

SAP How-to Guide

Mobility

SAP Sybase365 Mobiliser

HTG - Set up SAP Customer Loyalty on Mobiliser 5.1 for Linux

provided by SAP Rapid Innovation Group – RIG

Applicable Releases:

Mobiliser 5.1 SP1

Linux platform

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Document History

Document Version	Authored By	Description
1.4	Simmaco Ferriero	Switched to Fedora Linux
1.3	Simmaco Ferriero	Source code formatted
1.2	Simmaco Ferriero	Included source code in some text boxes
1.1	Simmaco Ferriero	Corrected some typo errors
1.0	Simmaco Ferriero	First release of this guide

Typographic Conventions

Type Style	Description
<i>Example Text</i>	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

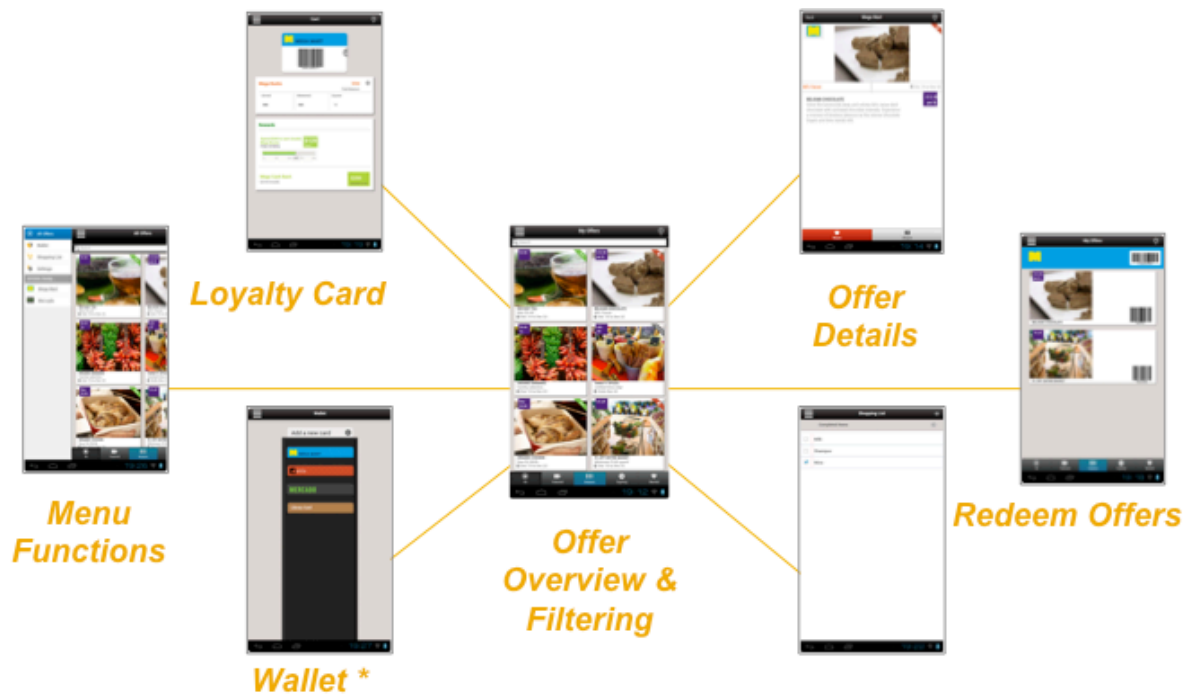
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1. Business Scenario

SAP Customer Loyalty is a Business-to-Consumer (B2C) solution based on the Sybase Money Mobiliser platform providing:

- Smartphone App
 - For Consumers
- Portal
 - Consumer Self Service
 - Customer Service Agent
 - Marketing Manager
- Light-weight Loyalty Engine (LWLE)
- Server components to support the smartphone app and the portal, with services interfaces



2. Background Information

Among all the features of SAP Customer Loyalty we can highlight the following:

- Ditch plastic loyalty **cards** and store **program** info in one digital wallet
- Personalized **offers**, share them with Facebook, and add them to your loyalty card for future use
- Manage loyalty **accounts** – review your account points, status levels, and upcoming rewards
- Create **shopping lists** so you never forget an item on your next visit to the store
- Find stores – use the **store locator** to search for directions and details

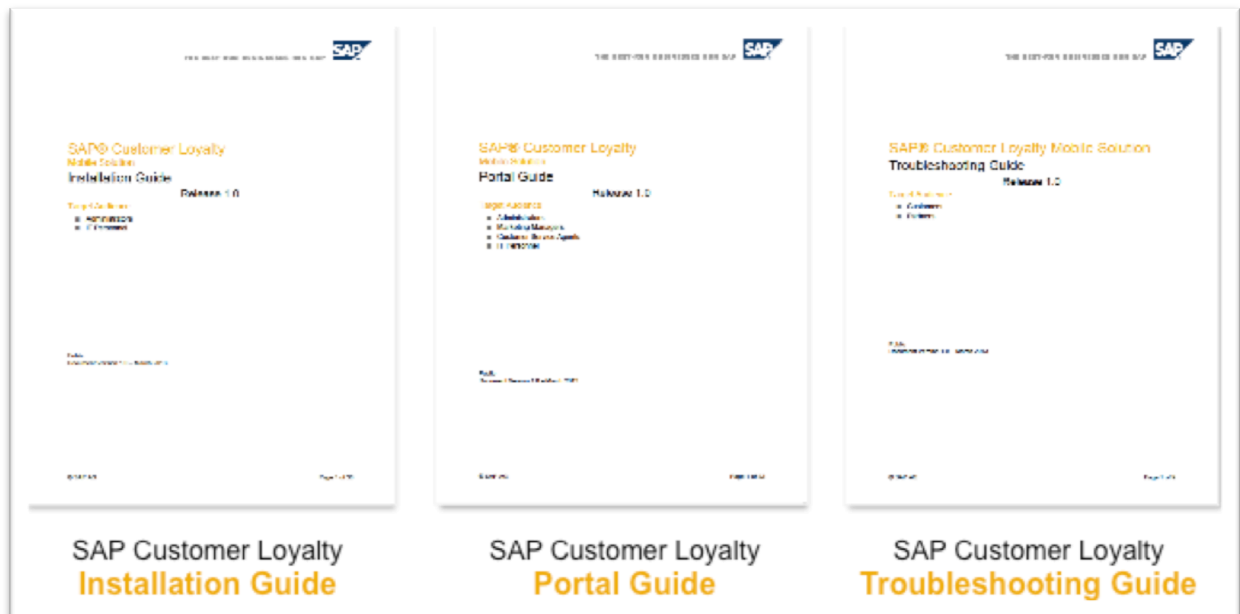
The solution supports two modes of operation:

- A. **Single-brand**
– for one retailer
- B. **Multi-brand**
– for an organization in relationship with multiple retailers, e.g. bank or telco.
The cards of all the retailers are in an unique wallet

The system context is explained in the following points:

- The rich client application is built based on SAP Mobiliser Platform
- The client app is an online hybrid application that is communicating to the services on the Sybase Mobiliser system by calling Services in a request/response manner
- In the first version, the client app will run on iPhone and Android smartphone devices
- The Light-Weight Loyalty Engine is running on the Sybase Mobiliser Platform
- All data persistency is maintained at the Mobiliser level
- It is possible to integrate with backend systems, e.g. CRM. The integration has to be implemented

Please consider the following this document as and example of installation for SAP Customer Loyalty. Refer to the link below in order to get the latest documentation on the product.



<http://service.sap.com/instguides> >

SAP Components > SAP Mobile Applications > SAP Business to Consumer (B2C) Apps >

SAP Customer Loyalty Mobile Application

The product components can be downloaded from the SMP by the following links:

Product	Path to download
Server components	SAP Software Download Center → Support Packages and Patches → Browse our catalog → SAP Mobile Solutions → SAP Customer Loyalty → MOB MLOYALTY AND
Android App	SAP Software Download Center → Support Packages and Patches → Browse our catalog → SAP Mobile Solutions → SAP Customer Loyalty → MOB MLOYALTY INT

The iOS App can be downloaded directly from the AppStore.

For the SAP Customer Loyalty configuration, please refer to the chapter 5 of the installation guide. For your comfort, you can find in the appendix A, the list of all the configurable parameters.

3. Prerequisites

Here it is a list of all the software components needed for SAP Customer Loyalty installation.

- Sybase Mobiliser Platform 5.1 SP1
- One of the following supported DB platforms:
 - Sybase ASE 15.7+
 - Oracle 11g Release 2
 - DB2 9.7.4+
- iOS 5.0+
- Android 4.0 (Ice Cream Sandwich)

In this guide we will use the following naming convention:

Variable	Description	Value in this document
TERM	Linux Terminal	Icon 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
<db_type>	Data base type (oracle, ase, db2)	ase
<local_user_path>	The Windows path for the current user profile	/home/mobiliser
<temp>	Temporary folder	/home/mobiliser/Temp

4. Step-by-Step Procedure

Our installation will be made by the following steps:

- 1) Download SAP Customer Loyalty package from SMP
- 2) Apply a SQL script to the ASE DB
- 3) Copy the SAP Customer Loyalty bundles in Mobiliser
- 4) Deploy the SAP Customer Loyalty portal extension on Mobiliser
- 5) Running SAP Customer Loyalty and testing the service

4.1 Download SAP Customer Loyalty package from SMP

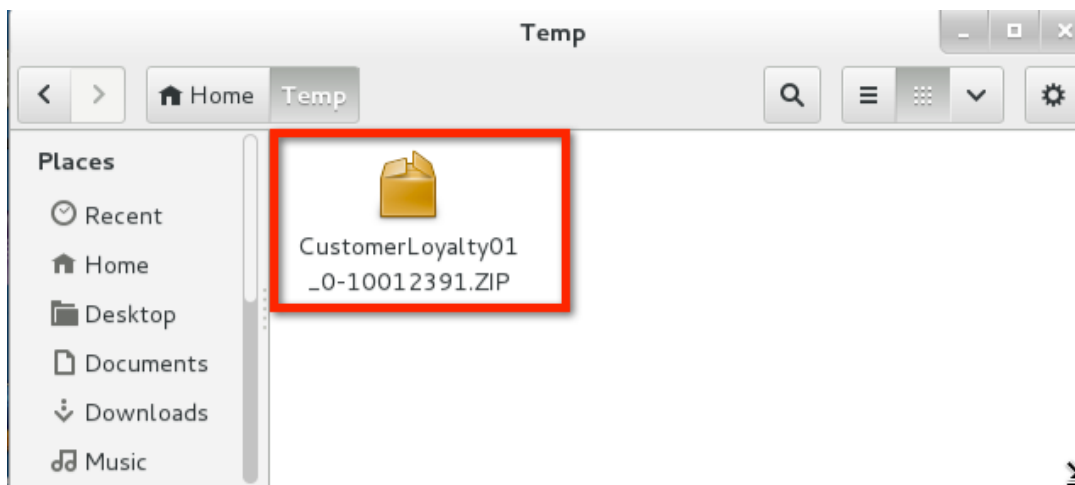
1. Go on the Service Market Place
2. Locate the SAP Customer Loyalty distribution and download it.

The following objects are available for download:

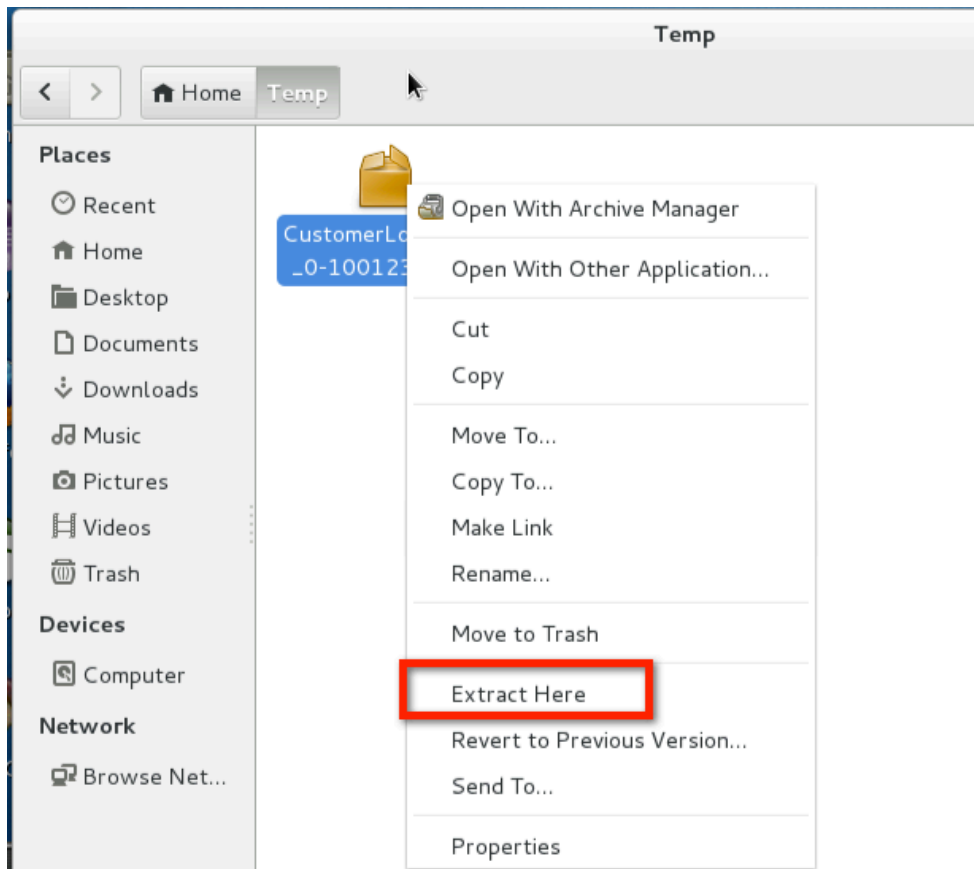
	File Type	Download Object	Title	Patch Level	Info File	File Size [kb]	Last Changed
<input type="checkbox"/>	ZIP	CustomerLoyalty00_0-10012391.ZIP	SP00 for MLOYALTY CONTENT 1.0.0	0	Info	8388	30.05.2013
<input type="checkbox"/>	ZIP	CustomerLoyalty01_0-10012391.ZIP	SP01 for MLOYALTY CONTENT 1.0.0	0	Info	8395	13.06.2013

[Add to Download Basket](#)
[Maintain Download Basket](#)
[Select All](#)
[Deselect All](#)

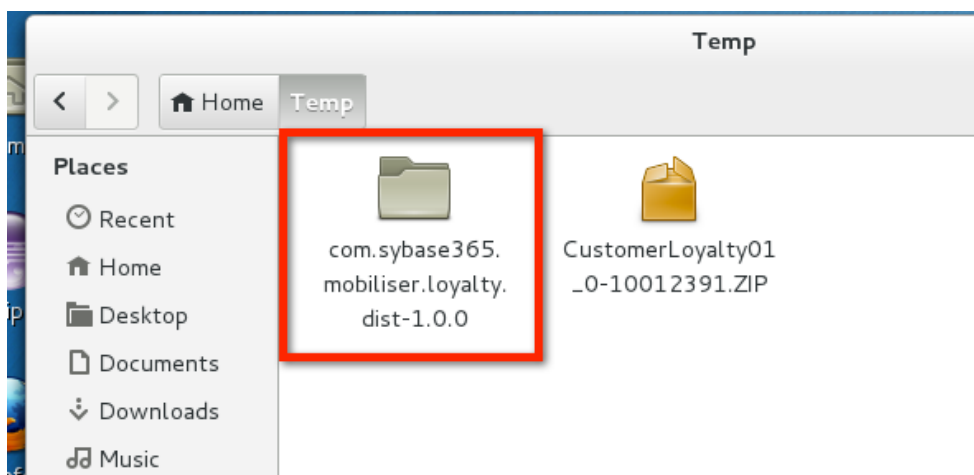
3. Transfer it on the VM in a temporary folder. In our case we are using <temp>



4. Right click on the file `com.sybase365.mobiliser.loyalty.dist-1.0.0-dist-mLoyalty.zip` and extract it in the same folder.



5. You will get a new folder named `com.sybase365.mobiliser.loyalty.dist-1.0.0`. Go inside this new folder.



6. You should see now 3 subfolders:
- a. money – containing the new bundles to be installed in Mobiliser
 - b. sql – containing the SQL script to be applied to the DB
 - c. web – containing the enhanced web portal



4.2 Apply a SQL script to the ASE DB

In order to run SAP Customer Loyalty we need to add some new tables and new values to the existing Mobiliser database.

1. Stop Money Mobiliser and Web Mobiliser if they are running.
2. Go inside the `sql` folder of the installation package:

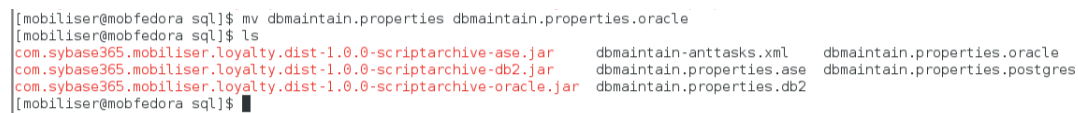
`cd /home/mobiliser/Temp/com.sybase365.mobiliser.loyalty.dist-1.0.0/sql`



```
mobiliser@mobfedora:~/Temp/com.sybase365.mobiliser.loyalty.dist-1.0.0/sql
File Edit View Search Terminal Help
[mobiliser@mobfedora ~]$ cd /home/mobiliser/Temp/com.sybase365.mobiliser.loyalty
.dist-1.0.0/sql
[mobiliser@mobfedora sql]$ ls
com.sybase365.mobiliser.loyalty.dist-1.0.0-scriptarchive-ase.jar  dbmaintain-anttasks.xml  dbmaintain.properties.db2
com.sybase365.mobiliser.loyalty.dist-1.0.0-scriptarchive-db2.jar  dbmaintain.properties  dbmaintain.properties.postgres
com.sybase365.mobiliser.loyalty.dist-1.0.0-scriptarchive-oracle.jar  dbmaintain.properties.ase
[mobiliser@mobfedora sql]$
```

3. Locate the right version of `dbmaintain.properties` file to use, depending on the DB server you have installed. In our case we are using ASE, so we will need to use the `dbmaintain.properties.ase` file. The current `dbmaintain.properties` file is the Oracle version, so, since we don't need it in this guide, we can simply delete it or rename it as `dbmaintain.properties.oracle`. Let's rename it with the command

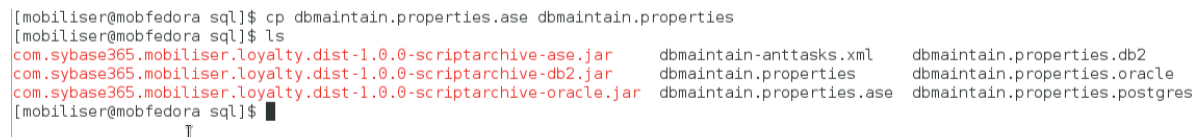
`mv dbmaintain.properties dbmaintain.properties.oracle`



```
[mobiliser@mobfedora sql]$ mv dbmaintain.properties dbmaintain.properties.oracle
[mobiliser@mobfedora sql]$ ls
com.sybase365.mobiliser.loyalty.dist-1.0.0-scriptarchive-ase.jar  dbmaintain-anttasks.xml  dbmaintain.properties.oracle
com.sybase365.mobiliser.loyalty.dist-1.0.0-scriptarchive-db2.jar  dbmaintain.properties.ase  dbmaintain.properties.postgres
com.sybase365.mobiliser.loyalty.dist-1.0.0-scriptarchive-oracle.jar  dbmaintain.properties.db2
[mobiliser@mobfedora sql]$
```

4. Copy the `dbmaintain.properties.ase` as `dbmaintain.properties` using the command

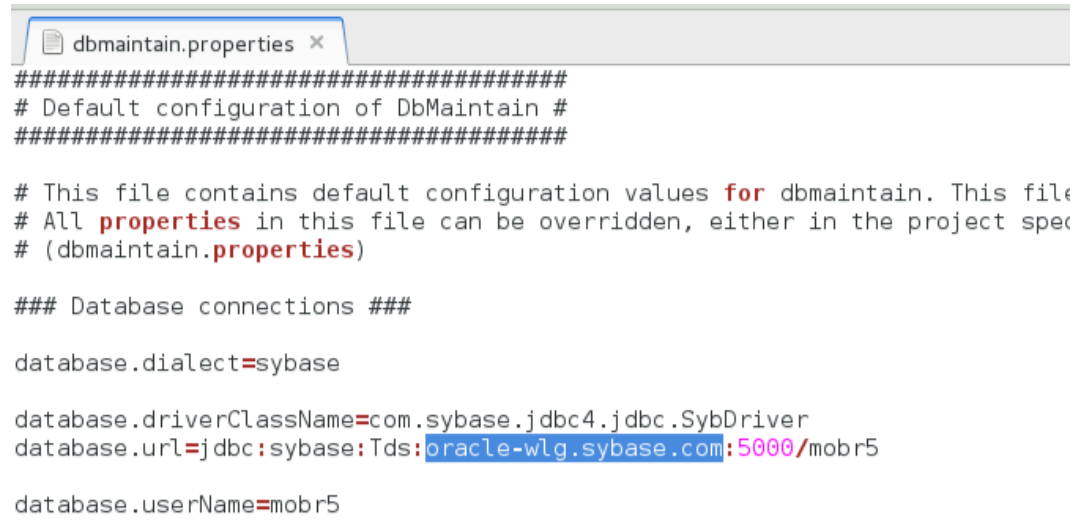
`cp dbmaintain.properties.ase dbmaintain.properties`



```
[mobiliser@mobfedora sql]$ cp dbmaintain.properties.ase dbmaintain.properties
[mobiliser@mobfedora sql]$ ls
com.sybase365.mobiliser.loyalty.dist-1.0.0-scriptarchive-ase.jar  dbmaintain-anttasks.xml  dbmaintain.properties.db2
com.sybase365.mobiliser.loyalty.dist-1.0.0-scriptarchive-db2.jar  dbmaintain.properties  dbmaintain.properties.oracle
com.sybase365.mobiliser.loyalty.dist-1.0.0-scriptarchive-oracle.jar  dbmaintain.properties.ase  dbmaintain.properties.postgres
[mobiliser@mobfedora sql]$
```

5. Change the name of the DB connection

gedit dbmaintain.properties



```
#####
# Default configuration of DbMaintain #
#####

# This file contains default configuration values for dbmaintain. This file
# All properties in this file can be overridden, either in the project spec
# (dbmaintain.properties)

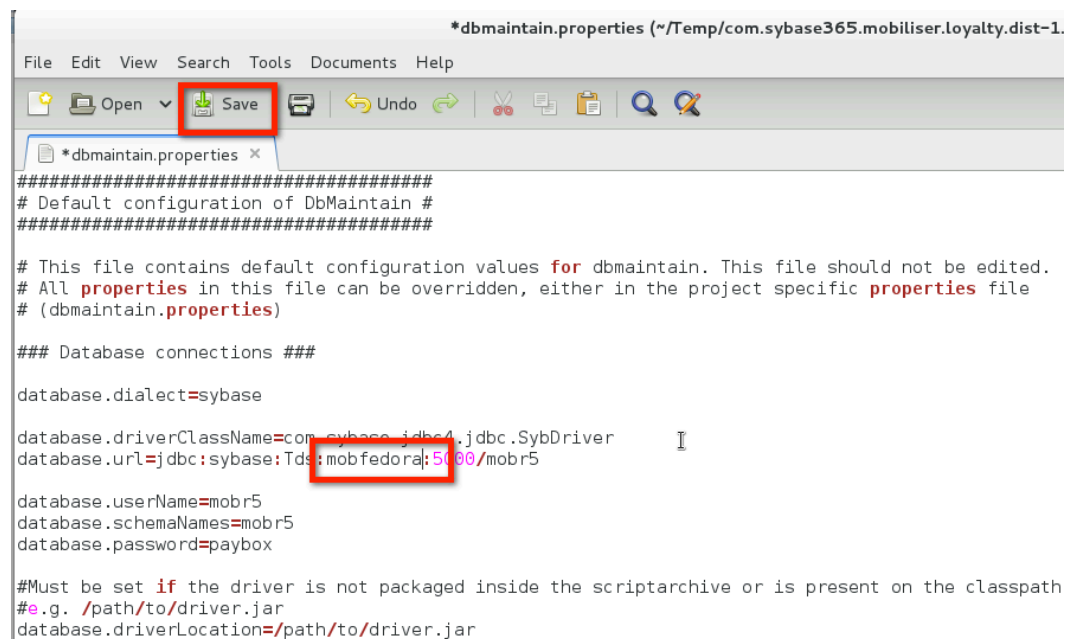
### Database connections ###

database.dialect=sybase

database.driverClassName=com.sybase.jdbc4.jdbc.SybDriver
database.url=jdbc:sybase:Tds:oracle-wlg.sybase.com:5000/mobr5

database.userName=mobr5
```

6. Replace the string oracle-wlg.sybase.com with the <server_name> (in this example it is "mobfedora")



```
*dbmaintain.properties (~/Temp/com.sybase365.mobiliser.loyalty.dist-1.

File Edit View Search Tools Documents Help
Open Save Undo Cut Copy Paste Find
*dbmaintain.properties x

#####
# Default configuration of DbMaintain #
#####

# This file contains default configuration values for dbmaintain. This file should not be edited.
# All properties in this file can be overridden, either in the project specific properties file
# (dbmaintain.properties)

### Database connections ###

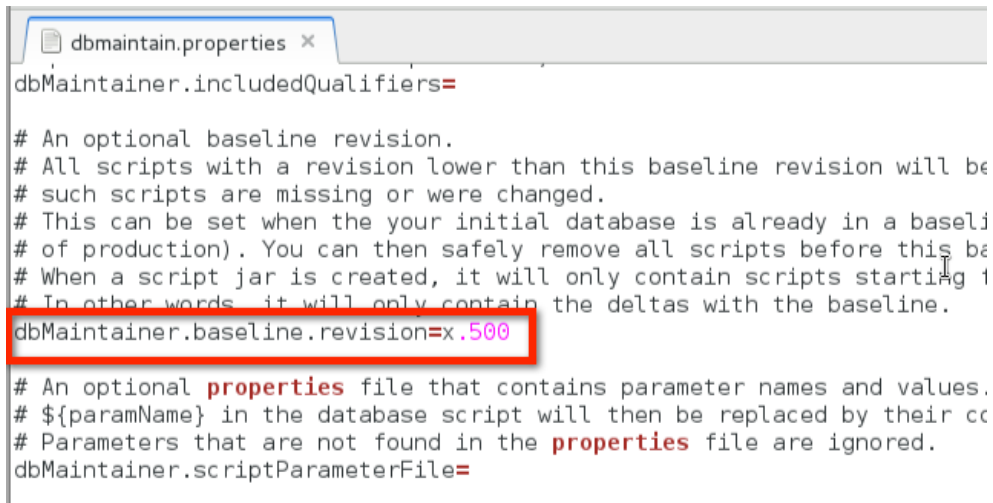
database.dialect=sybase

database.driverClassName=com.sybase.jdbc4.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 classpath
#e.g. /path/to/driver.jar
database.driverLocation=/path/to/driver.jar
```

7. Check that the **dbMaintainer.baseline.revision** properties is set to **x.500**

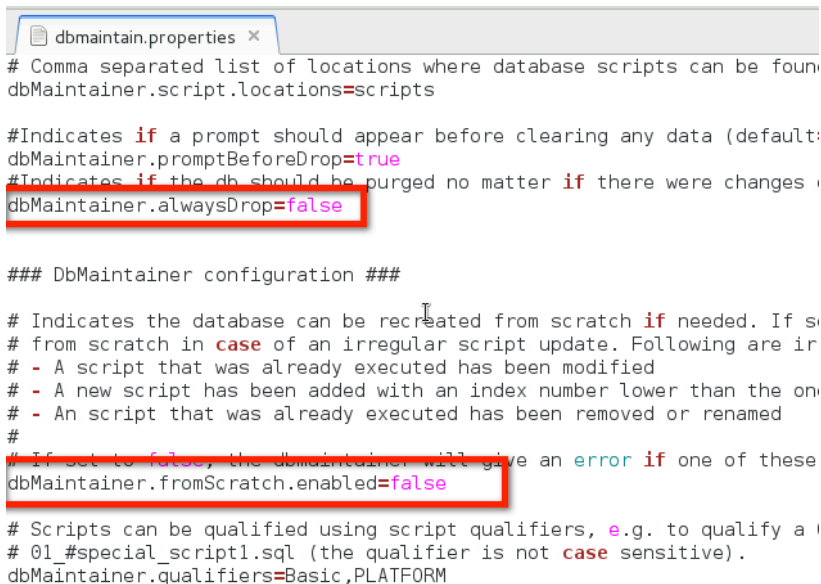


```
dbmaintain.properties x
dbMaintainer.includedQualifiers=

# An optional baseline revision.
# All scripts with a revision lower than this baseline revision will be
# such scripts are missing or were changed.
# This can be set when the your initial database is already in a baseli
# of production). You can then safely remove all scripts before this ba
# When a script jar is created, it will only contain scripts starting i
# In other words, it will only contain the deltas with the baseline.
dbMaintainer.baseline.revision=x.500

# An optional properties file that contains parameter names and values.
# ${paramName} in the database script will then be replaced by their co
# Parameters that are not found in the properties file are ignored.
dbMaintainer.scriptParameterFile=
```

8. Check that the **dbMaintainer.alwaysDrop** and **dbMaintainer.fromScratch** properties are both set to **false**.



```
dbmaintain.properties x
# Comma separated list of locations where database scripts can be found
dbMaintainer.script.locations=scripts

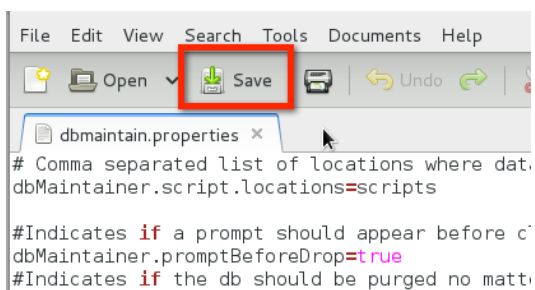
#Indicates if a prompt should appear before clearing any data (default:
dbMaintainer.promptBeforeDrop=true
#Indicates if the db should be purged no matter if there were changes
dbMaintainer.alwaysDrop=false

### DbMaintainer configuration ###

# Indicates the database can be recreated from scratch if needed. If s
# from scratch in case of an irregular script update. Following are ir
# - A script that was already executed has been modified
# - A new script has been added with an index number lower than the on
# - 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
dbMaintainer.fromScratch.enabled=false

# Scripts can be qualified using script qualifiers, e.g. to qualify a
# 01 #special_script1.sql (the qualifier is not case sensitive).
dbMaintainer.qualifiers=Basic,PLATFORM
```

9. Save the file



```
File Edit View Search Tools Documents Help
[Icons] Open Save [Icons] Undo
dbmaintain.properties x
# Comma separated list of locations where dat
dbMaintainer.script.locations=scripts

#Indicates if a prompt should appear before c
dbMaintainer.promptBeforeDrop=true
#Indicates if the db should be purged no matt
```

10. We are ready to run the DB update with the command

```
java -jar com.sybase365.mobiliser.loyalty.dist-1.0.0-scriptarchive-<db_type>.jar
dbmaintain.properties
```

(in this example it is `java -jar com.sybase365.mobiliser.loyalty.dist-1.0.0-scriptarchive-ase.jar dbmaintain.properties`) because we are installing on top of ASE server.

```
mobiliser@mobfedora:~/Temp/com.sybase365.mobiliser.loyalty.dist-1.0.0/sql
File Edit View Search Terminal Help
[mobiliser@mobfedora sql]$ ls
com.sybase365.mobiliser.loyalty.dist-1.0.0-scriptarchive-ase.jar  dbmaintain.properties  dbmaintain.properties.oracle
com.sybase365.mobiliser.loyalty.dist-1.0.0-scriptarchive-db2.jar  dbmaintain.properties-  dbmaintain.properties.postgres
com.sybase365.mobiliser.loyalty.dist-1.0.0-scriptarchive-oracle.jar  dbmaintain.properties.ase
dbmaintain-anttasks.xml  dbmaintain.properties.db2
[mobiliser@mobfedora sql]$ java -jar com.sybase365.mobiliser.loyalty.dist-1.0.0-scriptarchive-ase.jar dbmaintain.properties
```

11. Answer Yes.

```
mobiliser@mobfedora:~/Temp/com.sybase365.mobiliser.loyalty.dist-1.0.0
File Edit View Search Terminal Help
The baseline revision is set to x.500. All script with a lower revision will be ignored
Currently reading/home/mobiliser/Temp/com.sybase365.mobiliser.loyalty.dist-1.0.0/sql/com.sybase3
archive-ase.jar
The baseline revision is set to x.500. All script with a lower revision will be ignored

Dry Run Result:
*****
The database is updated incrementally, since following regular script updates were detected:
1. Newly added indexed script: sql/500_PROJECT/001_SETUP/001_CUSTOM_PROJECT_OBJECTS_ASE.sql
2. Newly added indexed script: sql/500_PROJECT/002_DATA/100_LOYALTY_PRIVILEGES.sql
3. Newly added indexed script: sql/500_PROJECT/002_DATA/110_LOYALTY_DATA.sql
4. Newly added indexed script: sql/500_PROJECT/002_DATA/120_LOYALTY_ERROR_CODES.sql
5. Newly added indexed script: sql/500_PROJECT/003_PREFS/001_CUSTOM_PROJECT_PREFS.sql

*****

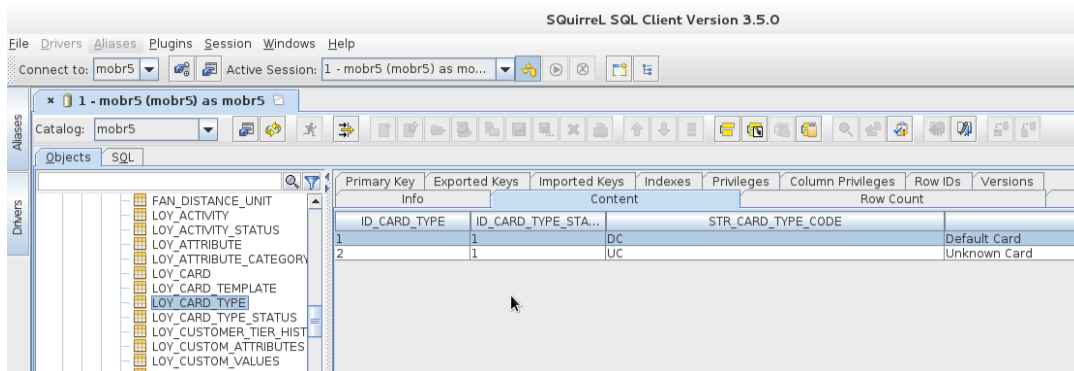
#####
The dry run above indicates what changes will be performed. Continue? y/n
#####
```

12. Your update is complete.

```
#####
The dry run above indicates what changes will be performed. Continue? y/n
#####
y
The database is updated incrementally, since following regular script updates were detected:
1. Newly added indexed script: sql/500_PROJECT/001_SETUP/001_CUSTOM_PROJECT_OBJECTS_ASE.sql
2. Newly added indexed script: sql/500_PROJECT/002_DATA/100_LOYALTY_PRIVILEGES.sql
3. Newly added indexed script: sql/500_PROJECT/002_DATA/110_LOYALTY_DATA.sql
4. Newly added indexed script: sql/500_PROJECT/002_DATA/120_LOYALTY_ERROR_CODES.sql
5. Newly added indexed script: sql/500_PROJECT/003_PREFS/001_CUSTOM_PROJECT_PREFS.sql

Executed newly added indexed script: sql/500_PROJECT/001_SETUP/001_CUSTOM_PROJECT_OBJECTS_ASE.sql (1416 ms)
Executed newly added indexed script: sql/500_PROJECT/002_DATA/100_LOYALTY_PRIVILEGES.sql (275 ms)
Executed newly added indexed script: sql/500_PROJECT/002_DATA/110_LOYALTY_DATA.sql (85 ms)
Executed newly added indexed script: sql/500_PROJECT/002_DATA/120_LOYALTY_ERROR_CODES.sql (4 ms)
Executed newly added indexed script: sql/500_PROJECT/003_PREFS/001_CUSTOM_PROJECT_PREFS.sql (27 ms)
The database has been updated successfully.
Creating data source. Driver: com.sybase.jdbc4.jdbc.SybDriver, url: jdbc:sybase:Tds:mobfedora:5000/mobr5, user: mc
shown>
The database is up to date
[mobiliser@mobfedora sql]$
```


13. If you open the Squirrel tool you can verify that now there are new tables in the `mobr5` DB. In particular there are some that start with the prefix "LOY". Those are some of the tables used by SAP Customer Loyalty.



4.3 Copy the SAP Customer Loyalty bundles in Mobiliser

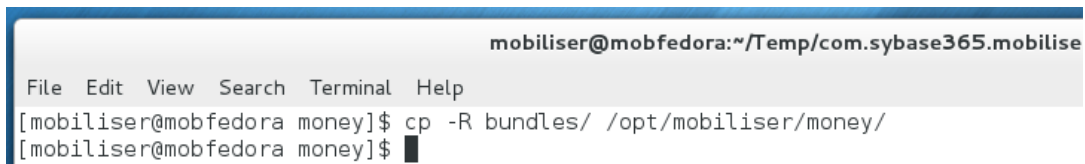
1. Stop Money Mobiliser and Web Mobiliser if they are running.
2. Go to the folder `money` in the installation package with command

```
cd /home/mobiliser/Temp/com.sybase365.mobiliser.loyalty.dist-1.0.0/money
```

3. Run the command

```
cp -R bundles/ /opt/mobiliser/money/
```

to copy all the bundles in the Mobiliser bundles folder.



```
mobiliser@mofedora:~/Temp/com.sybase365.mobilise
File Edit View Search Terminal Help
[mobiliser@mofedora money]$ cp -R bundles/ /opt/mobiliser/money/
[mobiliser@mofedora money]$
```

4. Check that the new bundles are in place:
`cd /opt/mobiliser/money/bundles/10-mobiliser-persistence`
5. You should see a new bundle named `com.sybase365.mobiliser.loyalty.persistence-1.0.0.jar`

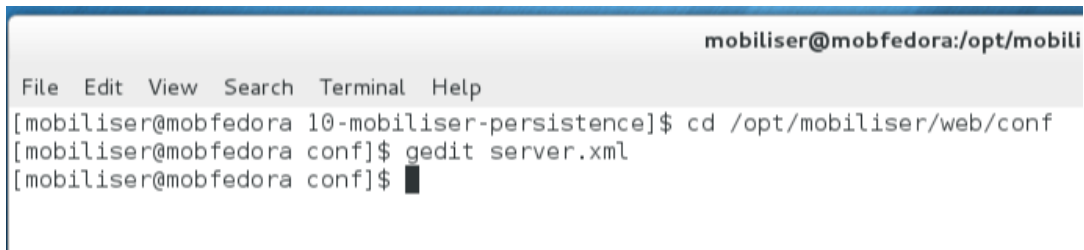


```
mobiliser@mofedora:/opt/mobiliser/money/bundles/10-mobiliser-persistence
File Edit View Search Terminal Help
com.sybase365.mobiliser.framework.persistence.hibernate.sessionfactory-5.1.0.SP02PL01.jar
com.sybase365.mobiliser.loyalty.persistence-1.0.0.jar
com.sybase365.mobiliser.mbanking.persistence.dao-api-1.0.0.SP02PL01.jar
com.sybase365.mobiliser.mbanking.persistence.dao.hibernate-1.0.0.SP02PL01.jar
com.sybase365.mobiliser.mbanking.persistence.dao-model-1.0.0.SP02PL01.jar
com.sybase365.mobiliser.money.alerts.persistence.dao-api-5.1.0.SP02PL01.jar
```

4.4 Deploy the SAP Customer Loyalty portal extensions on Mobiliser

1. Stop Money Mobiliser and Web Mobiliser if they are running.
2. We need to change some parameters in the existing Mobiliser Web Portal configuration.
`cd /opt/mobiliser/web/conf`

3. Run `gedit server.xml`

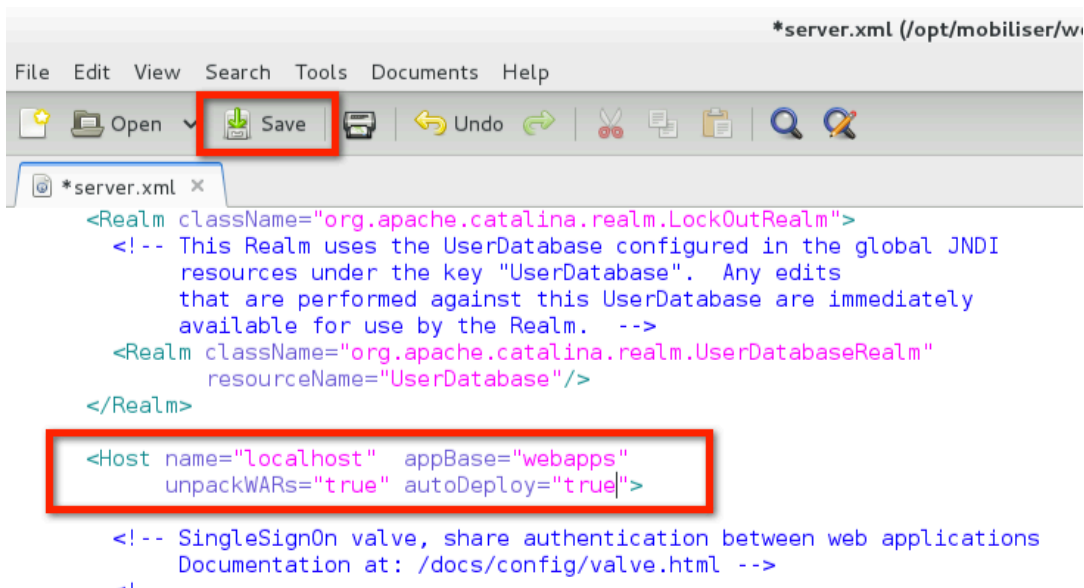


```

mobiliser@mobfedora:/opt/mobiliser/web/conf$ cd /opt/mobiliser/web/conf
[mobiliser@mobfedora conf]$ gedit server.xml
[mobiliser@mobfedora conf]$

```

4. Change the two `unpackWARs` and `autoDeploy` properties to `true` and save the file.



```

*server.xml (/opt/mobiliser/web/conf)
File Edit View Search Tools Documents Help
[Save] [Undo] [Redo] [Cut] [Copy] [Paste] [Find] [Replace]
*server.xml x
<Realm className="org.apache.catalina.realm.LockOutRealm">
  <!-- This Realm uses the UserDatabase configured in the global JNDI
        resources under the key "UserDatabase". Any edits
        that are performed against this UserDatabase are immediately
        available for use by the Realm. -->
  <Realm className="org.apache.catalina.realm.UserDatabaseRealm"
        resourceName="UserDatabase"/>
</Realm>

<Host name="localhost" appBase="webapps"
      unpackWARs="true" autoDeploy="true">

  <!-- SingleSignOn valve, share authentication between web applications
        Documentation at: /docs/config/valve.html -->
  <Valve className="org.apache.catalina.valves.SingleSignOnValve"/>
</Host>

```

5. Go to the folder web in the installation package
`cd /home/mobiliser/Temp/com.sybase365.mobiliser.loyalty.dist-1.0.0/web`

6. Copy the webapps folder to the web folder in the Mobiliser portal. Some new files will be added:

cp -R webapps/ /opt/mobiliser/web

```
mobiliser@mobfedora:~/Temp/com.sybase365.mobiliser.loyalty.dist-1.0.0/web
File Edit View Search Terminal Help
[mobiliser@mobfedora 10-mobiliser-persistence]$ cd /opt/mobiliser/web/conf
[mobiliser@mobfedora conf]$ gedit server.xml
[mobiliser@mobfedora conf]$ gedit server.xml
[mobiliser@mobfedora conf]$ cd /home/mobiliser/Temp/com.sybase365.mobiliser.loyalty.dist-1.0.0/web
[mobiliser@mobfedora web]$ cp -R webapps/ /opt/mobiliser/web
[mobiliser@mobfedora web]$
```

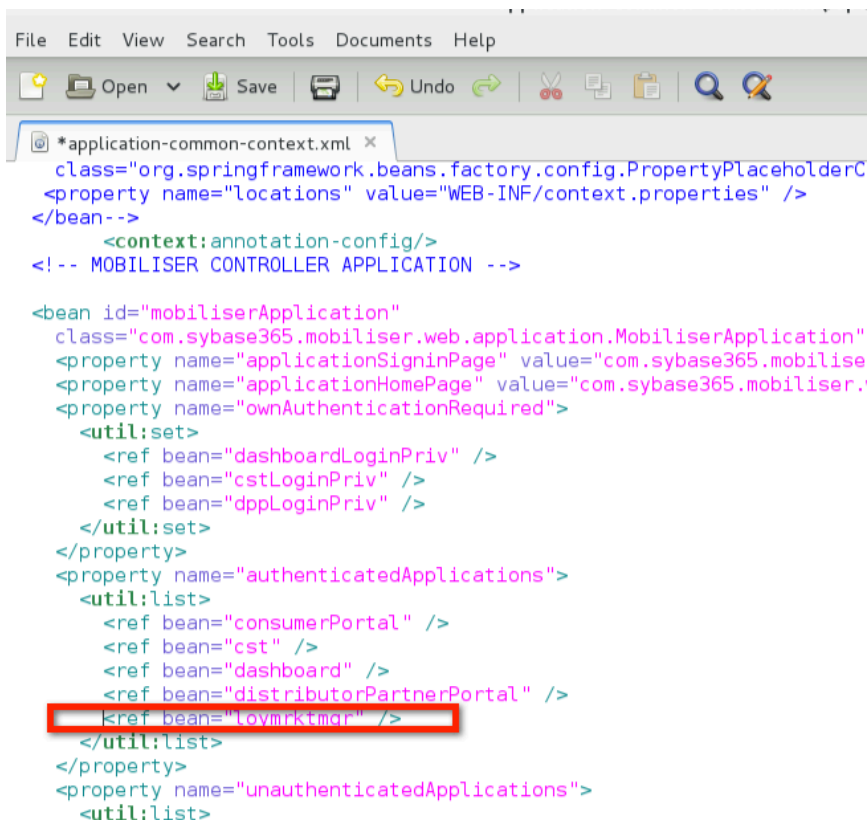
7. Run **cd /opt/mobiliser/web/webapps/portal/WEB-INF**

8. Run **gedit application-common-context.xml**

```
mobiliser@mobfedora:/opt/mobiliser/web/webapps/portal/WEB-INF
File Edit View Search Terminal Help
[mobiliser@mobfedora WEB-INF]$ gedit application-common-context.xml
```

9. Add the loyalty marketing manager among the authenticated applications. So add this line to the "authenticatedApplications" property:

<ref bean="loymrktmgr" />



```
File Edit View Search Tools Documents Help
*application-common-context.xml x
class="org.springframework.beans.factory.config.PropertyPlaceholderC
<property name="locations" value="WEB-INF/context.properties" />
</bean-->
<context:annotation-config/>
<!-- MOBILISER CONTROLLER APPLICATION -->

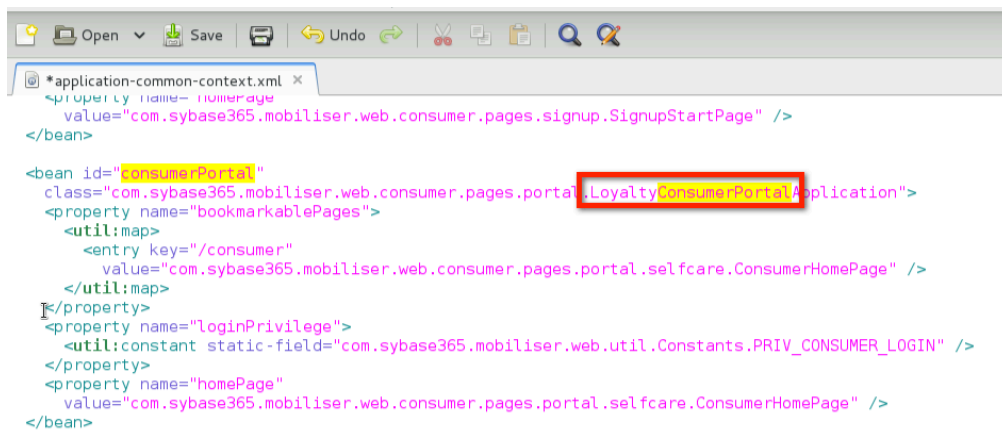
<bean id="mobiliserApplication"
class="com.sybase365.mobiliser.web.application.MobiliserApplication"
<property name="applicationSignInPage" value="com.sybase365.mobilise
<property name="applicationHomePage" value="com.sybase365.mobiliser.
<property name="ownAuthenticationRequired">
<util:set>
<ref bean="dashboardLoginPriv" />
<ref bean="cstLoginPriv" />
<ref bean="dppLoginPriv" />
</util:set>
</property>
<property name="authenticatedApplications">
<util:list>
<ref bean="consumerPortal" />
<ref bean="cst" />
<ref bean="dashboard" />
<ref bean="distributorPartnerPortal" />
<ref bean="loymrktmgr" />
</util:list>
</property>
<property name="unauthenticatedApplications">
<util:list>
```

10. Update the consumer Portal Application to reference the Loyalty additions by changing the line

```
<bean id="consumerPortal"
      class="com.sybase365.mobiliser.web.consumer.pages.portal.ConsumerPortalApplication">
```

to

```
<bean id="consumerPortal"
      class="com.sybase365.mobiliser.web.consumer.pages.portal.LoyaltyConsumerPortalApplication">
```

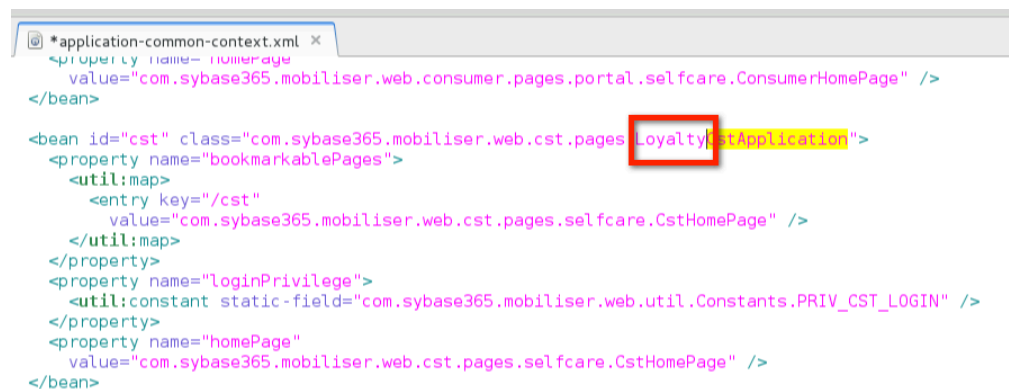


11. Update the Customer Support Portal Application to reference the Loyalty additions by changing the line

```
<bean id="cst"
      class="com.sybase365.mobiliser.web.cst.pages.CstApplication">
```

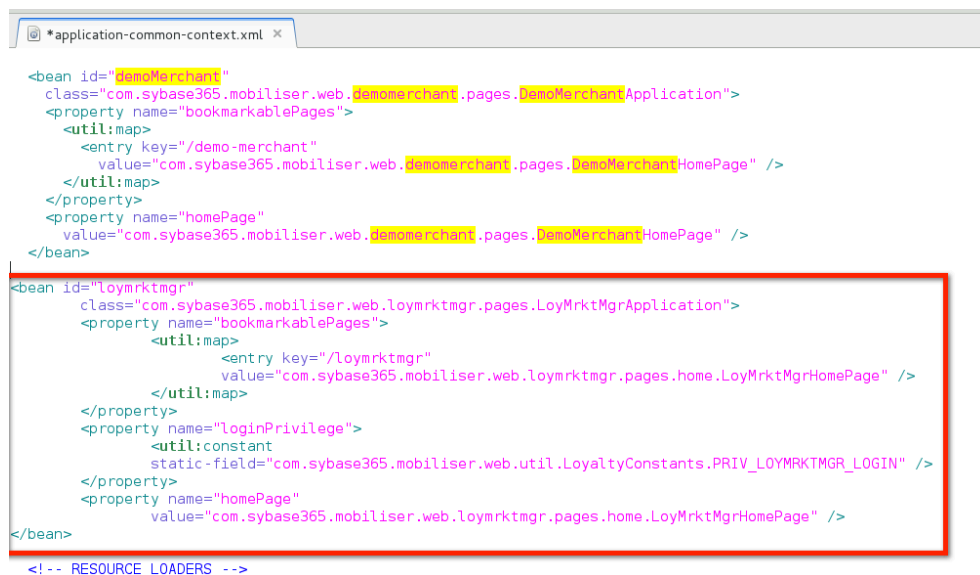
to

```
<bean id="cst"
      class="com.sybase365.mobiliser.web.cst.pages.LoyaltyCstApplication">
```



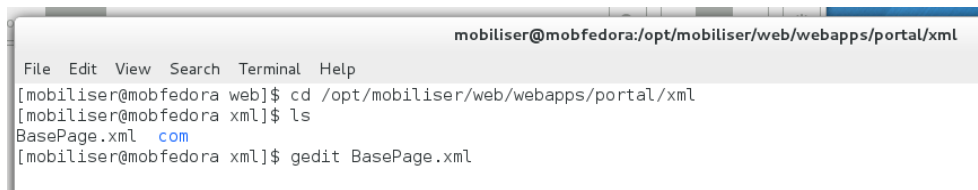
12. Add the Loyalty Marketing Manager Portal application by adding the following application reference. You can add it just after the "demoMerchant" bean.

```
<bean id="loymrktmgr"
  class="com.sybase365.mobiliser.web.loymrktmgr.pages.LoyMrktMgrApplication">
  <property name="bookmarkablePages">
    <util:map>
      <entry key="/loymrktmgr"
        value="com.sybase365.mobiliser.web.loymrktmgr.pages.home.LoyMrktMgrHomePage" />
    </util:map>
  </property>
  <property name="loginPrivilege">
    <util:constant
      static-field="com.sybase365.mobiliser.web.util.LoyaltyConstants.PRIV_LOYMRKTMGR_LOGIN" />
    </property>
  <property name="homePage"
    value="com.sybase365.mobiliser.web.loymrktmgr.pages.home.LoyMrktMgrHomePage" />
</bean>
```



13. Save the file and exit.

14. Update the Portal strings file, which enables the Loyalty specific menu items appear correctly in the existing Portal. Within the `/opt/mobiliser/web/webapps/portal/xml` folder, you will find the `BasePage.xml` file.



```

mobiliser@mobfedora:/opt/mobiliser/web/webapps/portal/xml
File Edit View Search Terminal Help
[mobiliser@mobfedora web]$ cd /opt/mobiliser/web/webapps/portal/xml
[mobiliser@mobfedora xml]$ ls
BasePage.xml  com
[mobiliser@mobfedora xml]$ gedit BasePage.xml
  
```

15. Add the following lines to this file. It's possible that these lines are already present in the `BasePage.xml` file: if this is the case, do not perform any change to this file.

```

<!-- ##### Loyalty Marketing Manager Top Menu ##### -->

<entry key="top.menu.loymrktmgr.loyalty">LOYALTY</entry>
<entry key="menu.loymrktmgr.loyalty.program">PROGRAMS</entry>
<entry key="menu.loymrktmgr.loyalty.store">STORE LOCATIONS</entry>
<entry key="menu.loymrktmgr.loyalty.cardtype">CARD TYPES</entry>
<entry key="menu.loymrktmgr.loyalty.transearningmodel">EARNING MODELS</entry>

<!-- ##### CST Top Menu ##### -->
<entry key="menu.cst.find.loycustomer">Find Loyalty Customer</entry>
<entry key="menu.cst.find.txnHistory">Point Transactions</entry>
<entry key="menu.cst.user.txnHistory">User Transactions</entry>
  
```

16. Run the command

```
cd /opt/mobiliser/money/conf/cfgbackup
```

to go to the `cfgbackup` folder.

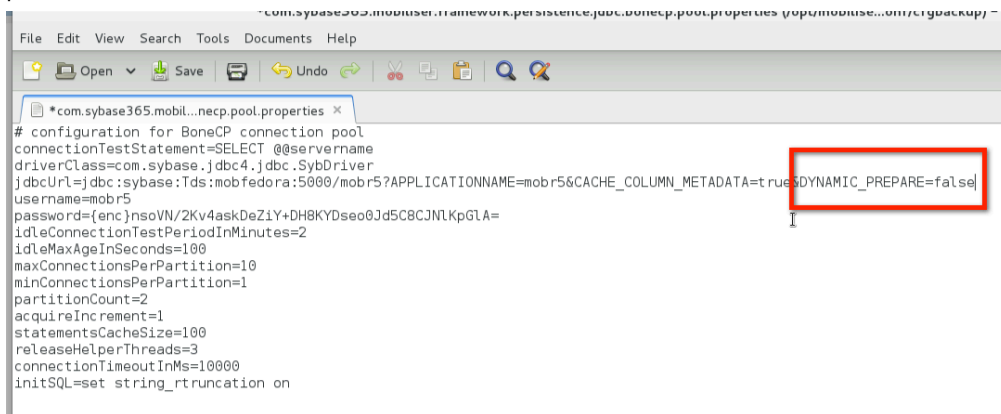
17. Run

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

to edit the

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

file and add the following string "&DYNAMIC_PREPARE=false" to the jdbcURL as in the following picture.



18. Save the file and exit.

19. For the SAP Customer Loyalty configuration, please refer to the chapter 5 of the installation guide. For your comfort, you can find in the appendix A, the list of all the configurable parameters.

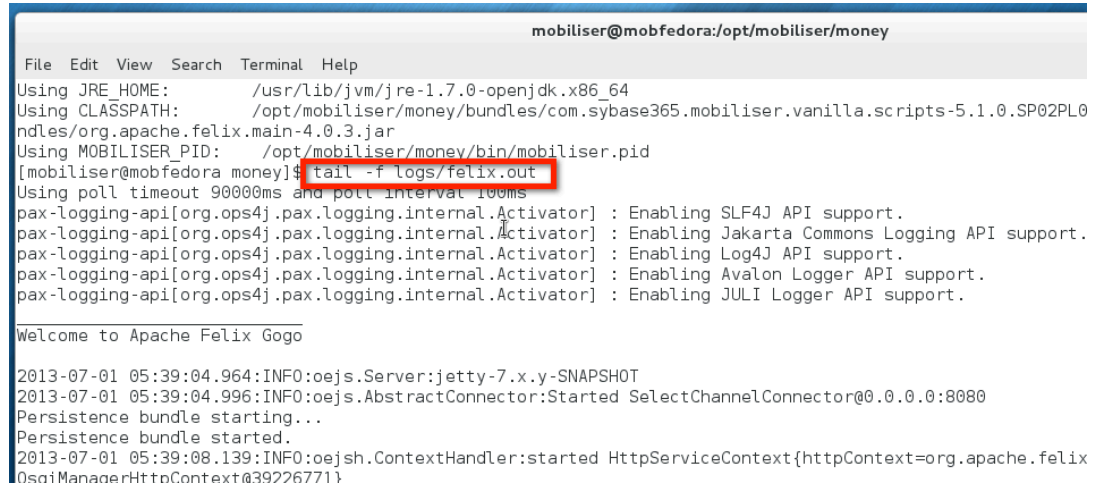
4.5 Running SAP Customer Loyalty and testing the service

1. Now that all the things are in the right place, we can start Mobiliser. The main Mobiliser package is "money" and we are going to start it first. Go inside the `money` folder and run the following command:

bin/startup.sh

2. 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



```

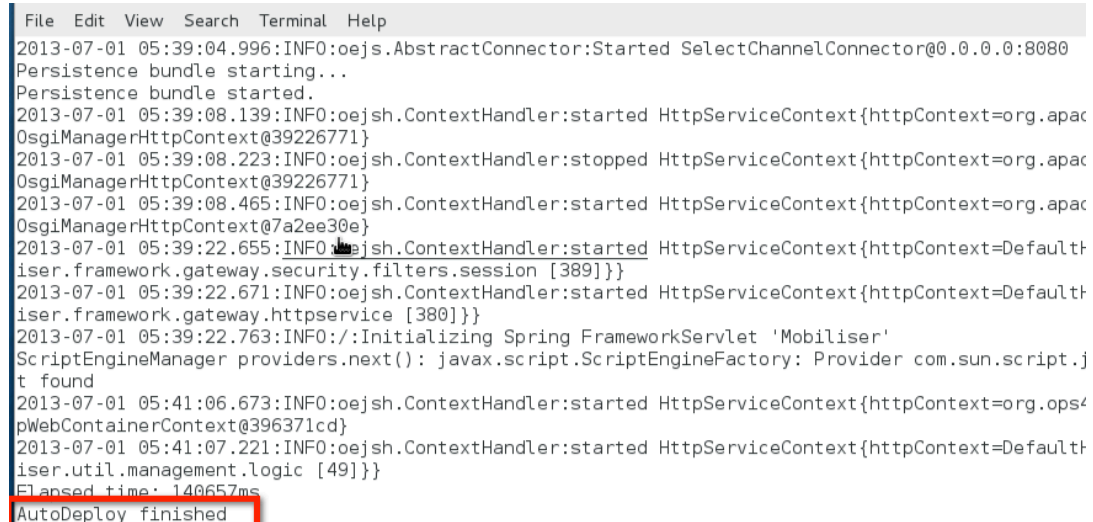
mobiliser@mobfedora:/opt/mobiliser/money
File Edit View Search Terminal Help
Using JRE_HOME: /usr/lib/jvm/jre-1.7.0-openjdk.x86_64
Using CLASSPATH: /opt/mobiliser/money/bundles/com.sybase365.mobiliser.vanilla.scripts-5.1.0.SP02PL0
ndles/org.apache.felix.main-4.0.3.jar
Using MOBILISER_PID: /opt/mobiliser/money/bin/mobiliser.pid
[mobiliser@mobfedora money]$ tail -f logs/felix.out
Using poll timeout 90000ms and poll interval 100ms
pax-logging-api[org.ops4j.pax.logging.internal.Activator] : Enabling SLF4J API support.
pax-logging-api[org.ops4j.pax.logging.internal.Activator] : Enabling Jakarta Commons Logging API support.
pax-logging-api[org.ops4j.pax.logging.internal.Activator] : Enabling Log4J API support.
pax-logging-api[org.ops4j.pax.logging.internal.Activator] : Enabling Avalon Logger API support.
pax-logging-api[org.ops4j.pax.logging.internal.Activator] : Enabling JULI Logger API support.

Welcome to Apache Felix Gogo

2013-07-01 05:39:04.964:INFO:oejs.Server:jetty-7.x.y-SNAPSHOT
2013-07-01 05:39:04.996:INFO:oejs.AbstractConnector:Started SelectChannelConnector@0.0.0.0:8080
Persistence bundle starting...
Persistence bundle started.
2013-07-01 05:39:08.139:INFO:oejsh.ContextHandler:started HttpServiceContext{httpContext=org.apache.felix
OsgiManagerHttpContext@39226771}

```

3. A lot of messages are written in this log. As soon as you see the message "AutoDeploy finished", you will understand that Mobiliser is now started and you can play with it.



```

File Edit View Search Terminal Help
2013-07-01 05:39:04.996:INFO:oejs.AbstractConnector:Started SelectChannelConnector@0.0.0.0:8080
Persistence bundle starting...
Persistence bundle started.
2013-07-01 05:39:08.139:INFO:oejsh.ContextHandler:started HttpServiceContext{httpContext=org.apac
OsgiManagerHttpContext@39226771}
2013-07-01 05:39:08.223:INFO:oejsh.ContextHandler:stopped HttpServiceContext{httpContext=org.apac
OsgiManagerHttpContext@39226771}
2013-07-01 05:39:08.465:INFO:oejsh.ContextHandler:started HttpServiceContext{httpContext=org.apac
OsgiManagerHttpContext@7a2ee30e}
2013-07-01 05:39:22.655:INFO:oejsh.ContextHandler:started HttpServiceContext{httpContext=DefaultH
iser.framework.gateway.security.filters.session [389]}
2013-07-01 05:39:22.671:INFO:oejsh.ContextHandler:started HttpServiceContext{httpContext=DefaultH
iser.framework.gateway.httpservice [380]}
2013-07-01 05:39:22.763:INFO:/:Initializing Spring FrameworkServlet 'Mobiliser'
ScriptEngineManager providers.next(): javax.script.ScriptEngineFactory: Provider com.sun.script.j
t found
2013-07-01 05:41:06.673:INFO:oejsh.ContextHandler:started HttpServiceContext{httpContext=org.ops4
pWebContainerContext@396371cd}
2013-07-01 05:41:07.221:INFO:oejsh.ContextHandler:started HttpServiceContext{httpContext=DefaultH
iser.util.management.logic [49]}
Elapsed time: 140657ms
AutoDeploy finished

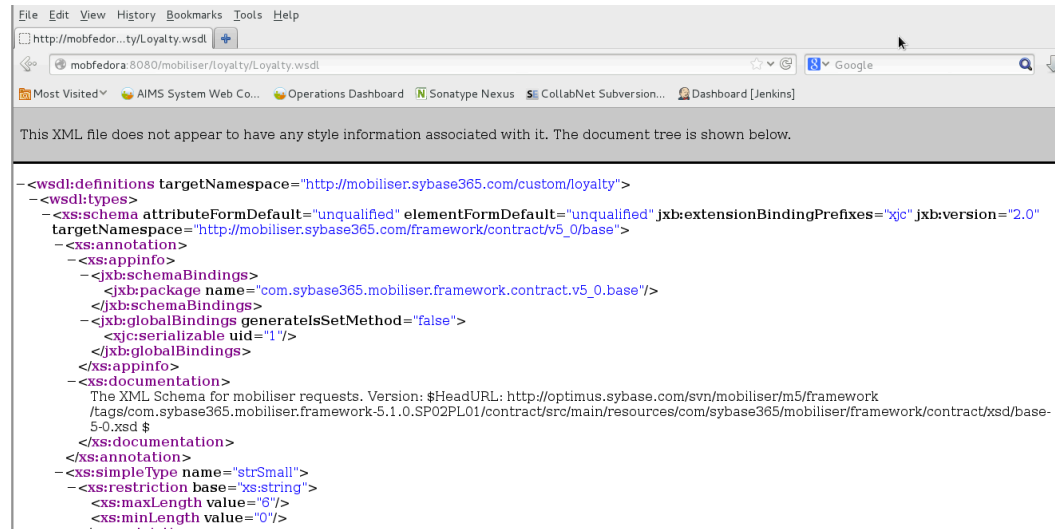
```

4. A valid check to do in order to see if SAP Customer Loyalty is fully working is to open the internet browser and run the following URL:

http://<server_name>:8080/mobiliser/loyalty/Loyalty.wsd

(in this example it is <http://mobfedora:8080/mobiliser/loyalty/Loyalty.wsd>)

If SAP Customer Loyalty is properly configured, you should get the Loyalty's schema:



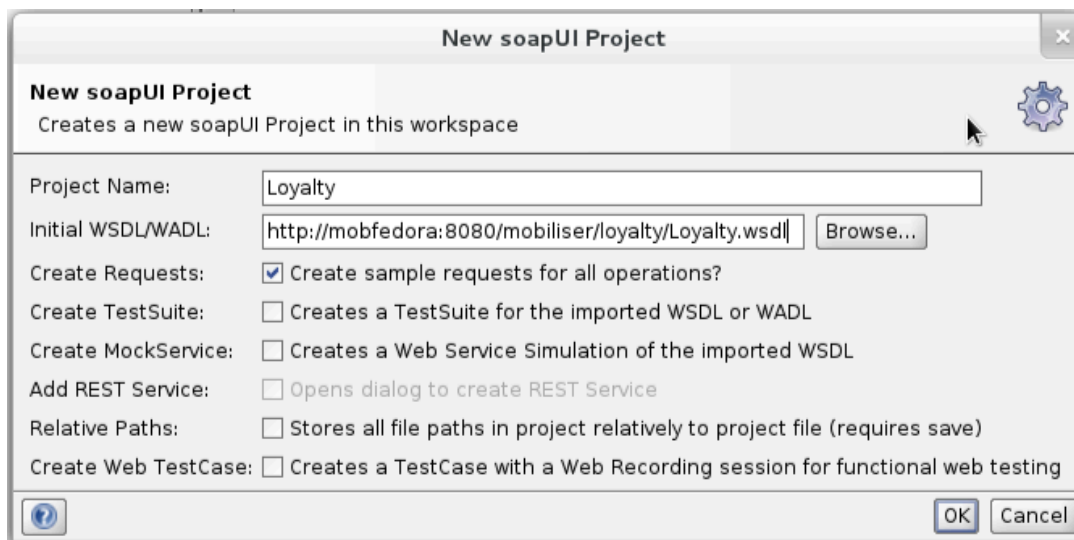
```

- <wsdl:definitions targetNamespace="http://mobiliser.sybase365.com/custom/loyalty">
- <wsdl:types>
- <xs:schema attributeFormDefault="unqualified" elementFormDefault="unqualified" jxb:extensionBindingPrefixes="xjc" jxb:version="2.0"
  targetNamespace="http://mobiliser.sybase365.com/framework/contract/v5_0/base">
- <xs:annotation>
- <xs:appinfo>
- <jxb:schemaBindings>
- <jxb:package name="com.sybase365.mobiliser.framework.contract.v5_0.base"/>
- </jxb:schemaBindings>
- <jxb:globalBindings generateIsSetMethod="false">
- <xjc:serializable uid="1"/>
- </jxb:globalBindings>
- </xs:appinfo>
- <xs: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 $
- </xs:documentation>
- <xs:annotation>
- <xs:simpleType name="strSmall">
- <xs:restriction base="xs:string">
- <xs:maxLength value="6"/>
- <xs:minLength value="0"/>
  
```

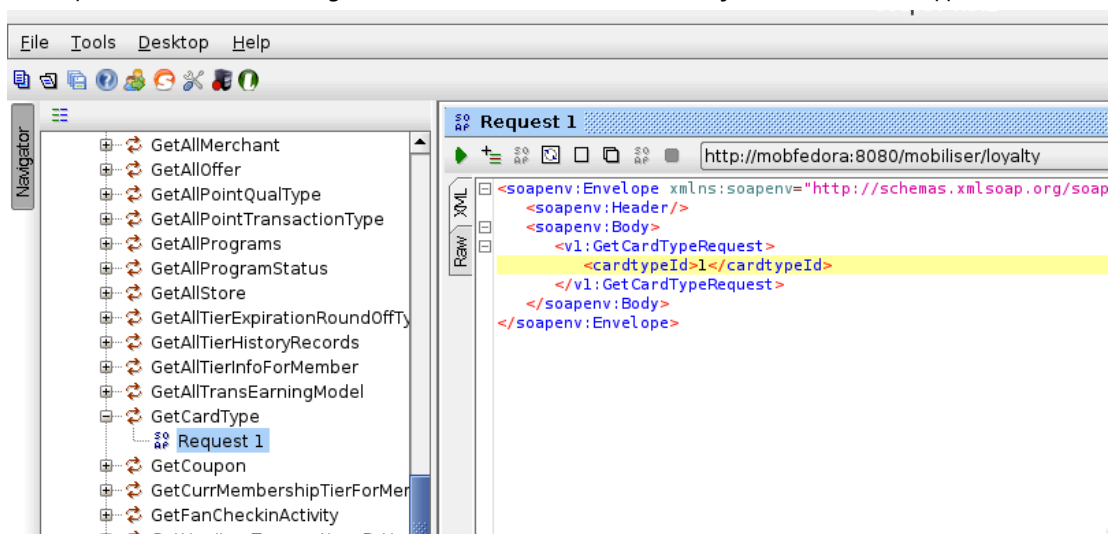
5. There is also another check that you can do by using the SoapUI tool. Open the SoapUI interface and create a new project by providing a project name and the link that you saw at the previous step.

http://<server_name>:8080/mobiliser/loyalty/Loyalty.wsdl

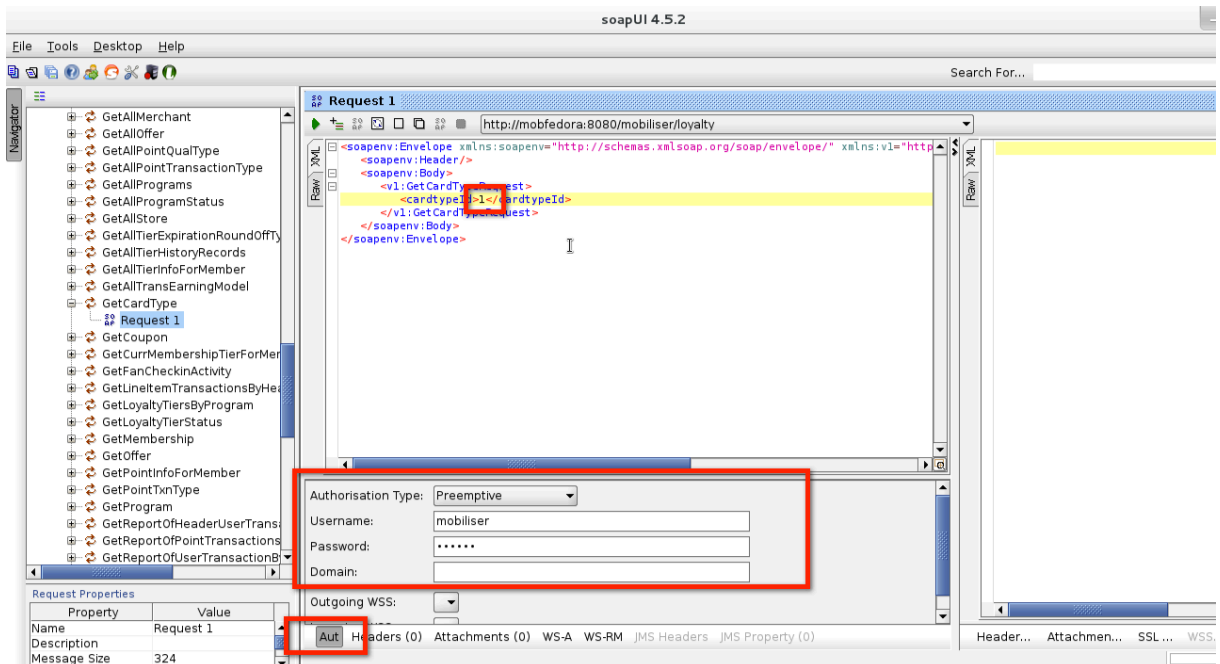
(in this example it is <http://mobfedora:8080/mobiliser/loyalty/Loyalty.wsdl>)



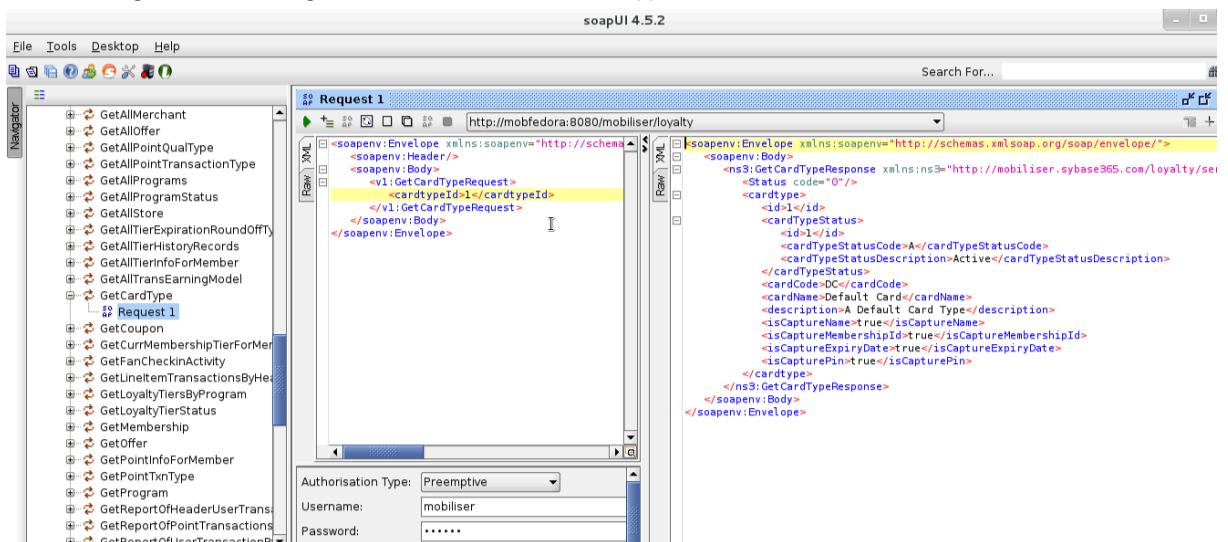
6. Go to one of the functions (i.e GetCardType), double click on the "Request 1" item and fill the request as in the picture below, removing all the unneeded statements. You just need the card type id.



- Click on the **Auth** word below the request and fill also the full authentication parameters.



- Once you have filled the request with the required information, you can click on the “play” button on the toolbar to send the request to the server.
- You should get the following answer related to the Card Type Id 1.



5. Appendix

Appendix A – Preference values to add to the Mobiliser portal

Table 1

Name	Valid values	Default value
BrandMode	single, multi	multi
SingleBrandProgramCode	Any valid loyalty program code	none (UC ?)
ShoppingListEnabled	true, false	true
WalletPasscodeLength	0, 3, 4, 5, 6	4
WalletPassCodeTimeout	# of seconds a passcode is valid. 0 means no timeout	300
TokenValidationEnabled	true, false	true
TokenValidationType	sms, email, both, none	email
GoogleAPIKey	A Google API key	
GoogleClientID	A Google API key	
GoogleClientSecret		
LocatorDistanceUOM		miles
FacebookAppId	A Facebook Application ID	
CardCaptureResolution	Two numeric values separated by an x, e.g. 320x212	320x212
StoresToReturn	a number, representing a reasonable number of nearby stores	5
<i>OfferNewDays</i>	a number, representing a reasonable number of days after an offer issues a coupon, is considered to be new	1
<i>OfferExpireDays</i>	a number, representing a reasonable number of days before the offer 'valid until' date	2
<i>GeocodeFiltering</i>	a valid filtering value, for example, <i>country:us</i>	
<i>EnableFanExperience</i>	true, false	false
OfferRefreshPeriod	A numeric value representing the number of seconds after which the offer list should be refreshed.	900



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