="xsd:string">
      <xsd:maxLength value="6"/>
      <xsd:minLength value="0"/>
    </xsd:restriction>
  </wsdl:message>
</wsdl:definitions>

```

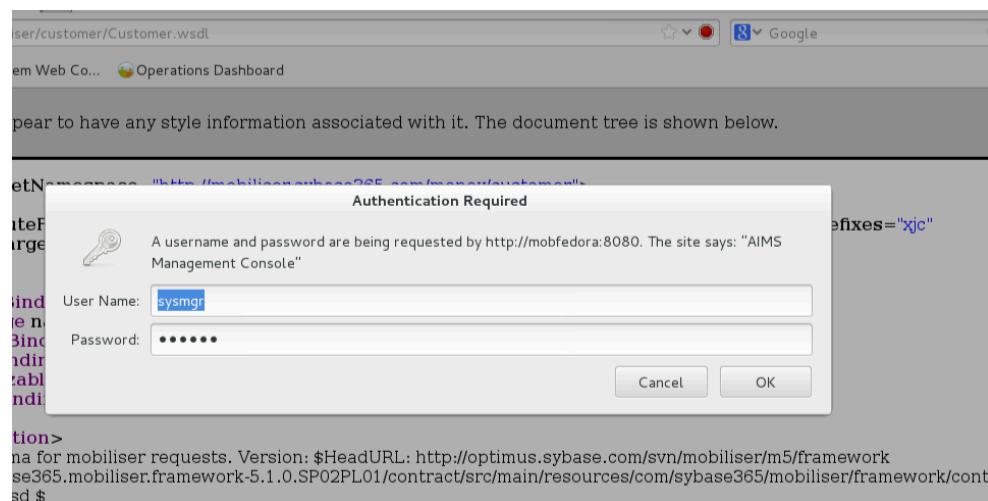
7. Now that Mobiliser is up, from the internet browser go to the following link:

http://<server_name>:8080/system/console

(in this example it is <http://mobfedora:8080/system/console>)

8. Enter the following credentials:

USER	PASSWORD
sysmgr	secret



9. The AIMS System Web Console will be opened on the Bundles page. Here you can see the list of all the bundles involved in this Mobiliser installation. All the bundles need to be in "Active" or "Fragment" state. If a bundle is in a different state, it means that it's not working properly and the entire Mobiliser platform might have problems. As you can see here all the bundles are active or fragments. There are no bundles in the Installed state

Bundles					
	Name	Version	Category	Status	Actions
0	System Bundle (org.apache.felix.framework)	4.0.3		Active	
97	activemq-core (org.apache.activemq.activemq-core)	3.1.2		Active	
98	activemq-core (org.apache.activemq.activemq-core)	5.5.1		Active	
99	Activiti - Engine (org.activiti.engine)	5.9.0.SY365-3		Active	
100	Activiti - OSGi (org.activiti.osgi)	5.9.0		Active	
62	AIMS Mobiliser : 3rd Party :: Barcode Library (com.sybase365.mobiliser.thirdparty.com.azalea.uff.barcode_1.0)	1.0.1	3rdparty	Fragment	
64	AIMS Mobiliser : 3rd Party :: BO CVOM Library (com.sybase365.mobiliser.thirdparty.com.businessobjects.cvom_12.2.212.1346)	1.0.1	3rdparty	Active	
65	AIMS Mobiliser : 3rd Party :: BO Foundation Logging (com.sybase365.mobiliser.thirdparty.com.businessobjects.foundation.logging_12.2.212.1346)	1.0.1	3rdparty	Active	
66	AIMS Mobiliser : 3rd Party :: BO JDBC Interface (com.sybase365.mobiliser.thirdparty.com.businessobjects.reports.jdbcinterface_12.2.212.1346)	1.0.1	3rdparty	Active	
68	AIMS Mobiliser : 3rd Party :: BO Keycode Decoder (com.sybase365.mobiliser.thirdparty.com.crystaldecisions.common.keycode_12.2.212.1346)	1.0.1	3rdparty	Active	
67	AIMS Mobiliser : 3rd Party :: BO PFGraphics Library (com.sybase365.mobiliser.thirdparty.com.businessobjects.visualization.pfgraphics_12.2.212.1346)	1.0.1	3rdparty	Active	

10. In order to reach the main page of Mobiliser portal, you need to start the web interface. It's located under the folder web

```
cd /opt/mobiliser/web
```

11. You can start it by running the command

```
bin/startup.sh
```

```
[mobiliser@mobilfedora mobiliser]$ cd /opt/mobiliser/web
[mobiliser@mobilfedora web]$ bin/startup.sh
Backing up /opt/mobiliser/web/logs/catalina.out to /opt/mobiliser/web/logs/catalina.out_06-06-2013-08:15:48 first
Removing work directory first
Using CATALINA_BASE: /opt/mobiliser/web
Using CATALINA_HOME: /opt/mobiliser/web
Using CATALINA_TMPDIR: /opt/mobiliser/web/temp
Using JRE_HOME: /usr/lib/jvm/jre-1.7.0-openjdk.x86_64
Using CLASSPATH: /opt/mobiliser/web/bin/bootstrap.jar:/opt/mobiliser/web/bin/tomcat-juli.jar
[mobiliser@mobilfedora web]$
```



As you can see here we are inside the folder web when running the above command. It's important that you run this command by accessing first that folder, otherwise you may get some errors related to the CATALINA path and the Mobiliser portal won't start.

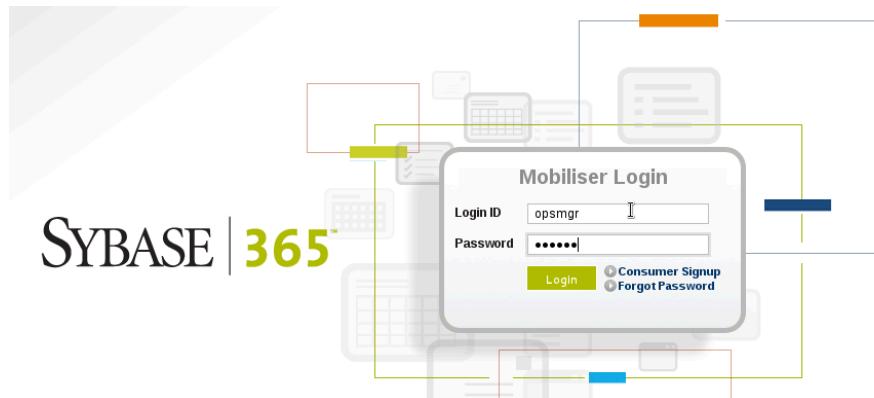
12. The web server is fully started when you see the following message in the logs/catalina.out file:

INFO: Server startup in xxxx ms

```
[mobiliser@mobfedora web]$ tail -f logs/catalina.out
*****
*** Do NOT deploy to your live server(s) without changing this. ***
*** See Application#>getConfigurationType() for more information. ***
*****
Jun 06, 2013 8:16:02 AM org.apache.coyote.AbstractProtocol start
INFO: Starting ProtocolHandler ["http-bio-8082"]
Jun 06, 2013 8:16:02 AM org.apache.coyote.AbstractProtocol start
INFO: Starting ProtocolHandler ["ajp-bio-8009"]
Jun 06, 2013 8:16:02 AM org.apache.catalina.startup.Catalina start
INFO: Server startup in 13376 ms
```

13. From the internet browser type http://<server_name>:8082/portal (in this example it's <http://mobfedora:8082/portal>) and enter the following credentials:

USER	PASSWORD
opsmgr	secret

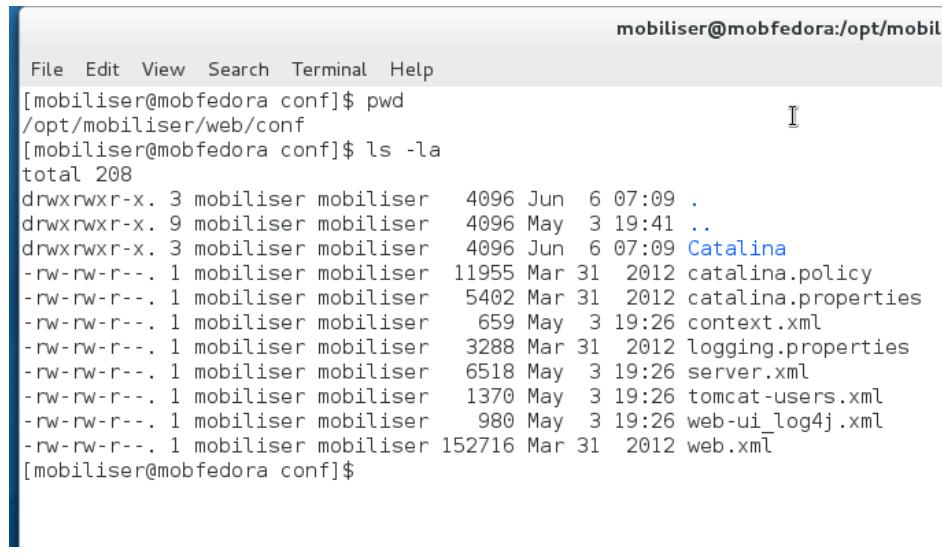


14. You are now inside the Mobiliser portal:

The screenshot shows a web browser window with the following details:

- Address Bar:** mobfedora:8082/portal/dashboard
- Toolbar:** File Edit View History Bookmarks Tools Help
- Header:** SYBASE | 365 MOBILE SERVICES, Operations Dashboard, Logged-in
- Navigation:** HOME SERVERS TRACKERS (HOME is selected)
- Mobiliser Operations Dashboard:**
 - Section Title:** Mobiliser Operations Dashboard
 - Description:** This dashboard provides functions for viewing the operational status of Mobiliser servers, such as:
 - Icon:** A small icon of a server or network node.
 - Text:** Get the health status of all your Mobiliser servers and a variety of information on 'inside-application' status and statistics; available services, messaging channels, preferences and more
 - Icon:** A small icon of a bar chart or graph.
 - Text:** Track individual statistics from your servers for monitoring throughput, health or general server operational efficiency

16. As you can see, the Mobiliser portal runs on the port 8082. Should you need to change this port, you can go in the folder web/conf and edit the file server.xml



```
mobiliser@mobiliser:~/opt/mobiliser$ pwd
/opt/mobiliser/web/conf
mobiliser@mobiliser:~/opt/mobiliser$ ls -la
total 208
drwxrwxr-x. 3 mobiliser mobiliser 4096 Jun  6 07:09 .
drwxrwxr-x. 9 mobiliser mobiliser 4096 May  3 19:41 ..
drwxrwxr-x. 3 mobiliser mobiliser 4096 Jun  6 07:09 Catalina
-rw-rw-r--. 1 mobiliser mobiliser 11955 Mar 31 2012 catalina.policy
-rw-rw-r--. 1 mobiliser mobiliser 5402 Mar 31 2012 catalina.properties
-rw-rw-r--. 1 mobiliser mobiliser 659 May  3 19:26 context.xml
-rw-rw-r--. 1 mobiliser mobiliser 3288 Mar 31 2012 logging.properties
-rw-rw-r--. 1 mobiliser mobiliser 6518 May  3 19:26 server.xml
-rw-rw-r--. 1 mobiliser mobiliser 1370 May  3 19:26 tomcat-users.xml
-rw-rw-r--. 1 mobiliser mobiliser 980 May  3 19:26 web-ui_log4j.xml
-rw-rw-r--. 1 mobiliser mobiliser 152716 Mar 31 2012 web.xml
mobiliser@mobiliser:~/opt/mobiliser$
```

17. You can change the port number, save the file and restart the Mobiliser portal with the new settings.

```
<!-- A "Connector" represents an endpoint by which requests are received
and responses are returned. Documentation at :
Java HTTP Connector: /docs/config/http.html (blocking & non-blocking)
Java AJP Connector: /docs/config/ajp.html
APR (HTTP/AJP) Connector: /docs/apr.html
Define a non-SSL HTTP/1.1 Connector on port 8080
-->
<Connector port="8082" protocol="HTTP/1.1"
connectionTimeout="20000"
redirectPort="8442" />
<!-- A "Connector" using the shared thread pool-->
<!--
<Connector executor="tomcatThreadPool"
port="8080" protocol="HTTP/1.1"
connectionTimeout="20000"
redirectPort="8442" />
```

18. When you want to stop the Mobiliser portal, simply run the command

bin/shutdown.sh

from the web folder.

19. If you want to stop Money Mobiliser, you can run the command:

bin/shutdown.sh

from the money folder.

4.3 Development environment

4.3.1 Install Apache Maven

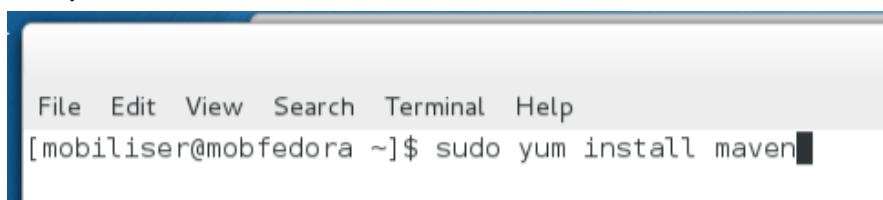
- Apache Maven can be easily installed directly by command line. So open a TERM window



```
mobiliser@mobfedora:~$ ls
core.1784 Desktop Documents Downloads Music Pictures Public squirrel-sql-3.5.0 sybinit.err Temp Templates Videos
[mobiliser@mobfedora ~]$
```

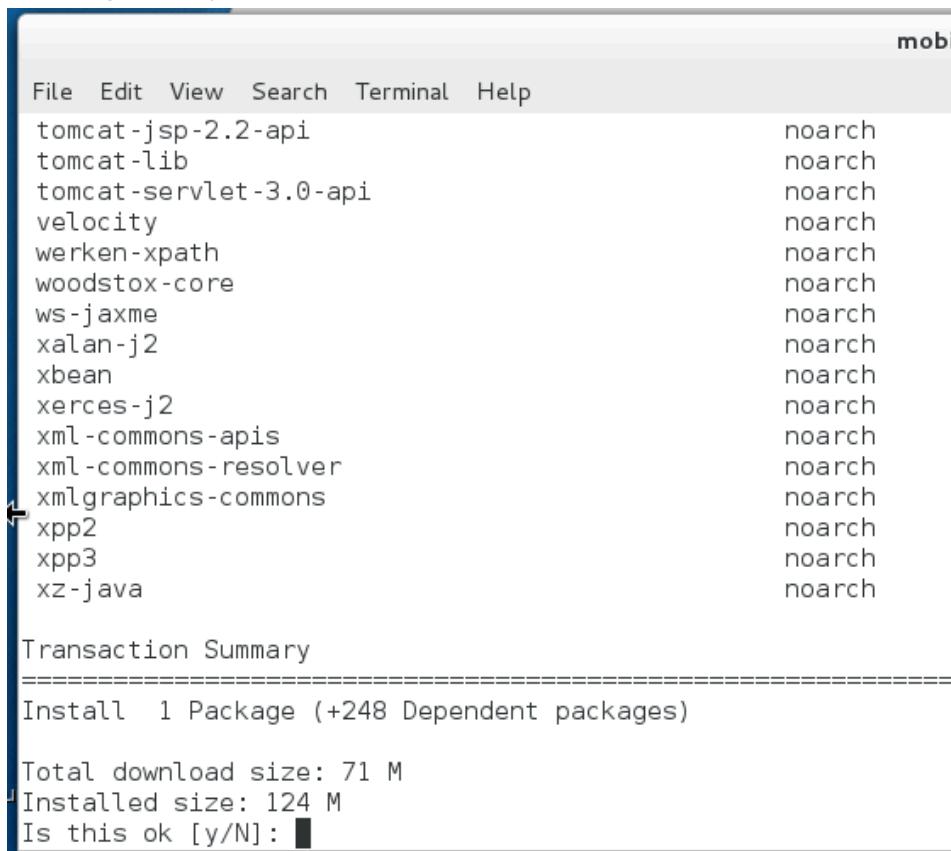
- Run the command

```
sudo yum install maven
```



```
File Edit View Search Terminal Help
[mobiliser@mobfedora ~]$ sudo yum install maven
```

- Answer "y" at this point



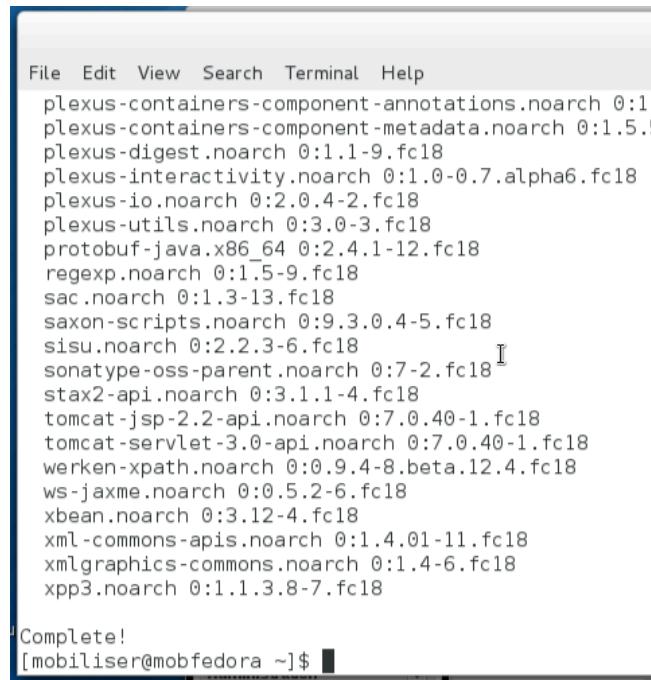
```
mobi

File Edit View Search Terminal Help
tomcat-jsp-2.2-api noarch
tomcat-lib noarch
tomcat-servlet-3.0-api noarch
velocity noarch
werken-xpath noarch
woodstox-core noarch
ws-jaxme noarch
xalan-j2 noarch
xbean noarch
xerces-j2 noarch
xml-commons-apis noarch
xml-commons-resolver noarch
xmlgraphics-commons noarch
xpp2 noarch
xpp3 noarch
xz-java noarch

Transaction Summary
=====
Install 1 Package (+248 Dependent packages)

Total download size: 71 M
Installed size: 124 M
Is this ok [y/N]:
```

4. A bunch of packages will be installed. At the end you will see the message



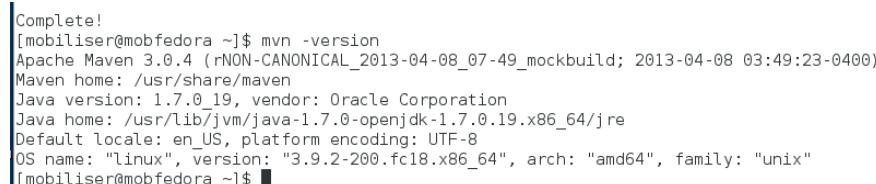
```
File Edit View Search Terminal Help
plexus-containers-component-annotations.noarch 0:1.
plexus-containers-component-metadata.noarch 0:1.5.5
plexus-digest.noarch 0:1.1-9.fc18
plexus-interactivity.noarch 0:1.0-0.7.alpha6.fc18
plexus-io.noarch 0:2.0.4-2.fc18
plexus-utils.noarch 0:3.0-3.fc18
protobuf-java.x86_64 0:2.4.1-12.fc18
regexp.noarch 0:1.5-9.fc18
sac.noarch 0:1.3-13.fc18
saxon-scripts.noarch 0:9.3.0.4-5.fc18
sisu.noarch 0:2.2.3-6.fc18
sonatype-oss-parent.noarch 0:7-2.fc18
stax2-api.noarch 0:3.1.1-4.fc18
tomcat-jsp-2.2-api.noarch 0:7.0.40-1.fc18
tomcat-servlet-3.0-api.noarch 0:7.0.40-1.fc18
werken-xpath.noarch 0:0.9.4-8.beta.12.4.fc18
ws-jaxme.noarch 0:0.5.2-6.fc18
xbean.noarch 0:3.12-4.fc18
xml-commons-apis.noarch 0:1.4.01-11.fc18
xmlgraphics-commons.noarch 0:1.4-6.fc18
xpp3.noarch 0:1.1.3.8-7.fc18

[Complete!
[mobiliser@mobfedora ~]$ ]
```

5. To check if Maven was installed correctly, type the command

mvn -version

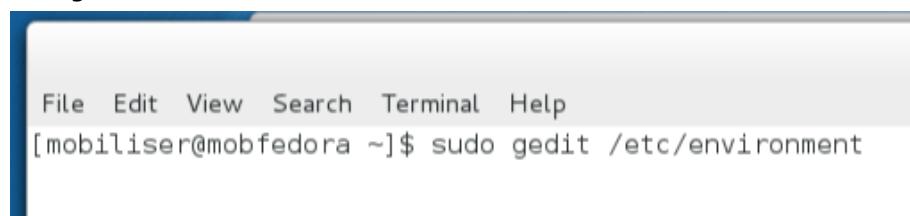
You should get the following result:



```
Complete!
[mobiliser@mobfedora ~]$ mvn -version
Apache Maven 3.0.4 (rNON-CANONICAL_2013-04-08_07-49_mockbuild; 2013-04-08 03:49:23-0400)
Maven home: /usr/share/maven
Java version: 1.7.0_19, vendor: Oracle Corporation
Java home: /usr/lib/jvm/java-1.7.0-openjdk-1.7.0.19.x86_64/jre
Default locale: en_US, platform encoding: UTF-8
OS name: "linux", version: "3.9.2-200.fc18.x86_64", arch: "amd64", family: "unix"
[mobiliser@mobfedora ~]$ ]
```

6. In order to properly set up Maven, we need to change a little bit its memory allocation. Let's create a new variable inside the /etc/environment file. Run the command

sudo gedit /etc/environment

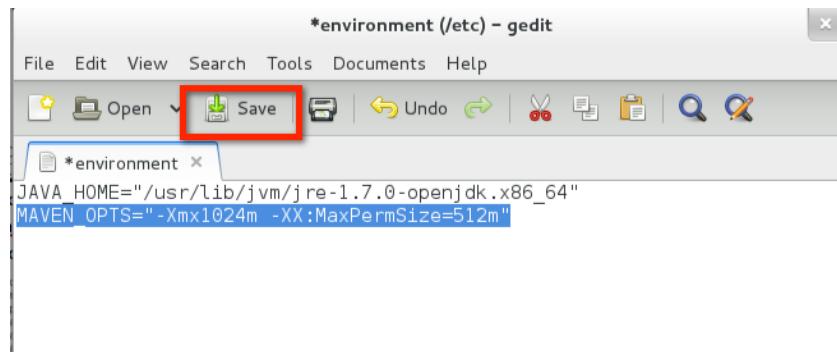


```
File Edit View Search Terminal Help
[mobiliser@mobfedora ~]$ sudo gedit /etc/environment
[mobiliser@mobfedora ~]$ ]
```

7. Paste the string

MAVEN_OPTS="-Xmx1024m -XX:MaxPermSize=512m"

at the end of this file and save it



8. Run

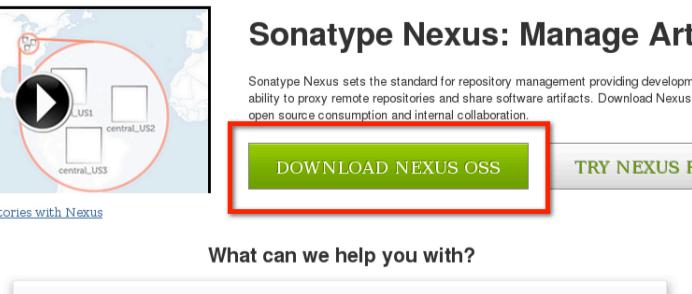
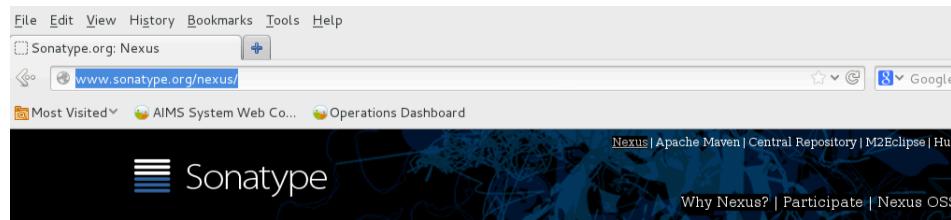
source /etc/environment

to immediately apply the new changes.

9. Your Maven installation is complete!

4.3.2 Install Sonatype Nexus

- Sonatype Nexus can be downloaded from the web site <http://www.sonatype.org/nexus/>



- You can download the file in the TGZ format.

1 Download Nexus

Download one of the following files. Nexus is only ~30MB, so it shouldn't take long.

NEXUS (TGZ)

Checksums: [MD5](#) [SHA](#) Signature: [PGP](#)

NEXUS (ZIP)

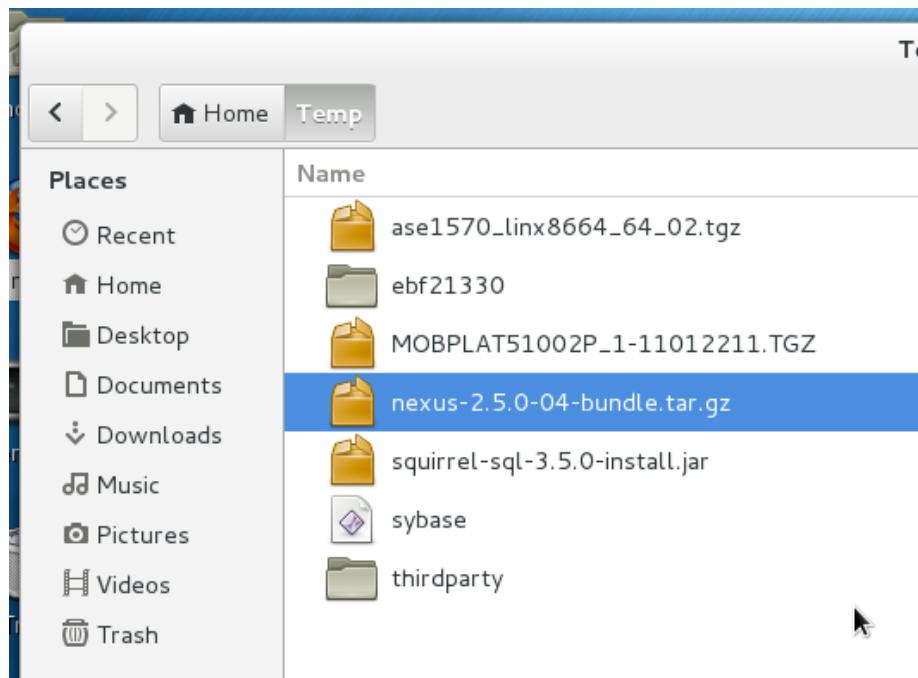
Checksums: [MD5](#) [SHA](#) Signature: [PGP](#)

2 Installing & Running Nexus

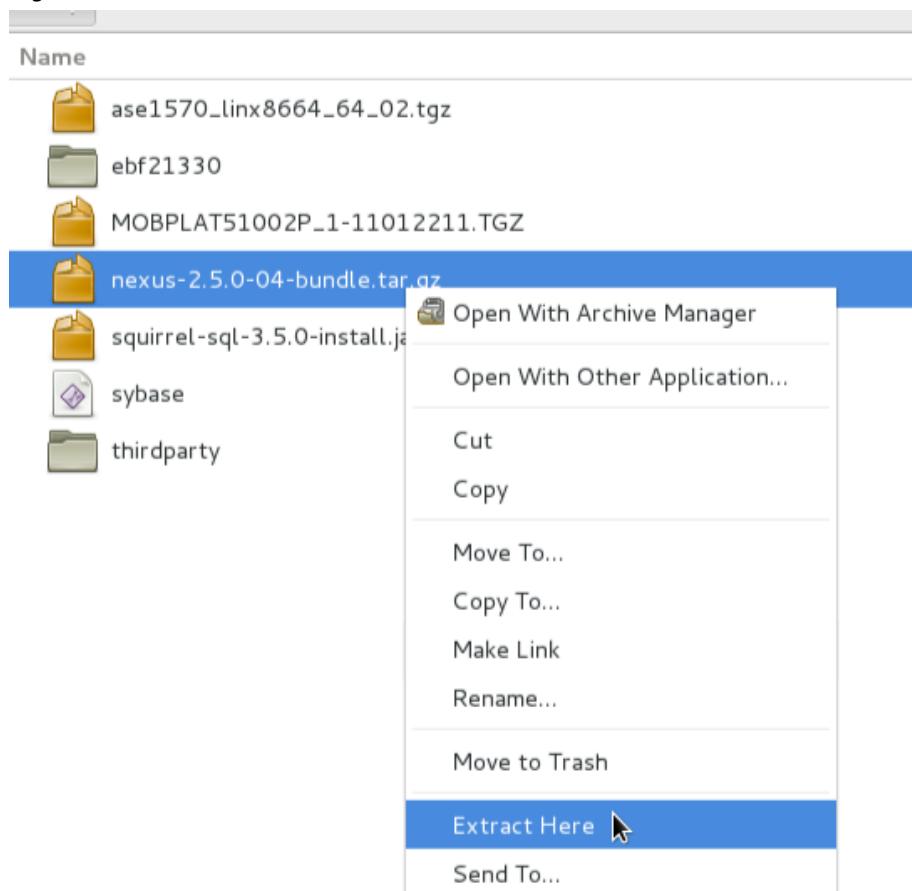
Install and start Nexus by following these instructions. Upgrading? See [these notes](#).

- [Nexus Release Notes](#)
- [Installing Nexus](#)
- [Upgrading Nexus](#)
- [Starting Nexus](#)

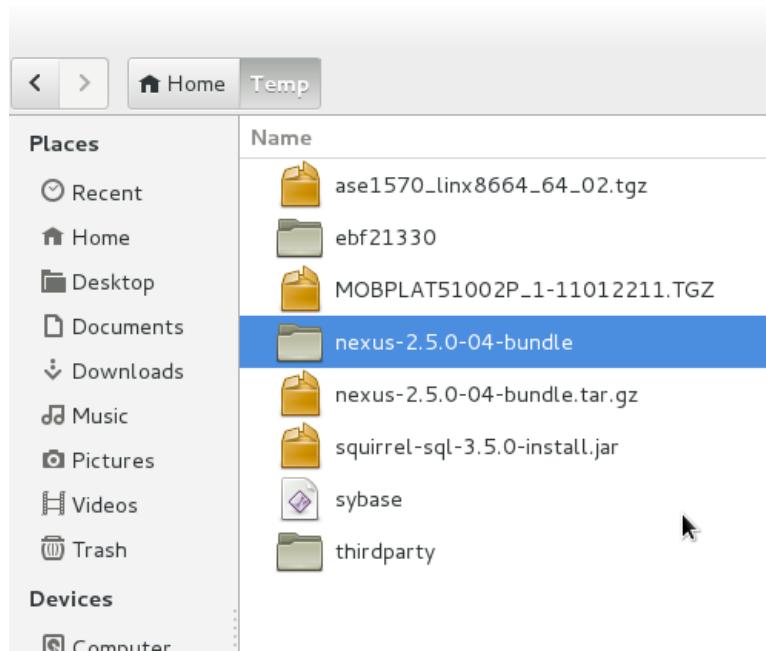
3. Move the downloaded file in the <temp> folder



4. Right click on this file and select **Extract Here**



5. You have now a new folder that contains the Nexus package



6. Open a TERM window and go inside this folder (pay attention to the name of the folder since you could have a different version!)

```
cd /home/mobiliser/Temp/nexus-2.5.0-04-bundle
```

7. Move all the content of this folder in a proper position. Since we are moving all the new software in the /opt folder, let's move this package there as well.

```
sudo mv * /opt
```

```
mobiliser@mobiliser:~/Temp/nexus-2.5.C
File Edit View Search Terminal Help
[mobiliser@mobiliser ~]$ ls
core.1784 Desktop Documents Downloads Music Pictures Public squirrel-sql
[mobiliser@mobiliser ~]$ cd Temp
[mobiliser@mobiliser Temp]$ ls
ase1570_linx8664_64_02.tgz MOBPLAT51002P_1-11012211.TGZ nexus-2.5.0-04-bundle
ebf21330 nexus-2.5.0-04-bundle squirrel-sql-3.5.0-in
[mobiliser@mobiliser Temp]$ cd nexus-2.5.0-04-bundle/
[mobiliser@mobiliser nexus-2.5.0-04-bundle]$ ls
nexus-2.5.0-04 sonatype-work
[mobiliser@mobiliser nexus-2.5.0-04-bundle]$ sudo mv * /opt
```

8. Rename the folder `nexus-2.5.0-04` simply as `nexus`

```
sudo mv /opt/nexus-2.5.0-04 /opt/nexus
```

You should have after these steps, the following situation in the /opt folder

```
[mobiliser@mobiliser opt]$ ls
mobiliser mobilisergood nexus-2.5.0-04 sonatype-work sybase
[mobiliser@mobiliser opt]$ sudo mv nexus-2.5.0-04/ nexus
[mobiliser@mobiliser opt]$ ls
mobiliser mobilisergood nexus sonatype-work sybase
[mobiliser@mobiliser opt]$
```

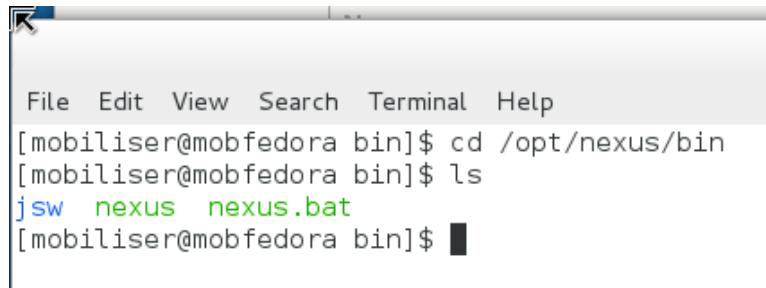
9. Change the owner of these two subfolders to "mobiliser" by using these two commands

```
sudo chown -R mobiliser /opt/nexus  
sudo chown -R mobiliser /opt/sonatype-work
```

```
mobiliser mobilisergood nexus sonatype-work sybase  
[mobiliser@mobfedora opt]$ sudo chown -R mobiliser nexus  
[mobiliser@mobfedora opt]$ sudo chown -R mobiliser sonatype-work/  
[mobiliser@mobfedora opt]$
```

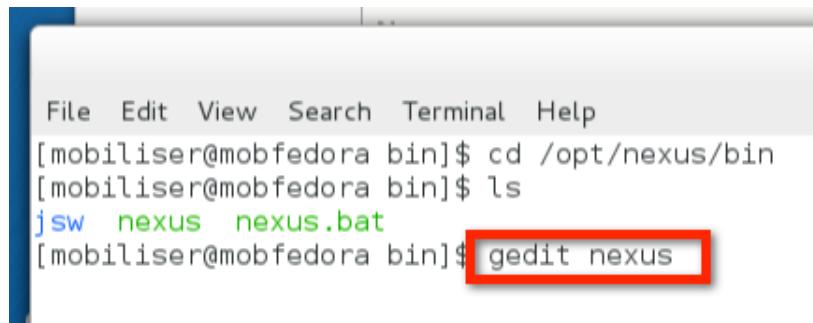
10. Navigate to the folder /opt/nexus/bin

```
cd /opt/nexus/bin
```



11. Edit the nexus file

```
gedit nexus
```



12. Do the following changes and save the file

- Add the line `#chkconfig: 2345 20 80` to the beginning of the file (**DO NOT remove the comment symbol "#" from this line!**)
- Change the `NEXUS_HOME` to your NEXUS installation path (`/opt/nexus` in this example)
- Change the name of the user who will run the NEXUS service ("mobiliser" in this example). **Pay attention to remove the comment symbol "#" from this line!**

```

File Edit View Search Tools Documents Help
Open Save Undo Redo Cut Copy Paste Find Replace Select All
@ *nexus *
#!/bin/sh

#
# Copyright (c) 1999, 2006 Tanuki Software Inc.
#
# Java Service Wrapper sh script. Suitable for starting and stopping
# wrapped Java applications on UNIX platforms.
#
# chkconfig: 2345 20 80
#-----#
# These settings can be modified to fit the needs of your application
# Set this to the root of the Nexus installation
NEXUS_HOME="/opt/nexus"
# If specified, the Wrapper will be run as the specified user.
# IMPORTANT - Make sure that the user has the required privileges to write into the Nexus installation directory.
# NOTE - This will set the user which is used to run the Wrapper as well as
# the JVM and is not useful in situations where a privileged resource or
# port needs to be allocated prior to the user being changed.
RUN_AS_USER="mobiliser"
# Application
APP_NAME="nexus"
APP_LONG_NAME="Nexus OSS"

```

13. Copy the `nexus` file in the `/etc/init.d` folder

```
sudo cp nexus /etc/init.d
```

14. Mark the `nexus` file as executable

```
sudo chmod +x /etc/init.d/nexus
```

```

mobiliser@mobfedora ~
File Edit View Search Terminal Help
[mobiliser@mobfedora bin]$ cd /opt/nexus/bin
[mobiliser@mobfedora bin]$ ls
jSW nexus nexus.bat
[mobiliser@mobfedora bin]$ gedit nexus
[mobiliser@mobfedora bin]$ sudo cp nexus /etc/init.d
[sudo] password for mobiliser:
[mobiliser@mobfedora bin]$ sudo chmod +x /etc/init.d/nexus
[mobiliser@mobfedora bin]$

```

15. Add the nexus service to the list of the automatically started services

```
sudo chkconfig --add /etc/init.d/nexus
```

16. Run the chkconfig command without any parameters to check that nexus has been correctly installed:

```
sudo chkconfig
```

```
[mobiliser@mobfedora ~]$ chkconfig  
  
Note: This output shows SysV services only and does not include native  
systemd services. SysV configuration data might be overridden by native  
systemd configuration.  
  
csvn      0:off  1:off  2:off  3:on   4:on   5:on   6:off  
ebtables  0:off  1:off  2:off  3:off  4:off  5:off  6:off  
iscsi     0:off  1:off  2:off  3:on   4:on   5:on   6:off  
iscsid    0:off  1:off  2:off  3:on   4:on   5:on   6:off  
jenkins   0:off  1:off  2:off  3:on   4:off  5:on   6:off  
livesys   0:off  1:off  2:off  3:on   4:on   5:on   6:off  
livesys-late 0:off  1:off  2:off  3:on   4:on   5:on   6:off  
netconsole 0:off  1:off  2:off  3:off  4:off  5:off  6:off  
network   0:off  1:off  2:off  3:off  4:off  5:off  6:off  
nexus     0:off  1:off  2:on   3:on   4:on   5:on   6:off  
sybase    0:off  1:off  2:on   3:on   4:on   5:on   6:off  
vmware-tools 0:off  1:off  2:on   3:on   4:on   5:on   6:off  
vmware-tools-thinprint 0:off  1:off  2:on   3:on   4:on   5:on   6:off  
[mobiliser@mobfedora ~]$
```

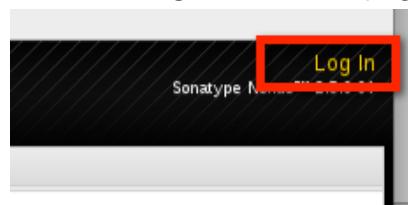
17. Start the nexus service

```
sudo service nexus start
```

```
vmware-tools  0:off  1:off  2:on   3:on   4:on  
vmware-tools-thinprint 0:off  1:off  2:on   3:on  
[mobiliser@mobfedora ~]$ sudo service nexus start  
Starting Nexus OSS...  
Started Nexus OSS.  
[mobiliser@mobfedora ~]$
```

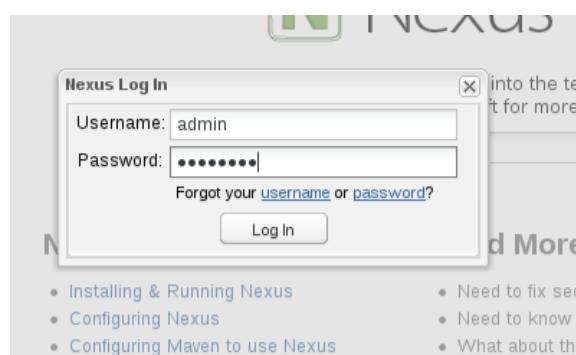
18. Open your browser and go on the web site http://<server_name>:8081/nexus (in this example it's <http://mobfedora:8081/nexus>). This is the Nexus main page. You can manage the entire Nexus suite by accessing this web interface.

19. Click on the **Log In** link on the top right corner



20. Provide the following credentials:

USER	PASSWORD
admin	admin123



21. You are now in the Nexus administration page

The screenshot shows the Sonatype Nexus administration interface. On the left, there is a sidebar with the following menu items: Sonatype™ Servers (nexus), Artifact Search, Advanced Search, Views/Repositories (Repositories, Repository Targets, Routing, System Feeds), Security, Administration, and Help. The main content area has a "Welcome" header and a "Nexus" logo. Below it is a search bar with placeholder text: "Type in the name of a project, class, or artifact into the text box below, and click Search. Use 'Advanced Search' on the left for more options." To the right of the search bar is a section titled "Nexus Resources:" with links to "Installing & Running Nexus", "Configuring Nexus", "Configuring Maven to use Nexus", "Go to the Knowledgebase", and "Download the Nexus Book". Another section titled "Need More From Nexus?" lists "Need to fix security vulnerabilities?", "Need to know about licensing issues?", "What about the quality of components?", and "Get it all in Nexus Pro". The top right corner shows the user "admin" and the version "Sonatype Nexus™ 2.5.0".

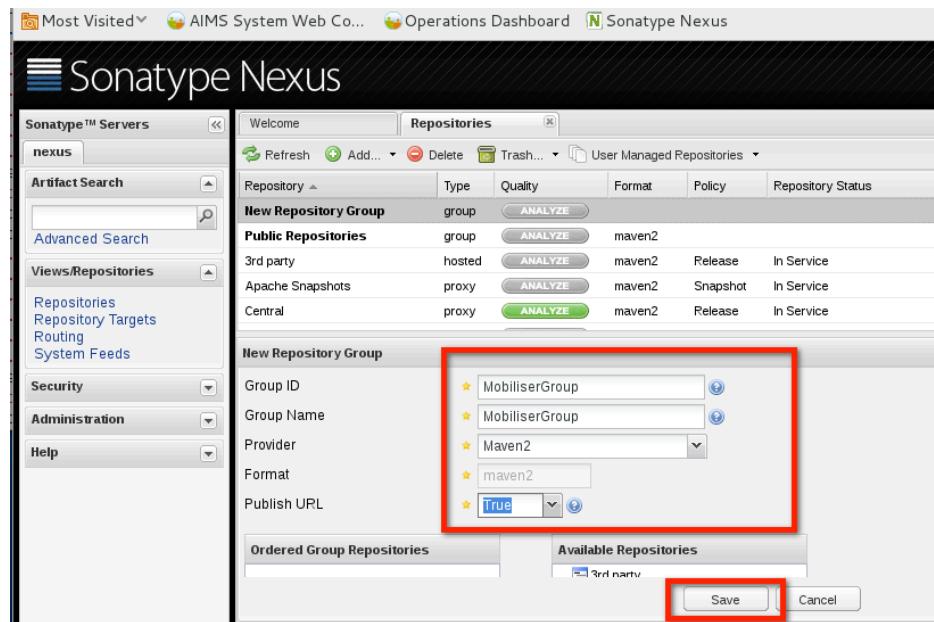
22. Click on the repository item on the left toolbar

The screenshot shows the Sonatype Nexus administration interface with the "Repositories" tab selected in the sidebar. The main content area displays a table of "Public Repositories" and a configuration panel for a new repository group. The table columns include Repository, Type, Quality, Format, Policy, and Repository Status. The "Format" column for the first row shows a button labeled "maven". The configuration panel includes fields for Group ID (public), Group Name (Public Repositories), Provider (Maven2), and Format (maven2). Buttons for "Save" and "Reset" are at the bottom.

23. Create a new repository group. We are going to name it **MobiliserGroup**, but you can choose any other name. Click on the **Add** button on the top bar

The screenshot shows the Sonatype Nexus administration interface with the "Repositories" tab selected. A dropdown menu is open over the "Add..." button in the top toolbar. The menu options are: Hosted Repository, Proxy Repository, Virtual Repository, and Repository Group. The "Repository Group" option is highlighted with a red box. Below the dropdown, a message says "Select a record to view the details."

24. Fill all the mandatory fields and click on **Save**.

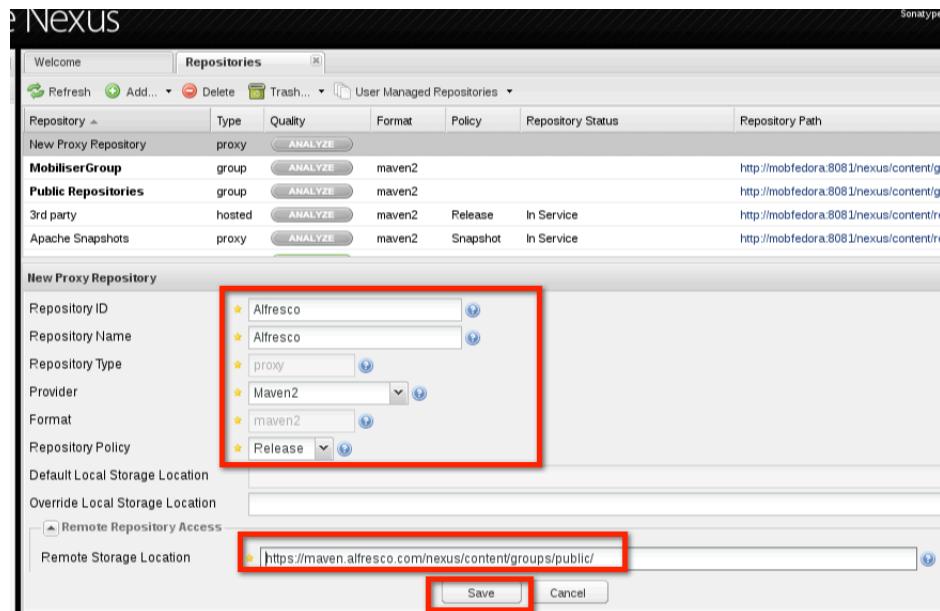


25. Add a new proxy repository called Alfresco by clicking again on the **Add** button on the top bar

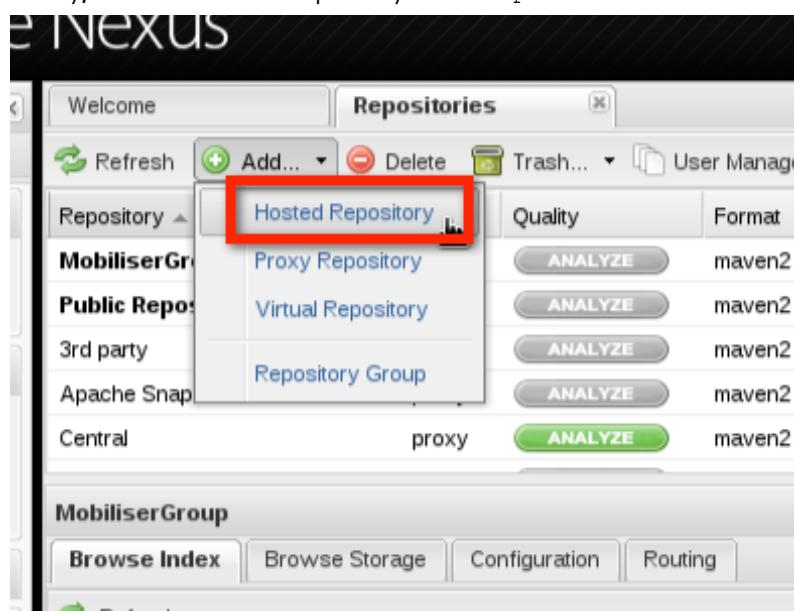


26. Fill all the mandatory fields and set the **Remote Storage Location** to the following URL:
<https://maven.alfresco.com/nexus/content/groups/public/>

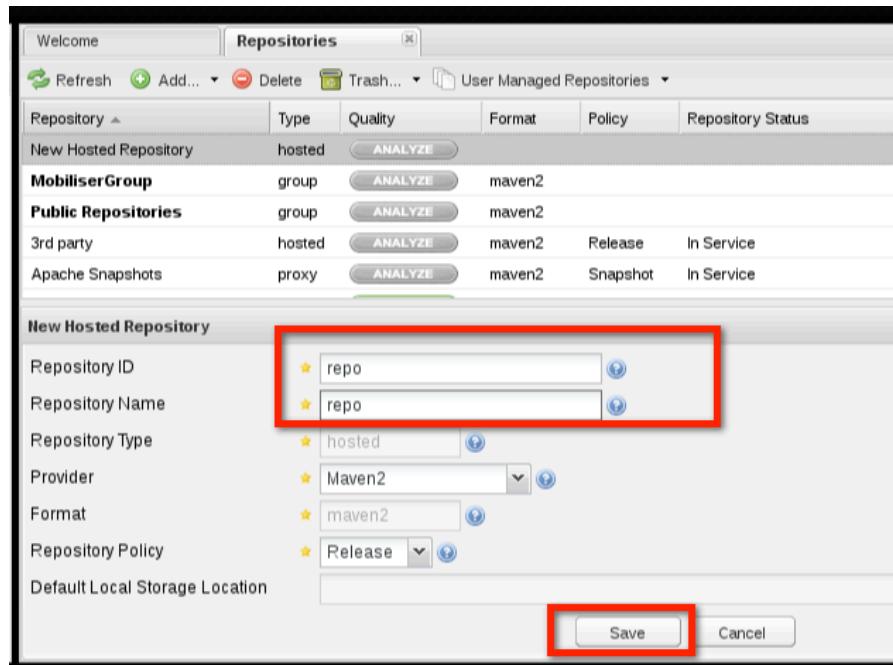
Click on **Save**



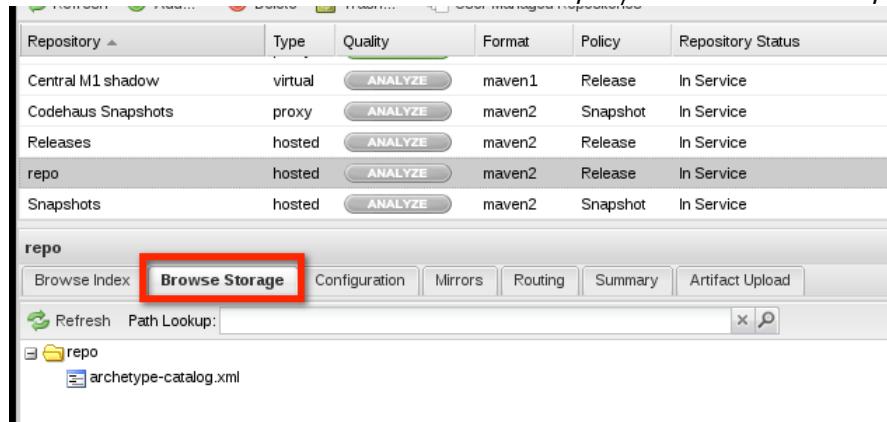
27. Finally, add a new hosted repository called `repo`



28. Fill the Repository ID and Name with `repo` and click on **Save**.



29. This repository, in particular, is the one that will contain all the artifacts you will need in order to build the Mobiliser custom source code. At moment, as you can see here below, it's empty.



30. In order to fill this repository you need to open a TERM window and go into the `tools` folder of the installation package

```
cd /home/mobiliser(Temp/ebf21330/com.sybase365.mobiliser.dist.full-5.1.0.SP02PL01-dist/tools/
```

```
mobiliser@mobiliser@mobfedora:~/Temp/ebf21330/com.sybase365.mobiliser.dist.full-5.1.0.SP02PL01-dist/tools$ cd /home/mobiliser(Temp/ebf21330/com.sybase365.mobiliser.dist.full-5.1.0.SP02PL01-dist/tools/
[mobiliser@mobiliser tools]$ ls
com.sybase365.mobiliser.dist.project-5.1.0.SP02PL01-customization.zip
com.sybase365.mobiliser.dist.tools-5.1.0.SP02PL01.jar
com.sybase365.mobiliser.dist.was-5.1.0.SP02PL01-dist.zip
com.sybase365.mobiliser.ui.web.application-5.1.0.SP02PL01.war
com.sybase365.mobiliser.ui.web.wicketutils-5.1.0.SP02PL01.jar
com.sybase365.mobiliser.utilcodegen.annotations-0.3.jar
dependencies.properties
mobicodegen-maven-plugin-0.3.jar
[mobiliser@mobiliser tools]$
```

31. In this folder there is a tool that will fill the `repo` repository with all the artifacts you need for code building your code. This tool is named `com.sybase365.mobiliser.dist.tools-5.1.0.SP02PL01.jar`: it will read the information contained in the file `dependencies.properties` and will upload all the artifacts in the `repo` repository of your local Nexus installation.

32. Use this command to start the tool

```
java -jar com.sybase365.mobiliser.dist.tools-5.1.0.SP02PL01.jar dependencies.properties ../
http://mobfedora:8081/nexus repo admin admin123
```

[Executing the command java -jar com.sybase365.mobiliser.dist.tools-5.1.0.SP02PL01.jar dependencies.properties .. http://mobfedora:8081/nexus repo admin admin123]

33. A lot of messages will be generated

```
Handling artifact:
GroupId : com.opensymphony.quartz
ArtifactId: com.sybase365.org.quartz.oracle
Version : 1.6.2
Classifier: null
Type : jar
Found file: ../applications/ibm/money/bundles/01-fragments/com.sybase365.org.quartz.oracle-1.6.2.jar
Accuracy of match: 2
Putting the file to: http://mobfedora:8081/nexus/content/repositories/repo/com/opensymphony/quartz/com.sybase365.org.quartz.or
.6.2/com.sybase365.org.quartz.oracle-1.6.2.jar
Artifact uploaded successfully

Handling artifact:
GroupId : com.sap.security.nw
ArtifactId: com.sap.security.nw.vsi
Version : 1.9.0.5
Classifier: null
Type : jar
Found file: ../applications/ibm/money/bundles/07-frameworks/com.sap.security.nw.vsi-1.9.0.5.jar
Accuracy of match: 2
Putting the file to: http://mobfedora:8081/nexus/content/repositories/repo/com/sap/security/nw/com.sap.security.nw.vsi/1.9.0.5.
ap.security.nw.vsi-1.9.0.5.jar
```

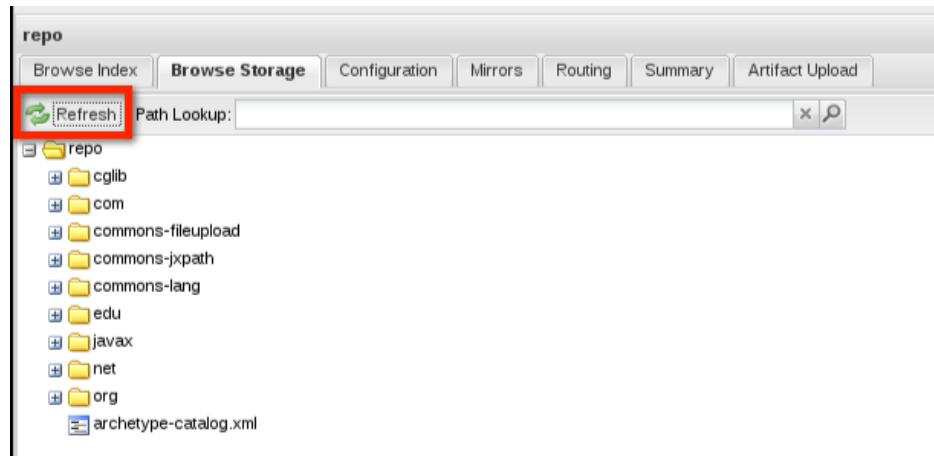
34. At the end of the process you will see the message

```
File Edit View Search Terminal Help
GroupId : org.wicketstuff
ArtifactId: jwicket-ui-datepicker
Version : 1.4.15
Classifier: null
Type : jar
Found file: ../applications/web/webapps/portal/WEB-INF/li
Accuracy of match: 2
Putting the file to: http://mobfedora:8081/nexus/content/re
datepicker-1.4.15.jar
Artifact uploaded successfully

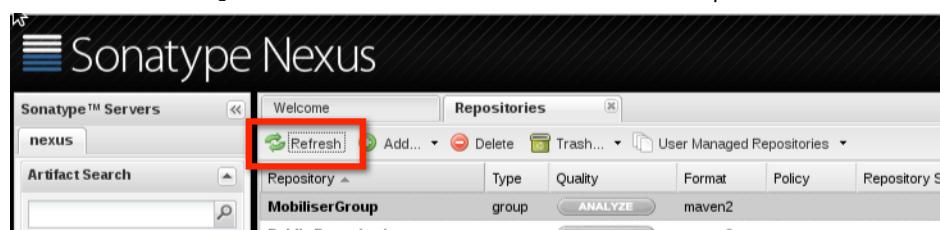
Handling artifact:
GroupId : org.xmlpull
ArtifactId: com.springsource.org.xmlpull
Version : 1.1.4.c
Classifier: null
Type : jar
Found file: ../applications/proxy/bundles/04-xml/com.spri
Accuracy of match: 2
Putting the file to: http://mobfedora:8081/nexus/content/re
ngsource.org.xmlpull-1.1.4.c.jar
Artifact uploaded successfully

[mobiliser@mobfedora tools]$
```

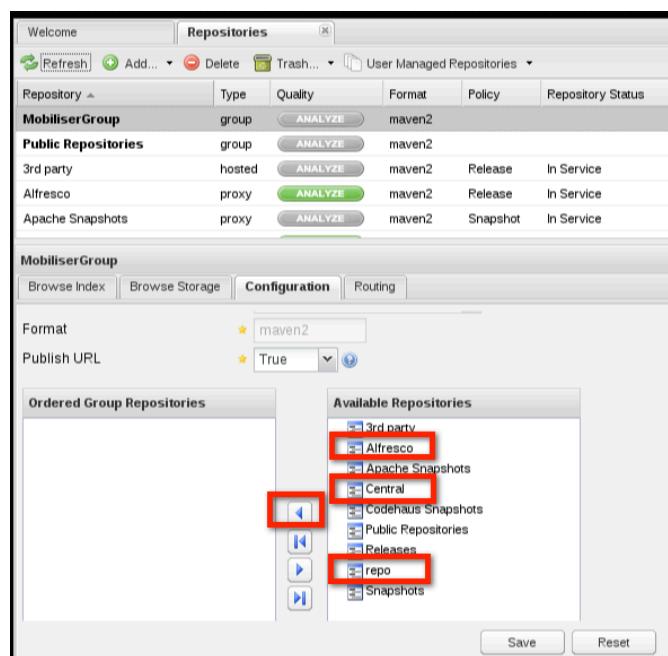
35. Now go back on your `repo` repository in the Nexus administration page, click on the **Refresh** button and you will find that it's now populated



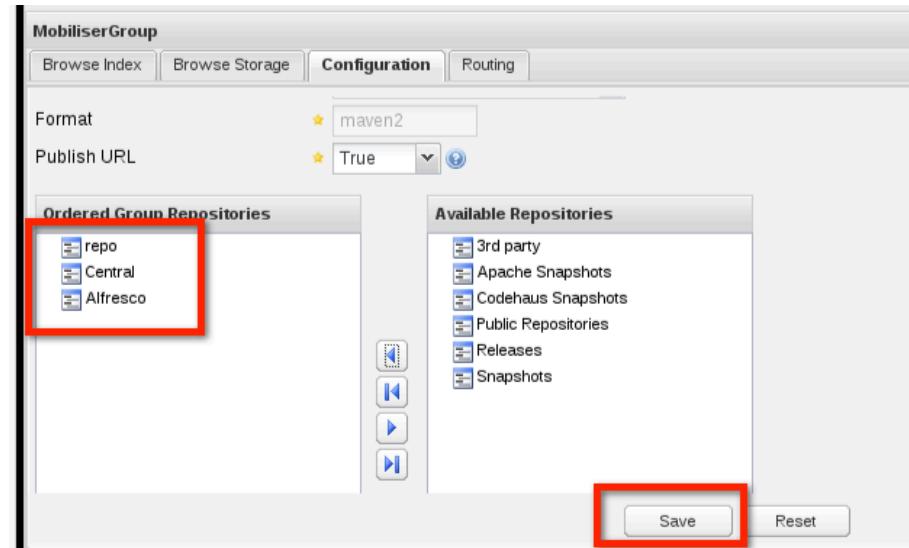
36. As the final step, we need to add these two new repositories we have created, to the MobiliserGroup. Click once on the **Refresh** button on the top toolbar



37. Select the MobiliserGroup and click on the **Configuration** tab. You should be able to see the two repositories Alfresco and repo plus another repository named Central. We need to add all of them to the MobiliserGroup



38. At the end you should have the following situation. Keep the repositories in this group in the shown sort order. Click on **Save** to save this group



39. Now if you click on the **Browse Storage** tab for this group, you will be able to see a lot of new artifacts collected together. These will be the artifacts needed to build your custom code

Repository	Type	Quality	Format	Policy	Repository State
MobiliserGroup	group	ANALYZE	maven2		
Public Repositories	group	ANALYZE	maven2		
3rd party	hosted	ANALYZE	maven2	Release	In Service
Alfresco	proxy	ANALYZE	maven2	Release	In Service
Apache Snapshots	proxy	ANALYZE	maven2	Snapshot	In Service
Central	proxy	ANALYZE	maven2	Release	In Service

MobiliserGroup

Browse Index **Browse Storage** Configuration Routing

Refresh Path Lookup:

- > **MobiliserGroup**
 - + com
 - + commons-fileupload
 - + commons-jxpath
 - + commons-lang
 - + edu
 - + javax
 - + net
 - + org
 - = archetype-catalog.xml

40. Pay attention to the fact that all the repositories need to be in the "In Service" status. If this is not the case, maybe you have problems with your web proxy.

Repository	Type	Quality	Format	Policy	Repository Status
MobiliserGroup	group	ANALYZE	maven2		
Public Repositories	group	ANALYZE	maven2		
3rd party	hosted	ANALYZE	maven2	Release	In Service
Alfresco	proxy	ANALYZE	maven2	Release	In Service
Apache Snapshots	proxy	ANALYZE	maven2	Snapshot	In Service
Central	proxy	ANALYZE	maven2	Release	In Service
Central M1 shadow	virtual	ANALYZE	maven1	Release	In Service
Codehaus Snapshots	proxy	ANALYZE	maven2	Snapshot	In Service
Releases	hosted	ANALYZE	maven2	Release	In Service
repo	hosted	ANALYZE	maven2	Release	In Service
Snapshots	hosted	ANALYZE	maven2	Snapshot	In Service

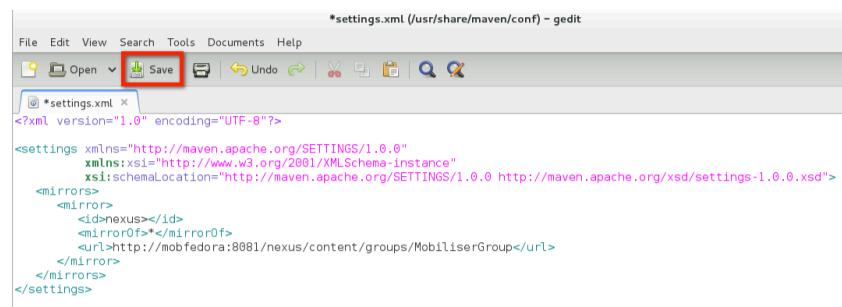
41. This is our last step. We need to edit our Maven settings file in order to enable Maven to use our new Nexus repository

```
sudo gedit /usr/share/maven/conf/settings.xml
```



42. Type the following code inside this file and save it.

```
<?xml version="1.0" encoding="UTF-8"?>
<settings xmlns="http://maven.apache.org/SETTINGS/1.0.0"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://maven.apache.org/SETTINGS/1.0.0
    http://maven.apache.org/xsd/settings-1.0.0.xsd">
  <mirrors>
    <mirror>
      <id>nexus</id>
      <mirrorof>*</mirrorof>
      <url>http://mobfedora:8081/nexus/content/groups/MobiliserGroup</url>
    </mirror>
  </mirrors>
</settings>
```



43. Your Nexus installation is now complete

4.3.3 Install CollabNet Subversion

- In order to download this software you will need to register; it can be done free of charge. Once you have registered and downloaded the software, you can install it on your server. The download site is the following: <http://www.collab.net/downloads/subversion>
Put the downloaded package in the <temp> folder.

The screenshot shows the Subversion Edge Download page. At the top, there's a navigation bar with links to 'Most Visited', 'AIMS System Web Co...', 'Operations Dashboard', and 'Sonatype Nexus'. Below the navigation, the title 'Subversion Edge Download' is displayed. A sub-header says 'Download Subversion Edge and within minutes be up and running with a fully featured, web and cloud enabled Subversion platform.' It also mentions 'Add your preferred Subversion clients and pick from a range of integrations to further extend your Subversion platform.' The main content area has a heading 'Choose your Platform:' followed by tabs for Windows, Linux (which is selected), Solaris, Hosted, Community Binaries, and Get Git. Under the Linux tab, there are two download links:

- Subversion Edge 3.3.2 (Linux 32-bit)**: A certified software stack containing the latest versions of Subversion, Apache, and ViewVC. The 'DOWNLOAD' button is visible.
- Subversion Edge 3.3.2 (Linux 64-bit)**: A certified software stack containing the latest versions of Subversion, Apache, and ViewVC. The 'DOWNLOAD' button is highlighted with a red box.

- Open a TERM window and go to the <temp> folder
`cd /home/mobiliser/Temp`
- Extract the content of the downloaded package directly in the /opt folder
`sudo tar xvzf CollabNetSubversionEdge-3.3.2_linux-x86_64.tar.gz -C /opt`
- Change the owner of this new folder by putting "mobiliser" as the new owner:
`sudo chown -R mobiliser:mobiliser /opt/csvn`
- Go inside the csvn folder
`cd /opt/csvn`

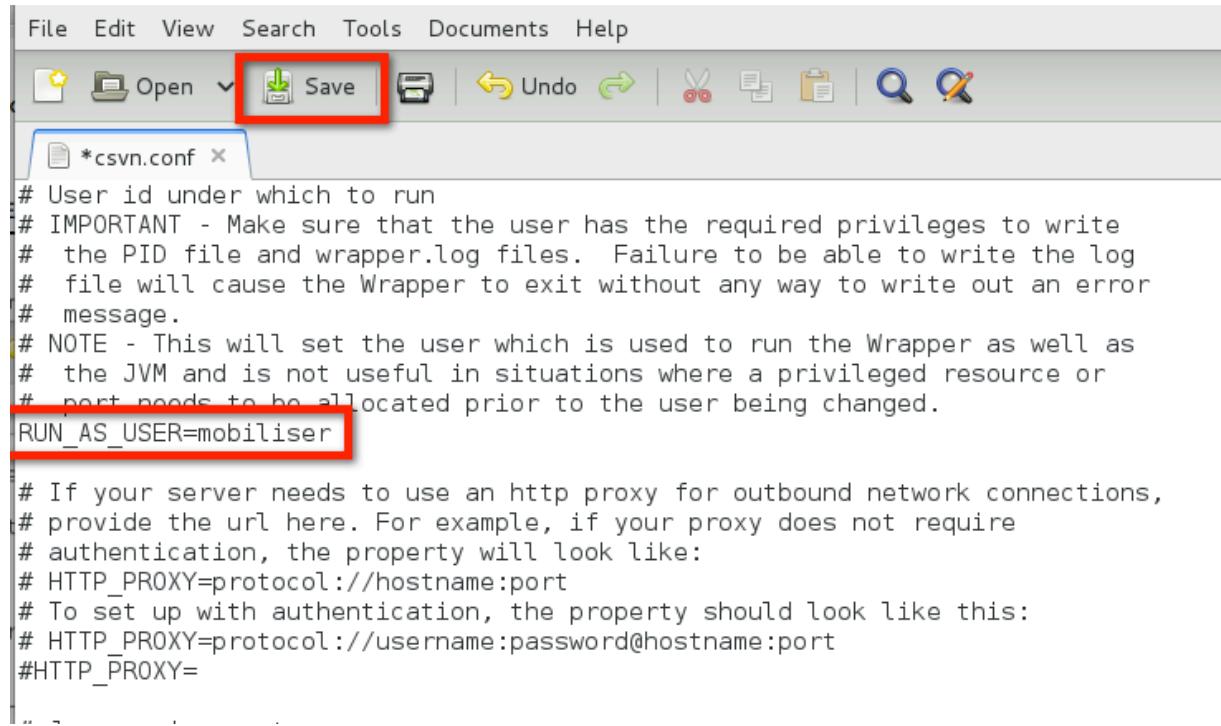
```
[mobiliser@mobfedora Temp]$ cd /opt/csvn/
[mobiliser@mobfedora csvn]$ ls
appserver bin data dist lib licenses pkg README www
[mobiliser@mobfedora csvn]$
```

- Restore the default configuration file
`sudo cp /opt/csvn/data/conf/csvn.conf.dist /opt/csvn/data/conf/csvn.conf`
- ```
[mobiliser@mobfedora Temp]$ sudo cp /opt/csvn/data/conf/csvn.conf.dist /opt/csvn/data/conf/csvn.conf
[mobiliser@mobfedora csvn]$ ls
appserver bin data dist lib licenses pkg README www
[mobiliser@mobfedora csvn]$ cp /opt/csvn/data/conf/csvn.conf.dist /opt/csvn/data/conf/csvn.conf
[mobiliser@mobfedora csvn]$
```

7. Edit the configuration file to set the user who will run the `csvn` service:

```
sudo gedit /opt/csvn/data/conf/csvn.conf
```

Uncomment the line with the `RUN_AS_USER` statement and set it to "mobiliser". Save the file.



```
User id under which to run
IMPORTANT - Make sure that the user has the required privileges to write
the PID file and wrapper.log files. Failure to be able to write the log
file will cause the Wrapper to exit without any way to write out an error
message.
NOTE - This will set the user which is used to run the Wrapper as well as
the JVM and is not useful in situations where a privileged resource or
port needs to be allocated prior to the user being changed.
RUN_AS_USER=mobiliser

If your server needs to use an http proxy for outbound network connections,
provide the url here. For example, if your proxy does not require
authentication, the property will look like:
HTTP_PROXY=protocol://hostname:port
To set up with authentication, the property should look like this:
HTTP_PROXY=protocol://username:password@hostname:port
#HTTP_PROXY=
```

8. Run the command

```
sudo -E bin/csvn install
```

to install `csvn` as a service

```
[mobiliser@mobfedora csvn]$ sudo -E bin/csvn install
[sudo] password for mobiliser:
Detected RHEL or Fedora:
Installing the CSVN Console daemon..
Setting JAVA_HOME to: '/usr/lib/jvm/jre-1.7.0-openjdk.x86_64'. Please edit '../data/conf/csvn.conf' if this needs to be adjusted.
[mobiliser@mobfedora csvn]$
```

9. Once the service has been installed you can start, check the status and stop with the following commands:

```
sudo service csvn start
sudo service csvn status
sudo service csvn stop
```

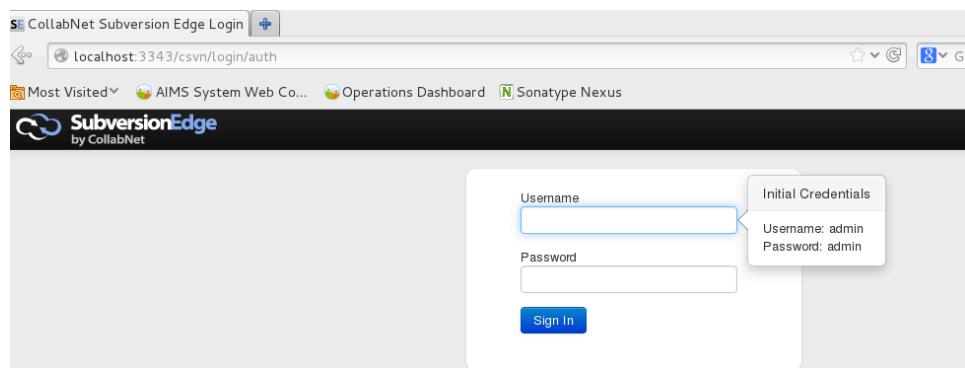
10. For the moment we are going to start it

```
sudo service csvn start
```

```
mobiliser@mobfedora:/opt/csvn
File Edit View Search Terminal Help
[mobiliser@mobfedora csvn]$ sudo service csvn start
Starting CSVN Console.....
CSVN Console started
Initializing CSVN Console at http://localhost:3343/csvn. Please wait a moment for server to become available.
[mobiliser@mobfedora csvn]$
```

11. Open the internet browser and type the following URL:

<http://localhost:3343/csvn>



12. Subversion is started and you are automatically prompted to logon to the administration page. The administration page will use the port 3343 of your machine, but it can be changed. In order to access the administration page, you need to provide an administrator account. The default administrator account is:

| USER  | PASSWORD |
|-------|----------|
| admin | admin    |

13. Go on Server Settings and change the port number to 8088. Then click on **Save**.

The screenshot shows the Subversion Edge administration interface. On the left, there's a sidebar with 'MAINTENANCE' (Status, Server Logs, Software Updates, Statistics, Jobs), 'CONFIGURATION' (Server Settings, Authentication, Proxy Server, Mail Server, Logging, Server Monitoring), and 'EXTENSIONS' (TeamForge). The 'Server Settings' link is highlighted with a red box. The main panel shows configuration options like 'Apache Encryption', 'Repository Directory', 'Backup Directory', 'Administrator', 'Administrator Email', and 'Console Encryption'. The 'Port' field is highlighted with a red box and contains '8088'. At the bottom right, there are 'Save' and 'Cancel' buttons, with 'Save' highlighted with a red box.

14. Select the **Status** tab and click on the **Start** button to start the server.

The screenshot shows the Subversion Edge status interface. The 'Status' tab is selected. In the 'Status' section, it says 'Subversion status: Down' with a red circle icon. A 'Start' button is highlighted with a red box. Below this, the 'Information' section provides details: Software version 3.3.2-3601.115, Subversion version 1.7.10-3601.115, Running since 06/10/2013 05:00:08 EDT, Repo health (no repositories), Throughput on primary interface 158.47 B/s IN, 38.25 B/s OUT, and Disk Usage as of 06/10/2013 05:02:09 EDT.

15. Subversion server is now running.

The screenshot shows the Subversion Edge status interface after starting the server. The 'Status' tab is selected. In the 'Status' section, it says 'Subversion status: Up' with a green circle icon. A 'Stop' button is highlighted with a red box. Below this, the 'Information' section displays the same software details as before: Software version 3.3.2-3601.115, Subversion version 1.7.10-3601.115, Running since 06/10/2013 05:00:08 EDT, Repo health (no repositories), Throughput on primary interface 158.47 B/s IN, 38.25 B/s OUT, and Disk Usage as of 06/10/2013 05:02:09 EDT.

16. Now click on **Repositories**. We need to add a new repository: this repository will be used to host our source code and all the subsequent versions we are going to have.

The screenshot shows the SubversionEdge interface. At the top, there are links for 'Most Visited', 'AIMS System Web Co...', 'Operations Dashboard', and 'Sonatype Nexus'. Below that is a navigation bar with tabs: 'SubversionEdge by CollabNet', 'Repositories' (which is highlighted with a red box), 'Users', 'Administration', and 'Extensions'. On the far right of the navigation bar is a 'Super Admin' link. Under the 'Repositories' tab, there's a 'Getting Started' section with three items: '1. Change Password', '2. Server Settings', and '3. Connect to CloudForge'. To the right of this is a 'Repositories' list area. It includes a dropdown for 'records per page' set to '10', a search bar with 'Name' and 'Checkout command' fields, and a message stating 'There are no repositories yet. You may create a new repository using the 'Create' button.' Below this is a 'Showing 0 entries' message. At the bottom right of the list area are 'Create' and 'Discover' buttons.

17. Click on **Create**.

This screenshot is similar to the previous one, showing the SubversionEdge interface under the 'Repositories' tab. The 'Create' button at the bottom right of the 'Repositories' list area is now highlighted with a red box.

18. Type a repository name ("custom" in our example). Select the option to create a standard trunk/branches/tags structure and then click on **Create**.

### Create Repository

The screenshot shows the 'Create Repository' dialog box. At the top, there's a 'Name:' field containing 'custom', which is highlighted with a red box. Below it is an 'Initialize:' section with three radio button options: 'Template' (selected), 'Empty repository', and 'Create standard trunk/branches/tags structure' (which is also highlighted with a red box). At the bottom of the dialog is a large blue 'Create' button, which is also highlighted with a red box.

19. If you go back to the repository list, you should be able to see your new repository.

The screenshot shows the Subversion Edge interface. The top navigation bar includes 'SubversionEdge by CollabNet', 'Repositories', 'Users', 'Administration', and 'Extensions'. The user is logged in as 'Super Administrator (admin)'. The main content area is titled 'Repositories' with a sub-section 'Repository List'. It lists repositories with columns for Name, Checkout command, and Status. One repository named 'custom' is highlighted with a red box. At the bottom right of the list is an 'OK' button.

20. Click on the name of the new repository, provide the credentials mentioned above and you will get the content of this repository. The folder `trunk` is where all the main source code is stored, while `branches` is where the users can put their own copies of the `trunk` folder; therefore they do changes to the code without affecting the main code.

The screenshot shows the content of the 'custom' repository. It's a table with columns: File, Rev., Age, Author, and Last log entry. It lists three entries: 'branches/' (Rev. 1, 104 seconds, mobiliser, Creating\_initial\_branch\_structure), 'tags/' (Rev. 1, 104 seconds, mobiliser, Creating\_initial\_branch\_structure), and 'trunk/' (Rev. 1, 104 seconds, mobiliser, Creating\_initial\_branch\_structure).

21. You may want to create a new account inside Subversion in order to not use the administrator account. We can create for example a new user with the same credentials as your login account. Click on the **Users** tab and click on **Create**.

The screenshot shows the 'Users' section of Subversion Edge. The top navigation bar includes 'SubversionEdge by CollabNet', 'Repositories', 'Users' (highlighted with a red box), 'Administration', and 'Extensions'. The user is logged in as 'Super Administrator (admin)'. The main content area is titled 'Users' with a sub-section 'User List'. It lists one user: 'admin' (Username, Full Name: Super Administrator, Description: admin user). At the bottom right of the list is a 'Create' button highlighted with a red box.

22. Fill the page with the required information;

| USER      | PASSWORD |
|-----------|----------|
| mobiliser | sybase   |

assign to this user the ROLE\_ADMIN role and click on **Create**.

The screenshot shows the 'Create User' form. It has fields for Login Name (mobiliser), Full Name (mobiliser), Password and Confirm Password (both set to '\*\*\*\*\*'), Email (mobiliser@sybase.com), and Description (empty). Under 'Roles Granted', the 'ROLE\_ADMIN' checkbox is checked. At the bottom is a 'Create' button highlighted with a red box.

23. You should have two users now in your system.

| Username  | Full Name           |
|-----------|---------------------|
| admin     | Super Administrator |
| mobiliser | mobiliser           |

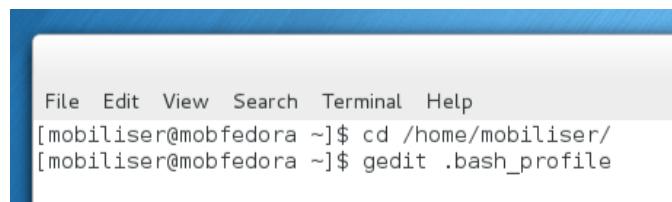
24. One last optional step is to add the `/opt/csvn/bin` folder to the PATH variable.

Go in your local folder

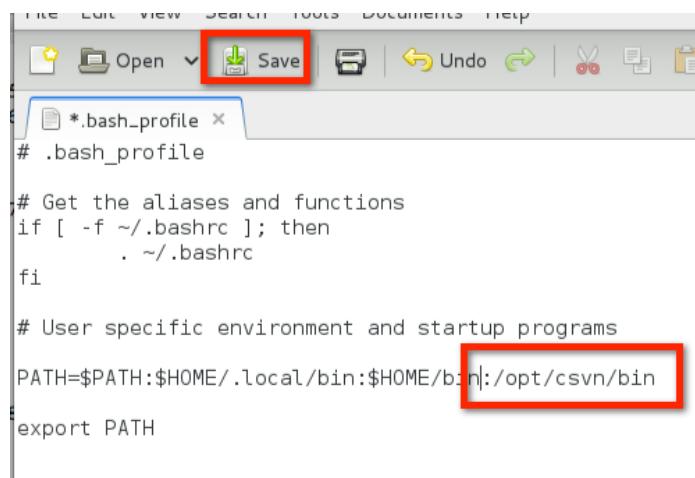
```
cd /home/mobiliser
```

25. Run the command

```
gedit .bash_profile
```



26. Add the string “`:/opt/csvn/bin`” to the PATH variable and save the file.



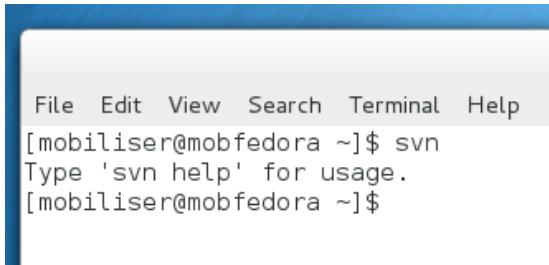
27. In order to apply immediately the change, run the following command.

```
. .bash_profile
```

(Notice the space between the two dots!)



28. If the path variable has been successfully modified, when you run the command  
**svn**  
in the TERM, you should get the following result



```
File Edit View Search Terminal Help
[mobiliser@mobfedora ~]$ svn
Type 'svn help' for usage.
[mobiliser@mobfedora ~]$
```

## 4.3.4 Upload Mobiliser source code to Subversion

1. Now that Subversion is in place, we need to put inside the source code we have received from SAP Development. The easiest way to do it is to use the Subversion command line operations.  
Open a TERM window.
2. Go to the folder <temp>/ebf21330/com.sybase365.mobiliser.dist.full-5.1.0.SP02PL01-dist/tools/

```
cd /home/mobiliser(Temp/ebf21330/com.sybase365.mobiliser.dist.full-5.1.0.SP02PL01-dist/tools/
```

```
[mobiliser@mobfedora ~]$ cd /home/mobiliser(Temp/ebf21330/com.sybase365.mobiliser.dist.full-5.1.0.SP02PL01-dist/tools/
[mobiliser@mobfedora tools]$ ls
com.sybase365.mobiliser.dist.project-5.1.0.SP02PL01-customization.zip
com.sybase365.mobiliser.dist.tools-5.1.0.SP02PL01.jar
com.sybase365.mobiliser.dist.was-5.1.0.SP02PL01-dist.zip
com.sybase365.mobiliser.ui.web.application-5.1.0.SP02PL01.war
com.sybase365.mobiliser.ui.web.wicketutils-5.1.0.SP02PL01.jar
com.sybase365.mobiliser.utilcodegen.annotations-0.3.jar
dependencies.properties
mobcodegen-maven-plugin-0.3.jar
[mobiliser@mobfedora tools]$ █
```

3. In this folder there is a .zip file containing the Mobiliser source code. This file is named: com.sybase365.mobiliser.dist.project-5.1.0.SP02PL01-customization.zip
4. Unzip this file in the current location  
**unzip com.sybase365.mobiliser.dist.project-5.1.0.SP02PL01-customization.zip**
5. After unzipping this file you will find a new subfolder named  
com.sybase365.mobiliser.dist.project-5.1.0.SP02PL01

```
pt
[mobiliser@mobfedora tools]$ ls
com.sybase365.mobiliser.dist.project-5.1.0.SP02PL01
com.sybase365.mobiliser.dist.project-5.1.0.SP02PL01-customization.zip
com.sybase365.mobiliser.dist.tools-5.1.0.SP02PL01.jar
com.sybase365.mobiliser.dist.was-5.1.0.SP02PL01-dist.zip
com.sybase365.mobiliser.ui.web.application-5.1.0.SP02PL01.war
com.sybase365.mobiliser.ui.web.wicketutils-5.1.0.SP02PL01.jar
com.sybase365.mobiliser.utilcodegen.annotations-0.3.jar
dependencies.properties
mobcodegen-maven-plugin-0.3.jar
[mobiliser@mobfedora tools]$ █
```

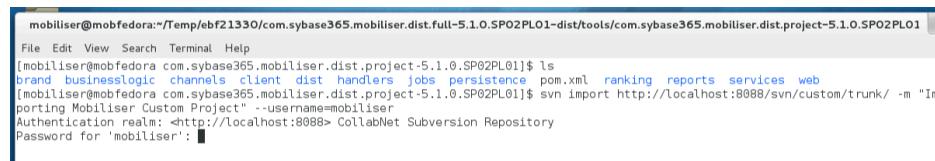
6. Go inside this folder  
**cd com.sybase365.mobiliser.dist.project-5.1.0.SP02PL01/**  
you can see all the source files that are part of our solution. They will be uploaded to the server.

```
[mobiliser@mobfedora tools]$ cd com.sybase365.mobiliser.dist.project-5.1.0.SP02PL01/
[mobiliser@mobfedora com.sybase365.mobiliser.dist.project-5.1.0.SP02PL01]$ ls
brand businesslogic channels client dist handlers jobs persistence pom.xml ranking reports services web
[mobiliser@mobfedora com.sybase365.mobiliser.dist.project-5.1.0.SP02PL01]$ █
```

7. Once in the source code folder, run the following command:

```
svn import http://<server_name>:8088/svn/<repository_name>/trunk/ -m "Importing Mobiliser Custom Project" --username=mobiliser
```

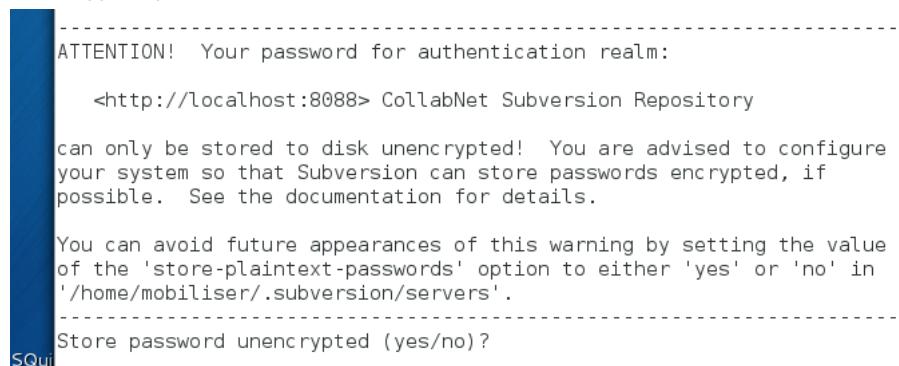
(in this example it's *svn import http://mobfedora:8088/svn/custom/trunk/ -m "Importing Mobiliser Custom Project" --username=mobiliser*)



```
mobiliser@mobfedora:~/Temp/ebf21330/com.sybase365.mobiliser.dist.full-5.1.0.SP02PL01-dist/tools/com.sybase365.mobiliser.dist.project-5.1.0.SP02PL01$ ls
brand businesslogic channels client dist handlers jobs persistence pom.xml ranking reports services web
[mobiliser@mobfedora com.sybase365.mobiliser.dist.project-5.1.0.SP02PL01]$ svn import http://localhost:8088/svn/custom/trunk/ -m "Importing Mobiliser Custom Project" --username=mobiliser
Authentication realm: <http://localhost:8088> CollabNet Subversion Repository
Password for 'mobiliser':
```

You will be requested with the mobiliser's password, which is "sybase".

8. The import phase starts, as depicted below. Answer "yes" to the question if you want to store an unencrypted password.

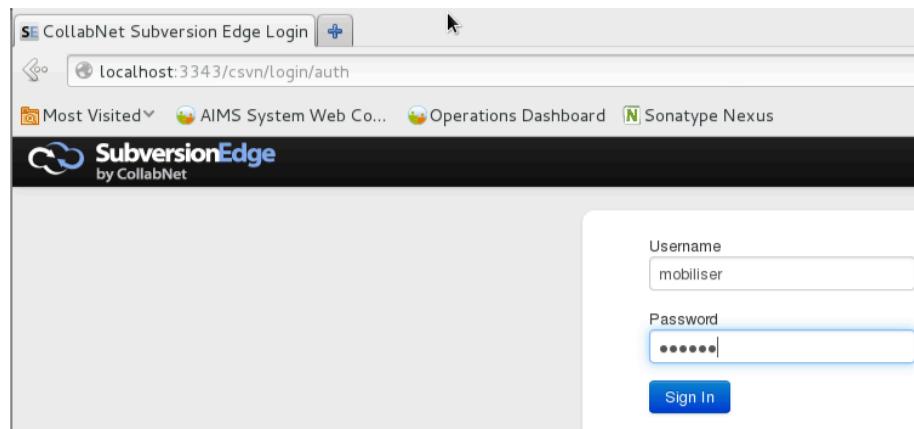


9. When it finishes, you should have the following message.



```
[Adding persistence/src/test/java/com/sybase365/mobiliser/custom/project/persis
[Adding tence/pom.xml
[Adding persistence/src/test/java/com/sybase365/mobiliser/custom/project/persis
[Adding tence/pom.xml
[Adding persistence/src/test/java/com/sybase365/mobiliser/custom/project/persis
[Adding tence/pom.xml
[Adding persistence/src/test/java/com/sybase365/mobiliser/custom/project/persis
[Adding tence/pom.xml
Quitting
Committed revision 2.
[mobiliser@mobfedora com.sybase365.mobiliser.dist.project-5.1.0.SP02PL01]$
```

10. Go back to the Subversion page



11. Click on the `trunk` folder which has the revision 2 now that we have done our first upload

| File      | Rev. | Age        | Author    | Last log entry                     |
|-----------|------|------------|-----------|------------------------------------|
| branches/ | 1    | 58 minutes | mobiliser | Creating_initial_branch_structure  |
| tags/     | 1    | 58 minutes | mobiliser | Creating_initial_branch_structure  |
| trunk/    | 2    | 93 seconds | mobiliser | Importing Mobiliser Custom Project |

12. This is what you see now in the `trunk` folder.

| File           | Rev. | Age       | Author | Last log entry                     |
|----------------|------|-----------|--------|------------------------------------|
| ..             |      |           |        |                                    |
| ..repository/  | 2    | 3 minutes | admin  | Importing Mobiliser Custom Project |
| .settings/     | 2    | 3 minutes | admin  | Importing Mobiliser Custom Project |
| brand/         | 2    | 3 minutes | admin  | Importing Mobiliser Custom Project |
| businesslogic/ | 2    | 3 minutes | admin  | Importing Mobiliser Custom Project |
| channels/      | 2    | 3 minutes | admin  | Importing Mobiliser Custom Project |
| client/        | 2    | 3 minutes | admin  | Importing Mobiliser Custom Project |
| dist/          | 2    | 3 minutes | admin  | Importing Mobiliser Custom Project |
| handlers/      | 2    | 3 minutes | admin  | Importing Mobiliser Custom Project |
| jobs/          | 2    | 3 minutes | admin  | Importing Mobiliser Custom Project |
| persistence/   | 2    | 3 minutes | admin  | Importing Mobiliser Custom Project |
| ranking/       | 2    | 3 minutes | admin  | Importing Mobiliser Custom Project |
| reports/       | 2    | 3 minutes | admin  | Importing Mobiliser Custom Project |
| services/      | 2    | 3 minutes | admin  | Importing Mobiliser Custom Project |
| web-ul/        | 2    | 3 minutes | admin  | Importing Mobiliser Custom Project |
| .gitignore     | 2    | 3 minutes | admin  | Importing Mobiliser Custom Project |
| .project       | 2    | 3 minutes | admin  | Importing Mobiliser Custom Project |
| pom.xml        | 2    | 3 minutes | admin  | Importing Mobiliser Custom Project |

13. Now go in your `<local_user_path>` by running

**cd /home/mobiliser**

14. Create your own source folder by checking out the source project directly from the repository. Let's call this folder `workspace`

**mkdir -p workspace**

```
[mobiliser@mobfedora ~]$ mkdir -p workspace
[mobiliser@mobfedora ~]$ ls
core.1784 Documents Music Public sybinit.err Templates workspace
Desktop Downloads Pictures squirrel-sql-3.5.0 Temp Videos
[mobiliser@mobfedora ~]$
```

15. Go inside this new folder. It's of course empty at moment.

**cd workspace**

```
[mobiliser@mobfedora ~]$ cd workspace/
[mobiliser@mobfedora workspace]$ ls
[mobiliser@mobfedora workspace]$
```

16. Run the following command

```
svn co http://<server_name>:8088/svn/<repository_name>/trunk <repository_name> --
username=mobiliser
```

(in this example it's *svn co http://mobfedora:8088/svn/custom/trunk custom --username=mobiliser*)

```
[mobiliser@mobfedora workspace]$ ls
[mobiliser@mobfedora workspace]$ svn co http://localhost:8088/svn/custom/trunk custom --username=mobiliser
```

17. At the end you will have a C:\<repository\_name> folder (in this example it's C:\custom) with the required source code. This will be the folder that we will use to build our source code and generate our custom version of Mobiliser.

```
[A custom/channels/src/main/java/com/sybase365
[A custom/channels/src/main/java/com/sybase365/mobiliser
[A custom/channels/src/main/java/com/sybase365/mobiliser/custom
[A custom/channels/src/main/java/com/sybase365/mobiliser/custom/project
[A custom/channels/src/main/java/com/sybase365/mobiliser/custom/project/channels
[A custom/channels/src/main/java/com/sybase365/mobiliser/custom/project/channels/OremChannel.java
[A custom/channels/src/main/java/com/sybase365/mobiliser/custom/project/channels/HttpChannelEnd.java
[A custom/channels/pom.xml
Checked out revision 2.
[mobiliser@mobfedora workspace]$ ls
custom
[mobiliser@mobfedora workspace]$ cd custom/
[mobiliser@mobfedora custom]$ ls
brand businesslogic channels client dist handlers jobs persistence pom.xml ranking reports services web
[mobiliser@mobfedora custom]$
```

### 4.3.5 Build Mobiliser source code with Maven

In this section we are going to see how to build the Mobiliser source code using Maven. The output of this process will be basically a couple of files containing: Money and Web Mobiliser and the script we will use to create the entire Mobiliser database.

1. Since we have chosen to use the Sybase DB, we have to check if, in the pom.xml file located in the <local\_user\_path>/workspace/custom/dist, there is the proper instruction to generate a script package for this database.

```
mobiliser@mobiliser:~/workspace/custom/dist
mobiliser@mobiliser:~/workspace/custom/dist$ ls
brand businesslogic channels client dist handlers jobs persistence pom.xml ranking reports services web
[mobiliser@mobiliser:~/workspace/custom/dist]$ cd dist
[mobiliser@mobiliser:~/workspace/custom/dist]$ ls
src pom.xml
[mobiliser@mobiliser:~/workspace/custom/dist]$ gedit pom.xml
```

2. The file should be changed in the following way: you need to move the code

```
<activation>
 <activeByDefault>true</activeByDefault>
</activation>
```

in the section related to the DB you want to generate. Since we decided to use Sybase, we need to put this under the "ase" section, as shown in the following picture, and save the file:

```
<name>AIMS Mobiliser :: Custom :: Project Distributable</name>
<packaging>pom</packaging>
<profiles>
 <profile>
 <id>ase</id>
 <activation>
 <activeByDefault>true</activeByDefault>
 </activation>
 <properties>
 <container.type>ase</container.type>
 <scriptarchive.name>ase</scriptarchive.name>
 </properties>
 </profile>
 <profile>
 <id>db2</id>
 <properties>
 <container.type>db2</container.type>
 <scriptarchive.name>db2-driverless</scriptarchive.name>
 </properties>
 </profile>
</profiles>
```



The above <activeByDefault></activeByDefault> tag, of course, should appear in the pom.xml file just once.

3. Open a TERM, move to the folder where you have your source project (in this example <local\_user\_path>/workspace/custom) and run the command  
**mvn clean install**

```
mobiliser@mobfedora:~/workspace/custom
File Edit View Search Terminal Help
[mobiliser@mobfedora custom]$ ls
brand businesslogic channels client dist handlers jobs persistence pom.xml ranking reports services web
[mobiliser@mobfedora custom]$ mvn clean install
```

4. The process finished successfully

```
mobiliser@mobfedora:~/workspace/custom
File Edit View Search Terminal Help
[INFO] AIMS Mobiliser :: Custom :: Project Services Parent POM SUCCESS [0.058s]
[INFO] AIMS Mobiliser :: Custom :: Project Services Contract SUCCESS [17.938s]
[INFO] AIMS Mobiliser :: Custom :: Project Persistence ... SUCCESS [20.886s]
[INFO] AIMS Mobiliser :: Custom :: Project Businesslogic Parent POM SUCCESS [0.038s]
[INFO] AIMS Mobiliser :: Custom :: Project Business Logic API SUCCESS [5.706s]
[INFO] AIMS Mobiliser :: Custom :: Project Business Logic Impl SUCCESS [44.598s]
[INFO] AIMS Mobiliser :: Custom :: Project Soap Client Collection SUCCESS [4.833s]
[INFO] AIMS Mobiliser :: Custom :: Project Services Context SUCCESS [5.318s]
[INFO] AIMS Mobiliser :: Custom :: Project Custom Ranking SUCCESS [0.689s]
[INFO] AIMS Mobiliser :: Custom :: Project Crystal Reports SUCCESS [0.931s]
[INFO] AIMS Mobiliser :: Custom :: Project Services Endpoint SUCCESS [10.157s]
[INFO] AIMS Mobiliser :: Custom :: Project Services Smartphone Endpoint SUCCESS [8.976s]
[INFO] AIMS Mobiliser :: Custom :: Project Services True Rest Endpoint SUCCESS [0.747s]
[INFO] AIMS Mobiliser :: Custom :: Project Web UI SUCCESS [1:03.669s]
[INFO] AIMS Mobiliser :: Custom :: Project Distributable . SUCCESS [7:34.178s]
[INFO] AIMS Mobiliser :: Custom :: Project Services SOAP Wrapper Endpoint SUCCESS [1.077s]
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 10:42.834s
[INFO] Finished at: Mon Jun 10 07:10:47 EDT 2013
[INFO] Final Memory: 147M/552M
[INFO] -----
[mobiliser@mobfedora custom]$
```

5. At the end of the process, if you go inside the <local\_user\_path>/workspace/custom/dist/target folder you will see two main big files:

- com.sybase365.mobiliser.custom.project.dist-1.0.0-SNAPSHOT-dist.zip
- com.sybase365.mobiliser.custom.project.dist-1.0.0-SNAPSHOT-scriptarchive-ase.jar

6. The first file is the zip containing the Money and Web Mobiliser and the second is the one that will be used to generate the database

```
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 10:42.834s
[INFO] Finished at: Mon Jun 10 07:10:47 EDT 2013
[INFO] Final Memory: 147M/552M
[INFO] -----
[mobiliser@mobfedora custom]$ ls
brand businesslogic channels client dist handlers jobs persistence pom.xml ranking reports services target web
[mobiliser@mobfedora custom]$ cd dist
[mobiliser@mobfedora dist]$ cd target/
[mobiliser@mobfedora target]$ ls
activempq classes dependency-maven-plugin-markers
antrun [com.sybase365.mobiliser.custom.project.dist-1.0.0-SNAPSHOT-dist.zip]
archive-tmp [com.sybase365.mobiliser.custom.project.dist-1.0.0-SNAPSHOT-scriptarchive-ase.jar]
[mobiliser@mobfedora target]$ reports
[mobiliser@mobfedora target]$ tomcat
```

7. If you have already performed all the steps shown in the chapter 4.2 and you have already built your run-time environment, probably you don't need to execute the following steps since you have already a Mobiliser database in place. If not or if you have already customized your DB so that it's no longer the standard database, you can follow the next steps in order to install it.
8. Staying in the current <local\_user\_path>/workspace/custom/dist/target folder you need to extract from the file com.sybase365.mobiliser.custom.project.dist-1.0.0-SNAPSHOT-scriptarchive-ase.jar a couple of additional files:
  - 001\_MONEY\_drop\_and\_create\_user.DDL
  - dbmaintain.properties.ase

9. The first file can be extracted using the command

```
jar xvf com.sybase365.mobiliser.custom.project.dist-1.0.0-SNAPSHOT-scriptarchive-ase.jar
sql/001_MONEY/001_SETUP/001_MONEY_drop_and_create_user.DDL
```

```
[mobiliser@mobfedora target]$ jar xvf com.sybase365.mobiliser.custom.project.dist-1.0.0-SNAPSHOT-scriptarchive-ase.jar sql/
001_SETUP/001_MONEY_drop_and_create_user.DDL
inflated: sql/001_MONEY/001_SETUP/001_MONEY_drop_and_create_user.DDL
[mobiliser@mobfedora target]$
```

10. The second just by using the command

```
jar xvf com.sybase365.mobiliser.custom.project.dist-1.0.0-SNAPSHOT-scriptarchive-ase.jar
dbmaintain.properties.ase
```

```
[mobiliser@mobfedora target]$ jar xvf com.sybase365.mobiliser.custom.project.dist-1.0.0-SNAPSHOT-scriptarchive-ase.jar dbmaintain.pr
operties.ase
inflated: dbmaintain.properties.ase
[mobiliser@mobfedora target]$
```

11. Once you have extracted these two files, go inside the folder sql/001\_MONEY/001\_SETUP/
 **cd sql/001\_MONEY/001\_SETUP/**

12. Execute the DDL script in order to create the new device for the database:

```
isql -S<ase_server_name> -Usa -P -i001_MONEY_drop_and_create_user.DDL
```

(in my case it's:

```
isql -Saseserver -Usa -P -i001_MONEY_drop_and_create_user.DDL)
```

13. If the operation is successful you should receive the following screen.

```
mobiliser@mobfedora:~/Temp/ebf21330/com.sybase365.mobiliser.dist.full-5.1.0.SPO2PLO1-
File Edit View Search Terminal Help
Type

enable functionality group
 0 0
 1
 1
switch
dynamic
(1 row affected)
Configuration option changed. ASE need not be rebooted since the option is
dynamic.
Changing the value of 'enable functionality group' does not increase the amount
of memory Adaptive Server uses.
(return status = 0)
New user added.
(return status = 0)
(1 row affected)
[mobiliser@mobfedora sql]$
```

14. Go back to the dist/target folder

```
cd /home/mobiliser/workspace/custom/dist/target
```

15. Copy the dbmaintain.properties.ase file to a new file named dbmaintain.properties

```
cp dbmaintain.properties.ase dbmaintain.properties
```

16. Edit the dbmaintain.properties file

```
gedit dbmaintain.properties
```

17. Change the database URL by replacing the "localhost" string with the <server\_name> string (in this example it is "mobfedora"), set to true all the 3 parameters in the picture (promptBeforeDrop, alwaysDrop, fromScratch.enable) and save the file.

```
dbmaintain.properties x
database.dialect=sybase
database.driverClassName=com.sybase.jdbc.SybDriver
database.url=db:sybase:Tds:mobfedora:5000/mobr5
database.userName=mobr5
database.schemaNames=mobr5
database.password=paybox

#Must be set if the driver is not packaged inside the scriptarchive or is present on the
#e.g. /path/to	driver.jar
database.driverLocations=/path/to	driver.jar

Comma separated list of locations where database scripts can be found. This list may contain
archive files.
dbMaintainer.script.locations=scripts

#Indicates if a prompt should appear before clearing any data (default=true)
dbMaintainer.promptBeforeDrop=true
#Indicates if the db should be purged no matter if there were changes or not
dbMaintainer.alwaysDrop=true

DbMaintainer configuration

Indicates the database can be recreated from scratch if needed. If set to true, the data
from scratch in case of an irregular script update. Following are irregular script update
- A script that was already executed has been modified
- A new script has been added with an index number lower than the one of an already executed
- An script that was already executed has been removed or renamed
#
If set to false, the dbmaintainer will give an error if one of these situations occurs
dbMaintainer.fromScratch.enable=true
```

18. Execute the creation script by issuing the following command

```
java -jar com.sybase365.mobiliser.custom.project.dist-1.0.0-SNAPSHOT-scriptarchive-ase.jar
dbmaintain.properties
```

19. Answer "Y"

```
[mobiliser@mobfedora sql]$ java -jar com.sybase365.mobiliser.vanilla.standalone-5.1.0.SP02PL01-scriptarchive-ase.jar dbmaintain.properties
Using dbmaintain.properties from directory that the jar is in /home/mobiliser/Temp/ebf21330/com.sybase365.mobiliser.dist.full-5.1.0.SP02PL01-dist/applications/ase/sql/dbmaintain.properties

#####
You have the option "dbMaintainer.fromScratch.enabled" set to true. If there are
any updates in your scripts all Objects in that schema will be DROPPED. If this is not
your intention please update your dbmaintain.properties file and set the parameter to
false, then this message will disappear. Are you sure you want to continue? (y/n)
#####
```

20. Answer "Y"

```
Dry Run Result:

The database is updated for the first time. The database is cleared to be sure that we start with a clean database
The database is cleared, and all database scripts are executed.

#####
The dry run above indicates what changes will be performed. Continue? y/n
#####
```

21. The script finished successfully

```
Executing script sql/105_COUPON/005_COUPON_DATA/001_UMGR_PRIVILEGES_ROLES.sql
Executing script sql/105_COUPON/005_COUPON_DATA/002_COUPON_DATA.sql
Executing script sql/106_WORKFLOW/002_DATA/005_activiti_ae_create_enginedata.sql
Executing script sql/108_MBANKING/002_DATA/000_MBANKING_DATA.sql
Executing script sql/108_MBANKING/002_DATA/010_MBANKING_USERS.sql
Executing script sql/108_MBANKING/002_DATA/020_MBANKING_ALERTS_MSG_TEMPLATES.sql
Executing script sql/108_MBANKING/002_DATA/021_MBANKING_ALERTS_DATA.sql
Executing script sql/108_MBANKING/002_DATA/030_MBANKING_TOPUP_DATA.sql
Executing script sql/108_MBANKING/003_PREFS/001_MBANKING_PREFS.sql
Executing script sql/108_MBANKING/003_PREFS/002_MBANKING_ALERTS_PREFS.sql
The database has been updated successfully.
Creating data source. Driver: com.sybase.jdbc.SybDriver, url: jdbc:sybase:Tds:mobfedora:5000/mobr5, user: mobr5, password: <not shown>
Executed scripts table "mobr5"."DBMAINTAIN_Mobiliser" doesn't exist yet or is invalid. A new one is created automatically.
The database is up to date
[mobiliser@mobfedora sql]$
```

22. Now we need to update the passwords in the Mobiliser database. By default they are not set, so we are going to set the same standard password, which is "secret", for all the service users in Mobiliser. Let's create a new blank file

**gedit updateMobiliser.sql**

23. Copy the following script and paste it in the editor window. Save and close the file

```
USE mobr5
GO
UPDATE MOB_CUSTOMERS_CREDENTIALS SET STR_CREDENTIAL
= '{SHA}euAIVLAW6SpS257g2qRawNno718='
WHERE ID_CUSTOMER = 100
GO
UPDATE MOB_PREFERENCES SET STR_VALUE = '{AES-128-
PBKDF2}5i06buFt6t+nuo6AvD3bLhnjhf7rmDC5AkXIDkywwQ='
WHERE ID_PREFERENCE = 402
GO
UPDATE MOB_PREFERENCES SET STR_VALUE = '{AES-128-
PBKDF2}2paqrFkmErN0+k7fxg+jX/c5psPmYJK1RODVQG1BF8U='
WHERE ID_PREFERENCE = 426
GO
UPDATE MOB_CREDENTIAL_POLICIES SET INT_DAYS_PASSWORD_TIMEOUT = 0
GO
```

24. Let's execute this file on the Mobiliser DB

**isql -Saseserver -Umobr5 -Ppaybox -iupdateMobiliser.sql**

25. You should get the following result

```
[mobiliser@mobfedora sql]$ isql -Saseserver -Umobr5 -Ppaybox -iupdateMobiliser.sql
(1 row affected)
(1 row affected)
(1 row affected)
(4 rows affected)
[mobiliser@mobfedora sql]$
```

26. Your Mobiliser database has been successfully installed. Should you need to browse your database and take a tour inside of it, you can use the Squirrel SQL Client. This tool is widely described at the end of this paper in the section of optional steps.

27. Now that the database is created we can continue with running our custom version of Mobiliser. Unzip the file **com.sybase365.mobiliser.custom.project.dist-1.0.0-SNAPSHOT-dist.zip** in the current folder by the command

**unzip com.sybase365.mobiliser.custom.project.dist-1.0.0-SNAPSHOT-dist.zip**



28. Go in the resulting folder by running the command  
**cd com.sybase365.mobiliser.custom.project.dist-1.0.0-SNAPSHOT/**

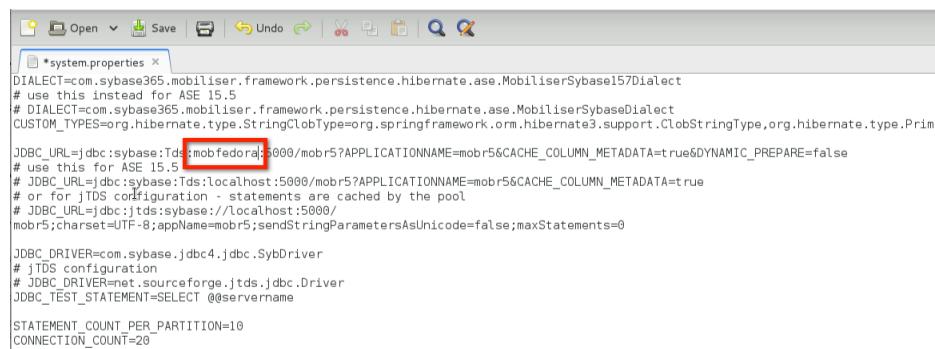
29. In this folder you have now the complete Mobiliser suite. Let's keep this folder as our base folder from now on.

```
mobiliser@mobfedora:~/workspace/custom/dist/target/com.sybase365.mobiliser.custom.project.
File Edit View Search Terminal Help
[mobiliser@mobfedora target]$ cd com.sybase365.mobiliser.custom.project.dist-1.0.0-SNAPSHOT/
[mobiliser@mobfedora com.sybase365.mobiliser.custom.project.dist-1.0.0-SNAPSHOT]$ ls
brand docs jms money sql web
[mobiliser@mobfedora com.sybase365.mobiliser.custom.project.dist-1.0.0-SNAPSHOT]$
```

30. Edit the system properties

**gedit money/conf/system.properties**

31. Change the name of the server from "localhost" to your <server\_name> (in this example it's "mobfedora"). When done, save the file and exit.



```
DIALECT=com.sybase365.mobiliser.framework.persistence.hibernate.ase.MobiliserSybase15Dialect
use this instead for ASE 15.5
DIALECT=com.sybase365.mobiliser.framework.persistence.hibernate.ase.MobiliserSybaseDialect
CUSTOM_TYPES=org.hibernate.type.StringClobType=org.springframework.orm.hibernate3.support.ClobStringType,org.hibernate.type.PrimitiveClobType=org.hibernate.type.ClobType
JDBC_URL=jdbc:sybase:Tds:mobfedora:5000/mobr5?APPLICATIONNAME=mobr5&CACHE_COLUMN_METADATA=true&DYNAMIC_PREPARE=false
use this for ASE 15.5
JDBC_URL=jdbc:sybase:Tds:localhost:5000/mobr5?APPLICATIONNAME=mobr5&CACHE_COLUMN_METADATA=true
or for jTDS configuration - statements are cached by the pool
JDBC_URL=jdbc:jtds:sybase://localhost:5000/
mobr5;charset=UTF-8;appName=mobr5;sendStringParametersAsUnicode=false;maxStatements=0
JDBC_DRIVER=com.sybase.jdbc4.JdbcSybDriver
jTDS configuration
JDBC_DRIVER=net.sourceforge.jtds.jdbc.Driver
JDBC_TEST_STATEMENT=SELECT @@servername
STATEMENT_COUNT_PER_PARTITION=10
CONNECTION_COUNT=20
```

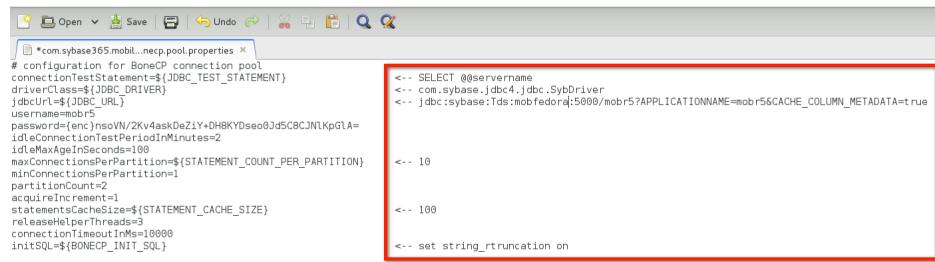
32. Edit the file

**com.sybase365.mobiliser.framework.persistence.jdbc.bonecp.pool.properties**

**gedit**

**money/conf/cfgbackup/com.sybase365.mobiliser.framework.persistence.jdbc.bonecp.pool.properties**

33. Do the following changes, save the file and exit.



```
configuration for BoneCP connection pool
connectionTestStatement=${JDBC_TEST_STATEMENT}
driverClass=${JDBC_DRIVER}
jdbcUrl=${JDBC_URL}
username=mobr5
password=mobr5
passQuery=select * from sys.tables where name='syscolumns'
idleConnectionTestPeriodInMinutes=2
idleMaxAgeInSeconds=100
maxConnectionsPerPartition=${STATEMENT_COUNT_PER_PARTITION}
minConnectionsPerPartition=1
partitionCount=2
acquireIncrement=1
statementCacheSize=${STATEMENT_CACHE_SIZE}
release��leThreads=3
connectionTimeoutInMs=10000
initSQL=${BONECP_INIT_SQL}
```

```
<-> SELECT @@servername
<-> com.sybase.jdbc4.JdbcSybDriver
<-> jdbc:sybase:Tds:mobfedora:5000/mobr5?APPLICATIONNAME=mobr5&CACHE_COLUMN_METADATA=true

<-> 10

<-> 100

<-> set string_truncation on
```

Plain Text ▾ Tab Width: 8 ▾ Ln 4, Col 94 INS

34. Your final file should look like the following. You need to pay attention just to replace the "localhost" string on the **jdbcUrl** with the correct <server\_name> (in this example it's "mobfedora")

```
configuration for BoneCP connection pool
connectionTestStatement=SELECT @@servername
driverClass=com.sybase.jdbc4.jdbc.SybDriver
jdbcUrl=jdbc:sybase:Tds:mobfedora:5000/mobr5?APPLICATIONNAME=mobr5&CACHE_COLUMN_META
DATA=true
username=mobr5
password={enc}nsoVN/2Kv4askDeZiY+DH8KYDseo0Jd5C8CJN1KpG1A=
idleConnectionTestPeriodInMinutes=2
idleMaxAgeInSeconds=100
maxConnectionsPerPartition=10
minConnectionsPerPartition=1
partitionCount=2
acquireIncrement=1
statementsCacheSize=100
releaseHelperThreads=3
connectionTimeoutInMs=10000
initSQL=set string_rtruncation on
```

## 35. Edit the file

```
com.sybase365.mobiliser.util.report.crystalreports.properties
gedit money/conf/cfgbackup/com.sybase365.mobiliser.util.report.crystalreports.properties
```

## 36. Do the following changes, save the file and exit.

37. Your final file should look like the following. You need to pay attention just to replace the "localhost" string on the **jdbcUrl** with the correct <server\_name> (in this example it's "mobfedora")

```
Default configuration for report app
jdbc.user=mobr5
jdbc.password={enc}nsoVN/2Kv4askDeZiY+DH8KYDseo0Jd5C8CJN1KpG1A=
jdbc.driver=com.sybase.jdbc4.jdbc.SybDriver
jdbc.url=jdbc:sybase:Tds:mobfedora:5000/mobr5?APPLICATIONNAME=mobr5&CACHE_COLUMN_METADATA=true
content.type=text/html;charset=UTF-8
```

38. You just need now to start your custom Mobiliser installation. The steps are exactly the same to the one reported in the section [4.2.3](#)

## 4.3.6 Install Jenkins

1. Jenkins can be downloaded from the web site:  
<http://jenkins-ci.org/>
2. In our case we are going to do a command line installation, which is easier. So open a TERM window.
3. First we need to install the WGET command  
**sudo yum install wget**

mobiliser

```
File Edit View Search Terminal Help
[mobiliser@mobfedora custom]$ sudo yum install wget
```

4. Then we can run the following two commands that will add a new repository to the yum command  
**sudo wget -O /etc/yum.repos.d/jenkins.repo http://pkg.jenkins-ci.org/redhat/jenkins.repo**  
**sudo rpm --import http://pkg.jenkins-ci.org/redhat/jenkins-ci.org.key**

```
mobiliser@mobfedora:~/workspace/custom
File Edit View Search Terminal Help
[mobiliser@mobfedora custom]$ sudo wget -O /etc/yum.repos.d/jenkins.repo http://pkg.jenkins-ci.org/redhat/jenkins.repo
2013-06-11 06:29:10 -> http://pkg.jenkins-ci.org/redhat/jenkins.repo
Resolving pkg.jenkins-ci.org (pkg.jenkins-ci.org)... 63.246.20.93
Connecting to pkg.jenkins-ci.org (pkg.jenkins-ci.org)|63.246.20.93|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 75 [text/plain]
Saving to: '/etc/yum.repos.d/jenkins.repo'

100%[=====] 75 --.-K/s in 0s
2013-06-11 06:29:10 (13.4 MB/s) - '/etc/yum.repos.d/jenkins.repo' saved [75/75]
[mobiliser@mobfedora custom]$

[mobiliser@mobfedora custom]$ sudo rpm --import http://pkg.jenkins-ci.org/redhat/jenkins-ci.org.key
0%
```

5. Now we can start the Jenkins installation by running:  
**sudo yum install jenkins**
6. Sometime this command may not work because the server, where the latest version is located, is not available. If this is the case, go on the Jenkins website <http://pkg.jenkins-ci.org/redhat/>, pick an older Jenkins version and try to install it, by specifying in the `yum` command the exact version you want to install.

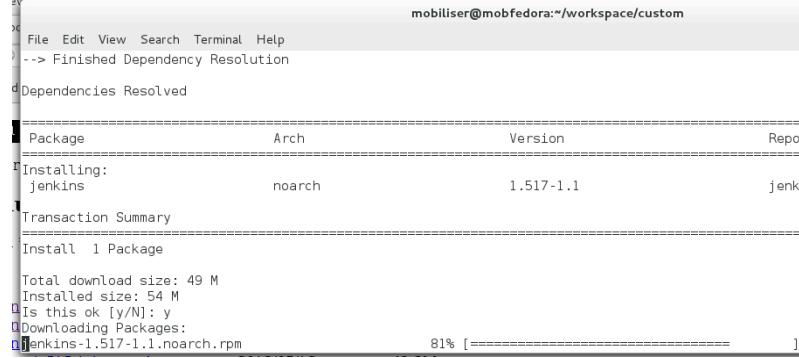
If you need \*.rpm for a specific version, use these.

Name	Last modified	Size
<a href="#">jenkins-1.518-1.1.noarch.rpm</a>	2013/06/11	51.0M
<a href="#">jenkins-1.517-1.1.noarch.rpm</a>	2013/06/02	49.3M
<a href="#">jenkins-1.516-1.1.noarch.rpm</a>	2013/05/27	49.2M
<a href="#">jenkins-1.515-1.1.noarch.rpm</a>	2013/05/18	49.2M
<a href="#">jenkins-1.514-1.1.noarch.rpm</a>	2013/05/01	49.2M
<a href="#">jenkins-1.513-1.1.noarch.rpm</a>	2013/04/28	46.4M
<a href="#">jenkins-1.512-1.1.noarch.rpm</a>	2013/04/21	46.4M

7. In this case for example, I'm going to install the 1.517.1.1 version. For this reason I'm going to issue the command

```
sudo yum install jenkins-1.517-1.1.noarch
```

8. The installation starts

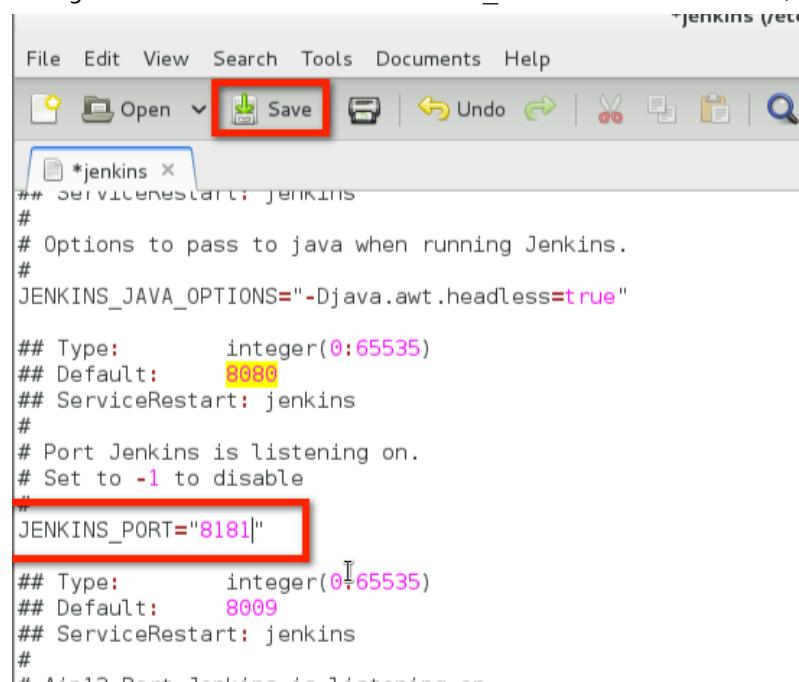


```
mobiliser@mobfedora:~/workspace/custom
mobiliser@mobfedora:~/workspace/custom
File Edit View Search Terminal Help
--> Finished Dependency Resolution
d Dependencies Resolved
=====
| Package | Arch | Version | Repo:
=====
Installing:
jenkins noarch 1.517-1.1 jenk.
Transaction Summary
Install 1 Package
Total download size: 49 M
Installed size: 54 M
Is this ok [y/N]: y
Downloading Packages:
jenkins-1.517-1.1.noarch.rpm
81% [=-----]
```

9. Before starting Jenkins we have to change the default Jenkins' port, which is set by default to 8080, the same Mobiliser's port. So open the Jenkins configuration file located in the /etc folder

```
sudo gedit /etc/sysconfig/jenkins
```

10. Change the value of the variable JENKINS\_PORT to a different value (i.e. 8181) and save the file.



```
JENKINS_PORT="8181"
ServiceStart: jenkins
#
Options to pass to java when running Jenkins.
#
JENKINS_JAVA_OPTIONS="-Djava.awt.headless=true"

Type: integer(0:65535)
Default: 8080
ServiceRestart: jenkins
#
Port Jenkins is listening on.
Set to -1 to disable
#
JENKINS_PORT="8181"
Type: integer(0:65535)
Default: 8009
ServiceRestart: jenkins
#
```

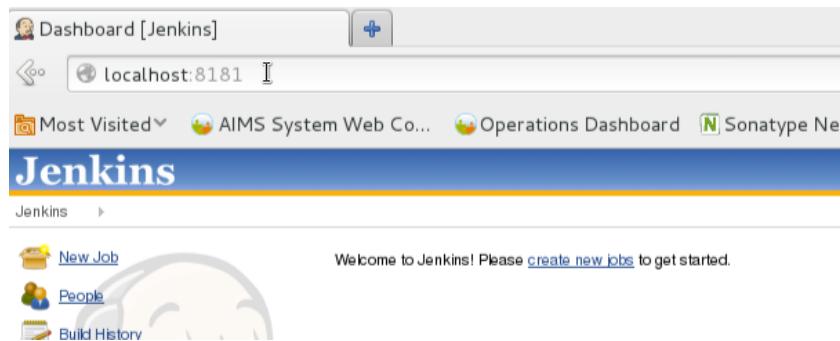
11. We are ready to start our Jenkins installation. The command is

```
sudo service jenkins start
```

12. After this command, if you want to check the Jenkins status, you can run  
**sudo service jenkins status**

```
mobiliser@mobfedora:~/workspace/custom
[mobiliser@mobfedora custom]$ sudo service jenkins start
Starting Jenkins (via systemctl): [OK]
[mobiliser@mobfedora custom]$ sudo service jenkins status
jenkins.service - LSB: Jenkins continuous build server
 Loaded: loaded (/etc/rc.d/init.d/jenkins)
 Active: active (running) since Tue 2013-06-11 06:45:37 EDT; 12s ago
 Process: 46304 ExecStart=/etc/rc.d/init.d/jenkins start (code=exited, status=0/SUCCESS)
 CGroup: /proc/46320 /etc/alternatives/java -Dcom.sun.akuma.Daemon=daemonized -Djava.awt.headless=true -DJENKINS_HOME=/var/lib/jenk
Jun 11 06:45:36 mobfedora runuser[46305]: pam_unix(runuser:session): session opened for user jenkins by (uid=0)
Jun 11 06:45:37 mobfedora jenkins[46304]: Starting Jenkins [OK]
Jun 11 06:45:37 mobfedora systemd[1]: Started Jenkins continuous build server.
[mobiliser@mobfedora custom]$
```

13. Now that the service is started, open your internet browser and navigate to the URL  
<http://localhost:8181>



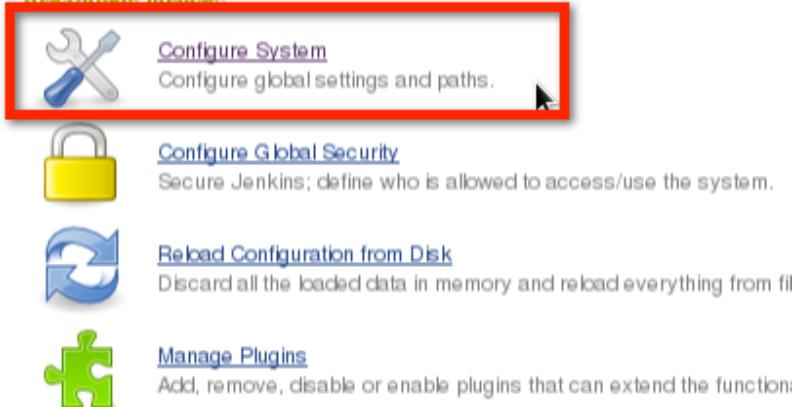
14. On the left side menu, click on **Manage Jenkins**



15. Click on **Configure System**

## Manage Jenkins

**⚠️ Unsecured Jenkins allows anyone on the network to launch processes on discourse misuse.**



16. We have to fill some parameters in this page. Let's start by configuring the location of Maven's settings file. Change to **Settings file in filesystem** and specify the path to your `settings.xml` file. According to what we have done so far, it should be in the `/usr/share/maven/conf/settings.xml` folder.

After the change click on **Apply**.

Default settings provider	Settings file in filesystem
File path	/usr/share/maven/conf/settings.xml
Default global settings provider	Use default maven global settings

JDK	
JDK installations...	
Save	Apply

17. Now you need to specify where your JDK is located. Click on the **Add JDK** button.



18. Remove the checkmark **Install automatically**, provide a name for this JDK installation and type in the location of your JDK, which should be `/usr/lib/jvm/java-1.7.0-openjdk.x86_64`. Click on the **Apply** button.

**JDK**

JDK installations	
<input checked="" type="checkbox"/> JDK	Name: Java7 JAVA_HOME: /usr/lib/jvm/java-1.7.0-openjdk.x86_64 <input type="checkbox"/> Install automatically
<b>Add JDK</b>	
<b>Save</b>	<b>Apply</b>

19. Configure Maven settings. Remove the checkmark **Install automatically**, provide a name for this configuration, type in the location of your Maven program (it should be in `/usr/share/maven`), type in the global Maven options “`-Xmx1024m -XX:MaxPermSize=512m`” and click on **Apply**.

**Maven**

Maven installations	
<input checked="" type="checkbox"/> Maven	Name: Maven3 MAVEN_HOME: /usr/share/maven <input type="checkbox"/> Install automatically
<b>Add Maven</b>	
<b>Maven Project Configuration</b>	
Global MAVEN_OPTS	<code>-Xmx1024m -XX:MaxPermSize=512m</code>
Local Maven Repository	Default ( <code>~/.m2/repository</code> )
<input checked="" type="checkbox"/> Help make Jenkins better by sending anonymous usage statistics and crash reports to the Jenkins project.	
<b>Jenkins Location</b>	<b>Save</b> <b>Apply</b>

20. The last thing to configure is the Jenkins location. Change the URL replacing “localhost” with your <server\_name> (“mobfedora” in this example) and this time, since we have finished, click on **Save**.

**Jenkins Location**

Jenkins URL	<code>http://mobfedora:8181/</code>
System Admin e-mail address	address not configured yet <nobody@nowhere>
<b>SSH Server</b>	<b>Save</b> <b>Apply</b>

21. Once done, you will go back to the Jenkins main page. Click on New Job on the left side.



22. Provide a job name, select **Build a maven 2/3 project** and click on **OK**.

Job name

Build a free-style software project  
This is the central feature of Jenkins. Jenkins takes care of the software build.

Build a maven2/3 project  
Build a maven 2/3 project. Jenkins takes a Maven POM file and executes it.

Build multi-configuration project  
Suitable for projects that need a large number of configurations.

Monitor an external job  
This type of job allows you to record the execution of an external job on the dashboard of your existing automation system.

**OK**

23. Fill a description for this job and select **Subversion** as the source code management tool

Project name

Description

Discard Old Builds  
 This build is parameterized  
 Disable Build (No new builds will be executed until the project is re-enabled.)  
 Execute concurrent builds if necessary

**(1) failures**

**Advanced Project Options**

**Source Code Management**

CVS  
 CVS Projectset  
 None  
 Subversion

24. Scroll down the page, and specify the URL that points to the source code repository for your project. In our case it's

<http://mobfedora:8088/svn/custom/trunk/>

Click on **Enter credentials**

The screenshot shows a Subversion configuration window. Under the 'Repository URL' field, there is an error message: 'Unable to access http://mobfedora:8088/svn/custom/trunk/: svn: E200015: OPTIONS /svn/custom /trunk failed (show details) (Maybe you need to enter credential?)'. A red box highlights the 'enter credential?' link.

25. Provide the credentials we setup in Subversion for accessing your repository and click **OK**

USER	PASSWORD
mobiliser	sybase

### Subversion Authentication

Enter the authentication information needed to connect to the Subversion repository. This info

Repository URL: http://mobfedora:8088/svn/custom/trunk/

Username/password authentication

User name: mobiliser

Password:

SSH public key authentication (svn+ssh)

HTTPS client certificate

**OK**

26. You should have the following situation

**Source Code Management**

CVS

CVS Projectset

None

Subversion

Modules

Repository URL: http://mobfedora:8088/svn/custom/trunk/

Local module directory (optional):

Repository depth option: infinity

Ignore externals option:

Add more locations...

Check-out Strategy:  Use 'svn update' as much as possible  
Use 'svn update' whenever possible, making the build faster. But this causes the artifacts from the previous build to remain when a new build starts.

Repository browser: (Auto)

27. Scroll down the page again and configure the building trigger. You may want to schedule this job, so select also the option Build periodically and specify the scheduling time. This time is specified according to the "cron" standards. In this case we are typing "30 \* \* \* \*", saying to Jenkins to run this job every 30 minutes. Since we have finished with the job configuration, click on **Save**.

**Build Triggers**

Build whenever a SNAPSHOT dependency is built

Build after other projects are built

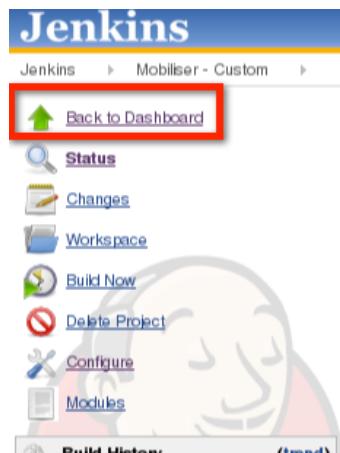
Build periodically

Schedule **30 \* \* \* \***

Poll SCM

**Save** **Apply**

28. Click on **Back to Dashboard**



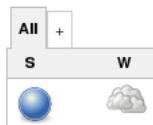
29. You see a new job in the system. If you want to test the execution of this job, without waiting for the next scheduled time, just click on the button with the green triangle. The execution will start



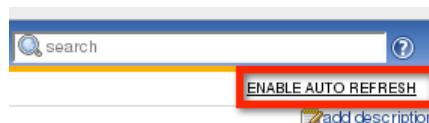
30. The execution is started.



31. You can also see a blinking ball on the page. It means that the process is running.



32. If you want your page to be refreshed automatically, you can click on the **ENABLE AUTO REFRESH** link on the top right corner



33. When you see a fixed blue ball on the job page, it means that your job is finished and it was successful. Click now on the job name

All	+	S	W	Name ↓	Last Success
					18 min - #4

Icon: [S](#) [M](#) [L](#)

34. You can get a lot of other details related to the job. Click on **Workspace**

The screenshot shows the Jenkins interface for the 'Project Mobiliser - Custom' project. In the left sidebar, there are links for Back to Dashboard, Status, Changes, Workspace, Build Now, Delete Project, Configure, and Modules. The 'Workspace' link is highlighted with a red box. Below the sidebar, there is a 'Build History' section showing five builds (#1 to #4) with their respective dates and times. To the right of the sidebar is a chart titled 'Test Result Trend' showing a steady increase from 0 to approximately 8.5 over time. At the bottom of the sidebar, there are RSS feed links for all and failures.

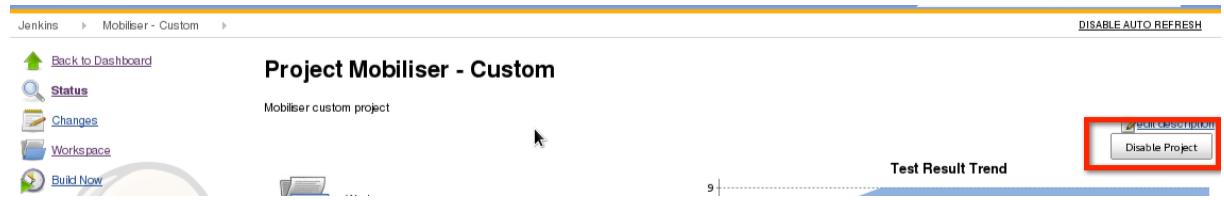
35. You will get into the workspace containing the source folder. This is not the same as the "workspace" folder in your <local\_user\_path>. This is just a folder belonging to Jenkins.

The screenshot shows the Jenkins workspace page for the 'Project Mobiliser - Custom' project. The left sidebar includes links for Back to Dashboard, Status, Changes, Workspace (which is highlighted with a red box), Wipe Out Current Workspace, Build Now, Delete Project, Configure, and Modules. The right side displays a list of subfolders within the workspace, such as svn, brand, businesslogic, channels, client, dist, handlers, jobs, persistence, ranking, reports, services, target/classes/META-INF/maven, web, and pom.xml. There is also a link to download all files in a zip archive.

36. By clicking on the `dist` subfolder and then on `target`, you will reach the level where you can find the output of your job execution.

The screenshot shows the Jenkins workspace page for the 'dist / target' subdirectory. The left sidebar includes links for Back to Dashboard, Status, Changes, Workspace, Build Now, Delete Project, Configure, and Modules. The right side displays a list of files in the target directory, including activemq, antrun, archive-tmp, classes, dependency-maven-plugin-markers, reports, and tomcat. Two specific files are highlighted with a red box: 'com.sybase365.mobiliser.custom.project.dist-1.0.0-SNAPSHOT-dist.zip' (124.80 MB) and 'com.sybase365.mobiliser.custom.project.dist-1.0.0-SNAPSHOT-scriptarchive-ase.jar' (2.22 MB). There is also a link to download all files in a zip archive.

37. Should you need to disable a job, preventing it to be executed, you can go inside the job and click on the **Disable Project** button.



38. Your Jenkins has been successfully installed

### 4.3.7 Install Eclipse

1. The last step in this guide is to install the Eclipse development environment. Eclipse can be downloaded from the following web site: <http://www.eclipse.org/downloads/>
2. There are several distributions. The most famous one are Juno and Indigo. In this guide, we are using Juno: let's download the Eclipse IDE for Java EE Developers for Linux 64 Bit.

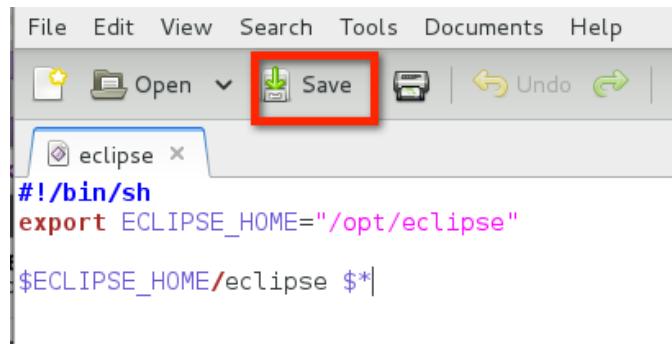


3. Open a TERM window and reach the location where you have downloaded Eclipse
4. Run the command  
`sudo tar -xvf eclipse-jee-juno-SR2-linux-gtk-x86_64.tar.gz -C /opt`  
to extract the Eclipse package directly in the `/opt` folder.
5. Change the owner to "mobiliser" for the new `/opt/eclipse` folder  
`sudo chown -R mobiliser /opt/eclipse/`
6. Assign the read permissions to all files in that folder  
`sudo chmod -R +r /opt/eclipse/`
7. Create a new file in the `/usr/bin` folder. This will be the executable file which will run Eclipse  
`sudo touch /usr/bin/eclipse`
8. Change the permissions of this file  
`sudo chmod 755 /usr/bin/eclipse`
9. Edit the content of this file  
`sudo gedit /usr/bin/eclipse`

10. Type the following text and save the file

```
#!/bin/sh
export ECLIPSE_HOME="/opt/eclipse"

$ECLIPSE_HOME/eclipse $*
```



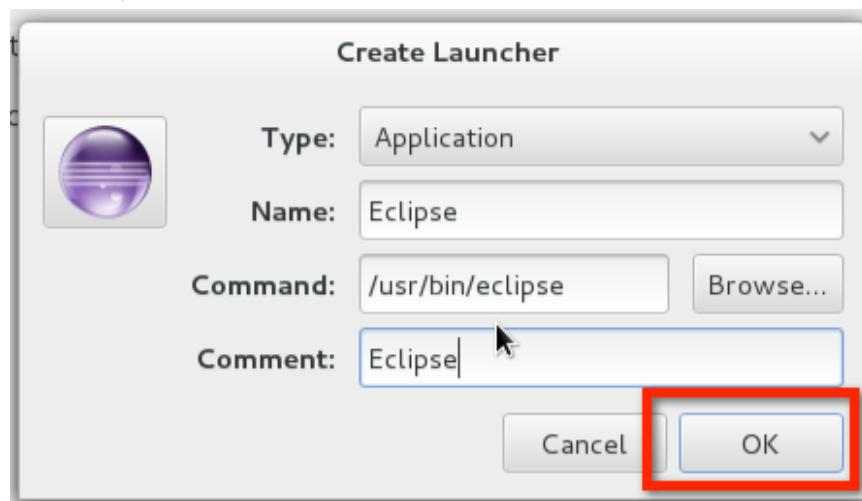
11. Copy the icon.xpm file from the /opt/eclipse folder to its proper location

```
sudo cp /opt/eclipse/icon.xpm /usr/share/icons/eclipse.xpm
```

12. Create a new file in the ~/Desktop folder to generate a launch icon on the desktop  

```
gnome-desktop-item-edit --create-new ~/Desktop
```

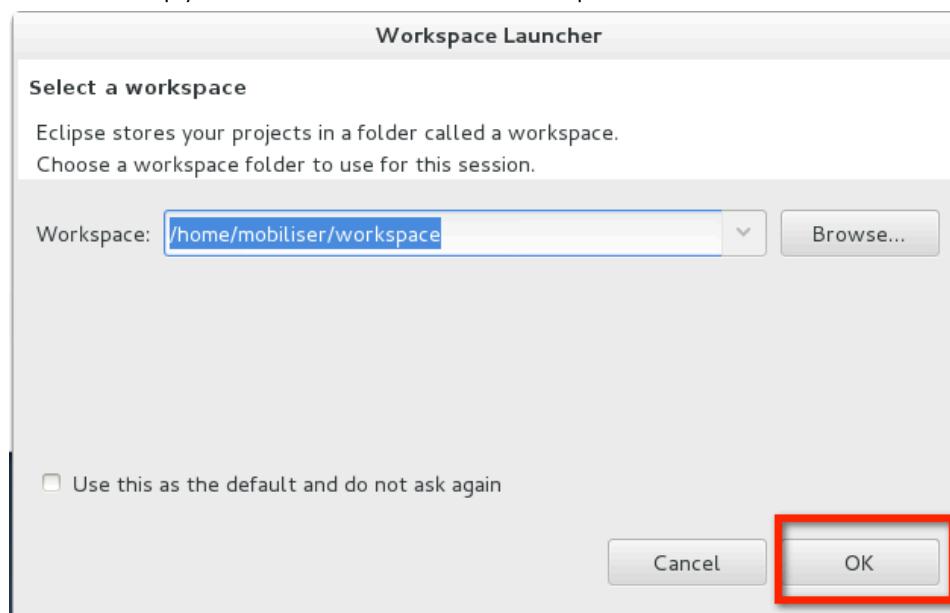
13. Fill the required fields and click on **OK**



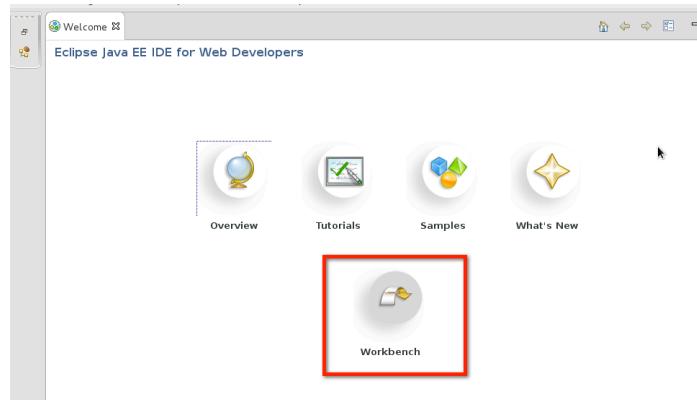
14. Now you should be able to see your Eclipse icon on your desktop



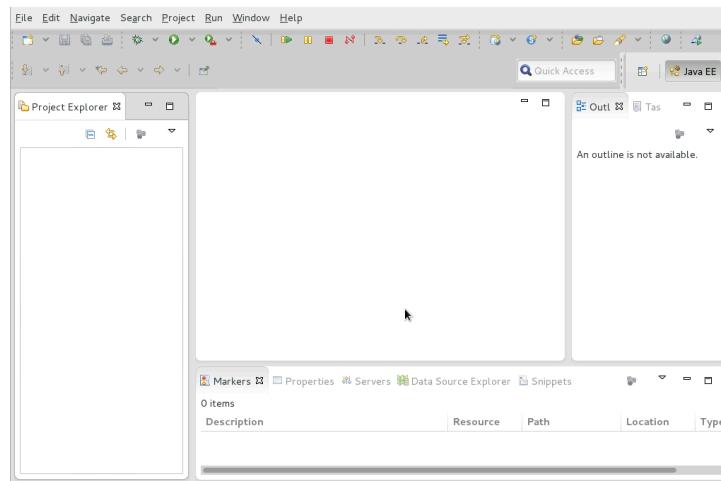
15. You can run Eclipse by clicking on this icon or by typing the command  
**eclipse**  
in the TERM window.
16. Let's start Eclipse. The first window you see is a request to create a new workspace. Let's create the workspace at the <local\_user\_path>/workspace location. Actually, you already have that folder: we simply want to use it as our default workspace.



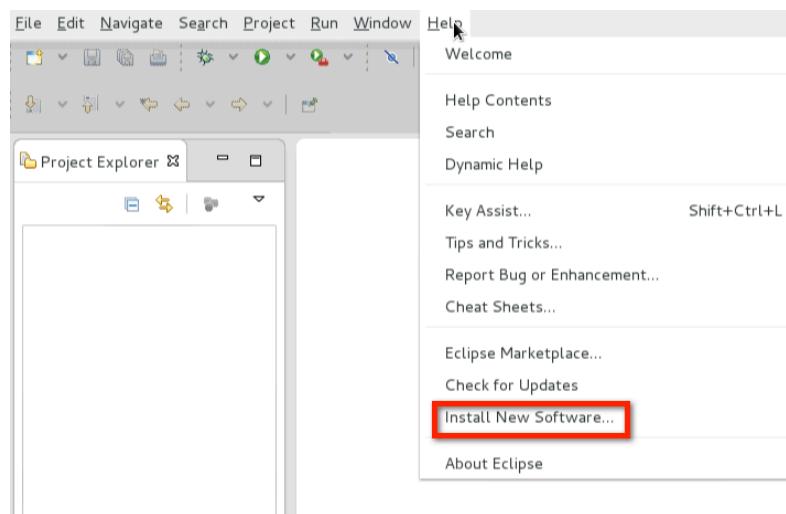
17. When Eclipse starts click on the Workbench icon to go to your workbench



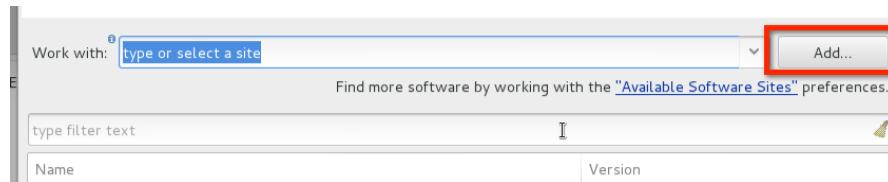
18. This is your workbench



19. We need to install the Maven plugin for Eclipse. Click on **Help → Install New Software...**



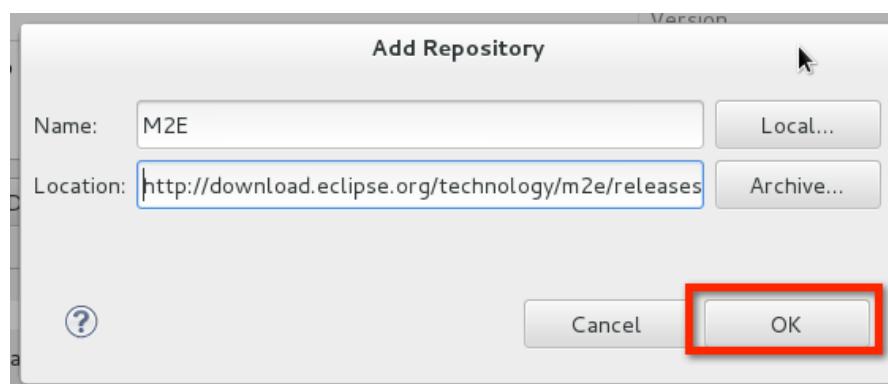
20. Click on the **Add** button



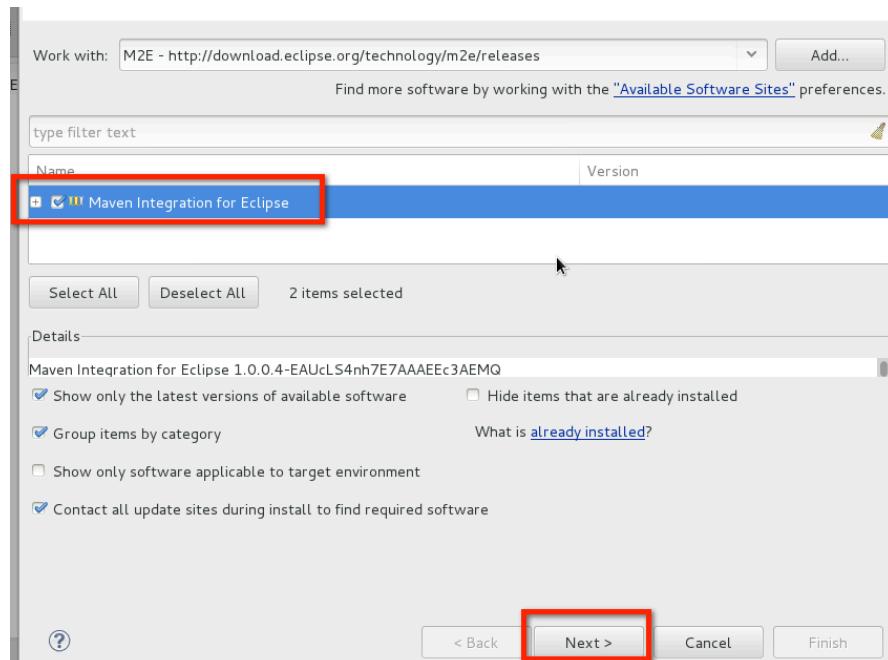
21. Enter a name and the URL

<http://download.eclipse.org/technology/m2e/releases>

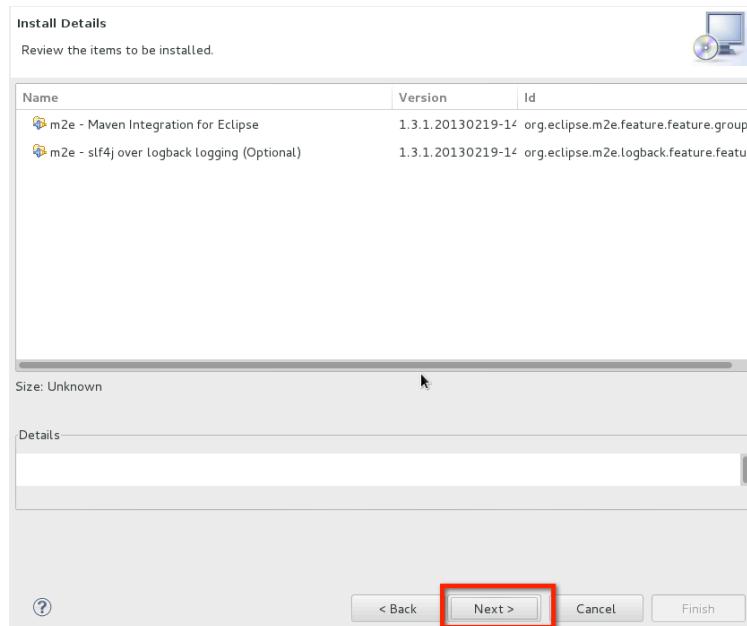
and click on **OK**.



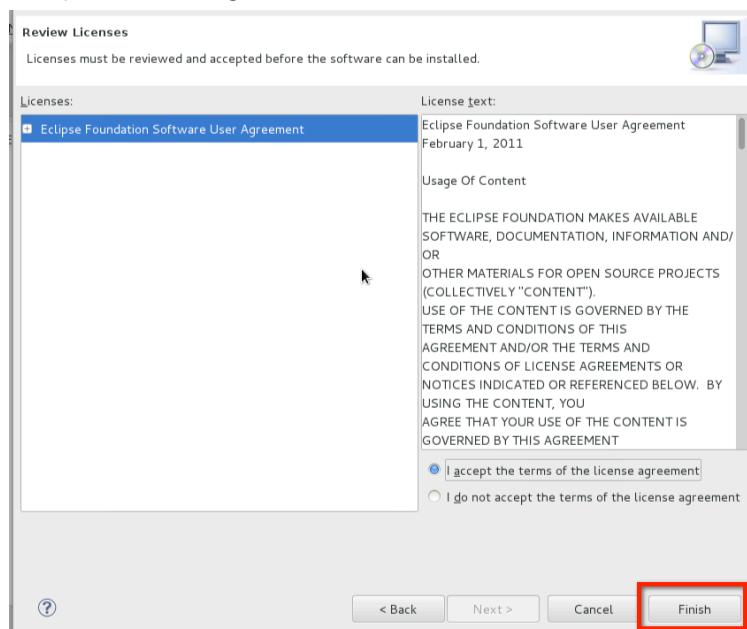
22. Select **Maven Integration for Eclipse** and click on **Next**.



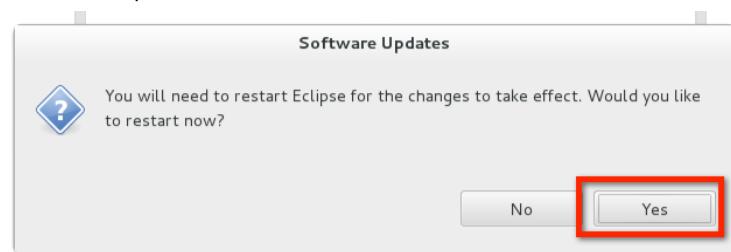
23. Click again on **Next** here.

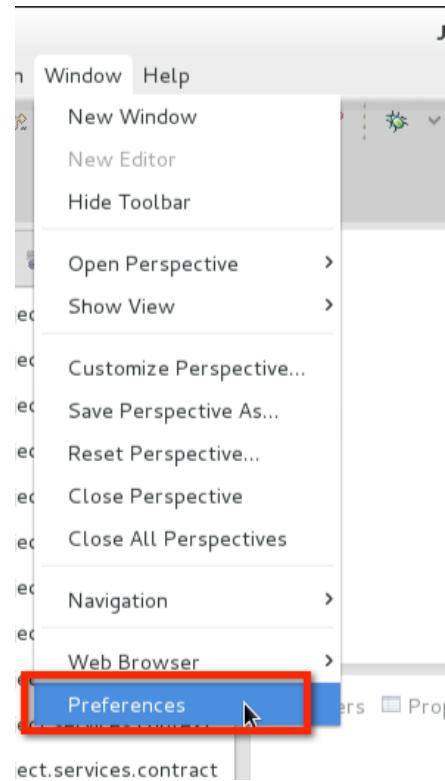
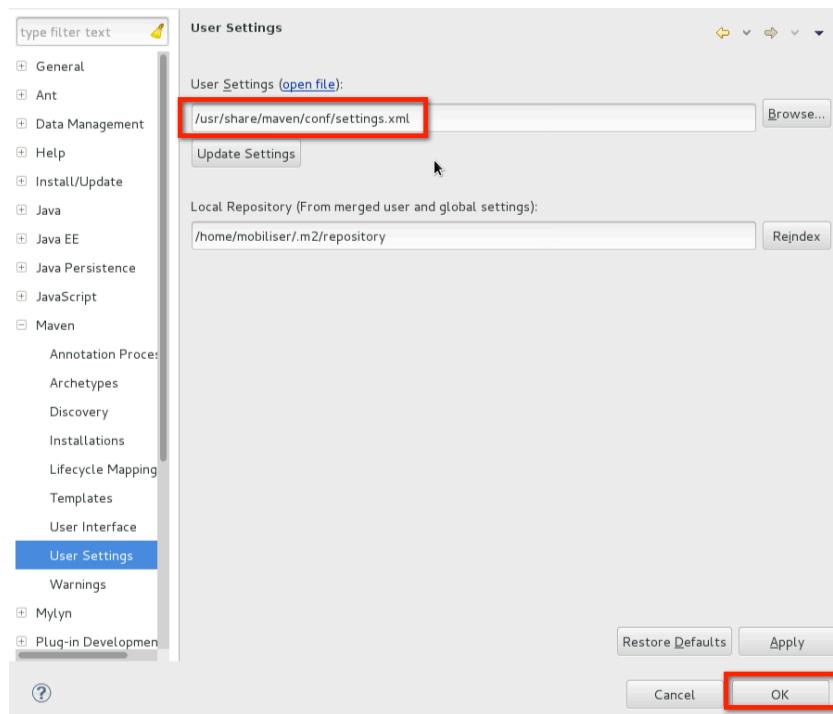


24. Accept the license agreement and click on **Finish**.

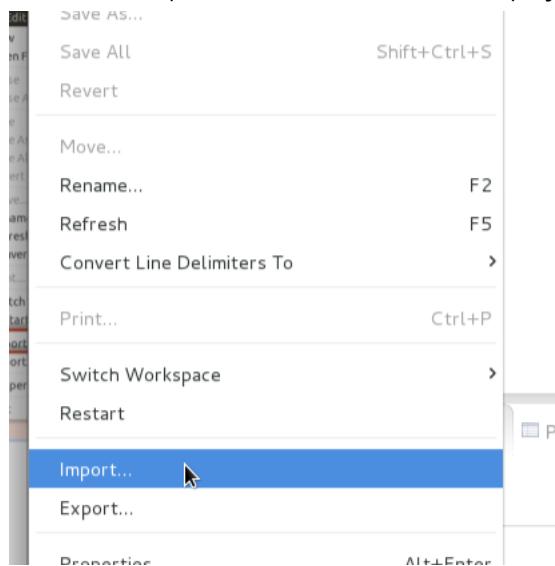


25. Restart Eclipse.

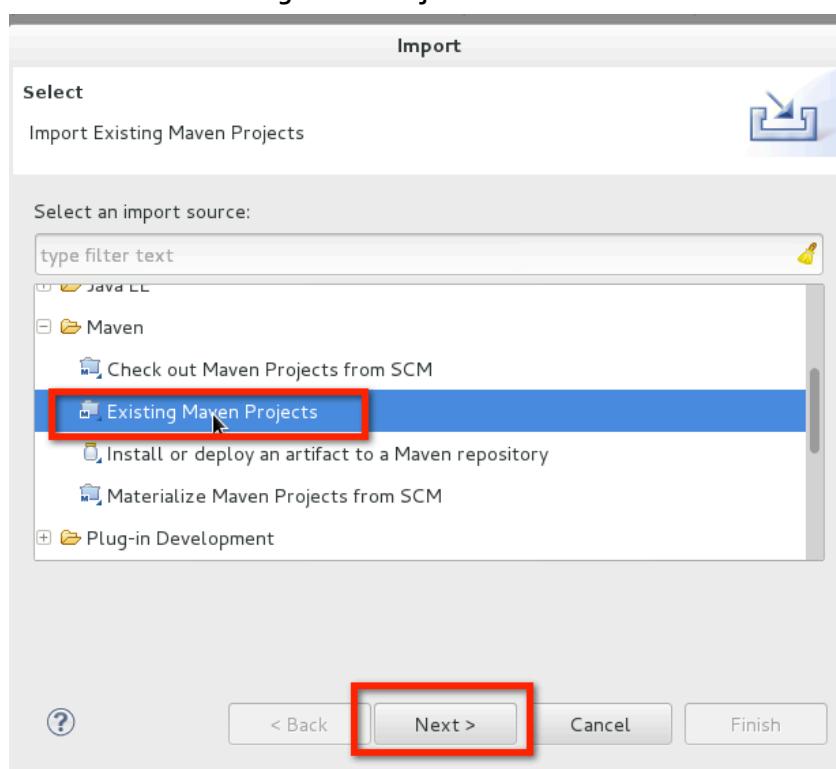


26. Click on **Window → Preferences**27. Specify the correct User Settings file location for Maven and click on **OK**

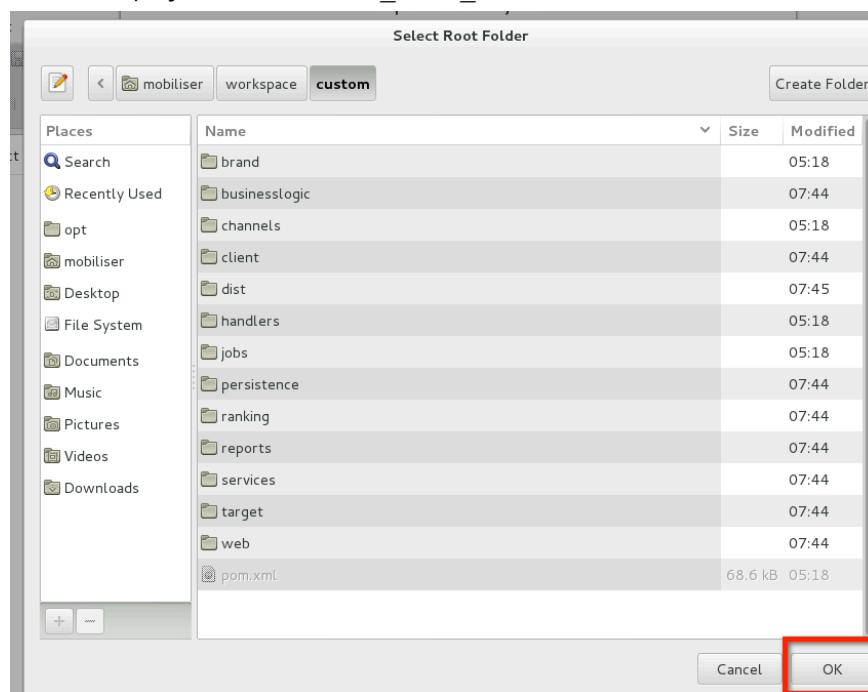
28. We need to import now our Mobiliser custom project. Click on **File → Import...**



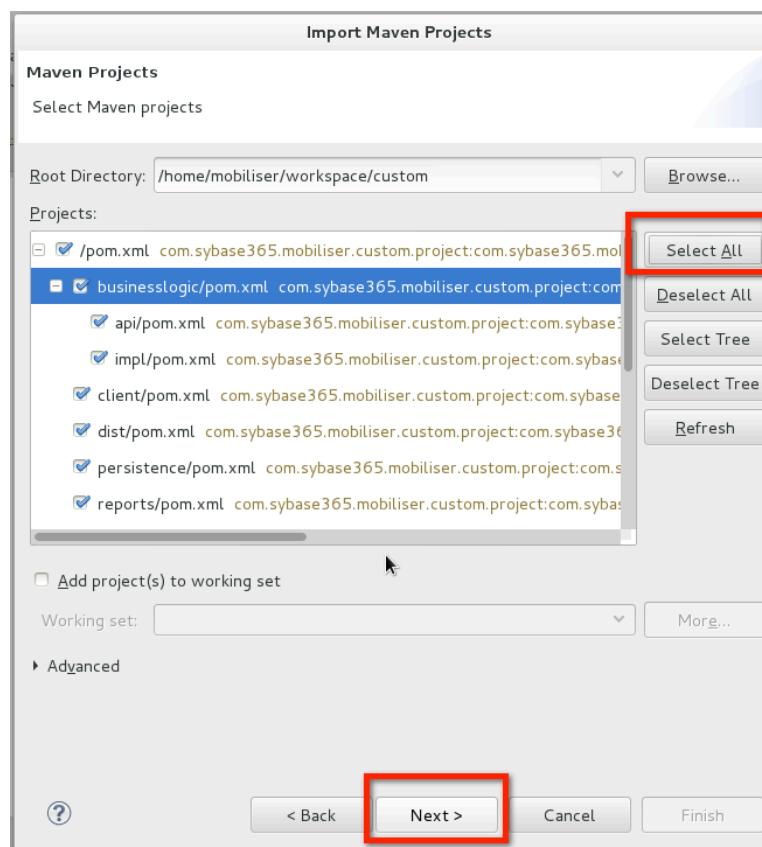
29. Select **Maven → Existing Maven Projects**



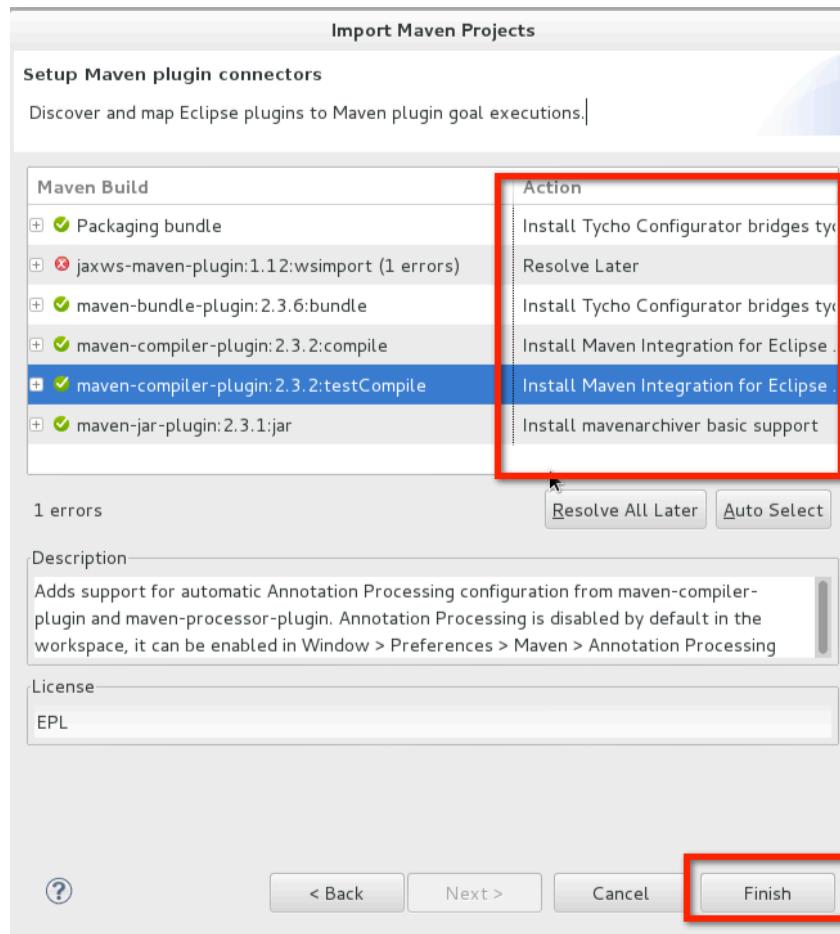
30. Locate the project in the <local\_user\_path>/workspace/custom folder and click on **OK**



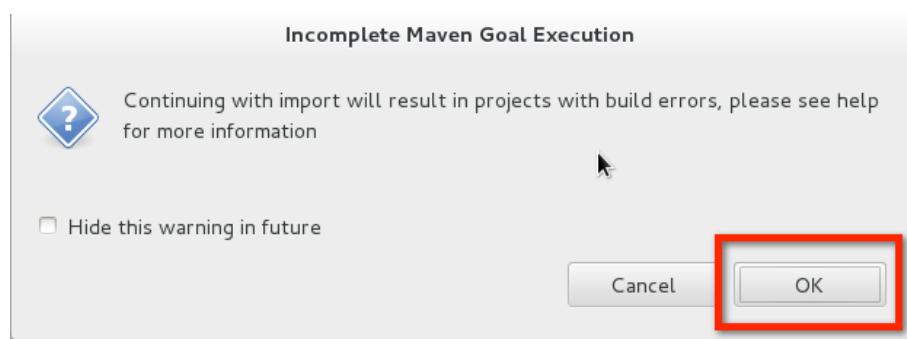
31. Click on **Select all** and then on **Next**

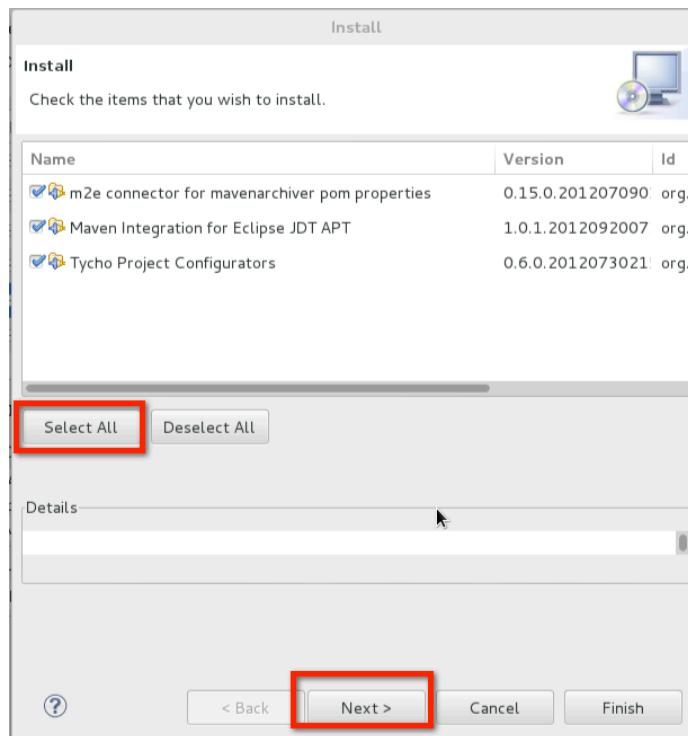
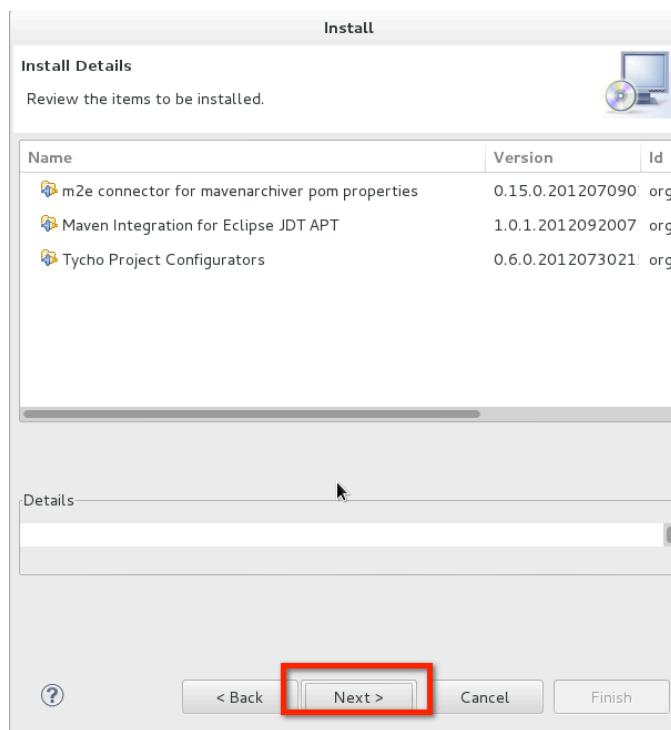


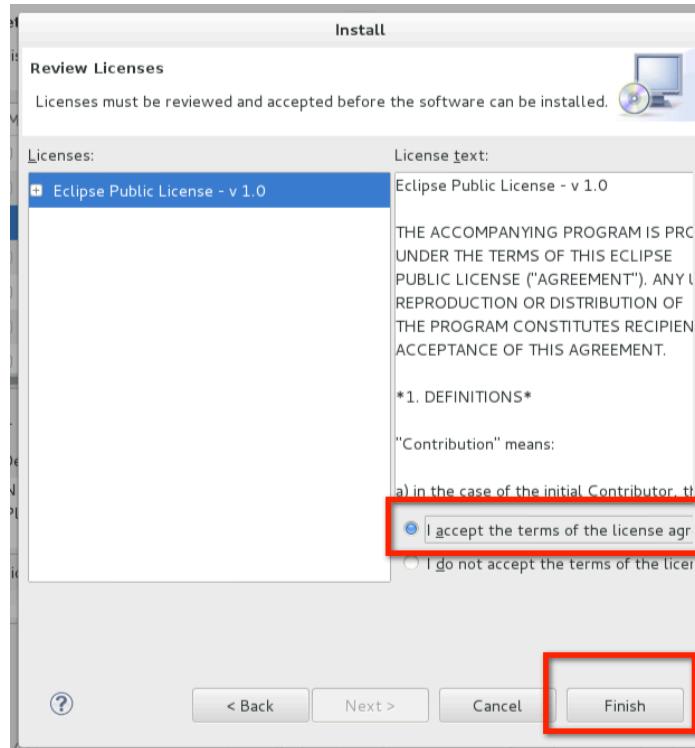
32. If you have some Maven plugin connectors to setup, set "Install..." in the action column for all the items. For this error you can simply skip it because it's not blocking, so let it set to Resolve Later. Click on **Finish**



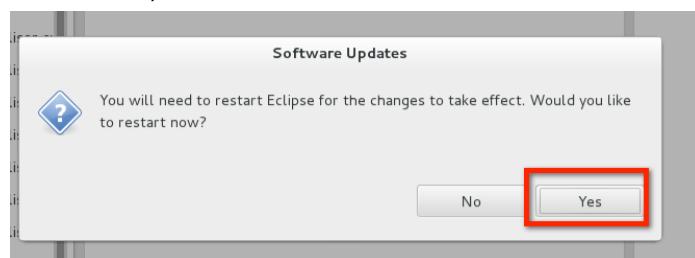
33. Click **OK** to continue



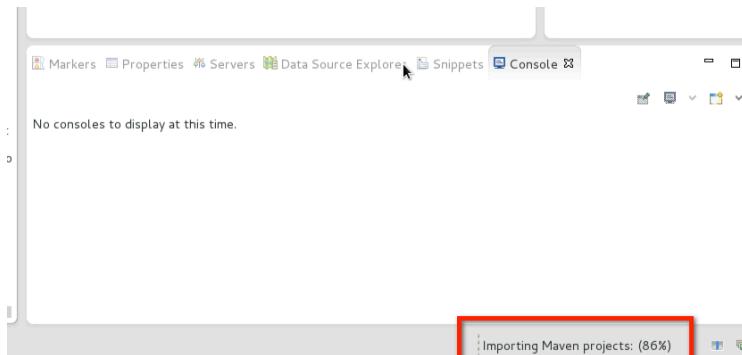
34. Click on **Next**35. Click on **Next**

36. Accept the license agreement and click on **Finish**37. Click on **OK**

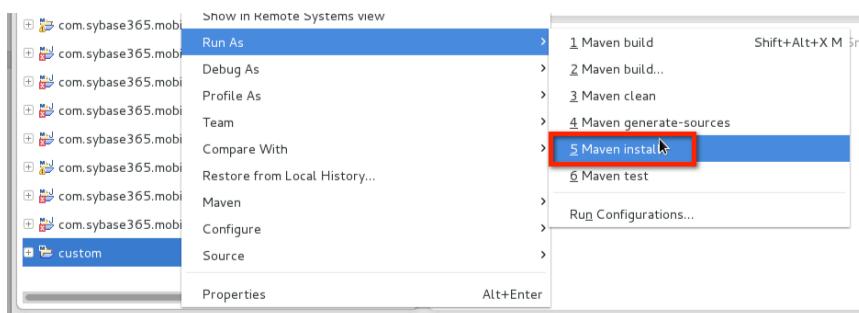
## 38. Restart the system at the end



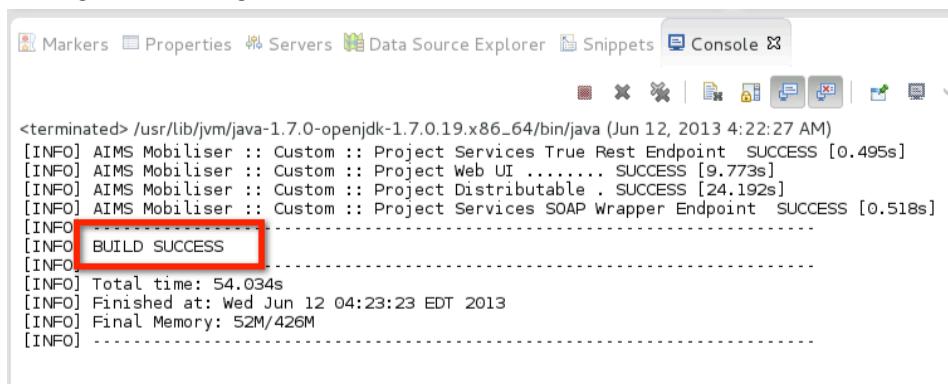
39. Some new plugins have been now installed. Check the status bar to know if the import is finished. When it's done, you can go to the next step.



40. You can now build it as a Maven install by right clicking on the pom.xml file and selecting **Run As** → **Maven install**



41. The project is being built and, when all is finished, in the console window you should get the message that building was successful.

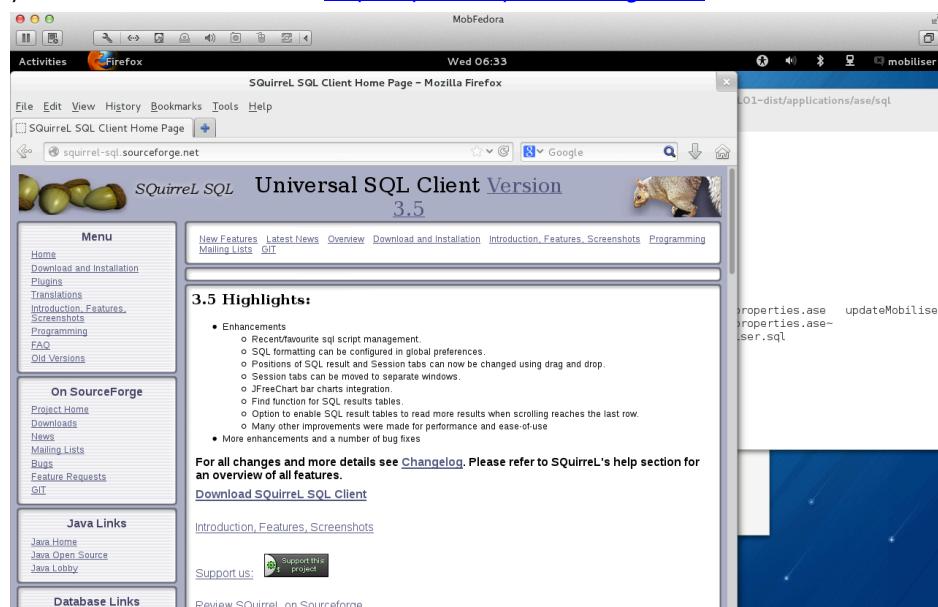


42. Your Eclipse is correctly configured.

## 4.4 Optional steps

### 4.4.1 Squirrel tool

- Squirrel is a very valid SQL client that can help you to easily access DB tables and work with the dbm by issuing selects, updates and a lot of other commands. This tool is very comfortable in combination with ASE database, because for the Linux platform there is no native visual tool for this. The only tool we have is "isql", but it's simply a command line tool. In order to install this tool you can download it from <http://squirrel-sql.sourceforge.net/>



- Once downloaded the file, you will find it under the Download folder. Open the TERM window and go inside this folder

```
cd /home/mobiliser/Download
```

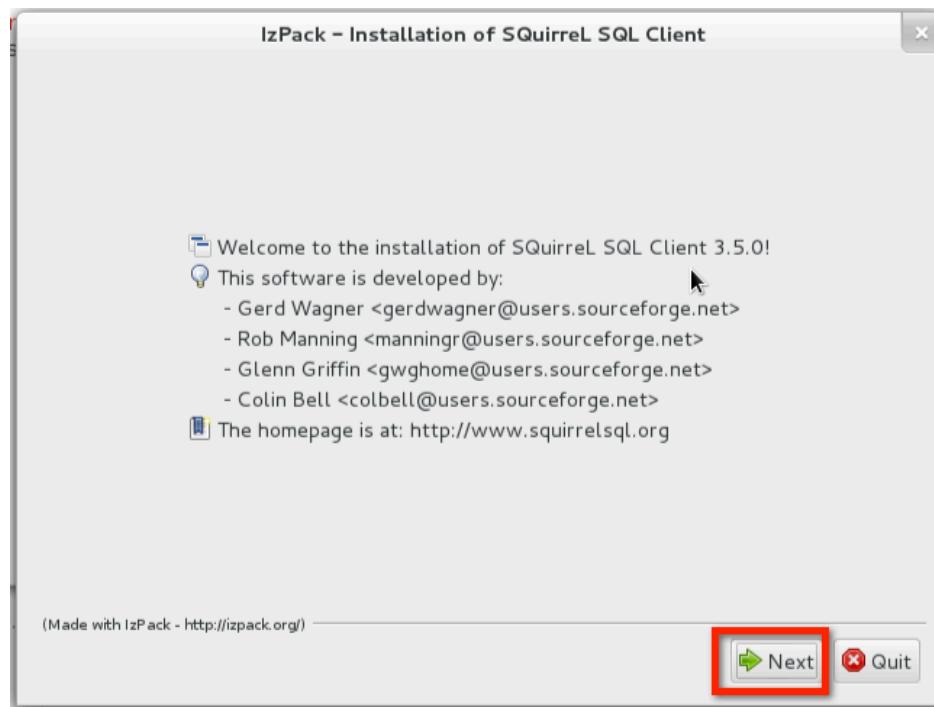
- Run the command

```
java -jar squirrel-sql-3.5.0-install.jar
```

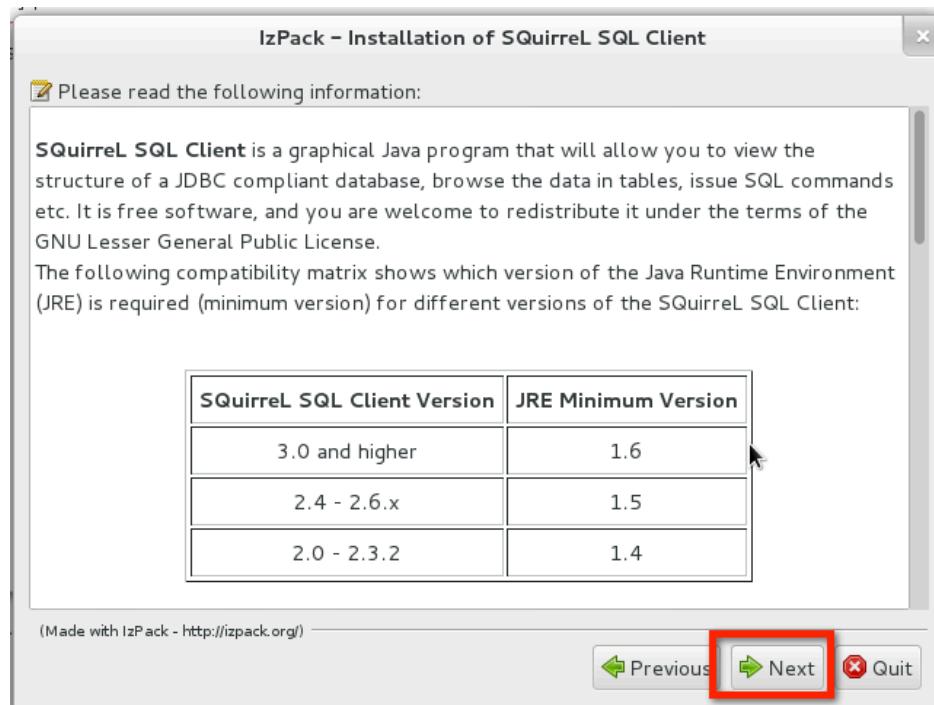
to start the installation.

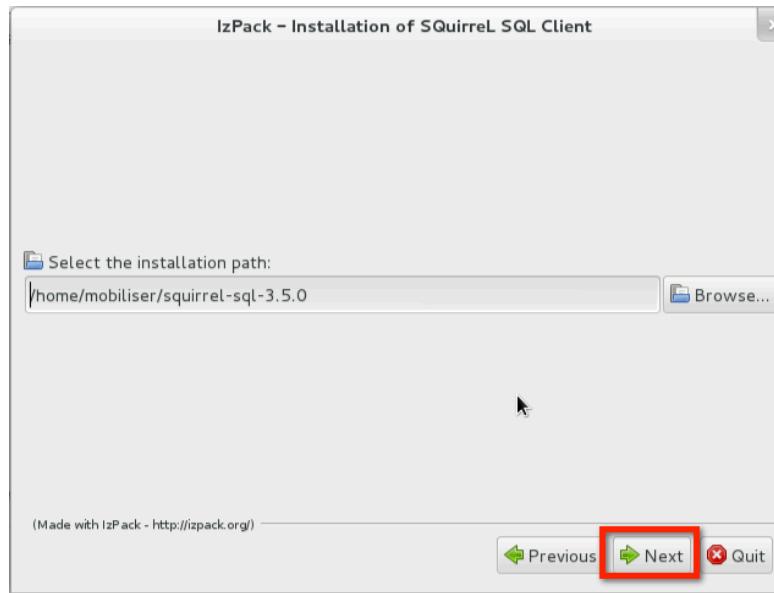
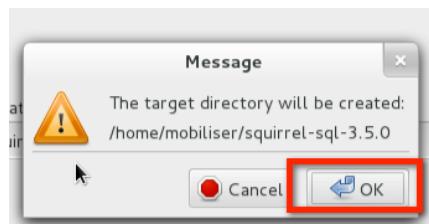
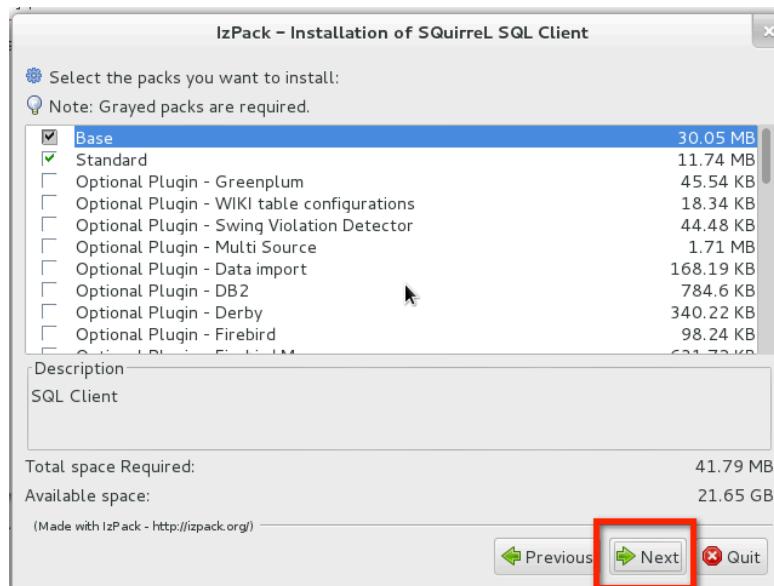
```
mobiliser@mobfedora:~/Downloads$ cd Downloads/
[mobiliser@mobfedora ~]$ ls
squirrel-sql-3.5.0-install.jar
[mobiliser@mobfedora Downloads]$ java -jar squirrel-sql-3.5.0-install.jar
```

4. Click on **Next**

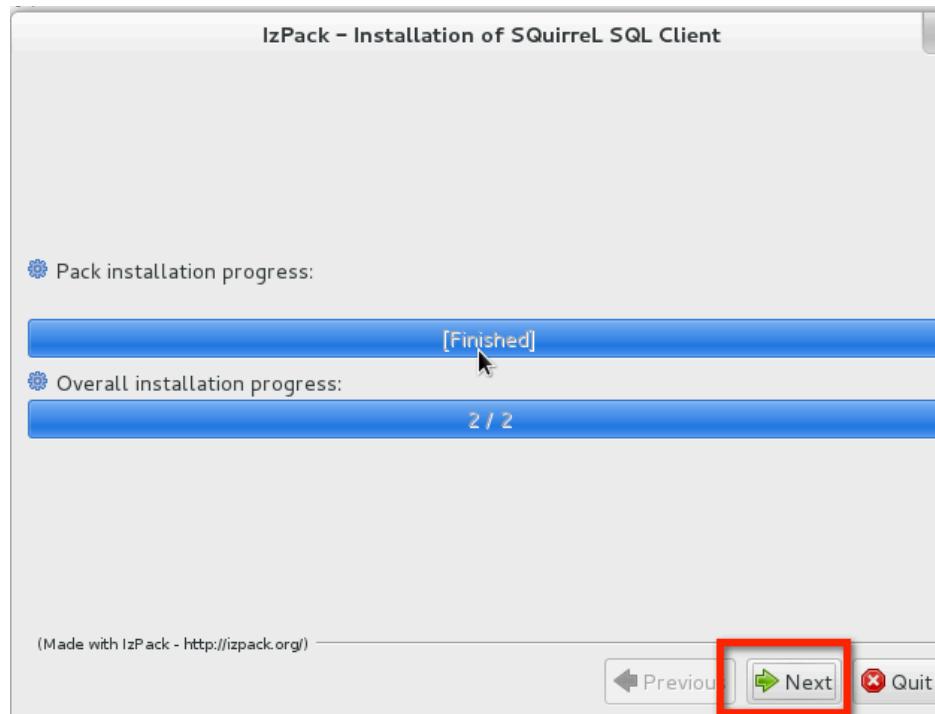


5. Click on **Next**

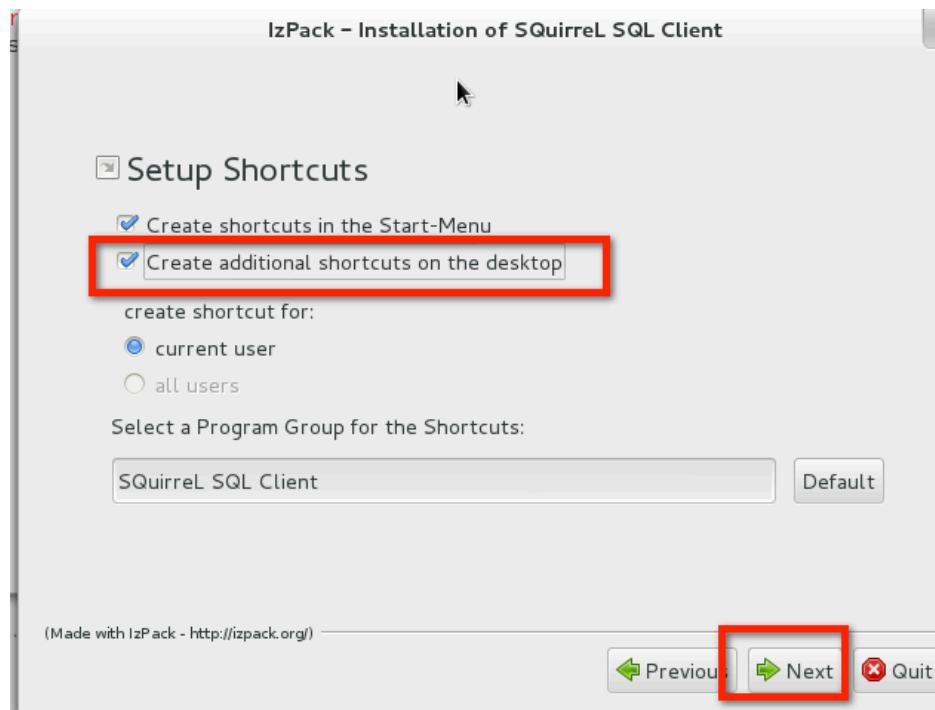


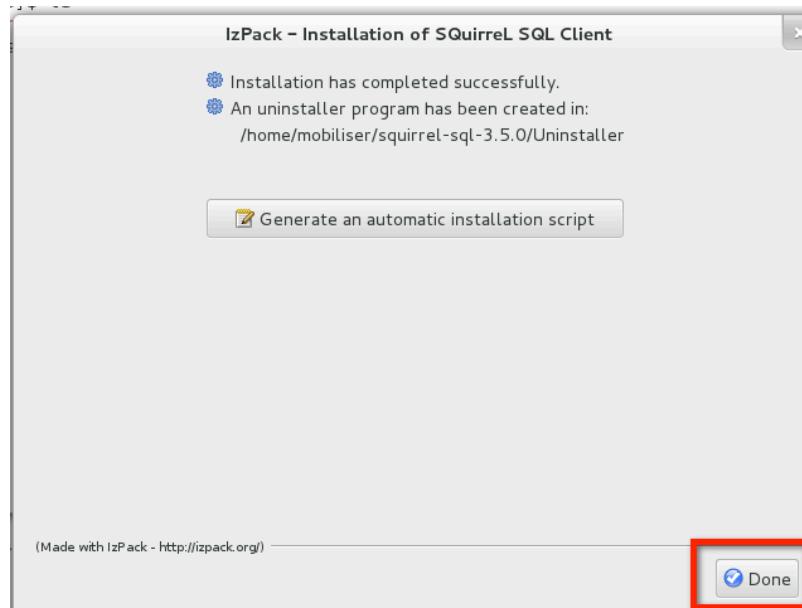
6. Click on **Next**7. Click on **OK**8. Leave all as by default and click on **Next**

9. Click on **Next**

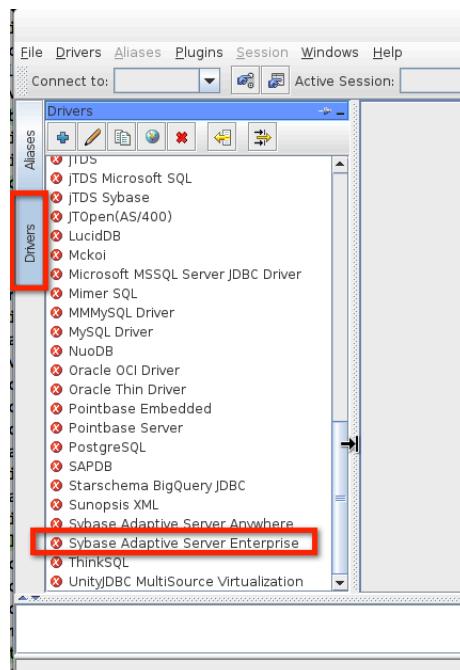


10. Select to create a shortcut on your desktop if you want and click on **Next**

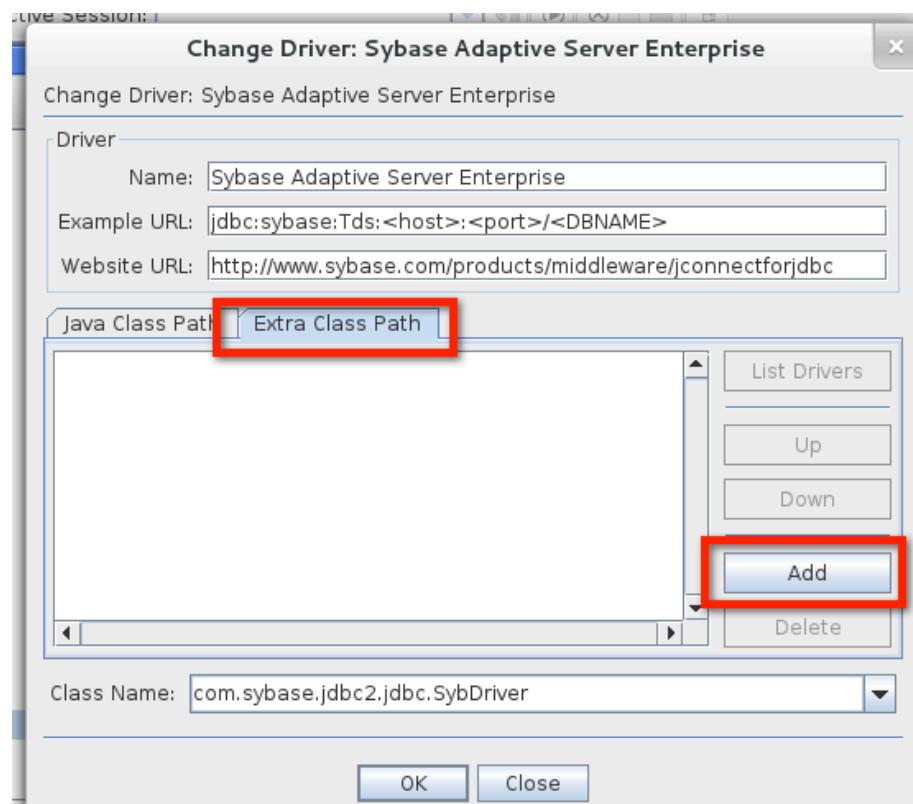


11. Click on **Done**

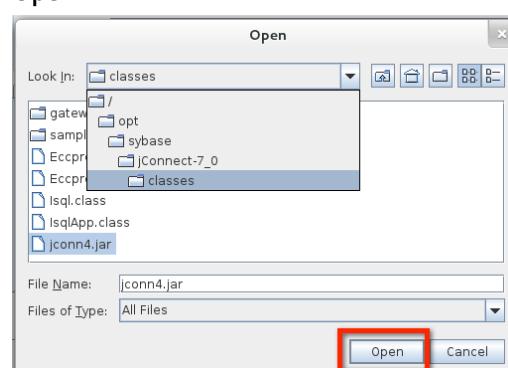
## 12. You should have now the Squirrel Tool icon on your desktop. Start the application

13. Click on the **Drivers** tab and double click on the **Sybase Adaptive Server Enterprise** driver

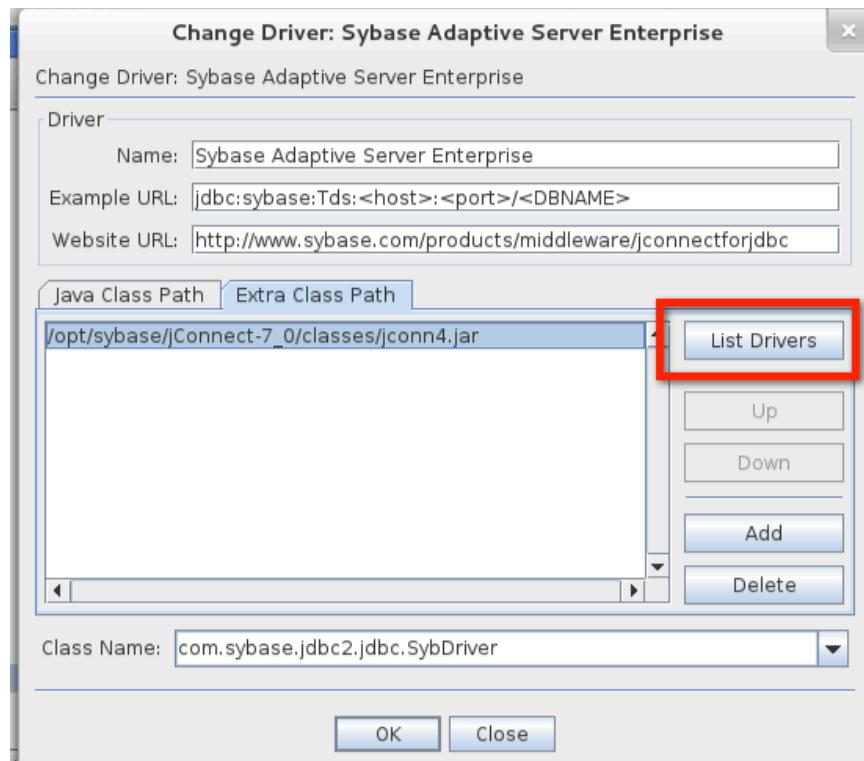
14. Switch on the **Extra Class Path** tab and then click on **Add**



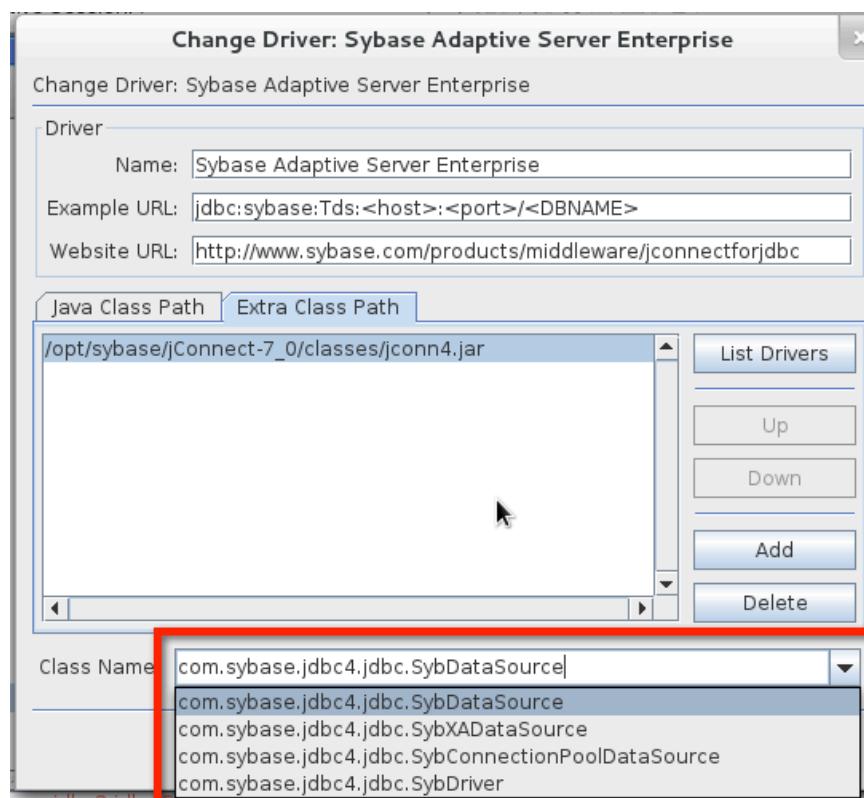
15. Browse for the file /opt/sybase/jConnect-7\_0/classes/jconn4.jar and click on **Open**



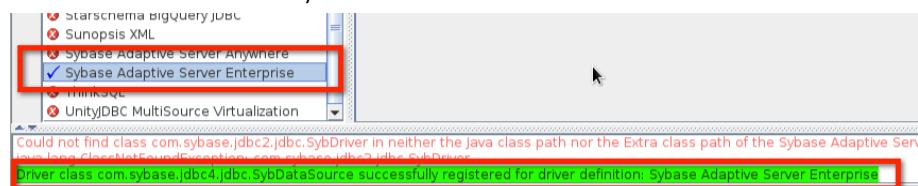
16. Click on the List Drivers button



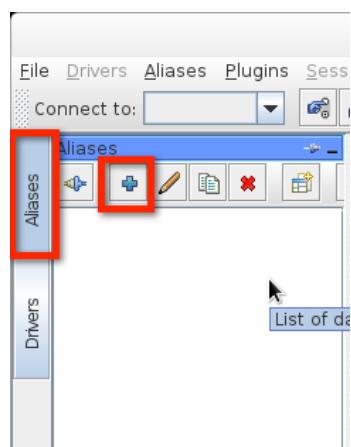
17. In the Class Name combo box you should be able to see now a lot of classes. Pick the class named `com.sybase.jdbc4.jdbc.SybDataSource` and click on **OK**



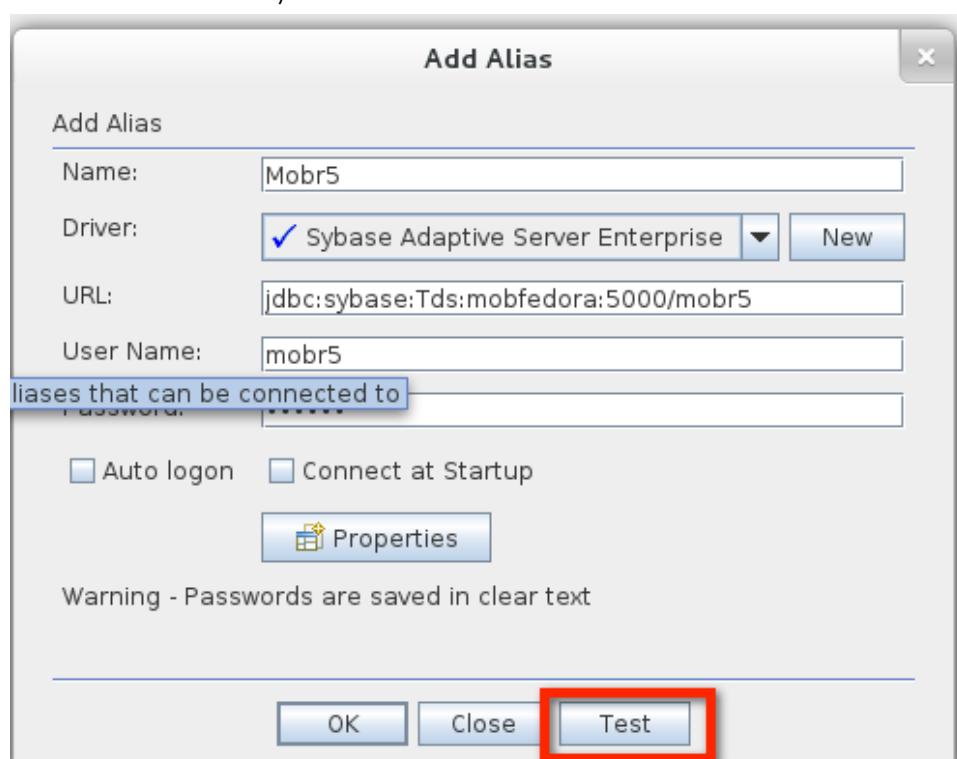
18. Your driver was successfully installed

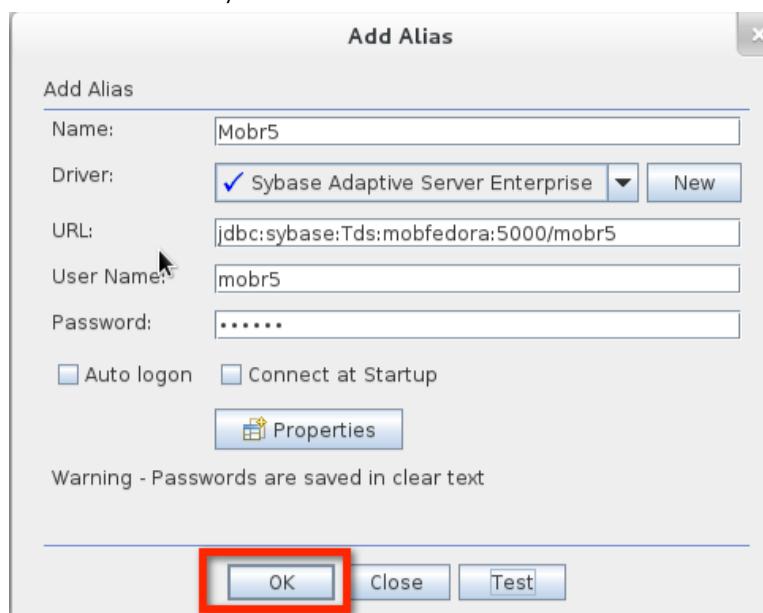


19. Select now the **Aliases** tab and click on the "+" sign



20. Provide the name of the database, the driver, the correct URL, the user name and the password and click on Test to verify if the connection is successful.



21. Click on **Connect**22. The connection test was fine. Click on **OK**23. Click on **OK** so that your connection will be saved.

24. You can now start browsing tables on your DB.

The screenshot shows the SQuirreL SQL Client interface. The left sidebar has tabs for 'Drivers', 'Aliases', and 'Objects'. Under 'Objects', 'mobr5' is selected, showing its schema structure. The 'TABLE' section contains several system tables, including ACT\_GE\_PROPERTY, ACT\_HI\_ACTINST, ACT\_HI\_ATTACHMENT, ACT\_HI\_COMMENT, ACT\_HI\_DETAIL, ACT\_HI\_PROCINST, ACT\_IDACTINST, ACT\_ID\_GROUP, ACT\_ID\_INFO, ACT\_ID\_MEMBERSHIP, ACT\_ID\_USER, ACT\_RE\_DEPLOYMENT, and ACT\_RE\_PROCDEF. The right panel displays a table named 'schema.history' with three rows:

NAME_	VALUE_	REV_
historyLevel	2	1
schema.version	5.9	1
schema.history	create(5.9)	1
next.dbid	1	1

At the bottom of the interface, there is a message about Java driver registration:

```
java.lang.ClassNotFoundException: com.sybase.jdbc4.jdbc.SybDriver
Driver class com.sybase.jdbc4.jdbc.SybDataSource successfully registered for driver definition: Sybase Adaptive Server Enterprise
Please close the tools popup by hitting ctrl+f5 in this SQL Editor. Or if three times to stop this message.
```

## 4.4.2 Install SoapUI Tool

SoapUI is an open source web service testing application for service-oriented architectures (SOA). Its functionality covers web service inspection, invoking, development, simulation and mocking, functional testing, load and compliance testing. A commercial version, soapUI Pro, which mainly focuses on features designed to enhance productivity, was also developed by eviware software. In 2011, SmartBear Software acquired eviware. (Wikipedia)

1. SoapUI can be downloaded from the following web site:  
<http://sourceforge.net/projects/soapui/files/soapui/4.5.2/>

Name	Modified	Size	Downloads
<a href="#">Parent folder</a>			
soapui-4.5.2-windows-bin.zip	2013-05-22	82.8 MB	1,459
soapui-4.5.2-win32-standalone-bin....	2013-05-22	86.4 MB	818
soapui-4.5.2-mac-bin.zip	2013-05-22	106.7 MB	138
<b>soapui-4.5.2-linux-bin.tar.gz</b>	2013-05-22	75.9 MB	759
soapUI-x64-4.5.2.exe	2013-05-22	145.6 MB	3,552
<a href="#">soapUI-x32-4.5.2.sh</a>	2013-05-22	140.6 MB	1,919
soapUI-x32-4.5.2.exe	2013-05-22	143.9 MB	21,868
soapUI-4.5.2.dmg	2013-05-22	173.1 MB	1,783
<b>Totals:</b>		955.0 MB	32,296
<b>8 Items</b>			

2. Open a TERM window and reach the location where you have downloaded SoapUI

```
mobiliser@mobfedora:~/Temp
File Edit View Search Terminal Help
[mobiliser@mobfedora ~]$ ls
core.1784 Documents Music Public sybinit.err Templates workspace
Desktop Downloads Pictures squirrel-sql-3.5.0 Temp Videos
[mobiliser@mobfedora ~]$ cd Temp
[mobiliser@mobfedora Temp]$ ls
ase1570_linux8664_64_02.tgz MOBPLAT51002P_1-11012211.TGZ sybase
CollabNetSubversionEdge-3.3.2_linux-x86_64.tar.gz nexus-2.5.0-04-bundle thirdparty
ebf21330 nexus-2.5.0-04-bundle.tar.gz updateMobiliser.sql
eclipse-jee-juno-SR2-linux-gtk-x86_64.tar.gz soapui-4.5.2-linux-bin.tar.gz
jconnect-osgi-7.0.5.jar squirrel-sql-3.5.0-install.jar
[mobiliser@mobfedora Temp]$
```

3. Run the command

**sudo tar -xvzf soapui-4.5.2-linux-bin.tar.gz -C /opt**

to extract the SoapUI package directly in the /opt folder.

```
[mobiliser@mobfedora Temp]$ ls
ase1570_linux8664_64_02.tgz MOBPLAT51002P_1-11012211.TGZ sybase
CollabNetSubversionEdge-3.3.2_linux-x86_64.tar.gz nexus-2.5.0-04-bundle thirdparty
ebf21330 nexus-2.5.0-04-bundle.tar.gz updateMobiliser.sql
eclipse-jee-juno-SR2-linux-gtk-x86_64.tar.gz soapui-4.5.2-linux-bin.tar.gz
jconnect-osgi-7.0.5.jar squirrel-sql-3.5.0-install.jar
[mobiliser@mobfedora Temp]$ sudo tar -xvzf soapui-4.5.2-linux-bin.tar.gz -C /opt
```

4. Rename the soapui-x.x.x folder to soapui

```
sudo mv /opt/soapui-4.5.2/ /opt/soapui
```

```
mobiliser@mobiliser-fdora:~$ sudo mv soapui-4.5.2/ soapui
[mobiliser@mobiliser-fdora:~$]
```

5. Change the owner to "mobiliser" for the new /opt/soapui folder

```
sudo chown -R mobiliser /opt/soapui/
```

```
mobiliser@mobiliser-fdora:~$ sudo chown -R mobiliser /opt/soapui/
[mobiliser@mobiliser-fdora:~$]
```

6. Assign the read permissions to all files in that folder

```
sudo chmod -R +r /opt/soapui/
```

```
mobiliser@mobiliser-fdora:~$ sudo chmod -R +r /opt/soapui/
[mobiliser@mobiliser-fdora:~$]
```

7. Download the proper SoapUI icon from the web through the command

```
wget http://freeapps.co.uk.s3.amazonaws.com/images%2Fthumbnails%2Fsoapui.png -O SoapUI.png
```

```
mobiliser@mobiliser-fdora:~$ wget http://freeapps.co.uk.s3.amazonaws.com/images%2Fthumbnails%2Fsoapui.png -O SoapUI.png
[mobiliser@mobiliser-fdora:~$]
```

8. Install the icon through the command

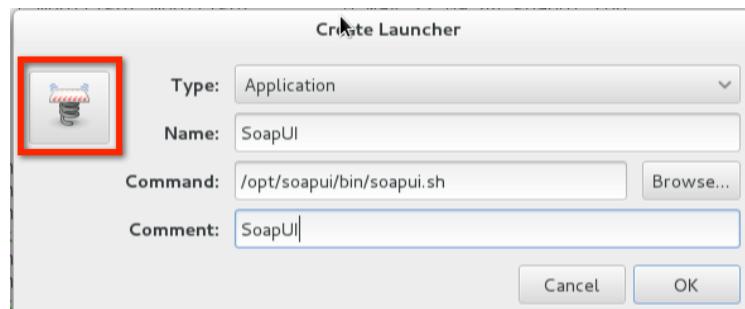
```
sudo cp SoapUI.png /usr/share/icons/
```

```
mobiliser@mobiliser-fdora:~$ sudo cp SoapUI.png /usr/share/icons/
[mobiliser@mobiliser-fdora:~$]
```

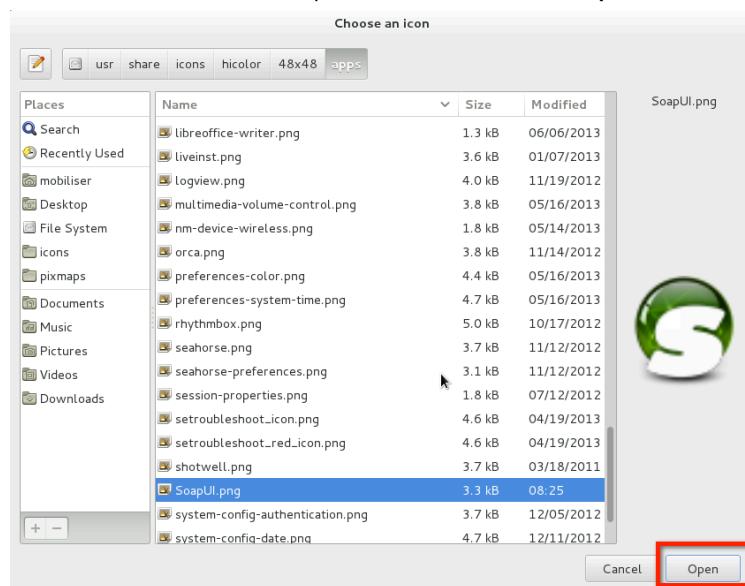
9. Create a new file in the ~/Desktop folder to generate a launch icon on the desktop

```
gnome-desktop-item-edit --create-new ~/Desktop
```

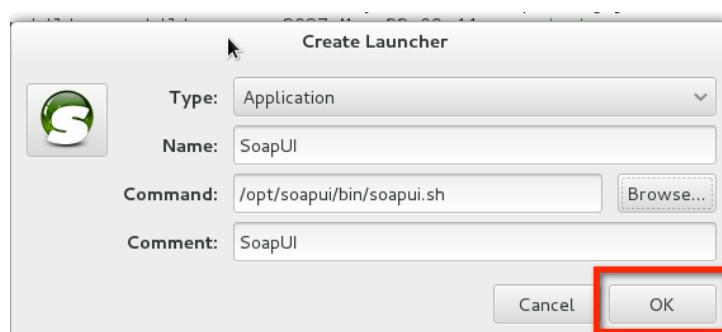
10. Fill the required fields and click on the icon symbol



11. Choose the icon we have copied before and click on Open



12. Now click on OK



13. You should now see the SoapUI icon among all the application icons on the desktop



14. Edit the soapui-settings.xml file

```
sudo gedit /opt/soapui/soapui-settings.xml
```

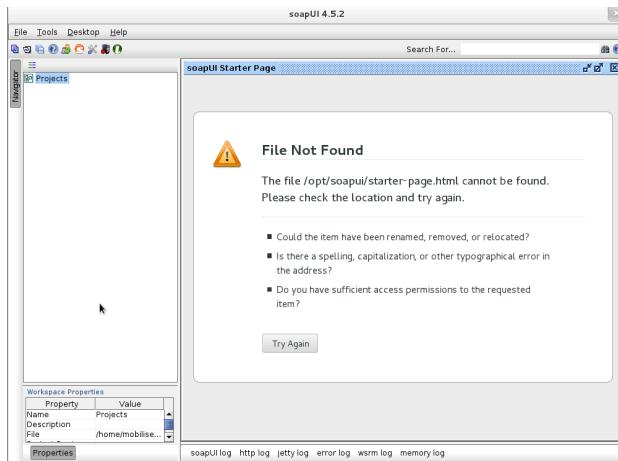
15. Change the path of the file `TestPBE-workspace.xml` by removing a parent folder and save the file

```
Activities edit Mon 07/11
File Edit View Search Tools Documents Help
*soapui-settings.xml (/opt/soapui) - gedit

[sudo] password for user: ./TestPBE-workspace.xml

<?xml version="1.0" encoding="UTF-8"?>
<con:soapui-settings xmlns:con="http://eviware.com/soapui/config"><con:setting id="WsdlSettings@cache-wsdlSets">true</con:setting><con:setting id="WsdlSettings@pretty-print-response_xml">true</con:setting><con:setting id="HttpSettings@include_request_in_time_taken">true</con:setting><con:setting id="HttpSettings@include_response_in_time_taken">true</con:setting><con:setting id="UISettings@auto_save_interval">0</con:setting><con:setting id="WsdlSettings@excluded-types">${con:entry xmlns:con="http://eviware.com/soapui/config"}<schema href="http://www.w3.org/2001/XMLSchema" /></con:entry><con:setting id="WsdlSettings@name-with-binding">${con:setting id="HttpSettings@max_connections_per_host">500</con:setting><con:setting id="HttpSettings@max_total_connections">2000</con:setting><con:setting id="com_eviware_soapui_Sqlite">./TestPBE-workspace.xml</con:setting><con:setting id="RecentProjects">${con:fragment}</con:setting><con:setting id="CookieJar">${con:entry xmlns:con="http://eviware.com/soapui/config"}<CookieJar></CookieJar></con:entry><con:entry xmlns:con="http://eviware.com/soapui/config">${con:entry}<ProxyConnection></ProxyConnection><con:entry xmlns:con="http://eviware.com/soapui/config">${con:entry}<CacheControl></CacheControl></con:entry><con:entry xmlns:con="http://eviware.com/soapui/config">${con:entry}<TransferEncoding></TransferEncoding></con:entry><con:entry xmlns:con="http://eviware.com/soapui/config">
```

16. Double click on the icon to start the tool



## 4.5 Troubleshooting

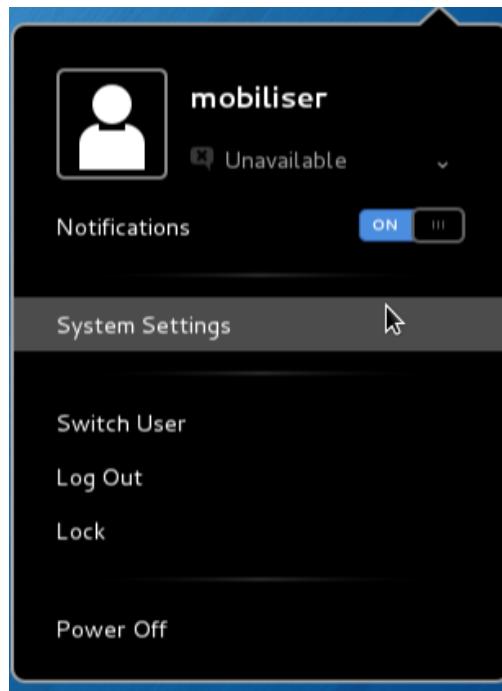
### 4.5.1 Network connection

In case you are in the SAP Network there are some further arrangements you need to do in order to make the connection fully working. In particular you need to add the proxy information to several points along this document. The current proxy server is

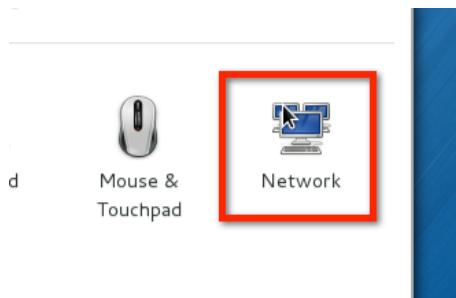
SERVER	PORT
proxy	8080

There are several points where you need to add this information.

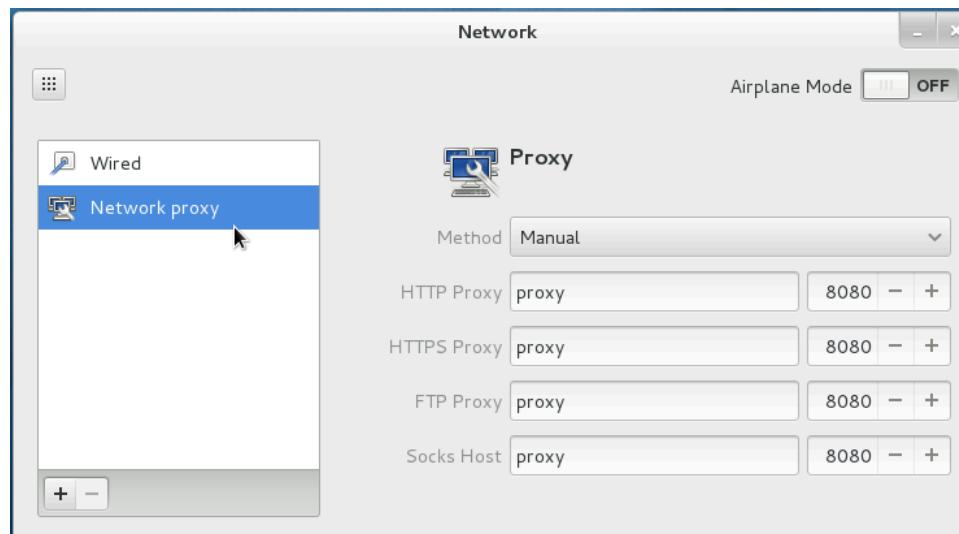
1. The first place to change is the Network Settings inside Fedora. From the top right menu go on System Settings



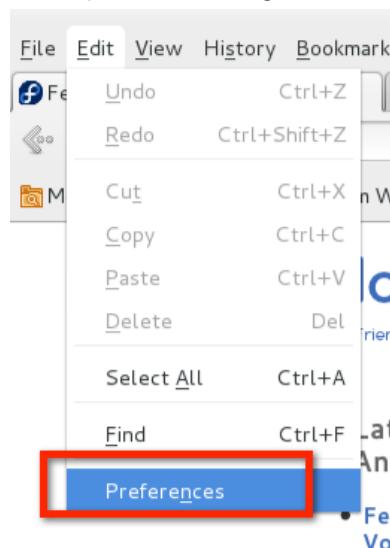
2. Click on the Network icon



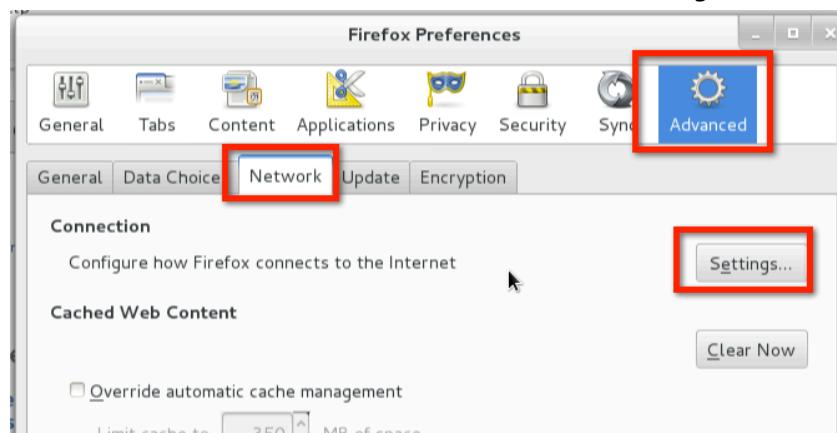
3. Click on the Network Proxy, set it in **Manual** mode and provide the proxy information



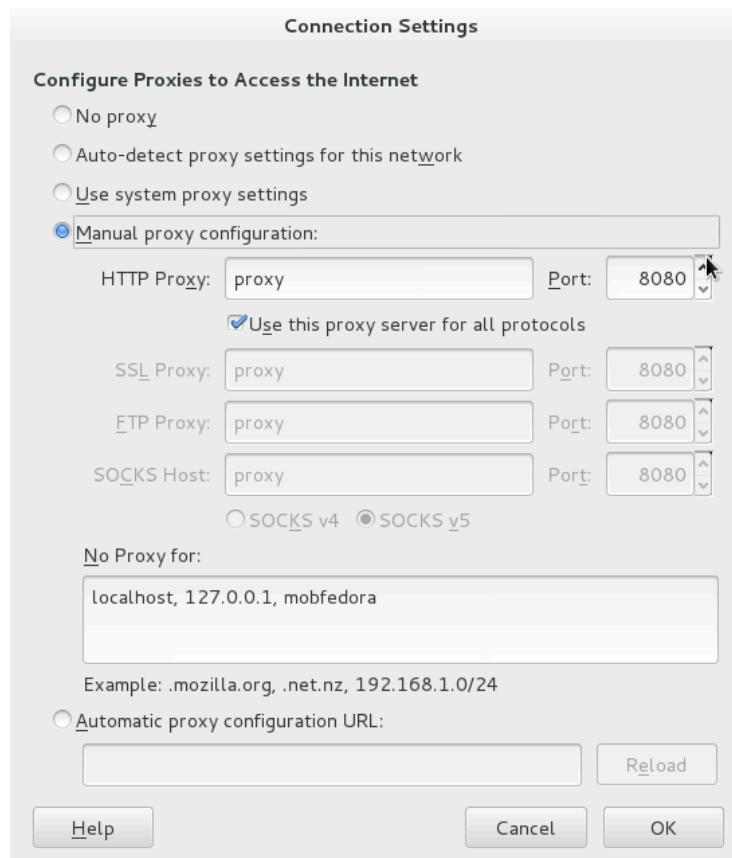
4. Then open Firefox and go to **Edit → Preferences**



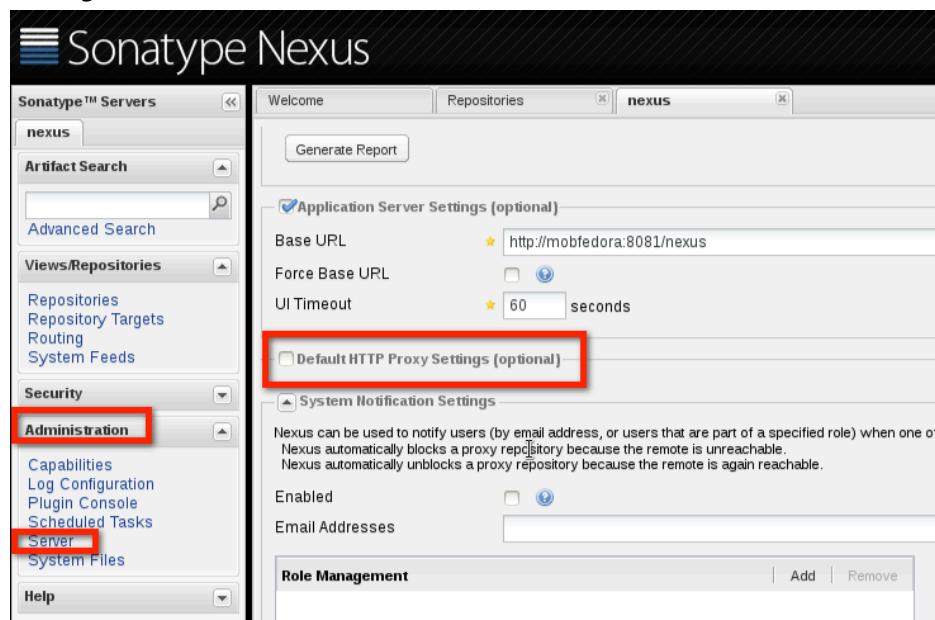
5. Click on **Advanced**, select the **Network** tab and click on **Settings**



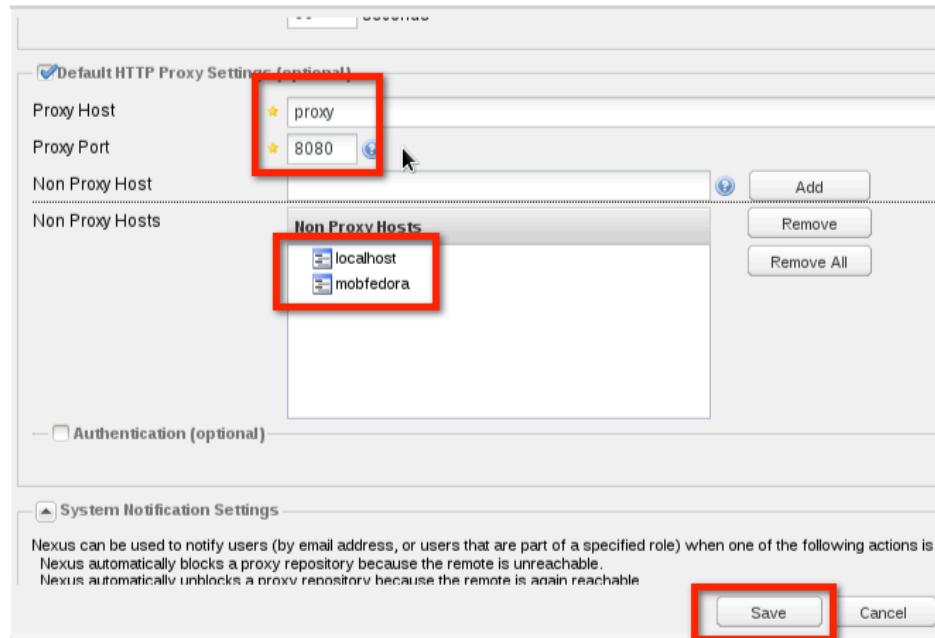
6. Adjust the settings according to this picture and click on **OK**



7. For Sonatype Nexus in chapter 4.3.2, just after the step 21, you need to configure the proxy server in this way. Click on **Administration** → **Server** and enable the checkbox **Default HTTP Proxy Settings**



8. Configure the proxy settings in this way, adding the name of your server to the Non-Proxy Hosts list. Then click on **Save**.



9. In the chapter 4.3.6 at step 4 there is the following 2 statements:

```
sudo wget -O /etc/yum.repos.d/jenkins.repo http://pkg.jenkins-ci.org/redhat/jenkins.repo
sudo rpm --import http://pkg.jenkins-ci.org/redhat/jenkins-ci.org.key
```

These statements don't work if you are in the SAP network. In order to make them working you need to replace them with the following sequence of steps:

- **sudo -i**
- **export http\_proxy=http://proxy:8080 && wget -O /etc/yum.repos.d/jenkins.repo http://pkg.jenkins-ci.org/redhat/jenkins.repo**
- **rpm --import http://pkg.jenkins-ci.org/redhat/jenkins-ci.org.key**
- **exit**

```
mobiliser@mobfedora:~$ sudo -i
[sudo] password for mobiliser:
[root@mobfedora ~]# export http_proxy=http://proxy:8080 && wget -O /etc/yum.repos.d/jenkins.repo http://pkg.jenkins-ci.org/redhat/jenkins.repo
--2013-06-26 06:12:47-- http://pkg.jenkins-ci.org/redhat/jenkins.repo
Resolving proxy (proxy)... 147.204.6.23
Connecting to proxy (proxy)[147.204.6.23]:8080... connected.
Proxy request sent, awaiting response... 200 OK
Length: 75 [text/plain]
Saving to: '/etc/yum.repos.d/jenkins.repo'

100%[=====] 75 --.-K/s in 0s

2013-06-26 06:12:48 (10.2 MB/s) - '/etc/yum.repos.d/jenkins.repo' saved [75/75]
[root@mobfedora ~]# rpm --import http://pkg.jenkins-ci.org/redhat/jenkins-ci.org.key
[root@mobfedora ~]# exit
logout
[mobiliser@mobfedora ~]$
```

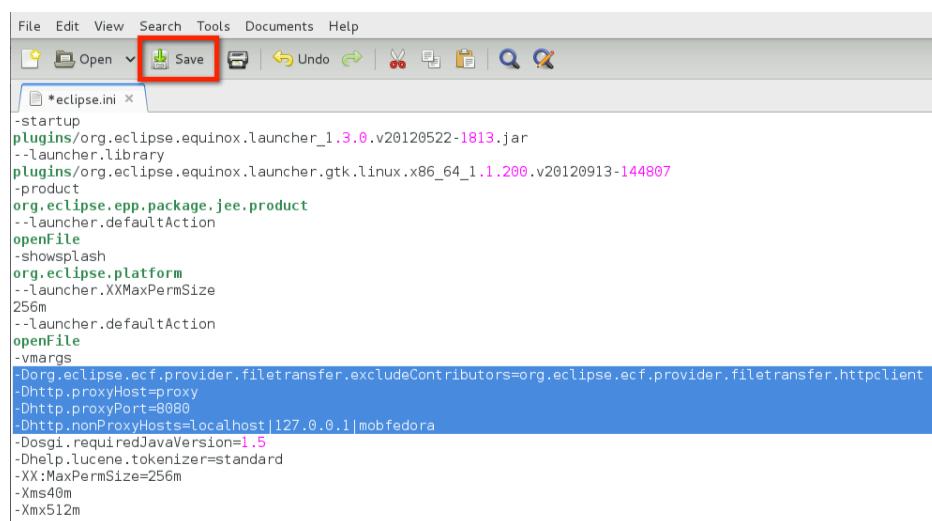
10. Finally for Eclipse in chapter 4.3.7 after step 14, you need to configure the proxy settings by changing the `eclipse.ini` file. So let's close Eclipse

11. Edit the `eclipse.ini` file

```
gedit /opt/eclipse/eclipse.ini
```

12. Add the following lines just after the `-vmargs` parameter and save the file

```
-Dorg.eclipse.ecf.provider.filetransfer.excludeContributors=org.eclipse.ecf.provider.filetransfer.httpclient
-Dhttp.proxyHost=proxy
-Dhttp.proxyPort=8080
-Dhttp.nonProxyHosts=localhost|127.0.0.1|mobfedora
```



13. Start Eclipse from the TERM window by running the command

```
eclipse
```

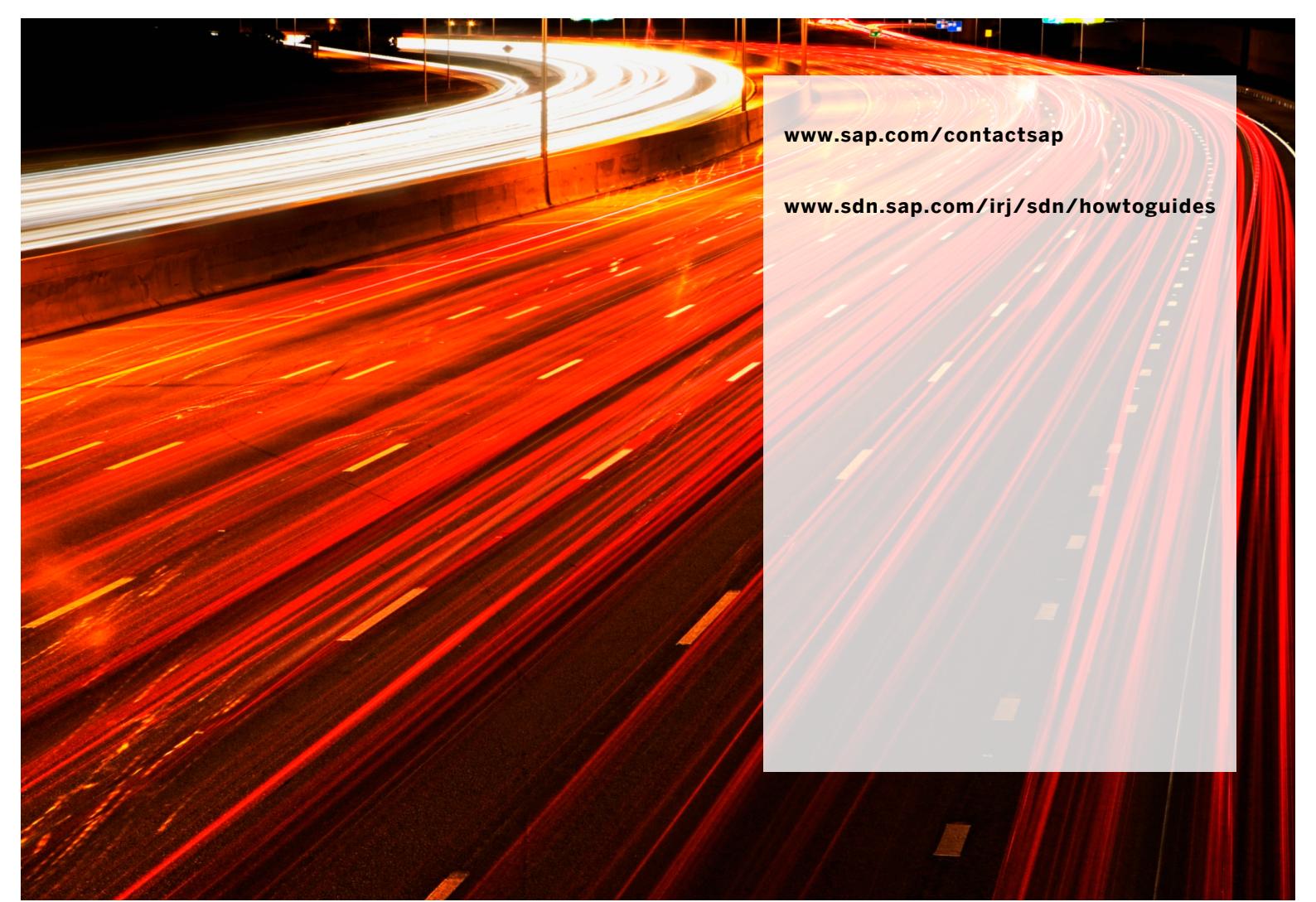
14. Your network proxy is correctly configured

## 5. Appendix

### Appendix A – Software collection

Here below you can find a list of all the files used during this guide.

Filename	Description
ase1570_linx8664_64_02.tgz	Sybase Advance Server Enterprise Developer Edition (ASE)
CollabNetSubversionEdge-3.3.2_linux-x86_64.tar.gz	CollabNet Subversion
eclipse-jee-juno-SR2-linux-gtk-x86_64.tar.gz	Eclipse Juno for Java EE Developers
MOBPLAT51002P_1-11012211.TGZ	Sybase Mobiliser 5.1 SP2 PL1
nexus-2.5.0-04-bundle.tar.gz	Sonatype Nexus
soapui-4.5.2-linux-bin.tar.gz	Soap UI tool
squirrel-sql-3.5.0-install.jar	Squirrel tool



[www.sap.com/contactsap](http://www.sap.com/contactsap)

[www.sdn.sap.com/irj/sdn/howtoguides](http://www.sdn.sap.com/irj/sdn/howtoguides)



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