Appendix D10

REGNET - Demonstration (Trial Service)

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

Table of Contents

A: Installation Manuals 8
1 REGNET Cultural Service Centre installation Guide 8
1.1 Distribution contents 8
1.2 Configuration 8
1.3 Software requirements 8
1.4 Installation procedure 9
1.5 Launch CSC 11
2 PORTAL 11
2.1 Basic Portal 11
2.2 Installing Axis in Tomcat 12
2.3 Installing Travel Plane demo prototype web service 12
3 INSTALLATION GUIDES FOR E-SHOP, PCM, EB and AUCTION IN LINUX MACHINE 13
3.1 Installation of Mysql 14
3.2 STARTING MYSQL 14
3.3 Installation of apache with php support and ssl 15
3.4 Installation of Jakarta and Soap – Ontology Client 17
3.5 Starting and stopping Jakarta server 18
3.6 Controlling of the server 18
3.7 Necessary changes 19
4 Procurement 19
4.1 Configuration 19
4.2 Software requirements 20
4.3 Installation procedure 20
5 Delivery 20
5.1 Configuration 20
5.2 Requirements 21
5.3 Installation procedure 21
6 Topic Maps Generator 21
6.1 Prerequisites 21
6.2 Installation process 21
7 Knowledge Base SOAP 22
7.1 Preface 22
7.2 Prerequisites 22
7.3 Installation process 22
7.4 Testing the installation 23
8 Installation of the Borrow/Lend ebXML based application 23

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

9 Index+ gateway 24
9.1 Hardware & software requirements 24
9.2 Instructions for installations of entire environment 25
9.3 Instructions for configuring and running webservice 26
10 Web publisher 26
10.1 Requirements 27
10.2 Installation of Java Plugin and JMF for SMIL Player Schmunzel 27
10.3 Instructions for the installation of the EPProtopye 27
B: User Manuals 28
11 PORTAL 28
11.1 Layout 28
11.2 Language Selection 29
11.3 Portlets 29
11.4 Create New Account 30
11.5 Edit account 31
11.6 Customize WEB 31
11.7 Customize WAP 34
12 Product Catalogue Management 34
12.1 GENERAL 34
12.2 INSERT ITEMS 35
12.3 MANAGE ITEMS 37
12.4 ADD ITEMS IN THE E-SHOP 41
12.5 WAREHOUSE INSERTION 43
12.6 INSERT SERVICES 44
12.7 MANAGE SERVICES 46
12.8 ADMINISTRATION PART OF PCM 49
12.9 EXIT 55
13 E-Shop 55
13.1 GENERAL 55
13.2 GOODS SEARCH 56
13.3 BASKET CONTROL 58
13.4 WISH LIST CONTROL 60
13.5 DELIVERY ADDRESS 61
13.6 ORDERS HISTORY 62
13.7 E-PAYMENT 64
13.8 TERMS AND CONDITIONS 67
13.9 EXIT 68
14 E-Business 68
14.1 GENERAL 68

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

14.2 ADVANCED SEARCH OF GOODS 69
14.3 SERVICES SEARCH 71
14.4 DRAW-UP A CONTRACT 71
14.5 EXIT 73
15 Auction 73
15.1 GENERAL 73
15.2 USERS REGISTRATION 74
15.3 SEEING THE LOTS 74
15.4 PRODUCTS SEARCH 76
15.5 USER'S ITEMS AND BIDS 77
15.6 ADD ITEMS IN THE AUCTION SYSTEM 80
15.7 AUCTION PARTICIPATION 81
15.8 CURRENCY CONVERTER 83
15.9 USER AGREEMENT & PRIVACY POLICY 84
15.10 EXIT 85
15.11 AUCTION SYSTEM ADMINISTRATION 85
15.12 MANAGE ITEMS 87
15.13 DELETE ITEMS 88
15.14 MANAGE USERS 89
15.15 DELETE USERS 90
15.16 ADD NEW CATEGORY 91
15.17 CURRENCY ADMIN 92
16 Procurement 94
16.1 Introduction 94
16.2 Supplier part 94
16.2.1 Managing showcase 94
16.2.2 Managing product 95
16.2.3 searching product for updating 96
16.3 Buyer part 97
16.3.1 Searching and ordering products 97
16.3.2 Consulting and validating orders 97
17 Delivery 98
18 Data-Entry and Search 98
18.1 Scope 98
18.2 Introduction 99
18.2.1 What is XML? 99
18.2.2 An example XML document 99
18.2.3 XML and Browsers 100
18.2.4 System Architecture 100
18.2.5 Sample Database used in this manual 100
18.2.6 View internal XML files 101
18.2.7 Accessing the Application 101
18.2.8 General Navigation 101
18.2.9 Security levels – User Types 101

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

18.3 Search & Retrieval ... 101
18.3.1 Search via the Full Text field ... 101
18.3.2 Select a Record Type ... 102
18.3.3 Search via Lookup lists ... 102
18.3.4 Refine Query ... 103
18.3.5 Sort criteria ... 104

18.4 Add a record ... 104
18.4.1 Metadata ... 104
18.4.2 Related Digital Files ... 104
18.4.3 Modify a Record ... 105
18.4.4 Remove a document ... 105

18.5 Features for management of data ... 105
18.5.1 Import of data in batch mode ... 105
18.5.2 Export of data ... 106
18.5.3 Batch modify ... 107

18.6 Important Database features that can be adapted in accordance to user needs ... 108
18.6.1 Definition of data field attributes ... 108
18.6.2 Display of records ... 109
18.6.3 Controlled vocabulary, Thesauri ... 109
18.6.4 Definition of Search result view ... 109
18.6.5 Templates ... 109
18.6.6 Synchronisation ... 109

18.7 Guidelines for data recording ... 109
18.7.1 General Remarks: ... 109
18.7.2 Character Sets ... 110
18.7.3 Dates ... 110
18.7.4 Languages ... 111
18.7.5 Subject Terms ... 111
18.7.6 Names ... 111
18.7.7 Object Type, Work Type ... 111
18.7.8 Ownership ... 112

18.8 Brief Guide to Controlled Vocabularies & Cataloguing Rules ... 112
18.8.1 Vocabularies ... 112

18.9 References ... 113

19 Cooperative thesauri ... 113

19.1 Navigation ... 114

19.2 Adding/updating/deleting entries ... 115

20 Topic Maps Generator "HOW TO" ... 115

20.1 General rules ... 116
20.1.1 What is a topic? ... 116
20.1.2 What is an association? ... 116
20.1.3 Members and Roles ... 117
20.1.4 Scopes ... 117

20.2 A real example ... 117
20.2.1 The procedure step by step ... 118

21 How to generate Topic Maps with Mapalizer / Linkbrowser / Webexplorer ... 122

21.1 Start ... 122

21.2 Overview – Steps to create a Topic Map and a Graph ... 123

21.3 Detailed description ... 123
21.3.1 Create Project ... 123
21.3.2 Create Topic Map Files ... 124

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

21.3.3 Use “Create Files” ... 124
21.3.4 Create XTM and create Graph ... 125
21.4 Topic Map Workspace ... 126
21.5 Mapalizer README ... 127
21.6 Export Occurrences from the Database ... 132
21.7 General Remarks ... 134
22 REGNET Broker ... 134
22.1 Introduction ... 134
22.1.1 Purpose of the document ... 134
22.1.2 Document overview ... 134
22.2 General presentation ... 135
22.3 Functionalities overview ... 135
22.3.1 Connection ... 135
22.3.2 List datasources ... 135
22.3.3 Catalogue selection ... 135
22.3.4 List items ... 136
22.3.5 View item ... 136
22.3.6 Transfer item ... 136
22.3.7 Transfer items ... 136
22.4 User guide ... 136
22.4.1 Connection ... 136
22.4.2 List and select datasources ... 137
22.4.3 Catalogue selection ... 138
22.4.4 List items ... 139
22.4.5 View item ... 142
22.4.6 Transfer item ... 143
22.4.7 Transfer several items ... 146
23 REGNET Connector ... 146
23.1 Purpose of the document ... 146
23.2 Document overview ... 147
23.3 Functionalities overview : borrower part ... 147
23.3.1 Request Catalogue ... 147
23.3.2 Request Loan ... 147
23.3.3 Sign Loan Agreement ... 147
23.3.4 Schedule Receipt ... 147
23.3.5 Notify Shipment’s Arrival ... 147
23.3.6 Return Item ... 147
23.4 Functionalities overview : lender part ... 147
23.4.1 Send Catalogue ... 147
23.4.2 Acknowledge Loan ... 147
23.4.3 Sign Loan Agreement ... 148
23.4.4 Accept Receipt Date ... 148
23.4.5 Notify Shipment’s Arrival ... 148
23.4.6 Return Item ... 148
23.5 User guide ... 148
23.5.1 Request catalogue (borrower) ... 148
23.5.2 Send catalogue (lender) ... 149
23.5.3 Request Loan (borrower) ... 150
23.5.4 Acknowledge Loan (lender) ... 151
23.5.5 Loan Agreement (borrower) ... 152
23.5.6 Loan Agreement (lender) ... 152

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

23.5.7 Schedule Receipt (Borrower) 153
23.5.8 Schedule Receipt (Lender) 154
23.5.9 Notify Shipment arrival (Borrower and lender) 154
23.5.10 Return Item(Borrower and Lender) 155

24 Index+ gateway 155

25 Web publisher 166

25.1 REGNET publishing process 167
25.1.1 Search objects 169
25.1.2 Edit ResultSet 169
25.1.3 Handle Multilinguality 169
25.1.4 Handle Layout 169
25.1.5 Add *Location* Storyboard 169
25.1.6 Create Output 170

25.2 Publishing user interface 170
25.2.1 Input 170
25.2.2 Handle Layout 171
25.2.3 Layouts 172
25.2.4 Create Output 175
25.2.5 Preview 176

Annexe C: Internationalisation forms 181

26 E-Shop, PCM, B2B, Auction 181

26.1 E-SHOP 181

26.2 PCM 182

26.3 E-BUSINESS 184

26.4 AUCTION 185

26.5 TERMS AND CONDITIONS 187
26.5.1 AUCTION SYSTEM 188
26.5.2 E-SHOP 192

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

A: Installation Manuals

This part contains installation instruction for each module developed during the REGNET project. The first paragraph called “Regnet Cultural Service Centre installation Guide” is dedicated to the overall installation of the software material from the REGNET CSC CD-ROM. Next paragraphs give details for each module installation in a standalone point of view.

1 REGNET Cultural Service Centre installation Guide

1.1 Distribution contents

Directories are:

- RegnetSite : contains components of Regnet Cultural Service Centre :
  - Delivery : contains files of the Delivery component
  - eletric : contains all available libraries for RPC via SOAP
  - portal : contains shop and business applications :
    - auction
    - eb
    - e-shop
    - pcm
  - RegnetBroker : contains files of the broker component (data exchange).
  - tomcat3.3.1 : contains file for regnet portal jetspeed. This directory include the applications below :
    - jetspeed
    - epprototype
    - procurement
    - broker
  - tomcat4.0.1 : include Ontology SOAP application which provide support for UserProfiles an TopicMap databases
  - xml-xindice-1.0 : contains files for the xindice xml database. (this database contains the UserProfiles and TopicMap items)
  - shopDatabases : contains the content of shop and business databases.
- Required softwares : contains sofware required by components of Regnet CSC.

1.2 Configuration

The regnet CSC shall run under a linux platform

1.3 Software requirements

- Java SDK 1.4.0_03 or above (you can find it in the <Required software> directory of this distribution):
  - 1. Install the rpm package of the JSDK.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

- 2. Set the JAVA_HOME environment variable to the location of your jdk installation. For instance if your jdk is installed in /usr/local/java/jsdk1.4.0_03 you would set JAVA_HOME=/usr/local/java/jsdk1.4.0_03

- Mysql:
  - Make sure mysql is installed (3.23.47 version or later). You can find one in the directory <Required Software> of the Regnet CSC distribution.
- Apache & PHP:
  - Usually Apache server and PHP are delivered with linux distribution. If your Linux distribution doesn't include these components, you can find them on the www.apache.org web site.

1.4 Installation procedure

- 1. Copy the <RegnetSite> directory to the installation path you choose.
- 2. Set the environment variables below :

  - REGNET_SITE

  - XINDICE_HOME

  Here is a configuration example :

  ######################

  ## REGNET

  ######################

  #JAVA_HOME=/usr/java/jdk1.3.1_02

  JAVA_HOME=/usr/java/j2sdk1.4.0_03

  export JAVA_HOME

  REGNET_SITE=/home/regnet/RegnetSite;export REGNET_SITE

  XINDICE_HOME=/home/regnet/RegnetSite/xml-xindice-1.0;export XINDICE_HOME

  PATH=.:$JAVA_HOME/bin:$XINDICE_HOME/bin:$PATH;export PATH

  Don't forget to add the <bin> directories of your xindice an jsdk installation to the PATH.

- 3. In the <yourInstallationPath>/RegnetSite/tomcat3.3.1/webapps/jetspeed/WEB-INF/templates/vm/portlets/html/ check the files:
  - - regnet_events.vm
  - - regnet_collections.vm
  - - regnet_shop.vm

  In these files : replace the url http://garonne.toulouse.valtech.fr:<aPort> by the adress of your host machine.

  NB : don't change the port of these addresses. It correspond to the tomcat ports.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

- 4. In the <yourInstallationPath>/RegnetSite/tomcat3.3.1/webapps/jetspeed/WEB-INF/conf/ check the file : ontology.properties

  In this file, replace the 10.67.0.10 IP address by the address of your host machine.

  NB : If you work beside a proxy don't forget to set the proxy options !

- 5. In the <yourInstallationPath>/RegnetSite/tomcat3.3.1/webapps/procurement/conf/ check the file procurement.properties

  In the same way as above, change the addresses to your host machine.

- 6. Broker configuration :

  in the <yourInstallationPath>/RegnetSite/RegnetBroker/classes/ check the files :

  - o - db.properties
  - o - server.properties
  - o - regnetBroker.properties
  - o - logServerProperties
  - o - logBrokerProperties

  for each property file set the addresses properties to your installation path.

Copy and paste these 5 files to the path <yourInstallationPath>/RegnetSite/tomcat3.3.1/webapps/broker/WEB-INF/classes/

in the <yourInstallationPath>/RegnetSite/tomcat3.3.1/webapps/broker/WEB-INF/classes/website/dataentry/ and <yourInstallationPath>/RegnetSite/tomcat3.3.1/webapps/broker/WEB-INF/classes/website/pcm/ check the action.properties files set the actions url to the correct value i.e your host address.

- 7. In the <yourInstallationPath>/RegnetSite/tomcat4.0.1/webapps/soap/WEB-INF/classes/ check the installation document and follow the given instructions

  Note that you can use the make file provided.

- 8. In the <yourInstallationPath>/RegnetSite/tomcat4.0.1/webapps/OntologyClient/WEB-INF/classes/ check the file Dispatcher.java and change addresses in the java source file to your host address.

  Note that you can use the make file provided for compilation.

- 9. In the <yourInstallationPath>/RegnetSite/tomcat4.0.1/bin/ check the files :

  - o - webpath.txt
  - o - xindiceip.txt

  Change the IP adresses to those of your host.

- 10. Check the commonhttpd.conf file of your apache server.

set the document root to your Regnet CSS installation (see example below) :

 # DocumentRoot: The directory out of which you will serve your

 # documents. By default, all requests are taken from this directory, but

 # symbolic links and aliases may be used to point to other locations.

#

 # Apache root is directed to general USER

DocumentRoot /home/regnet/RegnetSite

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

- 11. In the <yourInstallationPath>/RegnetSite/shopDatabases/ copy all the dirs to your mysql database installation.
- 12. Configure the Borrow/Lend ebXML based application according to instructions provided in ebXMLInstall.txt

1.5 Launch CSC

- 1. From a shell window execute "mysqladmin -u root shutdown"
- 2. Execute "mysqld --user=root -Sg&"
- 3. Execute in a new shell window :

  cd <yourInstallationPath>/RegnetSite/delivery/

  then type : ./startServer.sh
- 4. Execute in a new shell window :

  cd <yourInstallationPath>/RegnetSite/RegnetBroker/

  then type : ./server.sh
- 5. Execute in a new shell window :

  cd <yourInstallationPath>/RegnetSite/tomcat3.3.1/bin/

  then launch tomcat.
- 6. Execute in a new shell window :

  cd <yourInstallationPath>/RegnetSite/tomcat4.0.1/bin/

  then launch tomcat.
- 7. Execute in a new shell window :

  cd <yourInstallationPath>/RegnetSite/xml-xindice-1.0/

  then type ./start

YOUR CSC IS NOW AVALAIBLE TO http://<yourHostMachine>:8080/jetspeed/

2 PORTAL

Assumptions: hereafter Tomcat directory will be referred as TOMCAT-HOME, Axis directory as AXIS-HOME, and Jetspeed directory as JETSPEED-HOME.

2.1 Basic Portal

1. Unzip delivery archive in a folder into the final server hardware
2. Unzip Jetspeed archive in TOMCAT-HOME \webapps
3. Copy jetspeed.war in TOMCAT-HOME \webapps
4. Customize Tomcat_Environment.bat based on the previous 3 steps
5. Launch Tomcat_Environment.bat and then type "startup"
6. Open a browser on http://<servername>:8080/jetspeed/
7. To close Tomcat, in the launching window type "shutdown"

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

2.2 Installing Axis in Tomcat

Copy the Axis folder from *AXIS_HOME\webapps* into *TOMCAT_HOME\webapps*.

Check that the following libraries are available. In the following list is reported also the source URL to download them. They must be copied into the TOMCAT_HOME\webapps\axis\WEB-INF\lib directory.

Product	Version	URL
Ant	1.5	http://jakarta.apache.org/builds/jakarta-ant/release/v1.5/bin/
HttpClient	(latest cvs)	http://jakarta.apache.org/commons/httpclient/
HttpUnit	1.4.5	http://sourceforge.net/project/showfiles.php?group_id=6550
JAF	1.0.2	http://java.sun.com/products/javabeans/glasgow/jaf.html
JavaMail	1.3	http://java.sun.com/products/javamail/
JCE	115	http://www.bouncycastle.org/latest_releases.html
JDK	1.3.1_04	http://java.sun.com/j2se/1.3/
Jimi	-	http://java.sun.com/products/jimi/
JMS	1.0.2	http://java.sun.com/products/jms/docs.html
JSSE	1.0.3	http://java.sun.com/products/jsse/
JUnit	3.8.1	http://www.junit.org/index.htm
Log4j	1.2.6	http://jakarta.apache.org/log4j/docs/download.html
Tomcat	4.1.10	http://jakarta.apache.org/builds/jakarta-tomcat-4.0/release/
Xalan	2.4.0	http://xml.apache.org/dist/xalan-j/
Xerces	2.1.0	http://xml.apache.org/dist/xerces-j/
XML-security	1.0.4	http://xml.apache.org/security/dist/

Table 1 – Axis libraries

Set up your CLASSPATH so that it contains all the above jar files. This means editing the classpath variable in the Environment Variables section of the System control panel in 2000/XP, or in a batch file to run in the shell before launching the web served.

In order to validate the installation, make sure that the server is running the web application. Navigate to the start page of the *webapp*, usually http://127.0.0.1:8080/axis/, though of course the port may differ. You should now see an Apache-Axis start page. If you do not, then the *webapp* is not actually installed, or the web server is not running.

Follow the link *Validate the local installation's configuration*. This will bring you to *happyaxis.jsp* a test page that verifies that needed and optional libraries are present.

2.3 Installing Travel Plane demo prototype web service

Copy the samples.Test.Travel package

In the *TOMCAT_HOME\webapps\axis\WEB-INF* directory, look for (or create) a "classes" directory. In this directory, copy the samples.Test.Travel package.

Start Tomcat server

Deploy the service

Standard Deployment with WSDD (Web Service Deployment Descriptor) files: WSDD files are written using XML and allows you to have maximum configuration regarding your web service and enables

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

you to have custom type mappings, control different providers for your web service and also lets you have handlers. Axis takes a Web Service Deployment Descriptor, (a WSDD file), that describes in XML what the service is, what methods it exports and other aspects of the SOAP endpoint.

To deploy the service, run:

java org.apache.axis.client.AdminClient deployResponse.wsdd

The *org.apache.axis.client.AdminClient* program updates the *TOMCAT_HOME\webapps\axis\WEB-INF\server-config.wsdd* file.

The *server-config.wsdd* is read each time the server is started.

Stop Tomcat server.

Start again Tomcat server.

In this way the new service is visible and can be invoked.

Register the portlet with the Jetspeed portlet registry

Copy the registry fragment files *TravelPlaneHTML.xreg* and *TravelPlaneWML.xreg* under

JETSPEED-HOME \webapps\jetspeed\WEB-INF\conf

Any file in this directory that has the .xreg extension will be included in the Jetspeed Registry.

Put the portlets in the appropriate location

Copy *TravelPlaneHTMLForm.jsp* under *JETSPEED-HOME\web-inf\templates\jsp\portlets\html*;

Copy *TravelPlaneWMLForm.jsp* under *JETSPEED-HOME\web-inf\templates\jsp\portlets\wml*

Copy *TravelPlaneHTMLProcess.jsp* and *TravelPlaneHTMLForm.jsp* under *JETSPEED-HOME\web-inf\templates\jsp\layouts\html*

Copy *TravelPlaneWMLProcess.jsp* and *TravelPlaneWMLForm.jsp* under *JETSPEED-HOME\web-inf\templates\jsp\layouts\wml*

Put the samples.Test.Travel package in the appropriate location

Copy the *samples.Test.Travel* package under *TOMCAT-HOME\common\classes*. In this way the package is visible to Jetspeed.

3 INSTALLATION GUIDES FOR E-SHOP, PCM, EB and AUCTION IN LINUX MACHINE

The essential software that can be used in order to install successfully the specific components is the following

Apache_1.3.20.tar.gz

Php-4.0.6.tar.gz

Mysql_3.23.49.tar.gz

Mod_ssl-2.8.4-1.3.20.tar.gz

Openssl-0.9.6.b.tar.gz

J2sdkee-1_3_1-linux.tar.gz

Jakarta-tomcat-4.0.1.tar.gz

J2sdk-1_3_1_04-linux-i586-rpm.bin

Jre-1.3.3_04i386.rpm

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

Firstly we have to install an apache server with mysql php and ssl support

3.1 Installation of Mysql

In order to install mysql in the specific machine we have to use the Mysql_3.23.49.tar.gz software by following the next steps :

1) extract Mysql_3.23.49.tar.gz to directory /usr/local.

2) configuration :

./configure –prefix=/usr/local/mysql

./make

./make install

./scripts/mysql_install_db

After that it is necessary to add a new user except the root user in order to work without problems (e.g mysqladm).

So in the linux path we have to give the following orders

Su –

Adduser mysqladm

Passwd mysqladm

In order to change the ownership we will give the orders

./chown –R mysqladm /usr/local/mysql

3.2 STARTING MYSQL

We can start mysql by giving the following

/usr/local/mysql/bin/safe_mysqld --user=mysqladm &

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

3.3 Installation of apache with php support and ssl

We must extract the necessary software (Apache_1.3.20.tar.gz, Php-4.0.6.tar.gz, Mod_ssl-2.8.4-1.3.20.tar.gz, Openssl-0.9.6.b.tar.gz) in the directory /usr/local.

Then we must make the specific configuration

cd /usr/local/apache_1.3.20

./configure

cd /usr/local/php-4.0.6

Configure php before making and installing.

```
./configure \
--with-apache=/usr/local/apache_1.3.20 \
--with-mysql \
--with-track-vars \
--with-magic-quotes \
--without-gd \
--enable-versioning \
--disable-debug \
--with-mod_charset \
--disable-pear
```

Making and installing PHP

```
make
make install
```

Entrance to the openssl-0.9.6b source directory.

```
cd /usr/local/openssl-0.9.6b
```

Configure Openssl before making and installing.

```
$./config
```


Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

Making and installing Openssl.

```
$make
$make install
```

Entrance to the mod_ssl-2.8.4-1.3.20 source directory.

```
cd  /usr/local/mod_ssl-2.8.4-1.3.20
```

Configure mod_ssl before making and installing.

```
./configure \
--with-apache=/usr/local/apache_1.3.20 \
--with-ssl=/usr/local/openssl-0.9.6b \
--prefix=/usr/local/apache \
--with-shared=ssl
```

Entrance to the apache_1.3.20 source directory.

Reconfigure apache server before making.

```
$./configure \
--activate-module=src/modules/php4/libphp4.a \
--enable-shared=max \
--enable-module=most \
--disable-module=auth_dbm \
--without-confadjust
```

Making and installing apache server with PHP and SSL support.

```
$make
$make certficate (reply on asked questions. This is a local certificate for test).
$make install
```

Configuring apache server within the configuration file httpd.conf. The following lines should be inserted into this file. Some of them might be inserted as a default, during the installation process.

```
Listen 443
NameVirtualHost x.x.x.x:443
```


Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

```
<VirtualHost x.x.x.x:443>
SSLEngine on
SSLCertificateFile/usr/local/apache/conf/ssl.crt/server.crt
SSLCertificateKeyFile/usr/local/apache/conf/ssl.key/server.key
SSLLog /usr/local/apache/logs/ssl_engine_log
SSLLogLevel warn
SSLOptions +StdEnvVars

......
</VirtualHost>
```

Generate key.

```
$openssl genrsa -des3 -out server.key 1024
$openssl rsa –in server.key –out server.key.unsecure
```

Generate request to the verification service

```
$openssl req -new -key server.key -out server.csr
```

Generate verification center's signature.

```
$openssl genrsa -des3 -out ca.key 1024
$openssl rsa –in ca.key –out ca.key.unsecure
$openssl req -new -x509 -days 365 -key ca.key -out ca.crt
```

Certificate's subscription

```
$cd /usr/local/mod_ssl-2.8.4-1.3.20/pkg.contrib
$cp sign.sh /usr/local/apache/conf/ssl.key
$./sign.sh server.csr
```

Then after the succesfully installation of all the above components we must add the specific directories of our components (e-shop, pcm, auction, eb) in the directory path /usr/local/apache/htdocs/portal/ and also the specific databases btob_cl, btob_server and auction in the specific path of mysql.

3.4 Installation of Jakarta and Soap – Ontology Client

All of our components can be connected with the ontology system by an Ontology Client that have been developed in Java. So below we provide the briefly description of how we can install this client into our linux server.

Firstly we have to extract the specific software and install Jakarta Tomcat

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

J2sdkee-1_3_1-linux.tar.gz

Jakarta-tomcat-4.0.1.tar.gz

and then we have to give the following commands

rpm -iv j2sdk-1.3.1_04.i386.rpm

rpm -i jre-1.3.1_04.i386.rpm

Furthemore we will need to run these commands:

export

PATH=$PATH:/usr/java/jdk1.3.1_04/bin:/usr/local/j2sdkee1.3.1/bin:/usr/local/jakarta-tomcat-4.0.1/bin

export
CLASSPATH=.:/usr/java/jdk1.3.1_04/lib:/usr/java/jdk1.3.1_04/lib/tools.jar:/usr/java/jre1.3.1_04/lib/sunr
sasign.jar:/usr/java/jre1.3.1_04/lib/rt.jar:/usr/local/j2sdkee1.3.1/lib/j2ee.jar:/usr/local/j2sdkee1.3.1/lib/j2
eetools.jar:/usr/local/jakarta-tomcat-4.0.1/lib:/usr/local/jakarta-tomcat-
4.0.1/lib/servlet.jar:/usr/local/jakarta-tomcat-4.0.1/common/lib/mail.jar:/usr/local/jakarta-tomcat-
4.0.1/common/lib/activation.jar:/usr/local/jakarta-tomcat-4.0.1/common/lib/xerces.jar:/usr/local/jakarta-
tomcat-4.0.1/common/lib/soap.jar
export JAVA_HOME=/usr/java/jdk1.3.1_04
export CATALINA_HOME=/usr/local/jakarta-tomcat-4.0.1
ulimit -s 2048

3.5 Starting and stopping Jakarta server

$CATALINA_HOME/bin/startup.sh
$CATALINA_HOME/bin/shutdown.sh

3.6 Controlling of the server

In order to check if the Jakarta tomcat server works correctly we have to give the command http://localhost:8080 in our web explorer.
If it is not displayed we have to check that the names of the directories

/usr/local/jakarta - tomcat - 4.0.1/webapps/ROOT
/usr/local/jakarta-tomcat-4.0.1/webapps/ROOT/WEB-INF are keyed with caps lock. Else we have to change these files and startup again the server

If everything is right, then we have to make the following steps:

1) copy soap.jar to the directory /usr/local/jakarta-tomcat-4.0.1/common/lib
2) copy soap.war to /usr/local/jakarta-tomcat-4.0.1/webapps on the server.

Then we have to Shutdown and startup Tomcat again and check in the browser again by giving the following command http://localhost:8080/soap/servlet/rpcrouter

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

The system then it will print a message about that you can't use GET method, and you can use only POST method.

Then you have to add the Ontology client directory to the path /usr/local/jakarta-tomcat-4.0.1/webapps/OntologyClient and also the server.xml file must be added to the path /usr/local/jakarta-tomcat-4.0.1/conf . Then we will startup Tomcat and check again the http://localhost:8080/OntologyClient

3.7 Necessary changes

We must make the following changes into some files and also into the databases.

So we have to change the path of the file below :

/usr/local/apache/htdocs/eb/pathes.phtml

Databases

The databases that we are using are the btob_server, btob_cl and the auction database for the auction system. After we have installed the specific components then we have to make some changes about the path and the name of the new server in these databases. (About the catalogues of each server in order to specify the essential location and also the path of the photos that we want to add to the system.

SOAP

We can use eshop, pcm, b2b and auction components in order to search in distributed databases (different servers). So if we have a linux server and want to add this server to our system, firstly we must add the directory lt in the user/local/apache/htdocs directory and then we must add the btob_cl database that it can contains the new items. Also in the main server we must add an entry to the catalogue of the btob_server database with the specific path of the new server.

4 Procurement

4.1 Configuration

These are the required tools :

Java Environment	Sun Java 1.3 runtime environment
Web server	Jakarta Tomcat (v.3.2.2)
Enterprise information portal	Jakarta Jetspeed (v. 1.3a2) (jetspeed.war)
Libraries (.jar)	activation.jar log4j.jar pop3.jar smtp.jar mail.jar mm.mysql-2.0.4-bin.jar

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

	soap.jar xerces-1.4.3.jar xalan-2.0.1.jar xindice.jar xmldb.jar xmldb-sdk.jar xmldb-xupdate.jar xml-apis-1.0.jar
Prototype	procurement.zip

4.2 Software requirements

- regnet portal shall be installed

- mysql 3.23

- xml-xindice 1.0

4.3 Installation procedure

The steps to follow are the following:

Server Side

- Launch mysql on command line
- Enter "create database procurement;" command
- Exit from mysql
- Go to procurement/database directory
- Execute "mysql procurement < createDatabase.sql"
- Unzip procurement zip file in Tomcat Web Apps directory
- Configure parameters of procurement.properties in procurement/conf directory:
  "Smtp" property is the IP addresse of the SMTP server used to send orders to suppliers.
  "xmldb.url"property is the url of the XML database.
- Configure file paths in web.xml file in procurement/WEB-INF directory:
- Start Tomcat.

Client Side

- Open a Web Browser
- Point at http://localhost:8080/procurement/authenticate.jsp?user_id=xxx

5 Delivery

5.1 Configuration

These are the required tools:

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

Java Environment	Sun Java 1.3 runtime environment
Libraries (.jar)	GLUE-STD.jar Dom.jar Jnet.jar Servlet.jar
Prototype	delivery.zip

5.2 Requirements

REGNET portal shall be installed.

5.3 Installation procedure

The steps to follow are the following:

- - Use compile file to compile java class file
- - Use startServer batfile to launch web server
- – Use startClient bat file to lanch a test client

6 Topic Maps Generator

6.1 Prerequisites

Jakarta Tomcat (version 4.0.1 or above)
Apache Xindice (version 1.0rc2 or above)
Knowledge Base data structure (db.zip)

6.2 Installation process

Unzip the TMG.zip file and then copy the extracted files to the following directories:

<Jakarta>\bin

\tmg_templates

collectionpath.txt

webpath.txt

xindiceip.txt

xtm_tg_120.xml

<Jakarta>\webapps\ROOT

nanoxml-2.1.1.jar

TGLinkBrowser.jar

Visual.html

Visual.xml

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

\tmg

\css

\images

\js

<Jakarta>\webapps\ROOT\WEB-INF\classes

\org

\REGNET

\ontology\

XTMLoader.class

Next step, is to define the proper addresses and Xindice's collection where topic maps are installed by changing accordingly the:

- collectionpath.txt
- webpath.txt
- xindiceip.txt

Please, make sure that the collection defined in collectionpath.txt exists in the xindice tree.

You can see an instance at: http://160.40.50.22:8800/servlet/org.REGNET.ontology.XTMLoader

7 Knowledge Base SOAP

7.1 Preface

This package comprises of several classes, which provide general methods for file transfer between the various REGNET nodes, using the SOAP protocol. More precisely, the classes "Ontology" and "IOntology" should be installed in the Apache SOAP server, and the dass "OntologyClient" could be installed in any PC (it is used for testing purposes).

These classes implemented to be used by the REGNET project programmers.

7.2 Prerequisites

The Java Development Kit (JDK 1.3.1 or above).
Jakarta Tomcat (version 4.0.1 or above)
Apache SOAP (version 2.2 or above)
Apache Xindice (version 1.0rc2 or above)

Also, the following java classes are required:

- IOntology.java (interface)
- Ontology.java (implementation)
- OntologyClient.java (client for testing purposes)

7.3 Installation process

The files "IOntology.java" and "Ontology.java" should be compiled after the following changes:

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

- At Ontology.java, line 33: The localServerPath String variable must be set to a path that web documents are stored. Regularly should be on the same PC with the web service. (for example “C:\\Program Files\\Apache Group\\Apache\\htdocs\\”)
- At Ontology.java, line 40: The localServerPath String variable must be set to an address that is accessible from everyone. Should be match with the localServerPath. The last slash is necessary.

(for example “”http://160.40.50.210/)

IMPORTANT: The Xerces.jar should be set prior to all other XML parsers at installers CLASSPATH and should be a higher version than xerces_1.3.1

After compilation is completed, the “.class” files must be placed both on <Jakartaroot>\webapps\soap\WEB-INF\classes

and

<Jakartaroot>\webapps\ROOT\WEB-INF\classes

and also copy text file ‘key.txt’ in <Jakartaroot>\bin

Finally, classes should be deployed to SOAP

At http://xxx.xxx.xxx.xxx:xxxx/soap/admin/index.html (where xxx are the IP and port) the following must be completed:

ID: urn:OntologySOAP:dbms

Methods: retrieveFile retrieveFileContent listFiles deleteFile addCollection listCollections deleteCollection addFile getUniqueKey checkUser

Provider class: Ontology

7.4 Testing the installation

To ensure the proper installation procedure, an Ontology client developed in Java is available, named OntologyClient.java

After the compiling and running the java file, the following results should appear on screen:

invoke service

URL= http://160.40.50.22:8800/soap/servlet/rpcrouter

URN =urn:OntologySOAP:dbms

Result= CSC1-1604050228800-xxx

These results are created after calling the retrieveFile method.

All other methods could be tested if the appropriate line codes are uncommented at OntologyClient.java (see source code).

CERT already installed a SOAP server that could be accessed at http://160.40.50.22:8800/soap/servlet/rpcrouter using the urn:OntologySOAP:dbms ID.

8 Installation of the Borrow/Lend ebXML based application

For example purpose let's pretend, you want to install the Borrower app on 127.0.0.1:8080, and the Lender app on 127.0.0.1:8082

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

- Copy both provided Tomcats (Borrower and Lender) where you want it to run
- Modify the server.xml files so that, it will run on the ports you want
- Create 4 empty databases under mysql:
    - -msh
    - -msh2
    - -Borrower
    - -Lender
- in the Borrower Tomcat, open /common/classes/msh.properties.xml and modify the following fields:
    - - <URL> (in our example: 127.0.0.1:8080/msh/) (beware there are 2 <URL> fields to change in the file
    - - <PROXY>, if you are behind a proxy.
    - - you might as well modify the database settings so that it fits your system
- Repeat this operation with the Lender tomcat (the <URL> field would be 127.0.0.1:8082/msh/)
- Launch both provided Tomcats
- In the borrower application, open the setup.jsp file with a browser
- Fill the fields so that it suits your installation.

  in our example:

  fill the Borrower's Url with http://127.0.0.1:8080/Borrower/ (don't forget the last slash) and the Msh's Url with http://127.0.0.1:8082/msh/ (that's the url of the msh of the Lender)
- Now, in the Lender application, open the setup.jsp file with a browser and again fill the fields.

  in our example, it would be:

  Borrower's Url with http://127.0.0.1:8082/Lender/ (don't forget the last slash) and the Msh's Url with http://127.0.0.1:8080/msh/ (url of the msh of the Borrower)

The application should now be able to work properly

NOTE: the catalog.xml file is in the Lender/webapps/Lender/ directory.

9 Index+ gateway

The following is documentation on how to install the Index+ gateway web service on a Windows 2000 environment.

This section includes:

- Hardware, software, and database requirements
- Instructions for installations of entire environment
- Instructions for configuring and running webservice

9.1 Hardware & software requirements

Server hardware requirements depend on the entire REGNET platform.

Minimum Configuration

- 700 MHz Pentium II Processor

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

- 256MB RAM
- 4 GB hard disk with a minimum of 1 GB free space

Minimum Enterprise Configuration

- Dual 450 MHz Pentium II Processor
- 512MB RAM
- 4 GB hard disk with a minimum of 1 GB free space

Server Software Requirements

- Windows 2000 Professional
- Service Pack 2
- Microsoft, Internet Information Server (IIS)
- Windows Update
- .NET SDK environment

9.2 Instructions for installations of entire environment

Hereafter are listed all the actions executed to set up the server environment:

- Installation of Microsoft Windows 2000 operative system
- Installation of Service Pack 2 for Microsoft Windows 2000
- Installation of Microsoft, Internet Information Server (IIS). We installed Microsoft's web server, Internet Information Server (IIS) for free from the Windows 2000 Pro installation CD and configured it to run on our system by following the instructions below:
    - Place the Windows 2000 Professional CD-Rom into your CD-Rom Drive.
    - Open *'Add/Remove Windows Components'* found in *'Add/Remove Programs'* in the *'Control Panel'*.
    - Place a tick in the check box for *'Internet Information Services (IIS)'* leaving all the default installation settings intact.
    - Once IIS is installed on your machine you can configure IIS through the *'Personal Web Manager'* found in the *'Administration Tools'* in the *'Control Panel'*.
    - Double-click on the *'Personal Web Manager'* icon.
    - Once the Personal Web Manager is open you will see the Main dialog box were it will show your home page and home directory default values. Where the home page is shown below as *'http://My_Computer'*, will be *'http://'* followed by the name of your computer. Clicking on each of these values will open your home page in your default web browser or open the default home directory in Windows Explorer.
    - To view your home page in a web browser type *'http://localhost'* (you can substitute *'localhost'* for the name of your computer) into the address bar of your web browser. If you are not sure of the name of your computer right-click on the *'My Computer'* icon on your desktop, select *'Properties'* from the shortcut menu, and click on the *'Network Identification'* tab.
    - Until you place your own web site in the default directory for the web servers home page you should now be looking at the documentation for IIS.
    - To place your own web site in place of the IIS documentation in your home page you need to place your own web page in the *'c:\inetpub\wwwroot'* directory

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

making sure the page is called Default.htm or Default.asp. Now when you type *'http:// followed by your computer name'*, into your web browser you should see your own home page.

- Additionally we have to be sure to get the latest service packs for IIS from Microsoft. It is known to have many security holes at release and many of them have been addressed through the service packs.
- Through Windows Update we installed all the new updated version suggested excepted for Service Pack3, DirectX and latest version of Media Player.
- Installation of MDAC 2.7
- Installation of .Net SDK environment

9.3 Instructions for configuring and running webservice

The computer is now ready to proceed with the webservice component installation.

- Create a new folder named for instance C:\IndexPlus where to copy DLL libraries of IndexPlus
- You have to add this folder to the Computer path
- Copy into the new folder all the Index+ libraries

Now we are able to compile the developed code (written in C#) in order to build our own library that allows the interaction between our component (Index+gateway web services) and the Index+ DLL.

iplusixdb.cs is the source file of the C# code that interacts with the native Index+ DLLs.

iplusixdb.netmodule is the intermediate version of the above

IndexPlus.key is the key file that is used to make the library.

- Copy files **iplusixdb.cs**, **IndexPlus.key** in a temporary directory. For instance C:\temp
- Compile and link the **iplusixdb.cs** file

```
c:
cd temp
csc /t:module /unsafe iplusixdb.cs
al /keyfile:IndexPlus.key /out:iplusixdb.dll iplusixdb.netmodule
```

- Copy the created DLL in the **bin** sub-directory of **webroot** on IIS environment

```
cd \inetpub\wwwroot
mkdir bin
copy c:\temp\iplusixdb.dll bin
```

- Register the created DLL in .NET cache

```
cd \inetpub\wwwroot\bin
gacutil /i iplusixdb.dll
```

At this point we are able to install the **index.asmx** file in the Web server root.

To test if everything is fine we can simply point the browser to http://localhost/index.asmx

10 Web publisher

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

10.1 Requirements

Java Plugin (required by SMIL Player Schmunzel)

Java Media Framework (JMF) (required by SMIL Player Schmunzel)

Tomcat Server 3.2.x

10.2 Installation of Java Plugin and JMF for SMIL Player Schmunzel

Software required

Java Plugin

Java Media Framework

Installation

Installation of the Java Plugin (download the appropriate JRE for your OS from http://java.sun.com/j2se/1.4/download.html

Installation of the JMF (download the appropriate Version from http://java.sun.com/products/java-media/jmf/2.1.1/download.html

When schmunzel running as applet the root directory is the root directory of the web-browser.

Known Bugs:

Schmunzel uses a resource manager to prevent multiple downloads of media-files inside presentations. The resource manager use the /tmp-directory of the operating system to cache the media-files. Schmunzel does not yet delete this files.

When using schmunzel as applet over a longer period of time, there is the possibility of a OutOfMemoryError.

10.3 Instructions for the installation of the EPProtopye

Copy the *epprototype.war* file into the *webapps* directory of the Tomcat Server.

Start servlet with *[localhost]/epprototype/Search*

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

B: User Manuals

11 PORTAL

11.1 Layout

Three main areas constitute the Portal structure:

- Upper area
- Left area
- Central area

The upper area contains main functions menu, language selector and login form. This area is always present in the page.

Figure 1 - Upper area

The menu is organized in two levels: The former shows links to the home page, to a page with details about REGNET project, to the site map, to the registration form and finally the on line help. The second level is visible only for registered users and links to the customisation functions, the editing of the user profile and the logout command.

Portal customisation means the choice of contents in each section of the central area and of some presentation properties. Customisation is available both for WEB browsers and for WAP browsers.

Figure 2 - Language menu

The contents of the Portal are available in a number of European languages (internationalisation). In order to get the list of the available languages, click on the selector highlighted in the picture. In order to choose a language, just click on one of the languages listed in the pull down menu that will open.

Figure 3 - Registration form

The registration form is available only if the user has not logged in yet. For registered users it is enough to provide the username and password into the respective fields and to click the login button. For user without the REGNET profile it is necessary to create the account first.

Figure 4 - Left area

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

Left area contains the illustrative menu about the contents available through the Portal, and the email address to get further support. The illustrative pages are loaded in the central area.

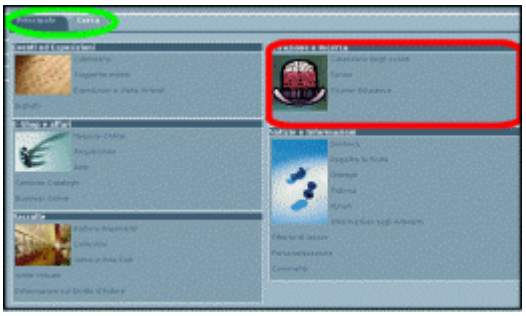


Figure 5 - Central area

All the contents and the support functions are loaded in the central area. The support functions (i.e. the site map) occupy the entire area. Contents are organized in "panes" (a sort of sections, highlighted in green in the picture) and each pane can contain one or more "portlets" (highlighted in red in the picture). Panes and portlets selection can be customized. Portlets contain resources, links or applications with the same theme. The Portal exposes them and the user can select them.

11.2 Language Selection

The contents of the Portal are available in a number of European languages (internationalisation). To the left of the upper area a language selector can be found. In order to get the list of the available languages, click on the selector as in the picture.

Figure 6 - Language selector

In order to choose a language, just click on one of the languages listed in the pull down menu that will open.

Figure 7 - Select a language

If in the user's profile a preferential language is indicated, the Portal will change the language by switching to the one indicated as soon as the user logs in. It should be noted that the change of language may cause a return to the main page of the Portal, depending on what was the current page at the moment of the selection.

11.3 Portlets

Portlets are containers of resources, of links or of applications centred on the same subject. The Portal manages the portlets as modules that can be activated and positioned in accordance with the user's selection (personalization or customisation). Portlets are stored in sections, that are special container portlets themselves. The picture highlights the sections (in green), represented as cards' tags, as well as a portlet (in red).

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

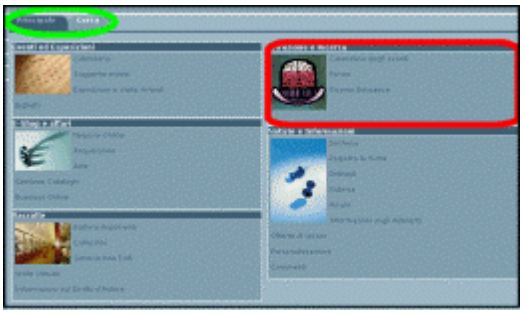


Figure 8 - Some portlets in the central area

The contents of the portlet may vary depending if the user has or has not been registered. In particular, whether the registration has occurred, the portlets can expose customisation actions. To activate them, click on the icons listed underneath:

	Customize	To access the properties displayed by the portlet. There might not be any. To go back to normal mode, click on the icon "Restore".
	Minimize	Reduces the portlet to the mere heading. To bring the portlet back to its original state, click on the icon "Restore".
	Maximize	Expands the portlet in the whole central area. The contents may vary. To make the portlet regain its original state, click on the icon "Restore".
	Restore	Brings back the portlet to its original state after the actions of customisation, minimization and maximization.

Table 2 – Customisation icons

11.4 Create New Account

In order to access the major part of the services supplied by the Portal, one has to be registered, i.e. there must be a user's profile in the Portal database. A role is associated to each profile, and from this role depends the user's visibility on the system resources. The role predefined at the moment of the profile creation is the basilar one. In order to expand the role, one must contact the administrator of the portal.

The profile is shared by all the Portals that constitute the infrastructure of REGNET. Therefore, the user can access the Portal of any CSC (Cultural Service Center) with the same "user name" and the same "password". The user name and password are chosen by the user. If the user name has already been utilized in the system, an error message appears. The minimum profile is made of:

User Name (key word)
Password
First name
Surname
Email address

The other fields are optional and can serve to personalize the services offered. In particular, indicating the native tongue, the Portal will change language by switching to the one selected as soon as the user logs in.

The following fields are specific for the companies:

Company Name:
Company ID:
Company Type:
- Local
- Duns
- USDoD
- EIN

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

TaxID
Others

The indication of the terminal signals what device is preferably used by the user in order to access the Portal. WEB devices are the typical browsers of the personal computer. WAP devices are the browsers of the cellulars or the palmtops compatible with the WAP system.

11.5 Edit account

All data of user's profile, except the user's name, can be modified after the creation of the profile. It should be noted that to change the role assigned to the profile is not allowed. To do this the administrator of the portal must be contacted.

The profile is shared by all the Portals that constitute the REGNET network. As a consequence, the modifications made to the profile are transferred in the Portals of all CSCs, included a modified password. To access any Portal with the old password would not be allowed any longer.

All pre-existing data are loaded in the form when opening the page. The minimum information that is loaded and that, even if modified, must always be present in submitting the module is:

First name
Surname
Email Address

The password is not necessary. The fields password are optional and need to modify the existing password.
The other facultative fields can be utilized for customizing the offered services. In particular, indicating the native language, the Portal will change the language by switching to the one selected as soon as the user logs in.

11.6 Customize WEB

The customisation is applied to a number of elements of the Portal: the single portlets, the sections that contain them, or the whole central area that includes the sections. The WEB personalization impacts only on the navigation done through the browsers of the PCs but not the cellular devices. On this point consult Customize WAP. It should be noted that a restore function to return to previous settings is not available.

11.6.1.1 Customize area

Figure 9 - Customize area links

In order to personalize the area, click on menu voice *Customize WEB* or click on the customize icon, both highlighted in green in the picture above.

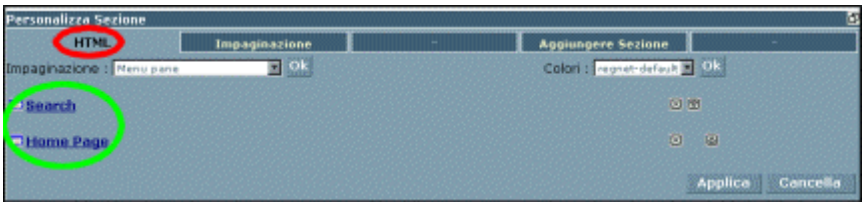


Figure 10 - Customisation GUI

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

The picture above shows the commands of *Layout*. From this display it is possible to modify the arrangement of the sections, delete a section and change the colour set. The indication *HTML* circled in red in the picture confirms that the customisation is applied to the WEB navigation. Circled in green in the picture, the available sections are listed; clicking on them, one can access the personalization of the selected section.

Figure 11 - Customisation GUI (2)

The selector of Layout (highlighted in blue in the picture above) enables to modify the mode in which the sections are represented:

Menu pane - representation in menu
Single column - all sections are appended in a column
Single row - all sections are appended in a row
Tab pane - the sections appear as tags of superimposed cards (basilar modality)
Three colums (25/50/25) - representation in three columns (in parenthesis the proportions)
Three colums (33/33/33) - representation in three columns (in parenthesis the proportions)
Two colums (25/75) - representation in two columns (in parenthesis the proportions)
Two colums (50/50) - representation in two columns (in parenthesis the proportions)
Two colums (75/25) - representation in two columns (in parenthesis the proportions)

The commands highlighted in yellow in the picture enable to modify the order with which the sections are shown or to delete a section. It should be noted that the removal of the section is definitive. It can be restored but only recreating it with the same name. The portlets contained are not deleted, though, and can be associated to other sections.

Still in the picture above, the colour selector is highlighted in green. By clicking on the selector, one can choose another colour schema, if available. The colour layout is applied only in the central area of the screen.

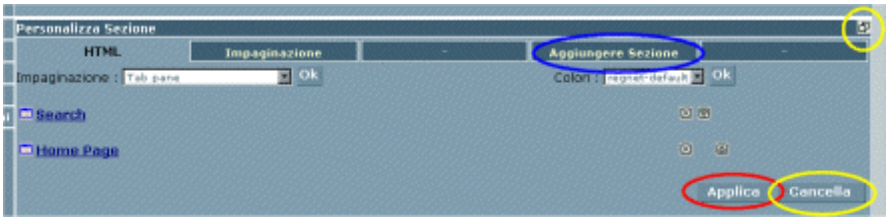


Figure 12 - Customisation GUI (3)

With reference to the picture above, in order to make the carried out changes effective, click on the button Apply (highlighted in red). To exit the customisation function without applying the modification performed or if no change has been made, click on the button Cancel or on the restore icon up on the right of the central area (highlighted in yellow). In order to create a new section, click on Add Pane in the horizontal menu (highlighted in blue).

Figure 13 - Area properties

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

To create a new section, write the name of the section in the text field and click on Add (highlighted in blue). In order to recall the page layout customisation, click on Layout (highlighted in green). To exit without saving the changes, click on the restore icon up on the right of the central area (highlighted in red).

11.6.1.2 Customize Pane

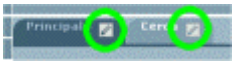


Figure 14 - Customise Pane links

In order to customize a section, click on the customize icon next to the tag of the section itself, highlighted in green in the picture above. Or pass through the area personalization, as explained in Customize area paragraph.

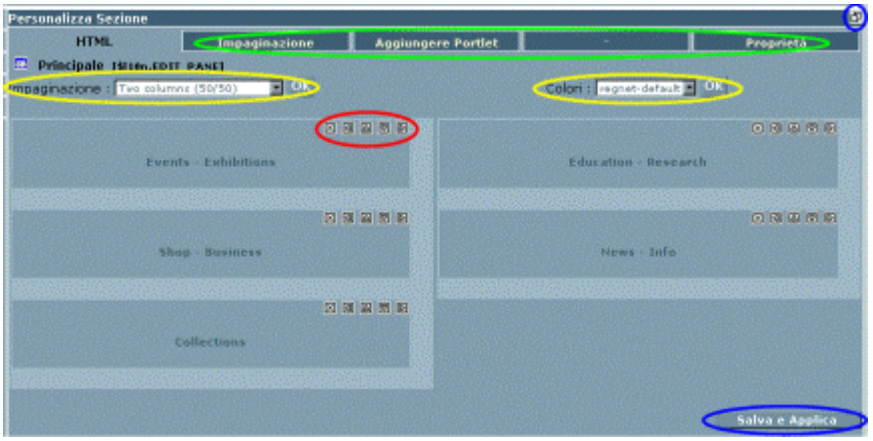


Figure 15 - Customisation GUI (4)

By this function one can customize the page layout, add portlets and modify the properties of the section itself. These options are presented in the menu circled in green in the picture above. The text of the picture refers to the functions of *Layout*.

The selector of Layout (highlighted in yellow in the picture above) allows to modify the way by which the sections are represented.

Still in the picture above, the colour selector is highlighted in yellow. Clicking on the selector, another colour schema, whether available, can be chosen. The colour diagram is applied to the central area of the screen.

The commands highlighted in red in the picture enable to modify the order by which the portlets of the section are displayed and to delete a portlet. It should be noted that the removal of a portlet concerns solely the section in object. If the portlet itself was associated to several sections, the other ones would not be involved. Afterwards, to restore the portlet or to associate it with another section is possible.

In order to make the performed changes effective, click on the button *Save & Apply*. To exit the customisation function without applying the modification carried out or if no change has been made, click on the restore icon up on the right of the central area (both highlighted in blue).

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

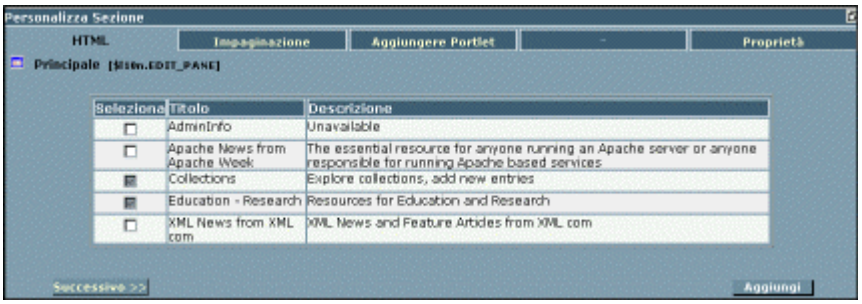


Figure 16 - Add a portlet

The picture above shows the add function of the portlets. A list of the available portlets can be looked through by means of the buttons *Next* and *Prev*. Choose the portlets by clicking on the box in the first column. The boxes of the portlets selected are already ticked off. To remove the portlets from this screen is not possible. In order to delete the portlets, go back to the layout section page.

In order to save the performed changes, click on the button *Add*. To exit the customize function without applying the modification carried put or if no change has been made, click on the restore icon up on the right of the central area.

Figure 17 - Pane properties

The picture above shows the screen necessary to modify the properties of the section. At present the only exposed property is the name of the section itself. To modify it, write the new name on the text field (highlighted in green) and click on *Save* to save and go back to the screen of the section customisation layout page or on *Save & Apply* to save and go back to the screen of area personalization layout page. Otherwise, to exit without saving the changes, click on the restore icon up on the right of the central area.

11.7 Customize WAP

The customisation is applied limited to the selection of portlets available for the user. The GUI is similar to that for portlet adding in the web context.

12 Product Catalogue Management

12.1 GENERAL

Product Catalogue Management (PCM), is an information system, which allows users (participants) to manage their catalogues. These catalogues contain information about the items and services included. The most important aspect of PCM is the use of SOAP protocol for the interconnections between the central (administrative database) and the remote (distributed) catalogues. The PCM system can be used only for registered users (suppliers) who already have catalogues in the system and additionally they have warehouses (on or more) (see figure 1). In order to identify registered users the system connects with the ontology system. So the first step for any user (supplier) is to register within the portal and then by following the specific link he/she can uses the PCM.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

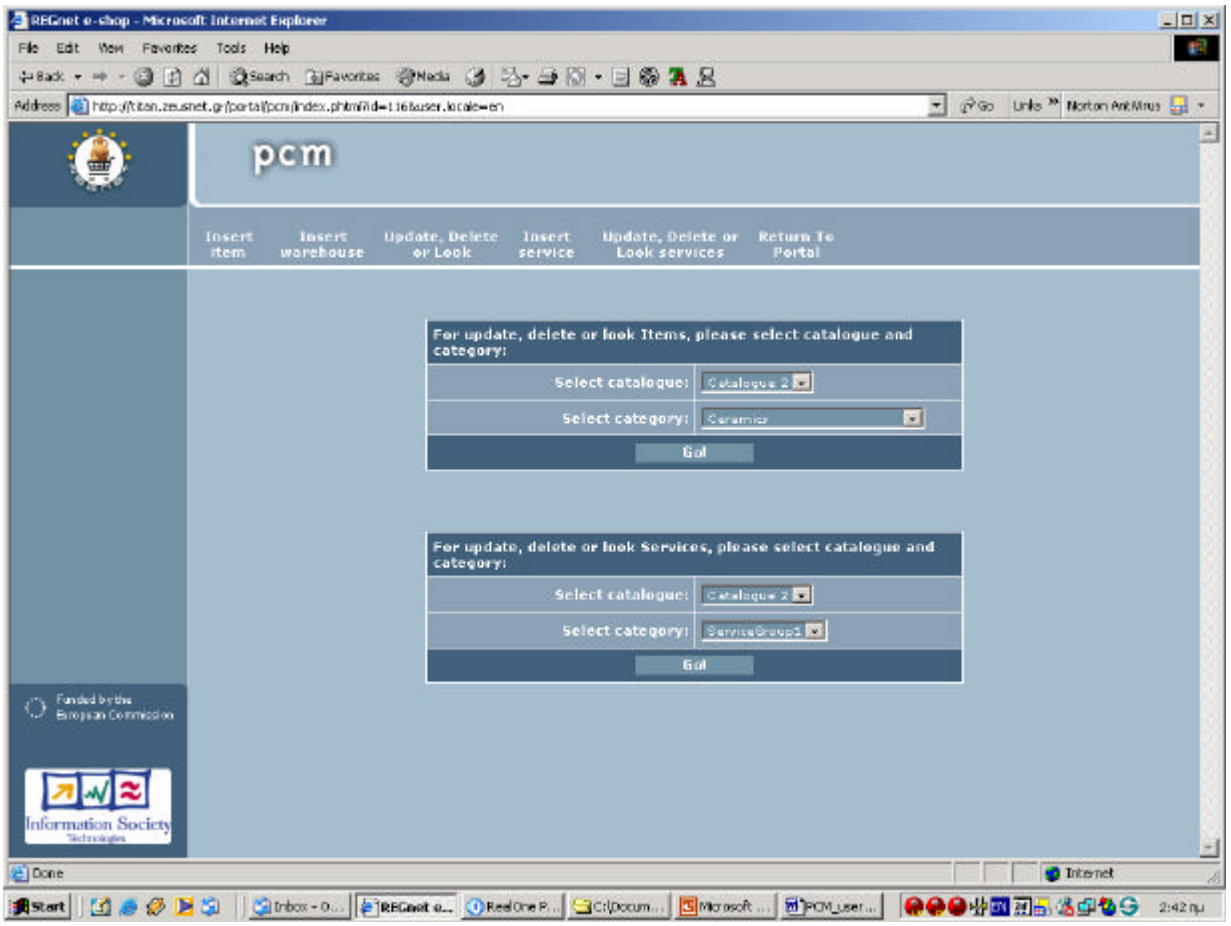


figure 1 – Product Catalogue Management

12.2 INSERT ITEMS

A user can insert items in the system of PCM. If he/she want to insert new items in the system it is necessary for to have a catalogue (or catalogues) in the system (because all the items are categorized according to catalogues).

To insert goods in the system, the user should press the Insert Item link and on the loaded page he/she must choose the specific catalogue where the items will be stored (see figure 2).

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

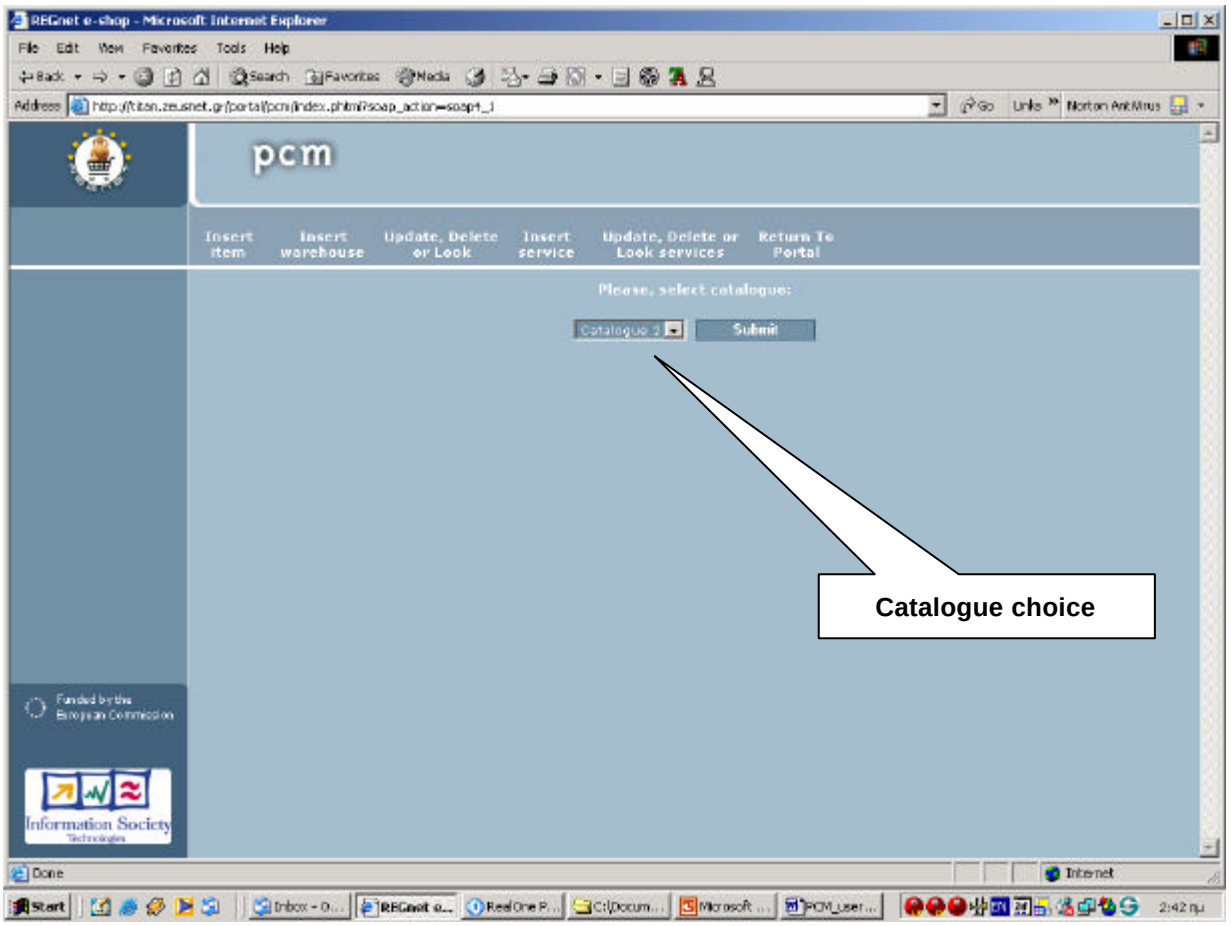


figure 2

Then the user has to choose the specific warehouse where the needed commodity exists and then fill all the specific information about the item.(figure 3)

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

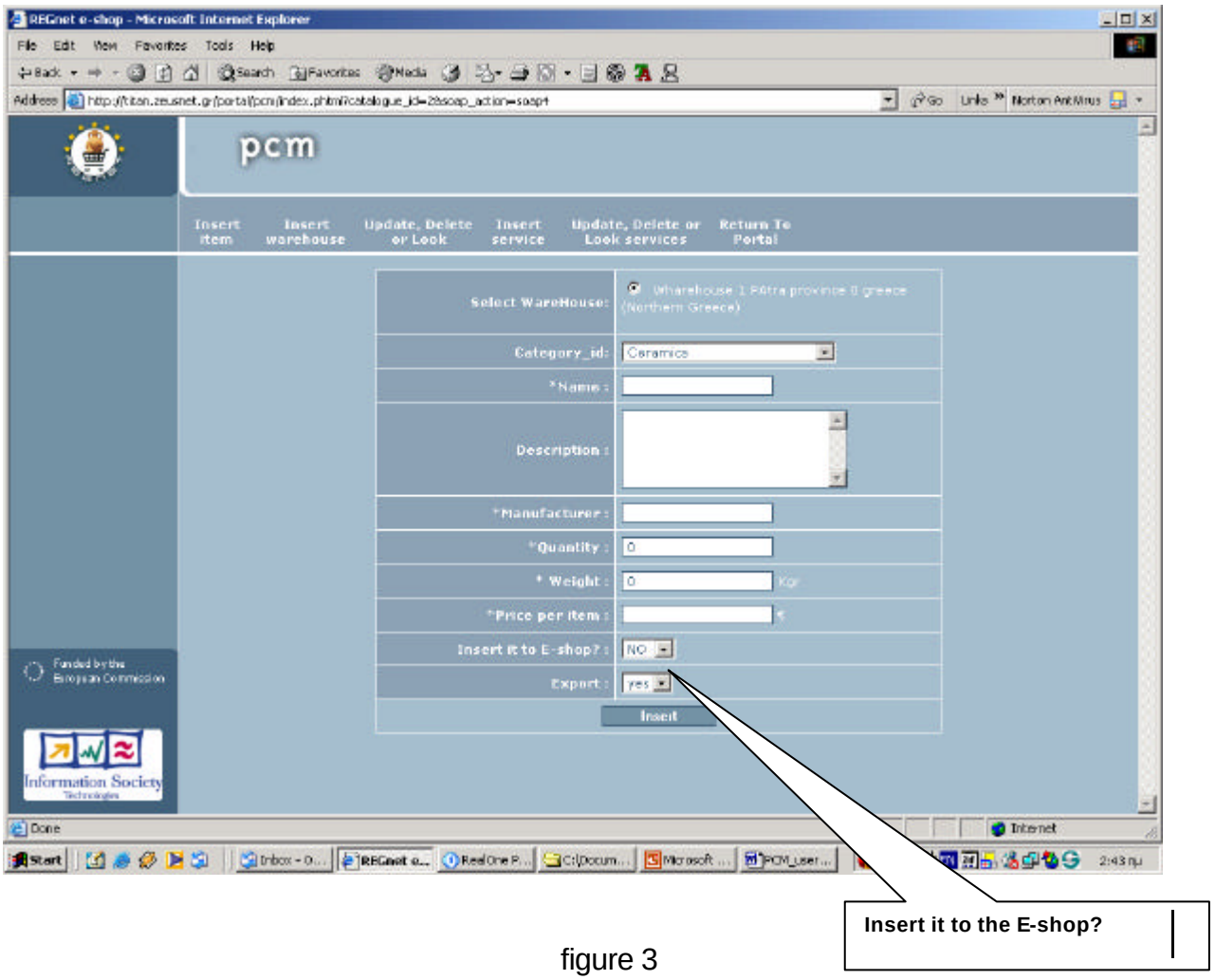


figure 3

In order to insert new items users must provide all the necessary information that needed for the successfully insertion of products such as name, manufacturer, quantity, weight (for the shipment costs), price etc.

If a user has no registered warehouses, then he would not be able to insert items to the system. In addition, the user is given the ability to put his items in the e-shop in order to sell them providing the potential buyers with picture of the items. What is required is to choose the “Yes” or “No” index in the specific field (Insert it to the E-shop?). By default, the items are not inserted in the e-shop.

12.3 MANAGE ITEMS

Users have the ability to manage their items. Therefore, they can update, delete or look for an item, which is stored in the system. Firstly, they have to choose the specific catalogue and also the specific category of an item and after that they have to press the “Go!” button. (You can see the figure 4)

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

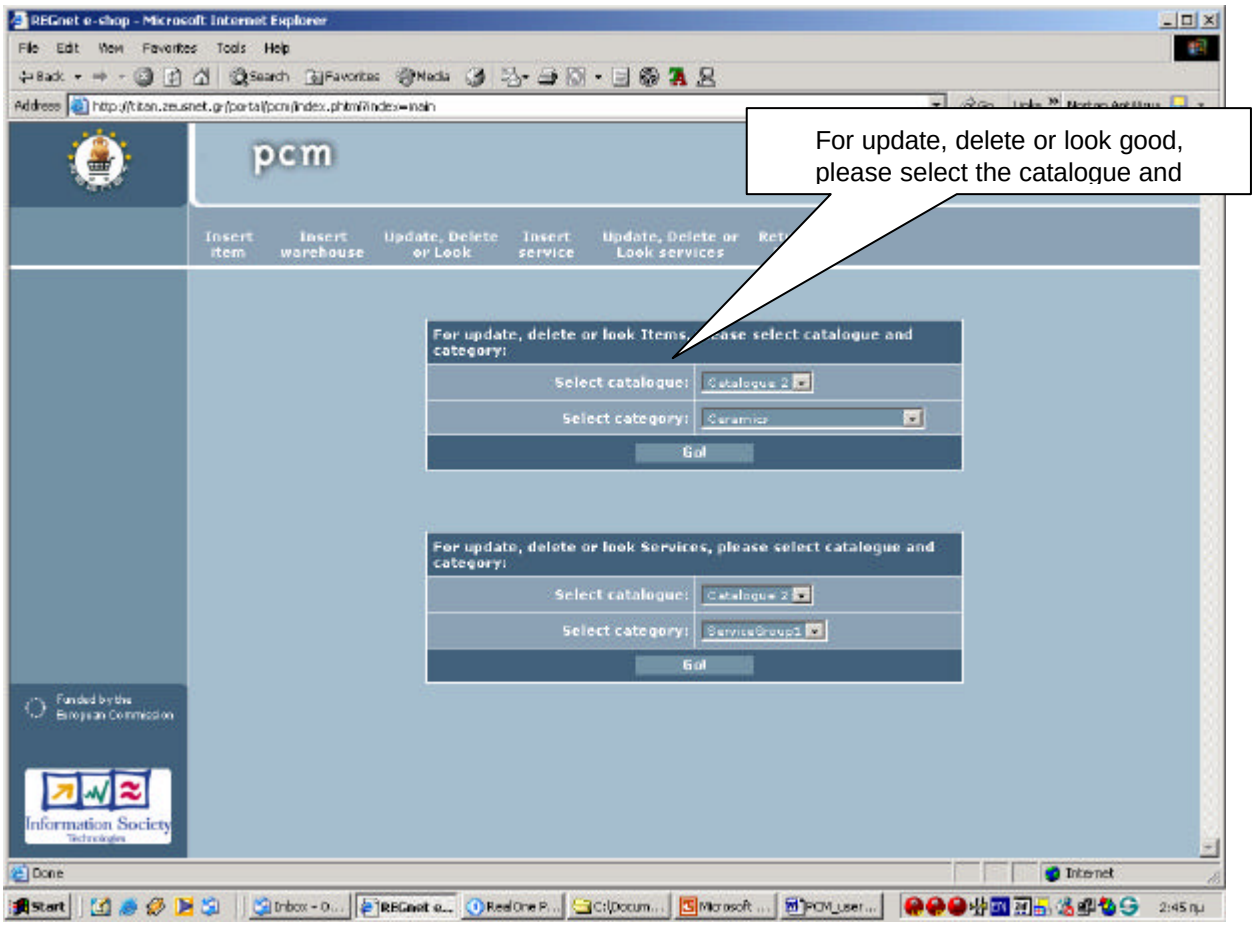


figure 4

Secondly, in the next page they can choose the specific item and also the action they want (see figure 5)

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

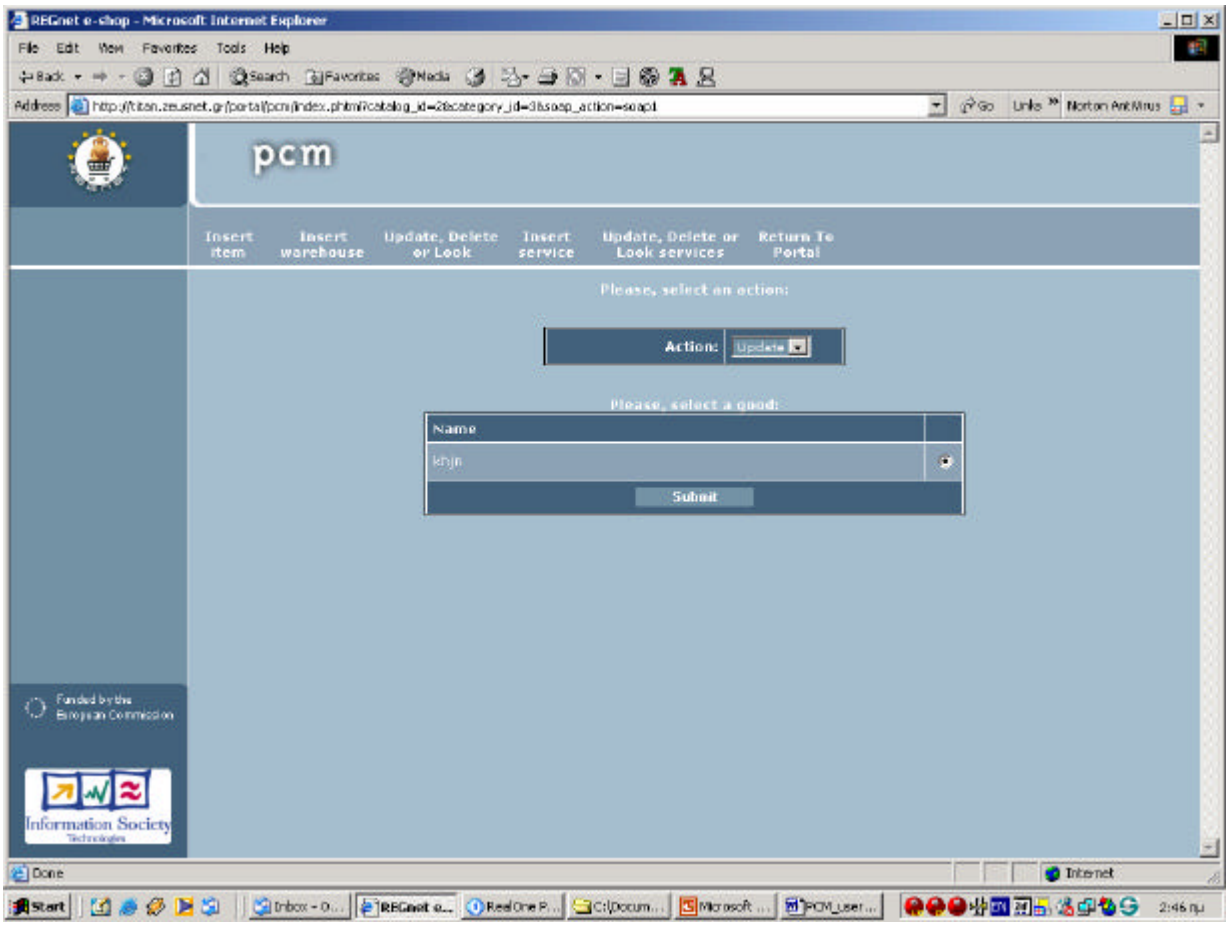


figure 5

If users want to update an item's needed information, they have to choose the update action and press the submit button in order to move to the next page where the user can update his/her items (see figure 6)

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

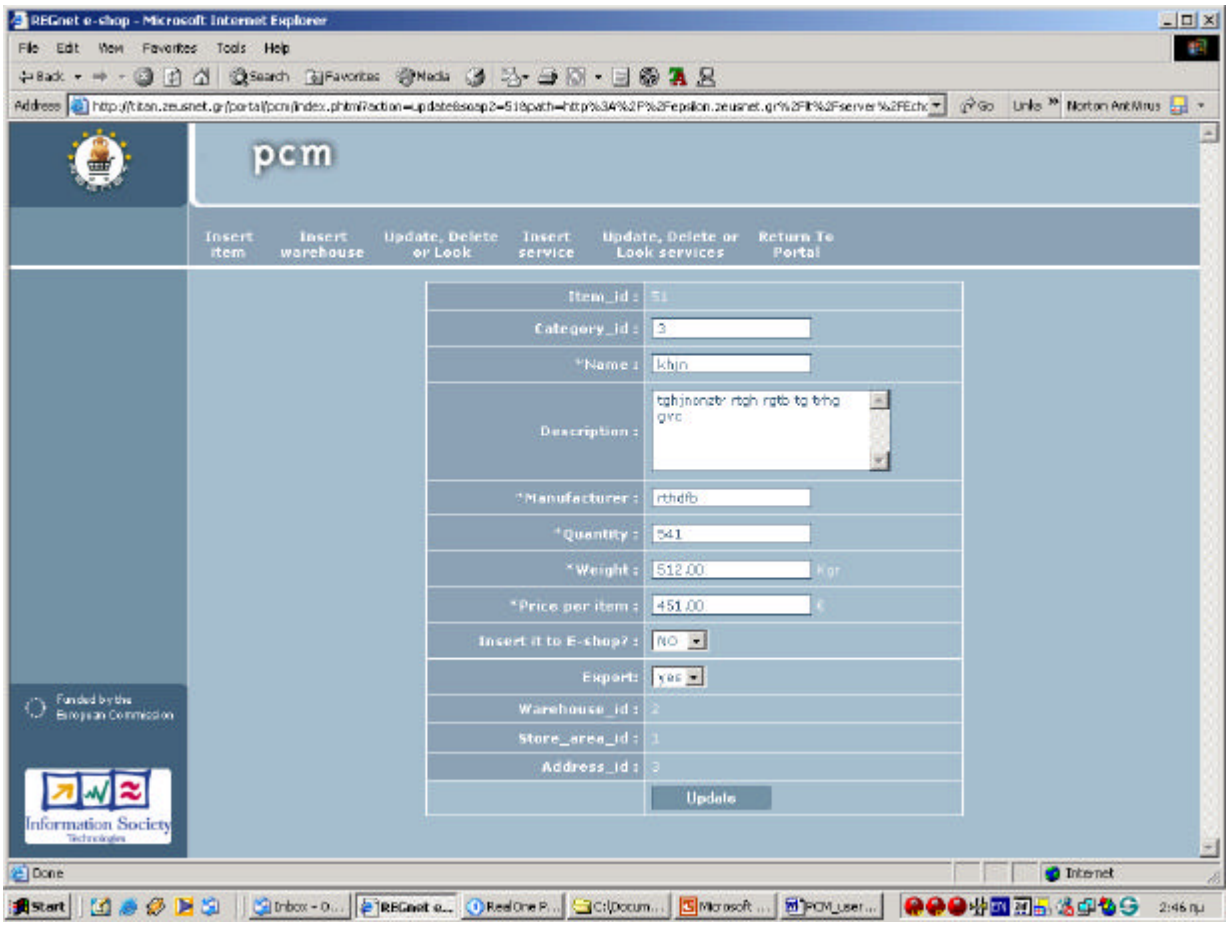


figure 6 – Update Functionality

Also the user can have a look at all the information regarding an item by choosing the look action and by pressing the submit button (see figure 7)

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

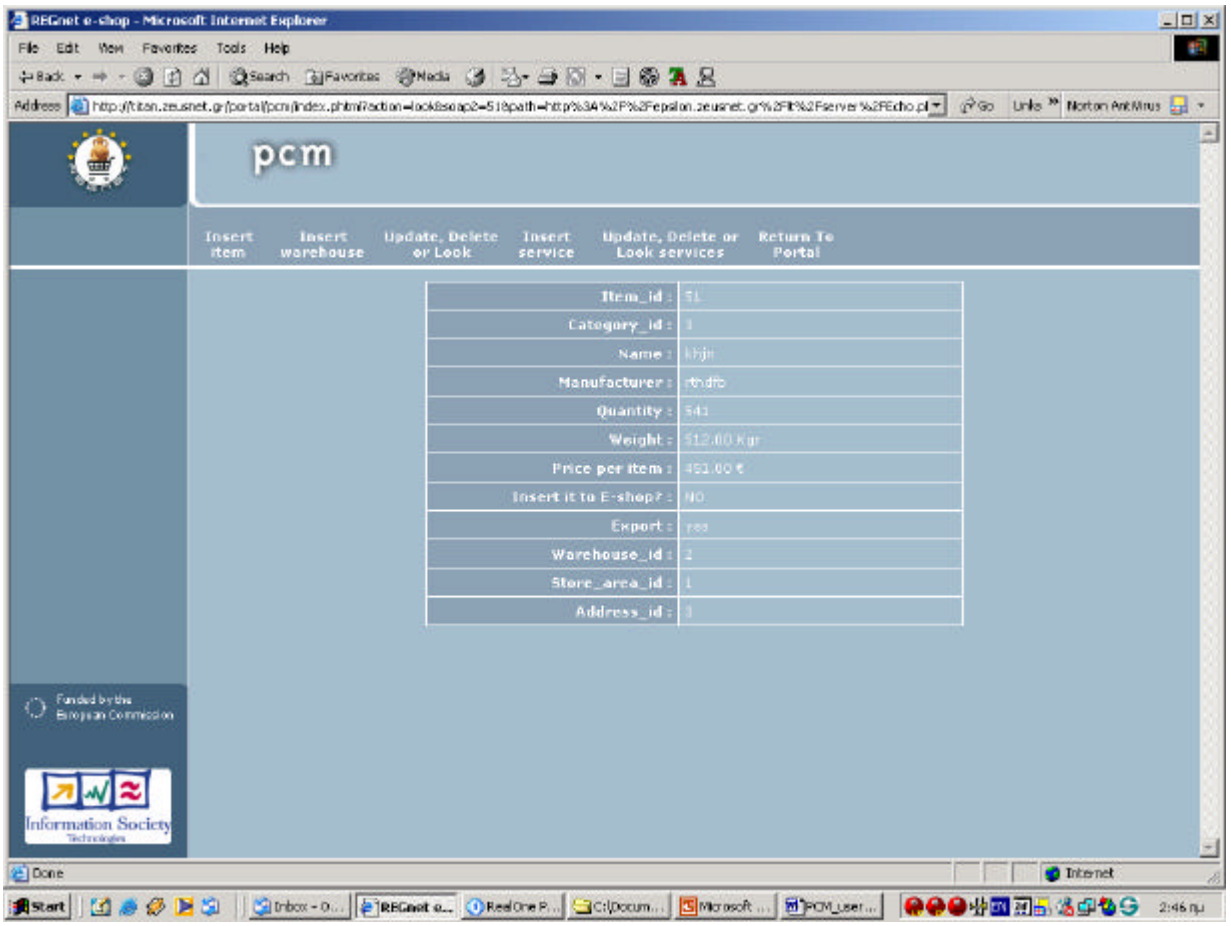


figure 7 – Looking Functionality

In addition there is also a deleting functionality where registered users can delete the preferable items they want.

12.4 ADD ITEMS IN THE E-SHOP

Furthermore, the system gives users the ability/ functionality of adding the items they want into the e-shop system. Thus, if they want to add their items in the e-shop they have to choose the YES value (instead of the NO value) from the field in the specific form, which is provided by the system.(see figure 8)

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

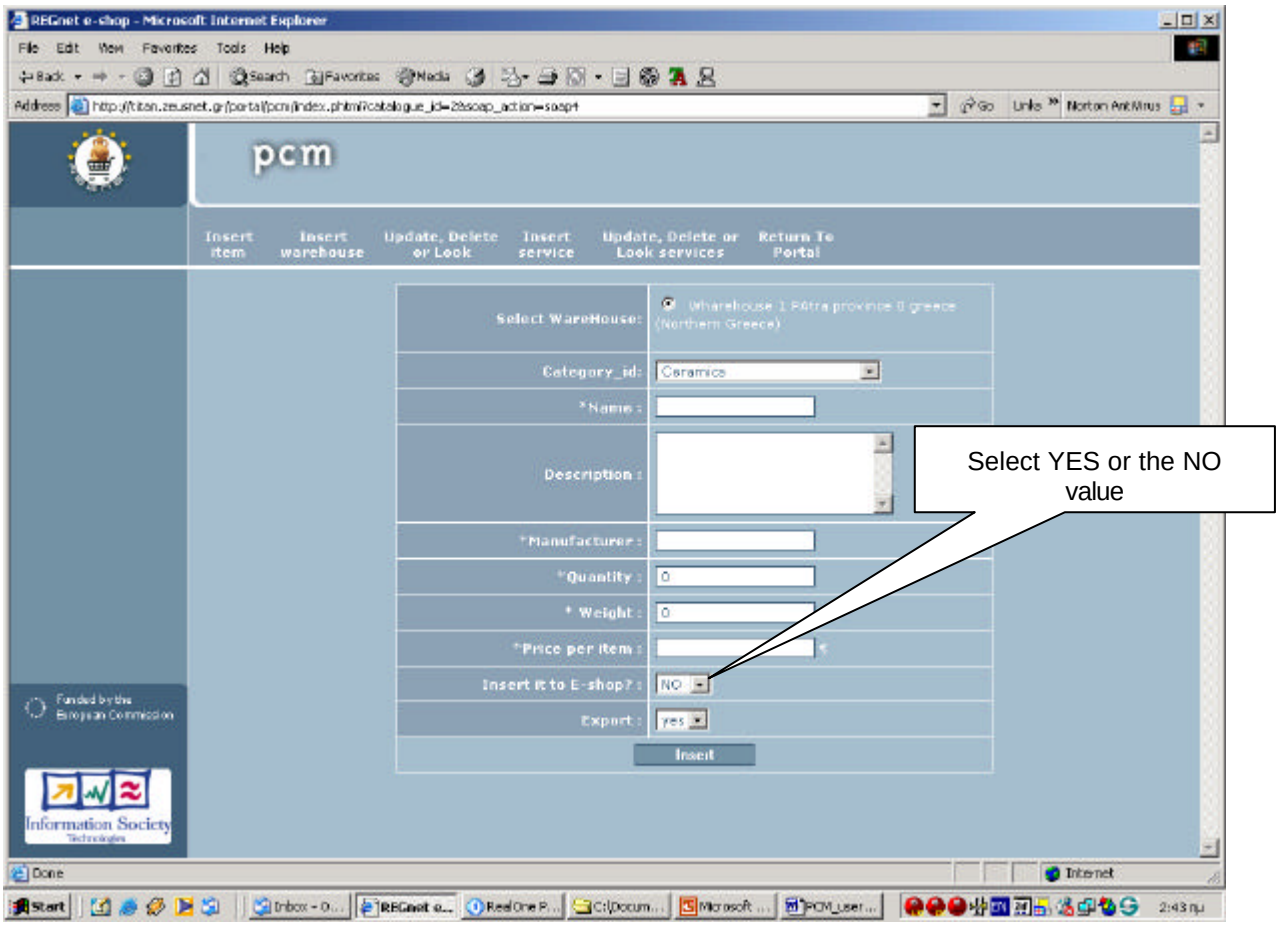


figure 8 – Insert items into the E-shop

Also a user can provide a picture for each specific item or he/ she can update an already uploaded picture.(see figure 9 and figure 10)

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

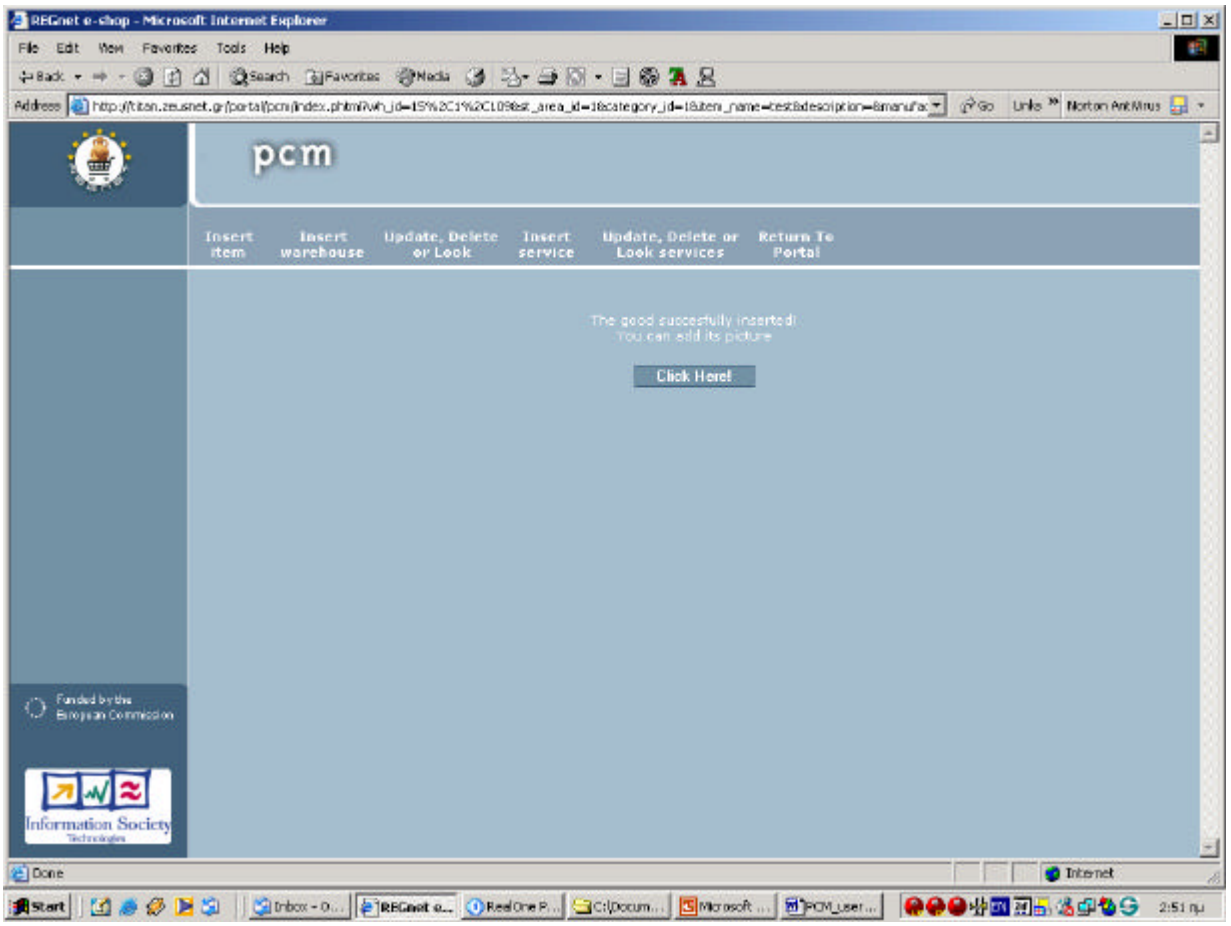


figure 9 – Provide picture

12.5 WAREHOUSE INSERTION

To insert a new warehouse it is necessary for registered users to press the Insert Warehouse link, and on the loaded page they have to fill in the form with the specific information about the warehouse (see figure 10).

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

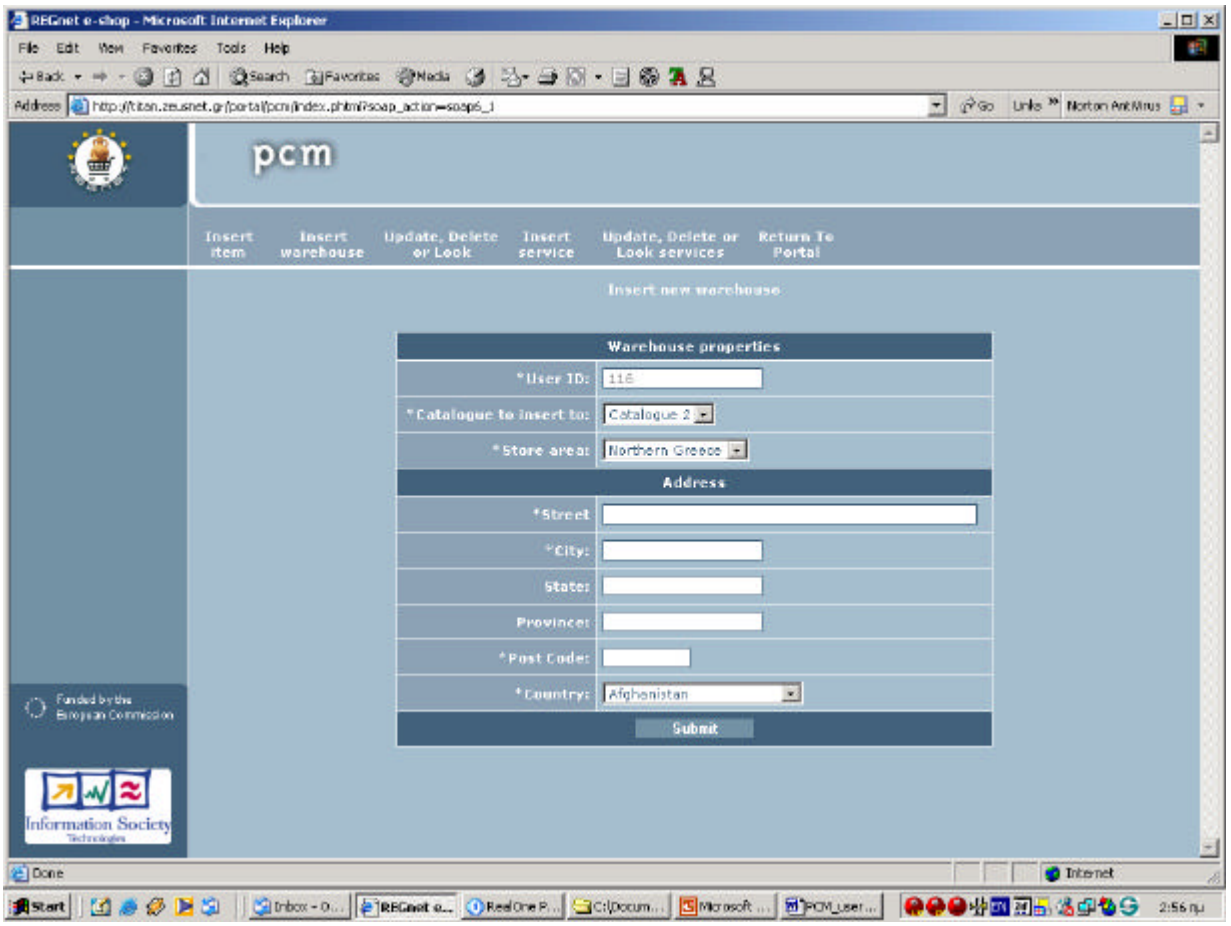


figure 10 – Insert Warehouse

12.6 INSERT SERVICES

A registered user can insert services in the system of PCM. If he/she want to insert new services it is necessary to have catalogues in the system (because all the items are categorized in catalogues).

To insert services the user should press the Insert services link and on the loaded page he/she must choose the specific catalogue where the services will be stored. (see figure 12)

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

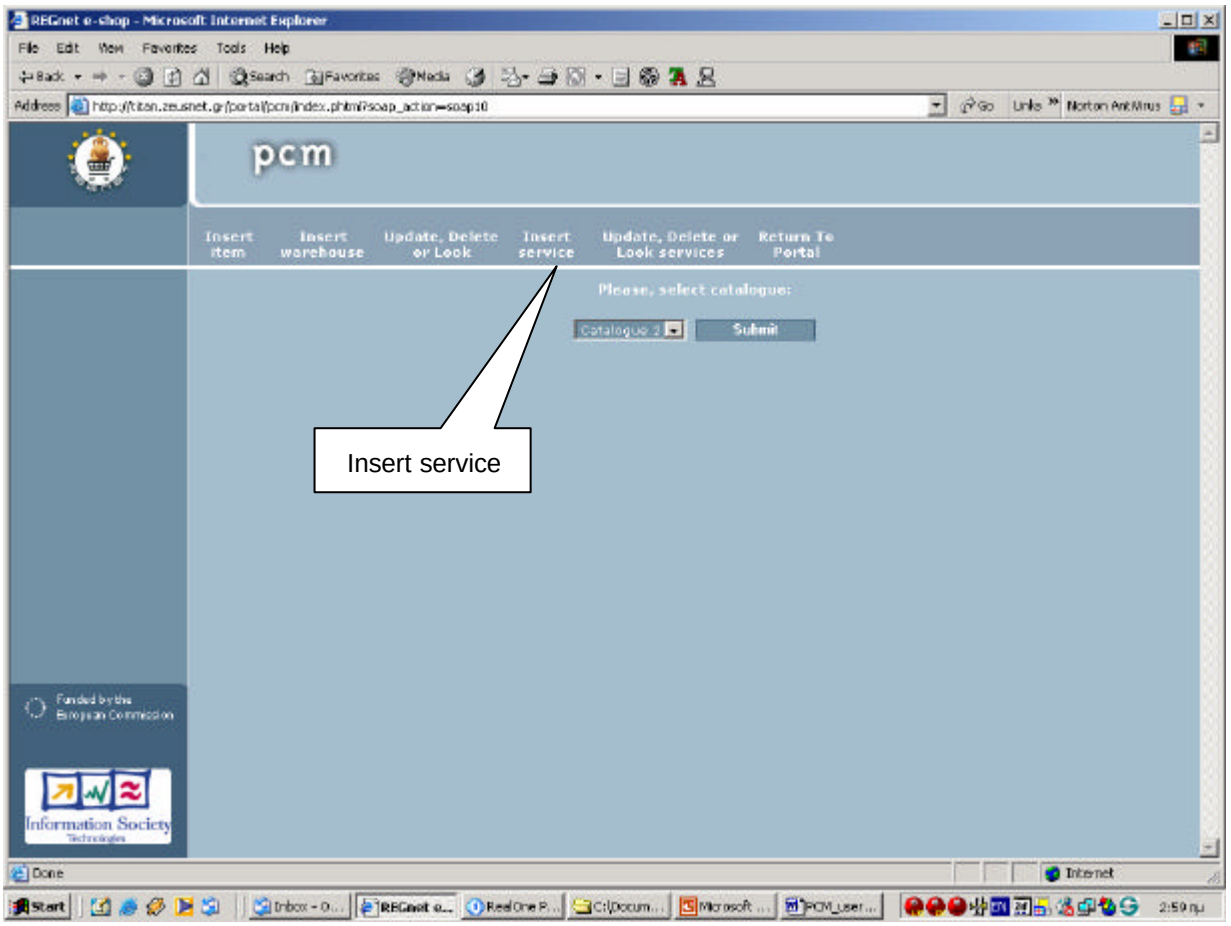


figure 12

Then in the next loaded page the user can give all the necessary information about the services. (see figure 13)

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

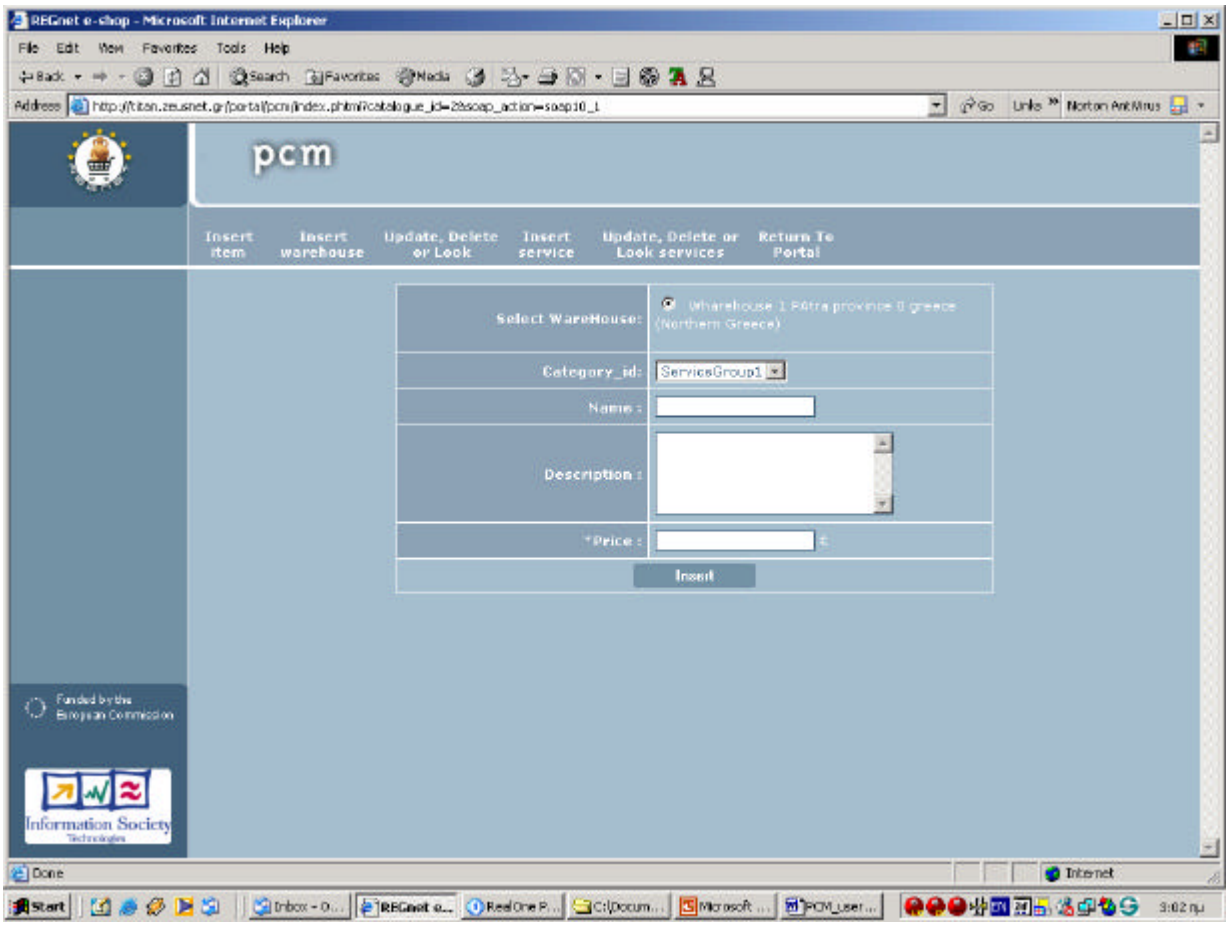


figure 13 – Insert new services

12.7 MANAGE SERVICES

Users can also have the ability of manage their services in the same way as their items. They can update, delete or look their stored services by pressing the Update, Delete or Look services link. Then the following page appears in which users must choose the specific catalogue (see figure 14) and then users can choose the specific services and also the specific actions that they want (delete, update or look). (you can see figure 14).

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

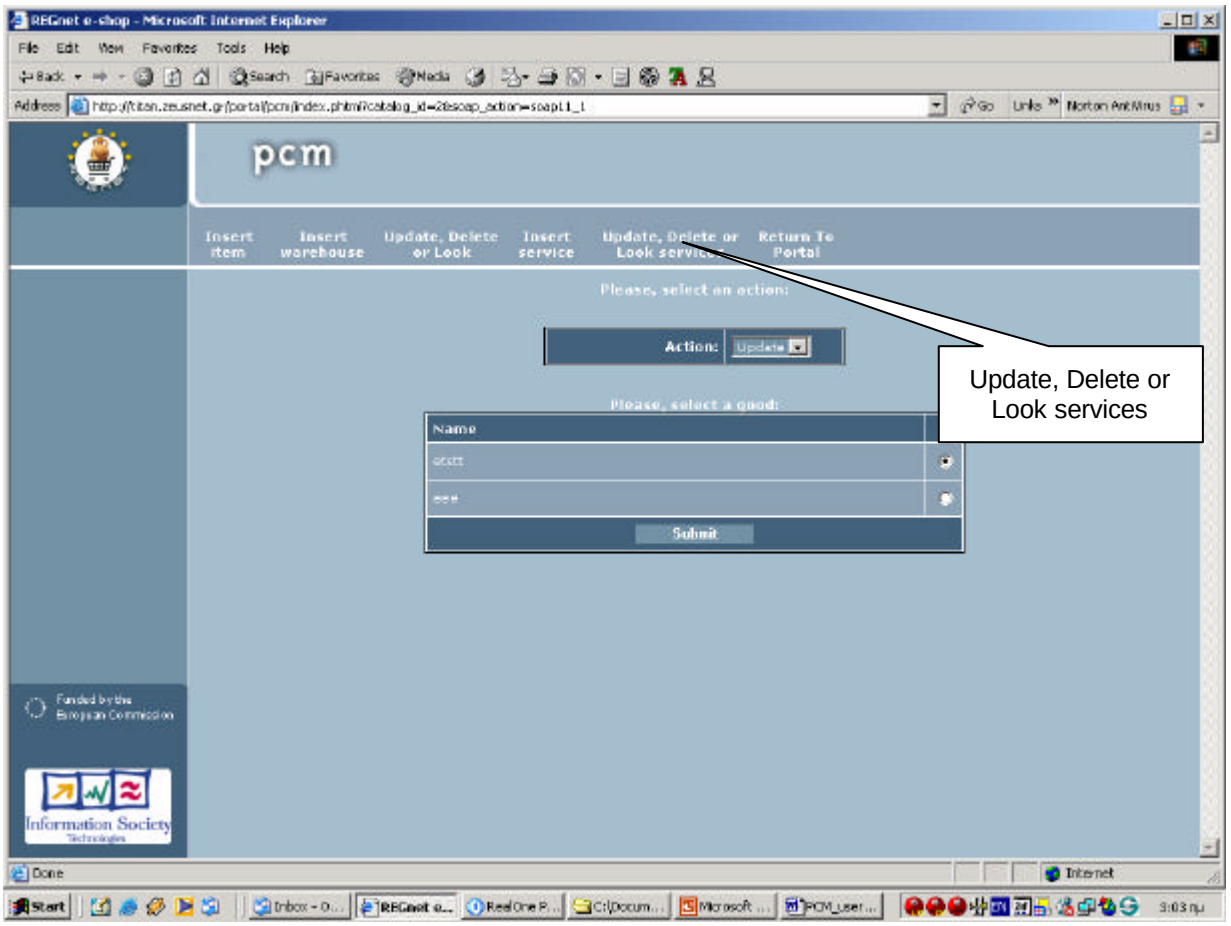


figure 14 – Manage Services

If users want to update the needed information of a service they have to choose the update action and press the submit button in order to move to the next page where the user can update his/her services (see figure 15).

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

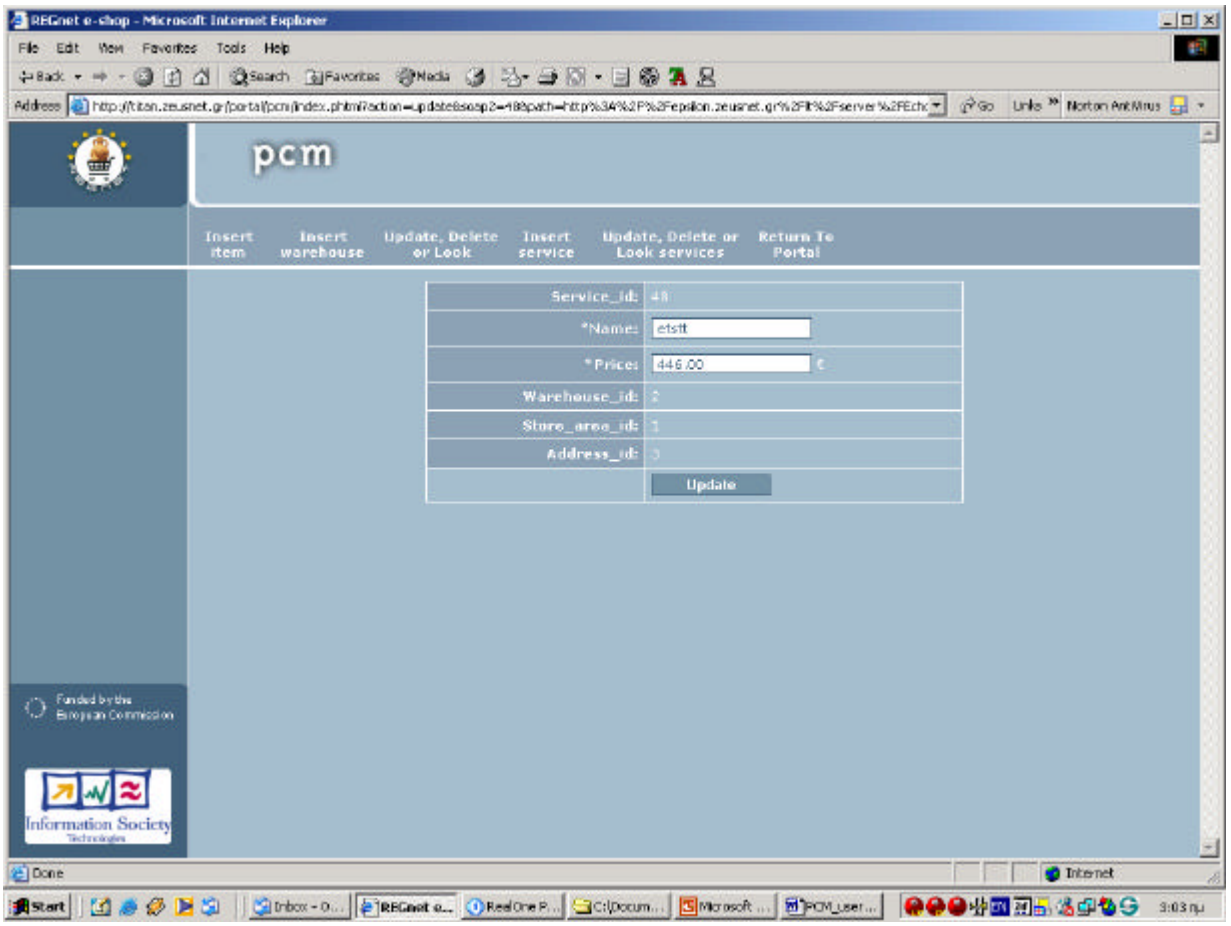


figure 15 – Update Services

Also the user can look all the information concerning an item by choosing the look action and pressing the submit button (see figure 16).

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

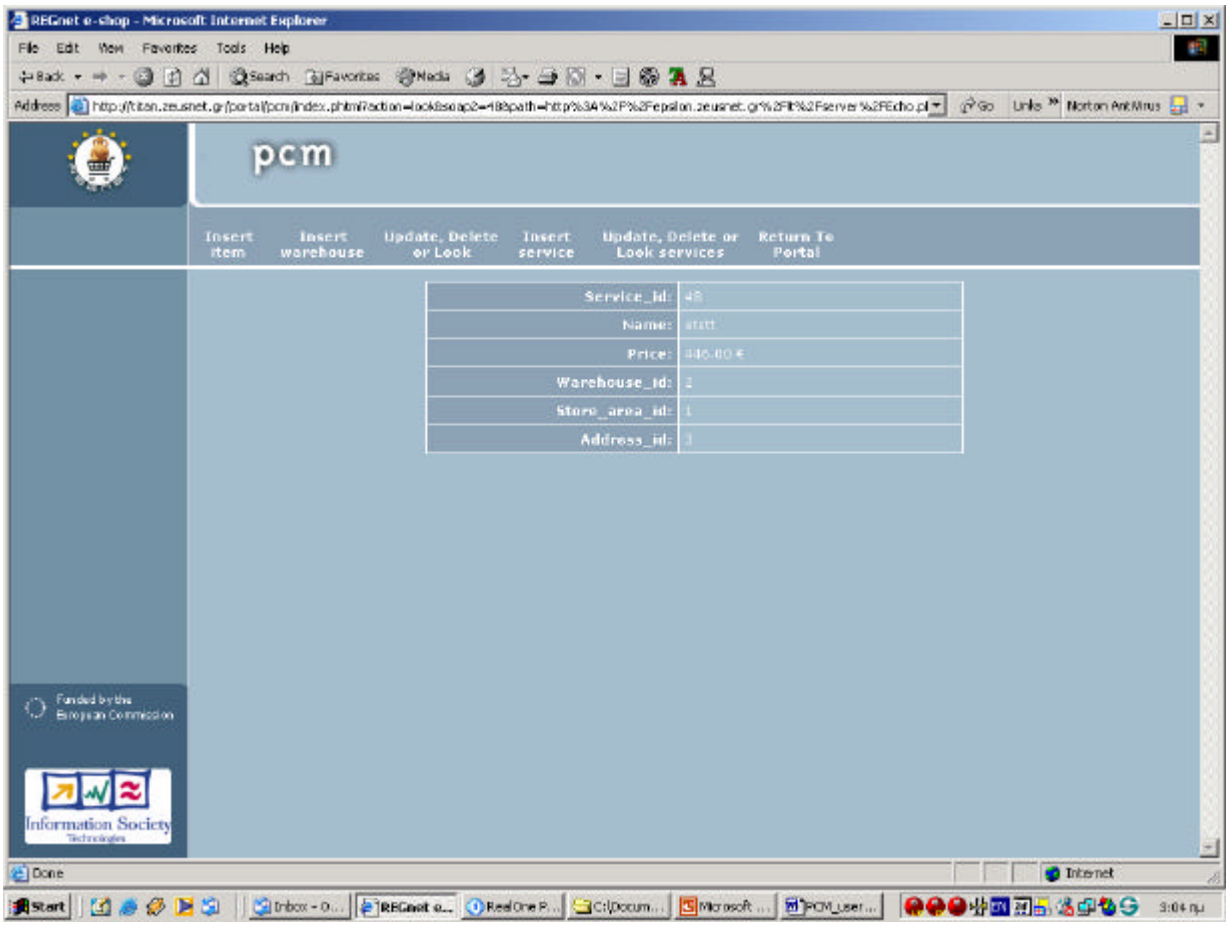


figure 16 – Look Services

12.8 ADMINISTRATION PART OF PCM

The administration part of PCM can only be used from the system's administrator. This part is very important for the system especially for adding new catalogues in local and distributed databases. Furthermore with this part we can manage the categories of the system and also to add a new type of currency*(See following figures).*

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

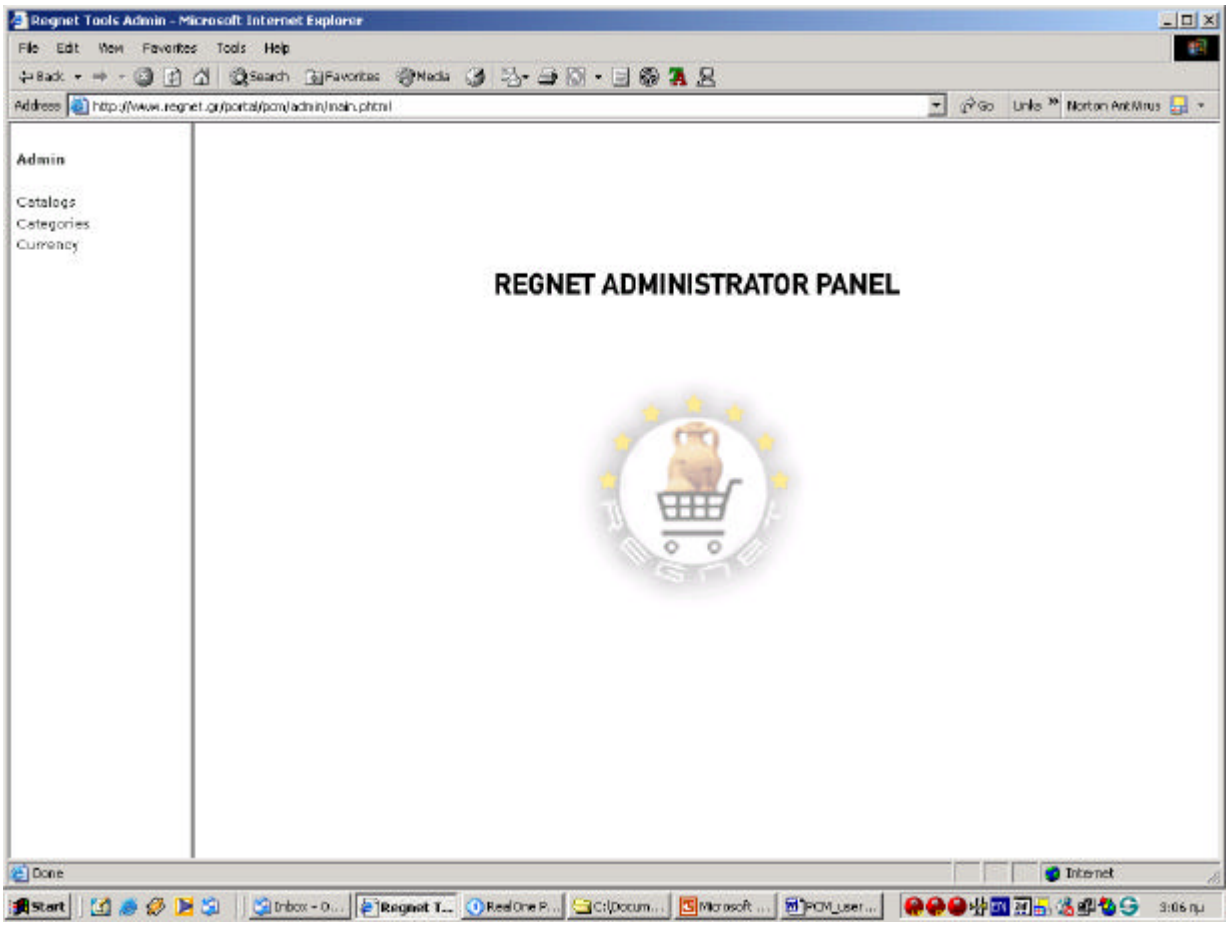


figure 17 –Administration Part

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

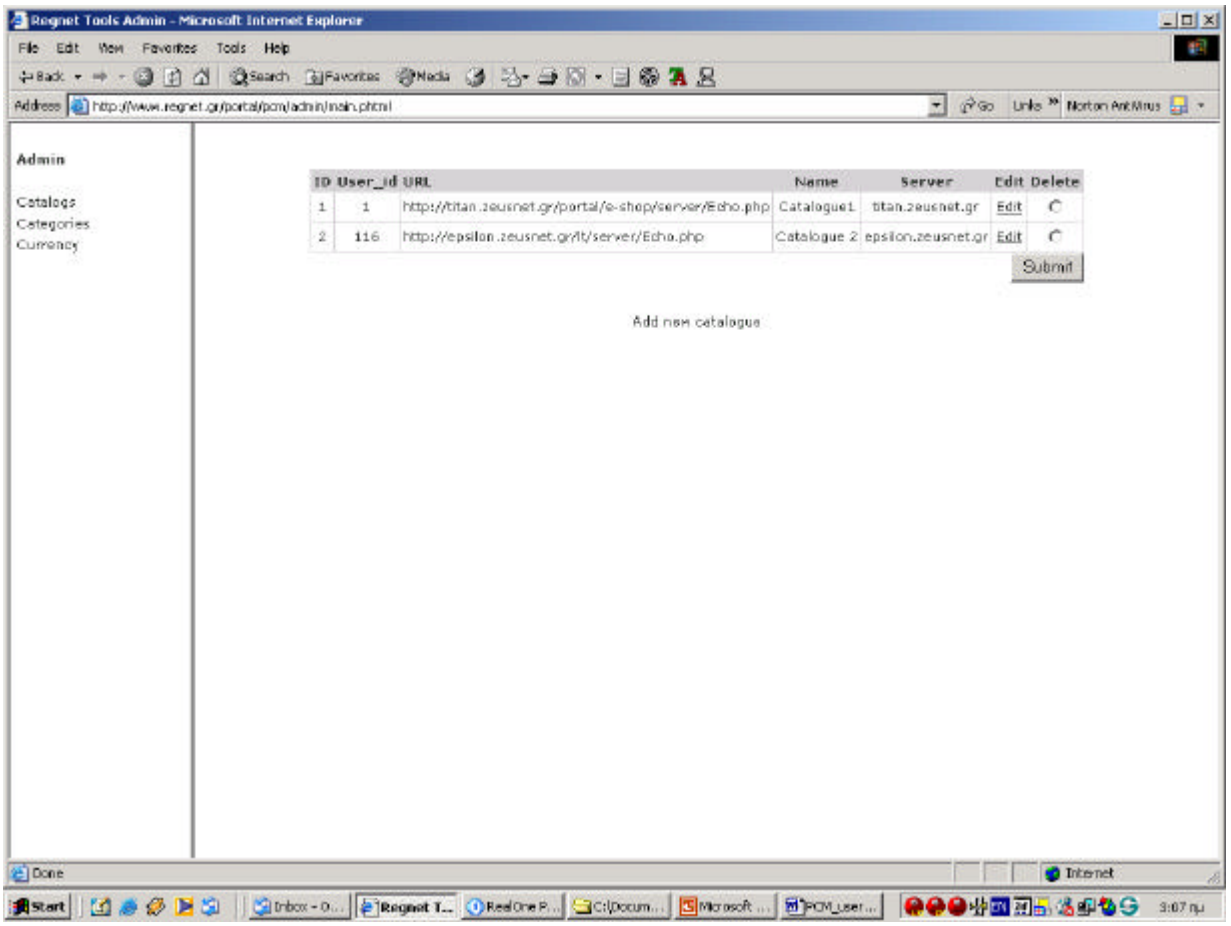


figure 18 – Add new Catalogue

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

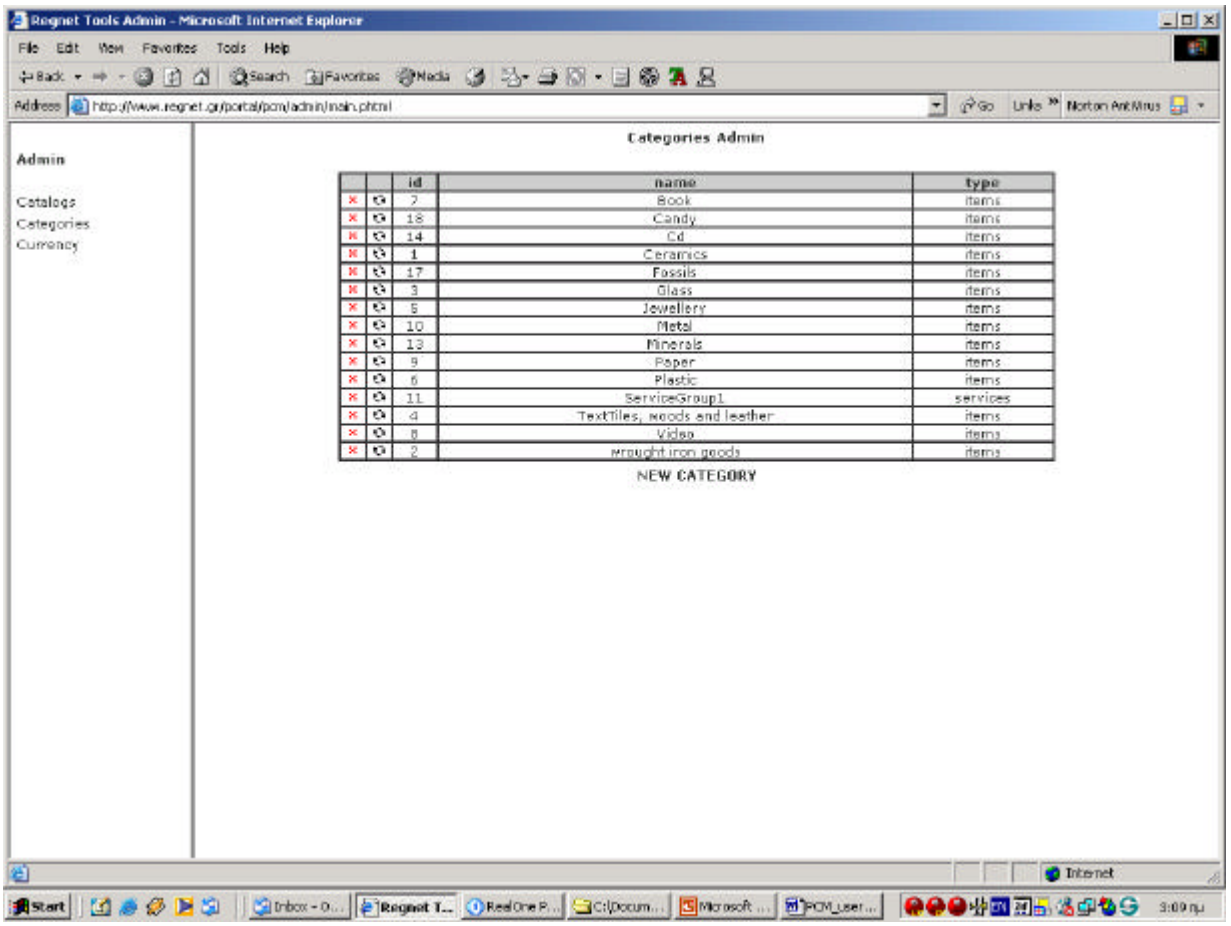


figure 19 – Manage Categories 1

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

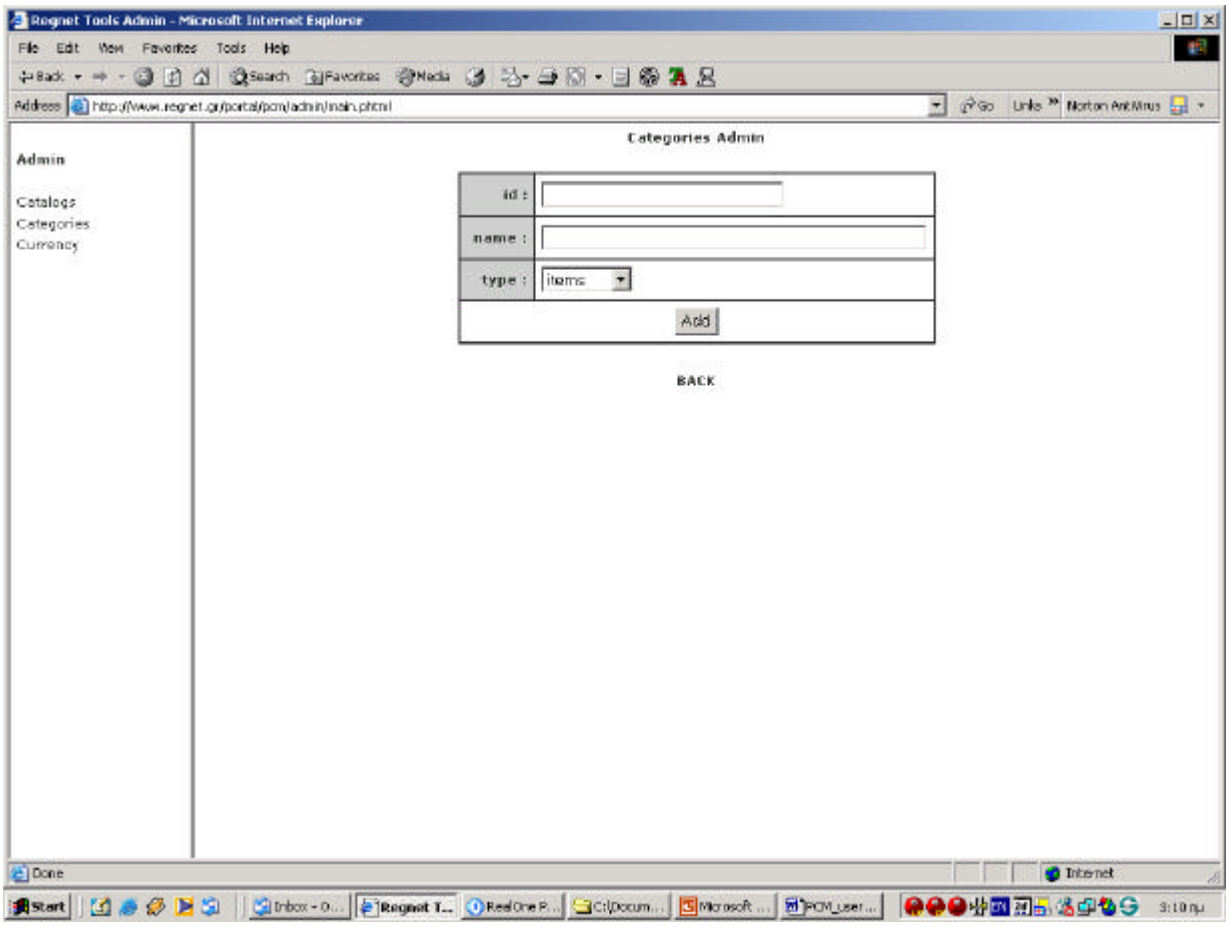


figure 20 – Manage Categories 2

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

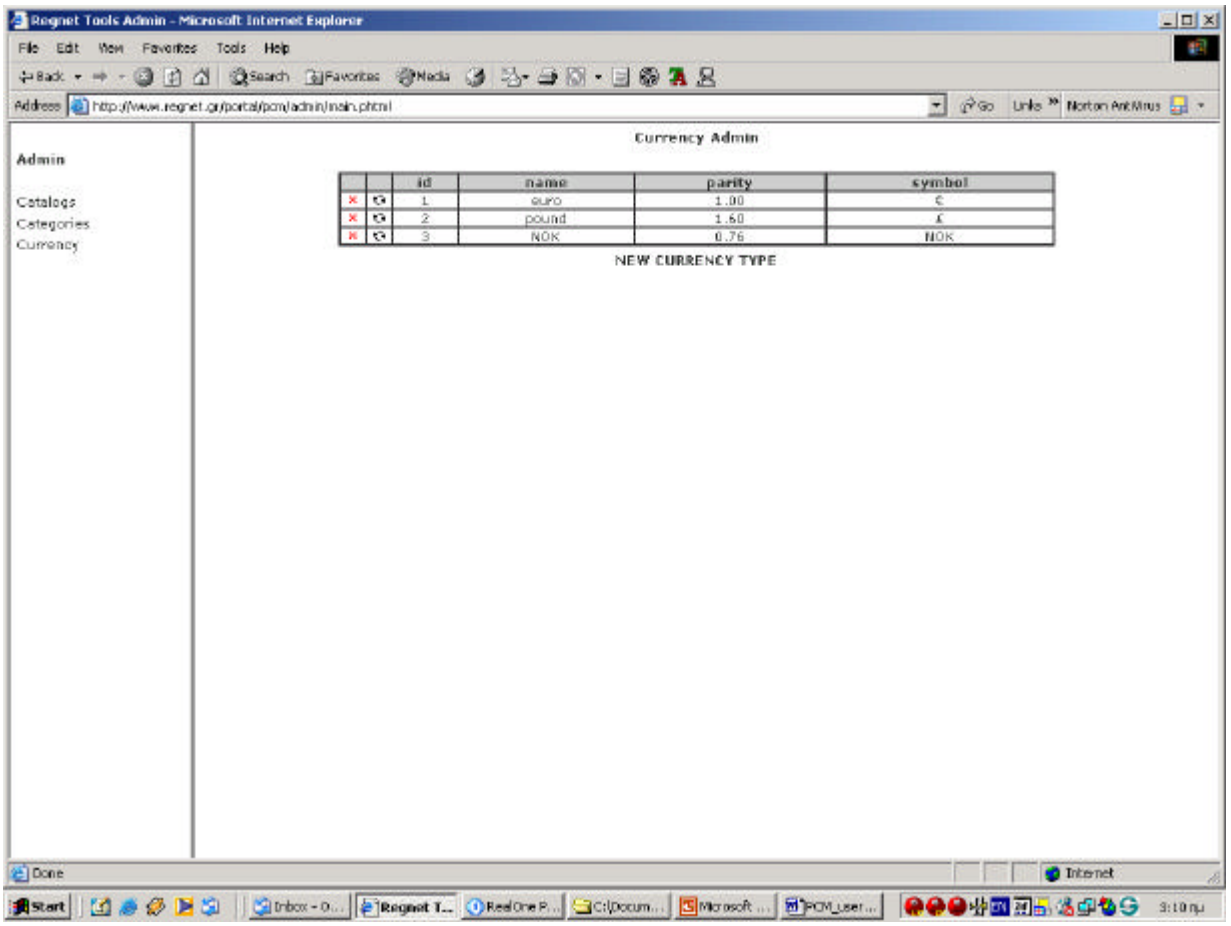


figure 21 – Currency Admin 1

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

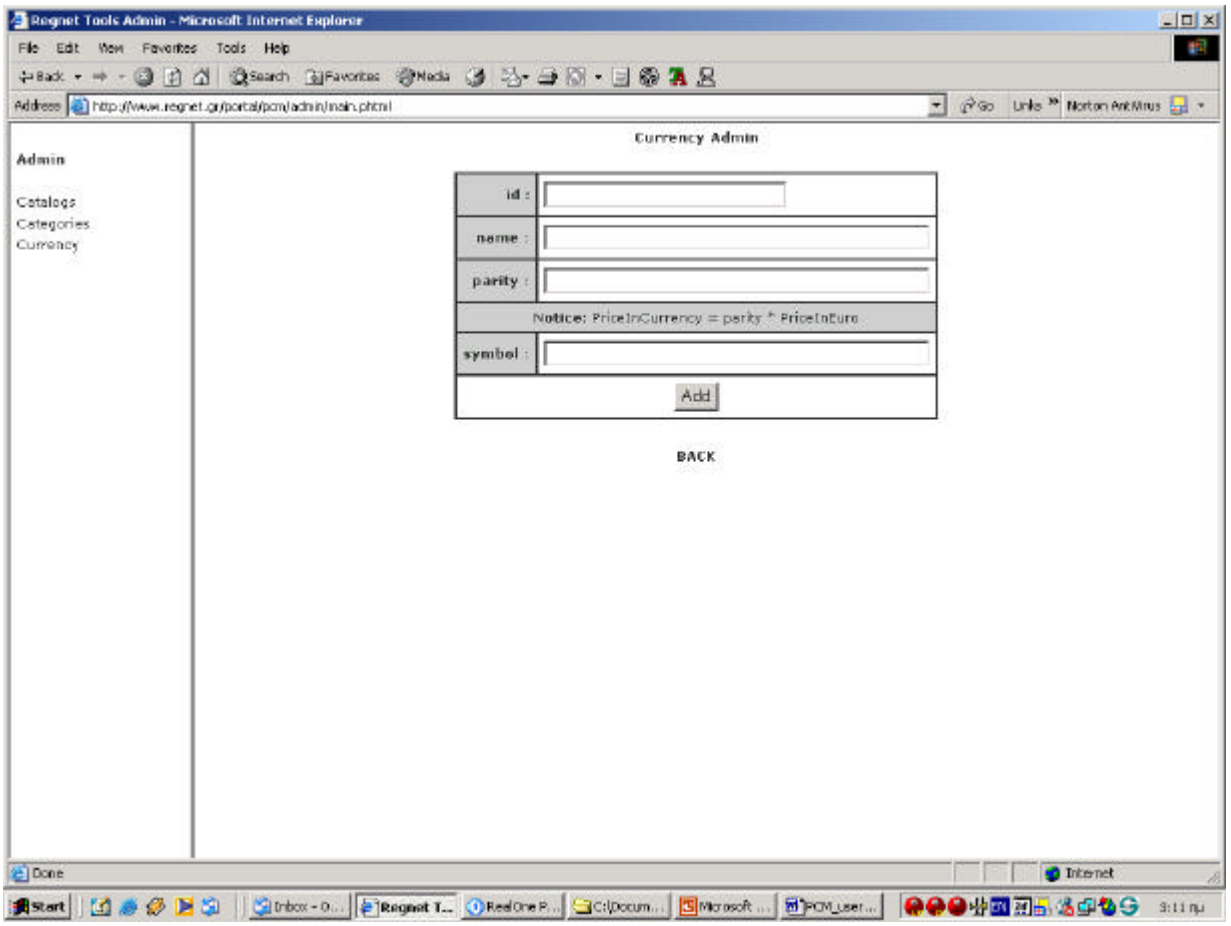


figure 22 – Currency Admin 2

12.9 EXIT

Users can exit from the eshop component by pressing the button “return to portal” from the main menu of e-shop’s system. After that users can return into the portal.

13 E-Shop

13.1 GENERAL

E-shop is a system, which allows users to make purchases via the Internet. The main difference of this system with others is that it allows users to search for products in different databases and not only in a local database. That means that the system can use distributed databases, which can be placed wherever the seller wants. This fact makes the system more flexible relatively to existing trade systems.(see figure 1).

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

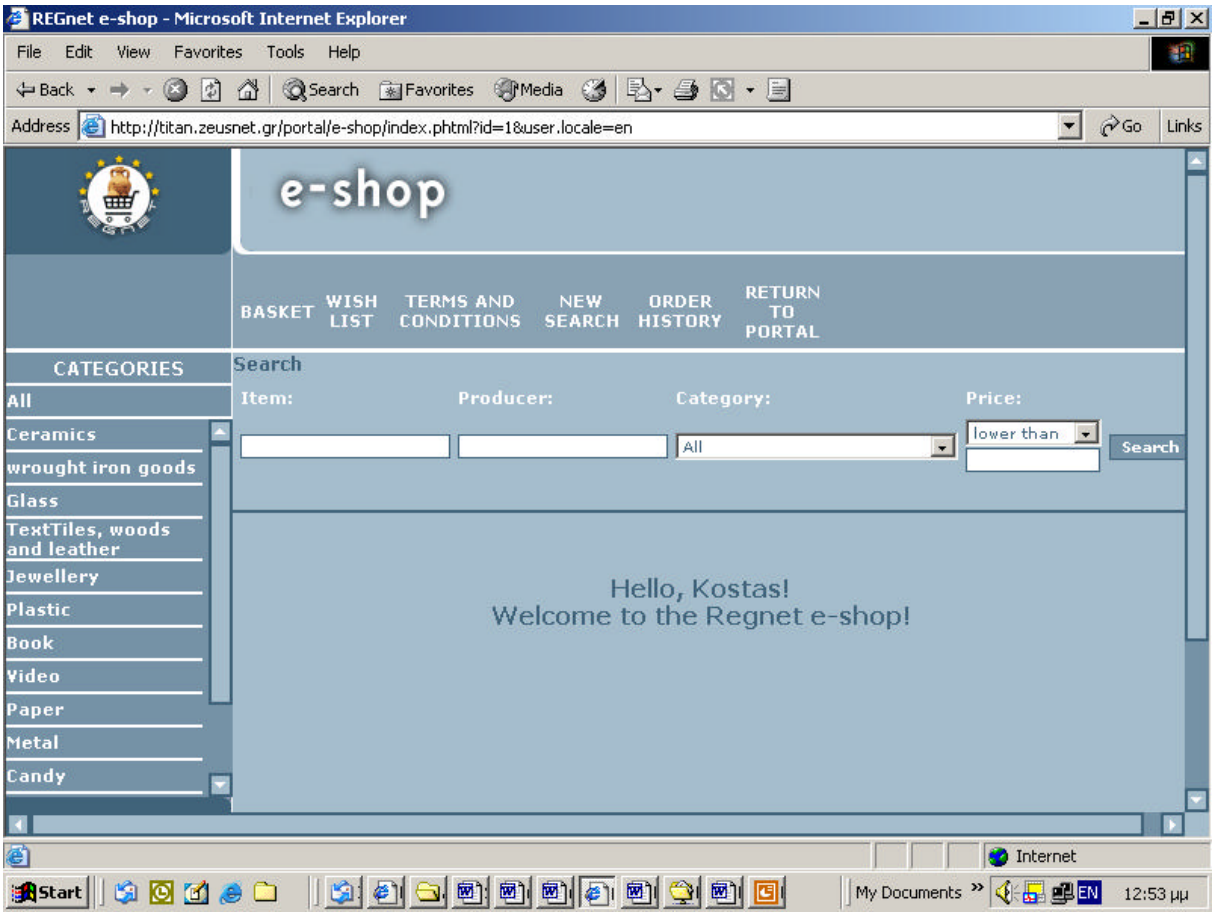


Figure 1 – e-shop

Registered users can use all the functionalities that are provided by the e-shop. For that reason users must authorize themselves by using the registration functionality that provided by REGNET's Portal. After that registered users can use the eshop component by following the specific link without any further authorization within the eshop (there is an ontology client that connects our component with the ontology system in order to take the full user profile and use it in any preferable purchases). Therefore, they can have all the functionalities that are offered to the user as well as a wishing list and the ability to make purchases.

13.2 GOODS SEARCH

Searching for goods can be done either by using the details of a product (e.g. name, description) or by the supplier and also by giving a max or a min price (see figure 2 and 3).

Searching of goods by name and by supplier:

Searching for goods by name, users should enter the sub-string of the name or the description of any product in the field **Item** and then pressing the **Search** button. Furthermore any user can search for goods by providing the specific supplier.

Searching of goods by categories:

Implicitly search is made for all categories.

In case of a search for one of the categories you should select category in combo-box, enter the search word and then press the **Search** button. The user is able to select from the predefined different categories that the system provides, by using a specific combo box or a scroll bar that exists on the

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

left of the screenThat window can help users to navigate and find all the products that belong to the desirable category.

Search with limits by price (max, min):

The e-shop system gives the option to search goods setting max or min price limits. To use this option you should enter the price in the **Price** field and select lower or higher in combo-box and then press the **Search** button.

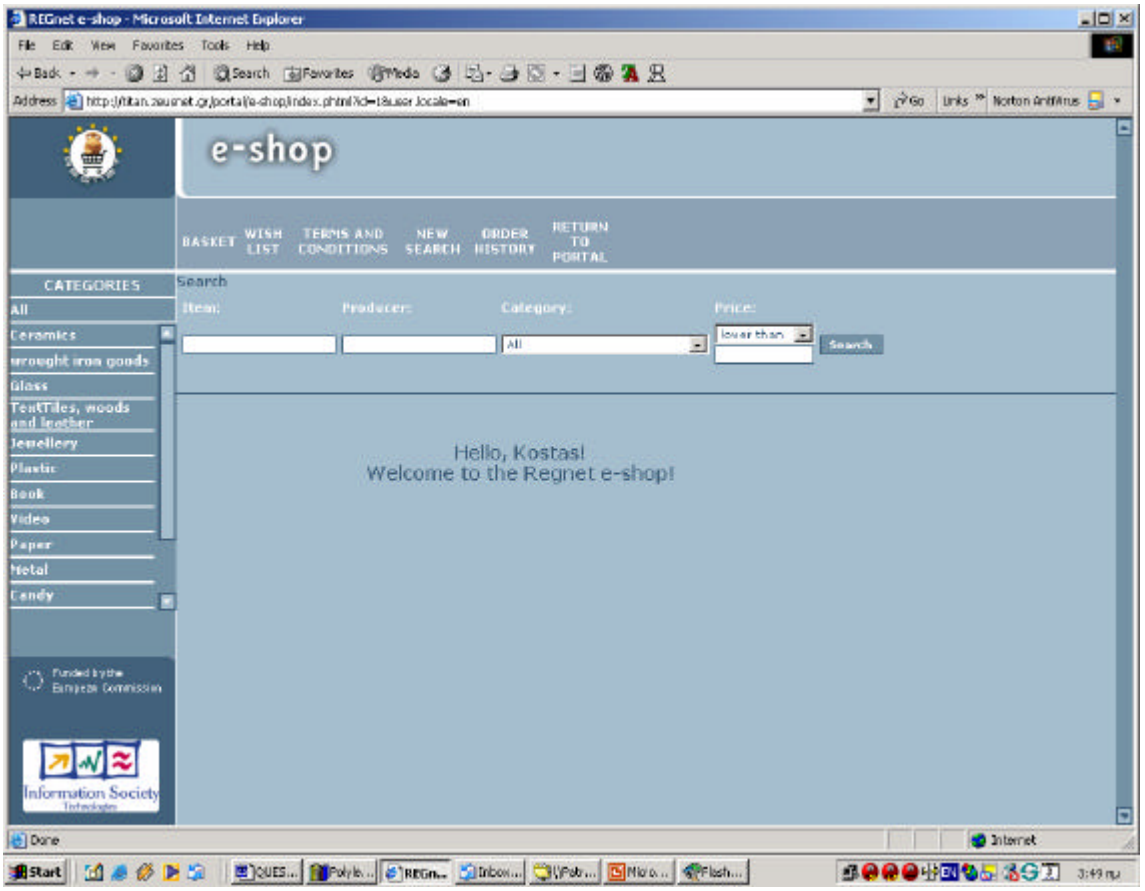


figure 2 – searching functionality 1

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

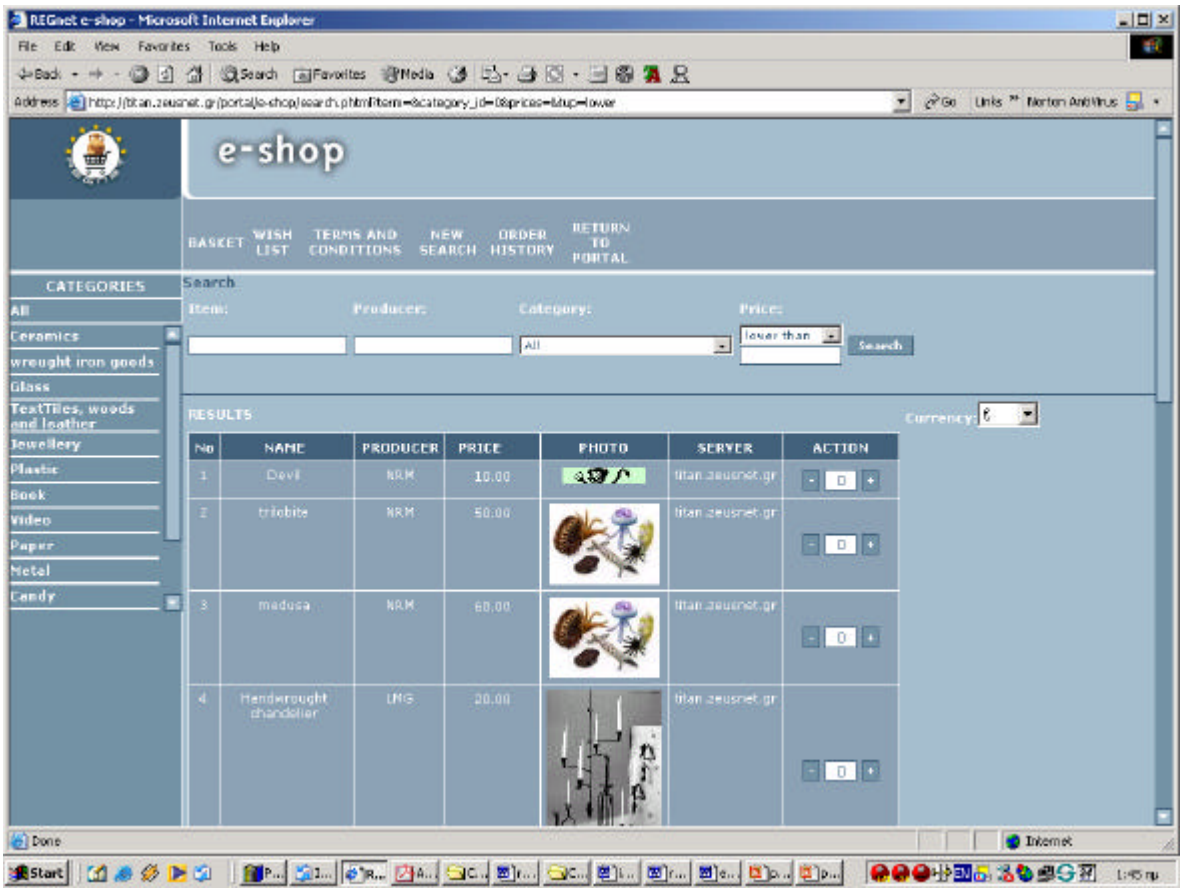


Figure 3 – searching functionality 2

13.3 BASKET CONTROL

To add goods to the Basket you should search goods using the **Search goods** function and then push the Button “add to basket” in order to move items from the search page (see figure 4) to the basket page (see figure 5). If no goods are selected, then the message «Your basket is empty!» will appear in the screen.

If there are goods in the Basket, then a user can have the following functionalities/ options:

- Add an item to the shopping cart
- Remove item from the shopping cart
- View item Details (all information regarding the product can be viewed to another page box)
- Move item to wish list
- Change the quantity of a product
- Calculate the total amount of the order
- Update the basket
- Change the currency of the price (by default is in Euro).
- Proceed an order

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

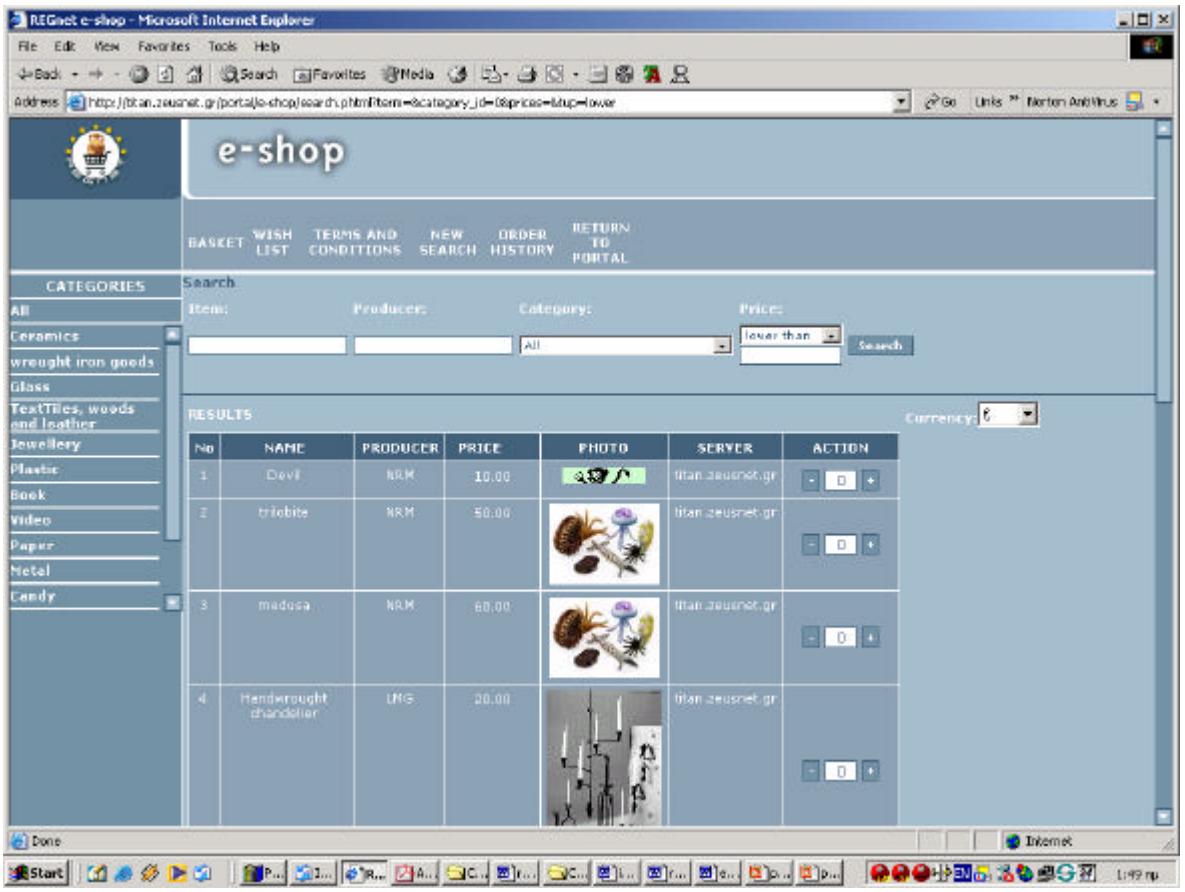


figure 4 – Add to basket

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

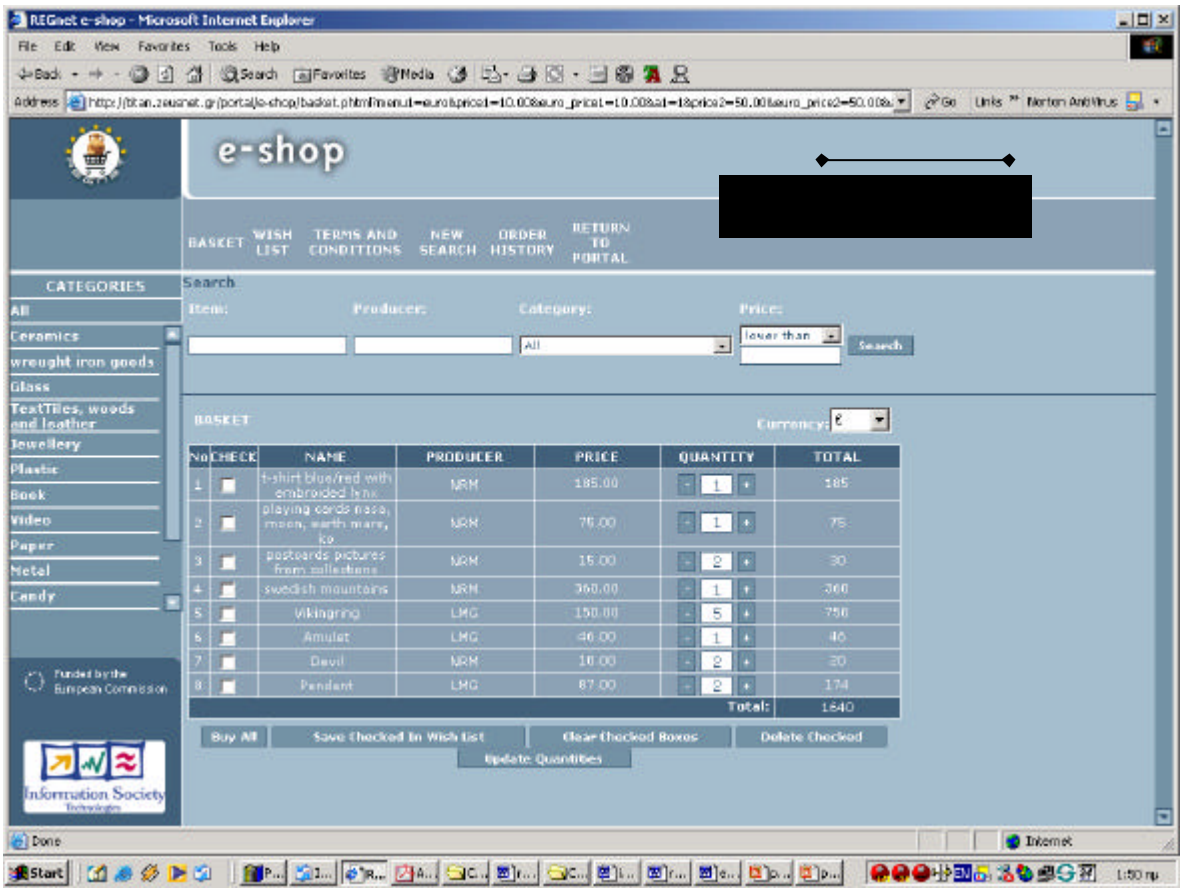


figure 5 – basket functionality

13.4 WISH LIST CONTROL

Wish List is a list of goods, which are put aside for a future purchase. All the products in the wish list have been provided from the basket (see figure 7). In the Wish List the following functionalities are available:

- Move to basket. A product may be transferred from the wish list to the basketUpdate the wish list
- Buy from the wish list the selected items
- View wish list, the client may access and manage his wish list Delete from wish list
- Request item details (You can see item details to another web box)
- Change the quantity and the currency

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

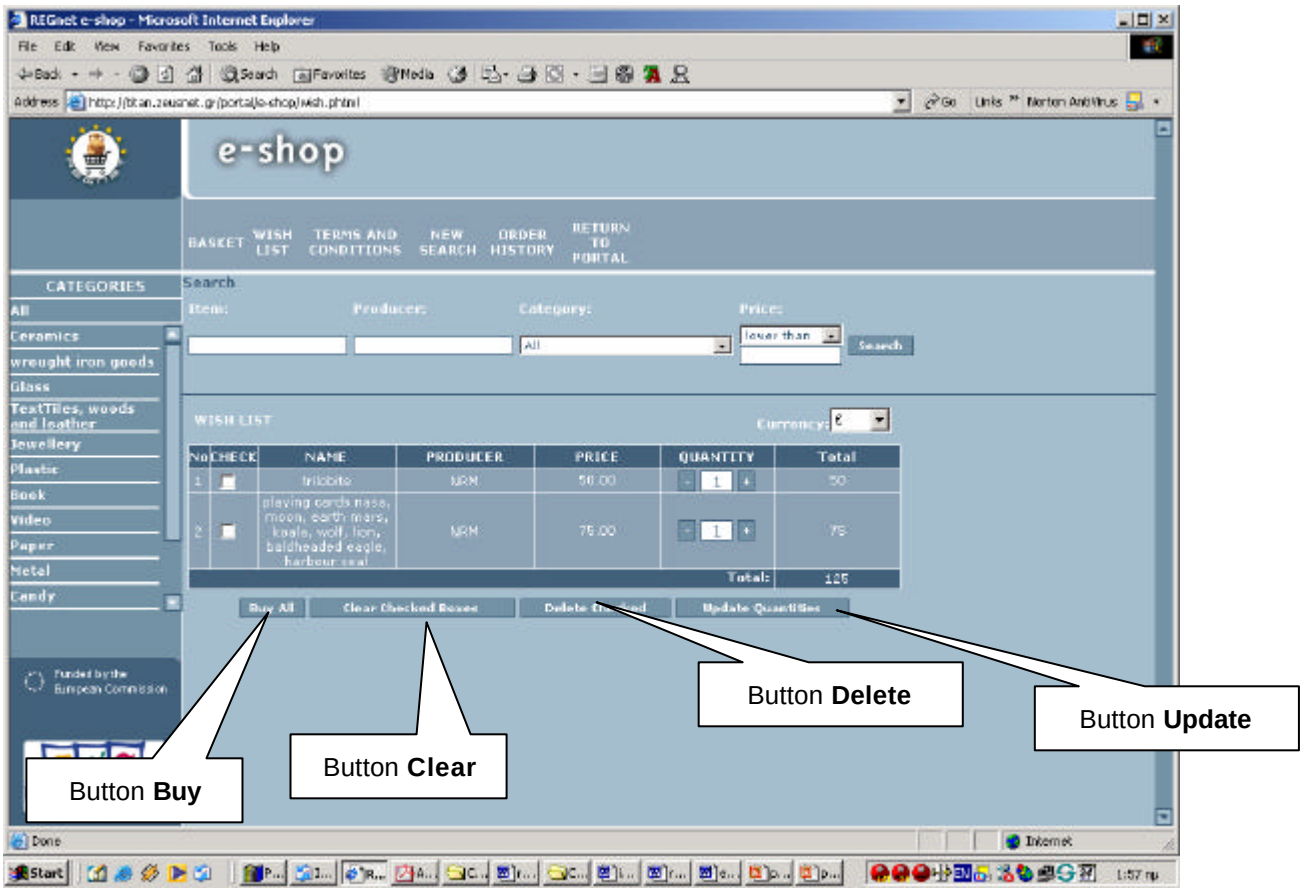


figure 7 – wish list

13.5 DELIVERY ADDRESS

Delivery address is necessary for the delivery of paid goods to the user, who bought goods from the e-shop system.

Delivery address may coincide with the user's address entered during registration (into the portal), but it may also be different. Delivery address is required during the purchase of goods and after authorization of the system (figure 6).

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

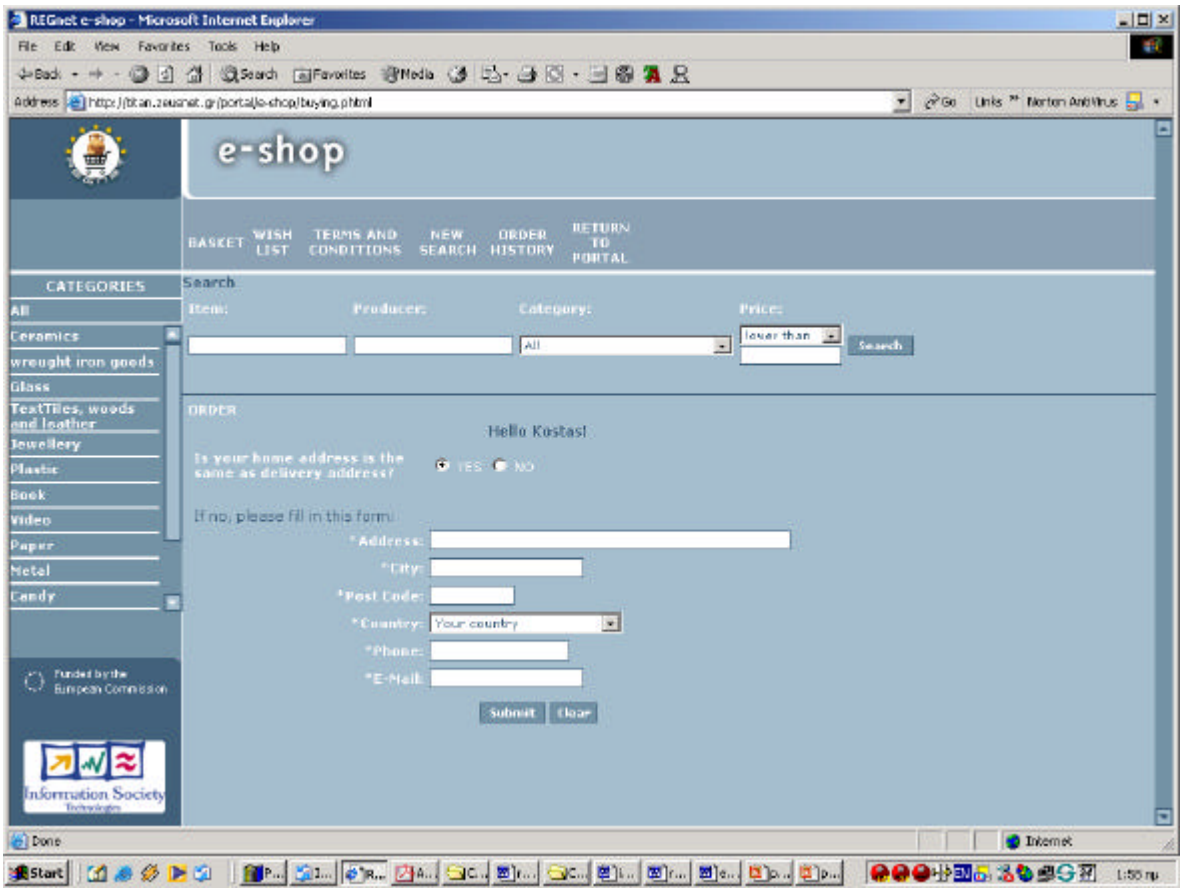


figure 6

13.6 ORDERS HISTORY

Registered users have the option to view the history of their orders (figure 8)

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

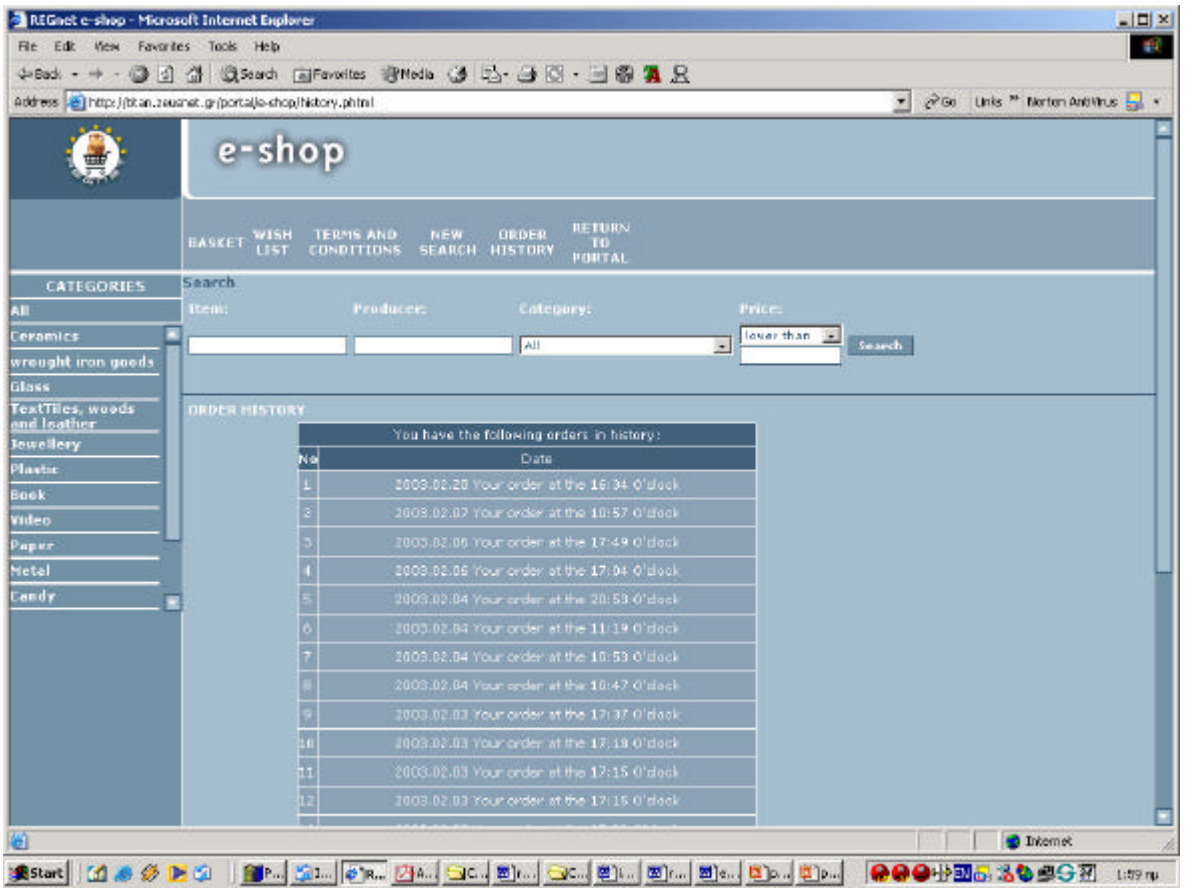


figure 8 – Orders History 1

On the orders' history view page, the user can see all the information regarding previous orders that he/she has made. By clicking on the specific link, a reference is available for the detailed information concerning a previous order (good's name, producer, quantity, price, sum for each goods, total cost of the order) (see figure 9)

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

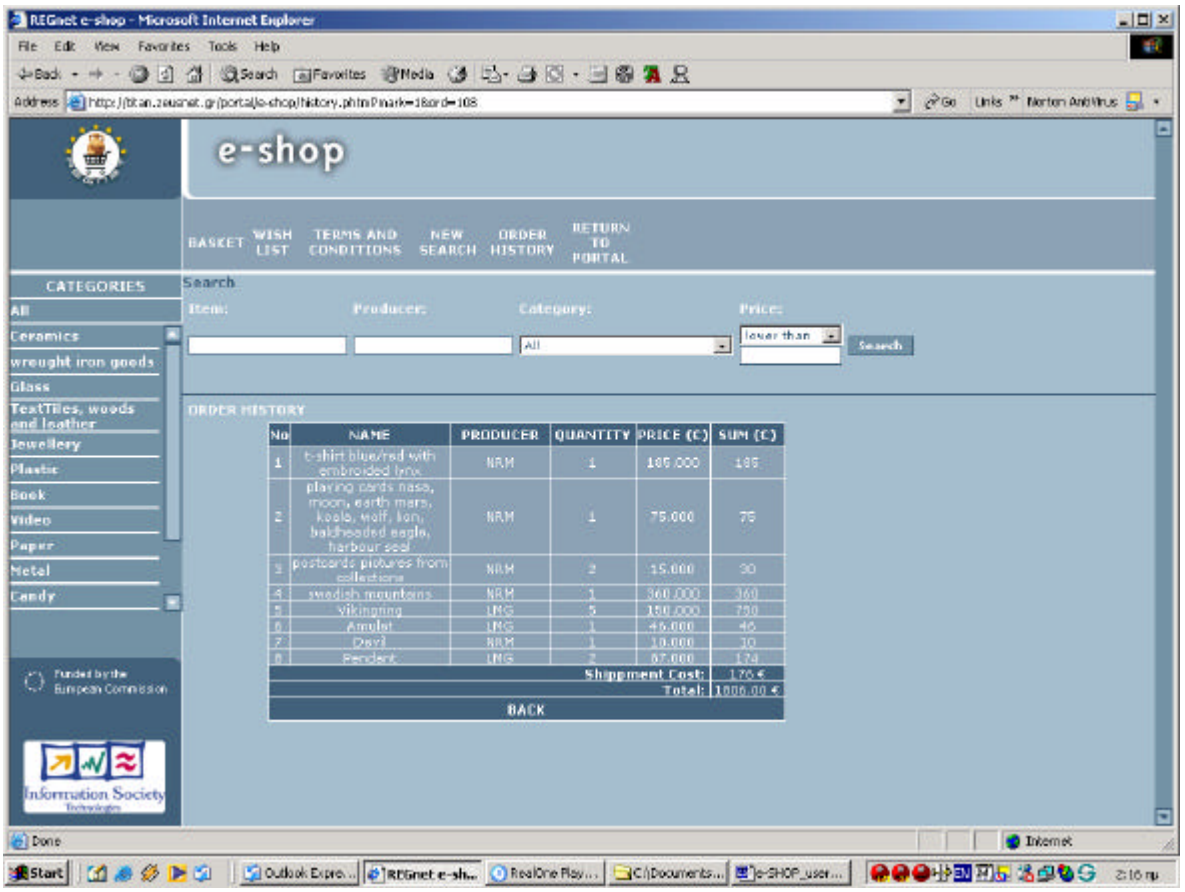


figure 9 – Orders History 2

13.7 E-PAYMENT

Users can select the way that they prefer to pay.

Before the final transaction there is a Review order. Furthermore the system gives the ability to users to verify their orders and also to specify the shipment costs (figure 10)

So we can have the following payment methods (you can see the figure 11)

1. Payment with credit card.

After that the system will send an email with the confirmation of the order and then any user can finish his/her order by submitting the credit card number in a Internet Secure Environment (see figure 12).

2. Deposit in a Bank Account.

Then an email with the confirmation of the order will be send to users with the details of the payment and the bank account.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

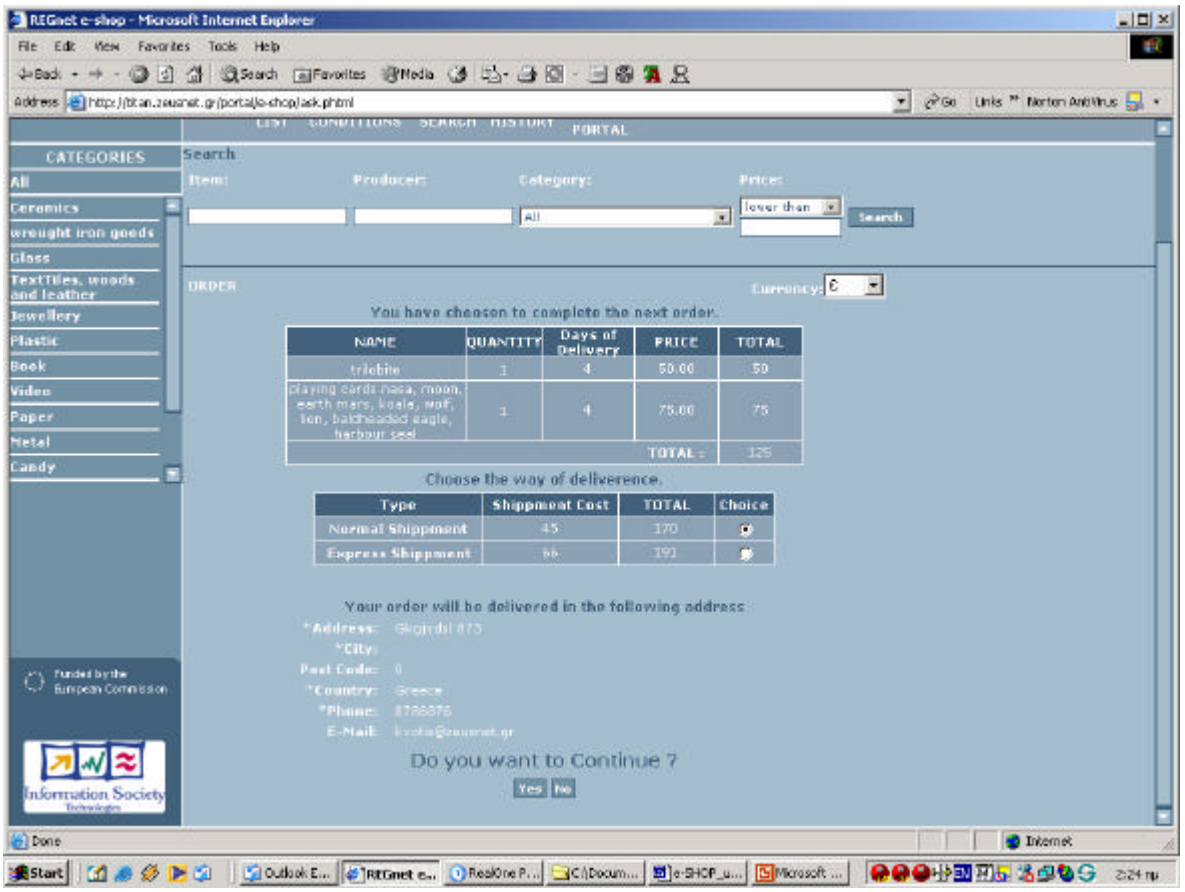


figure 10 –Review order

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

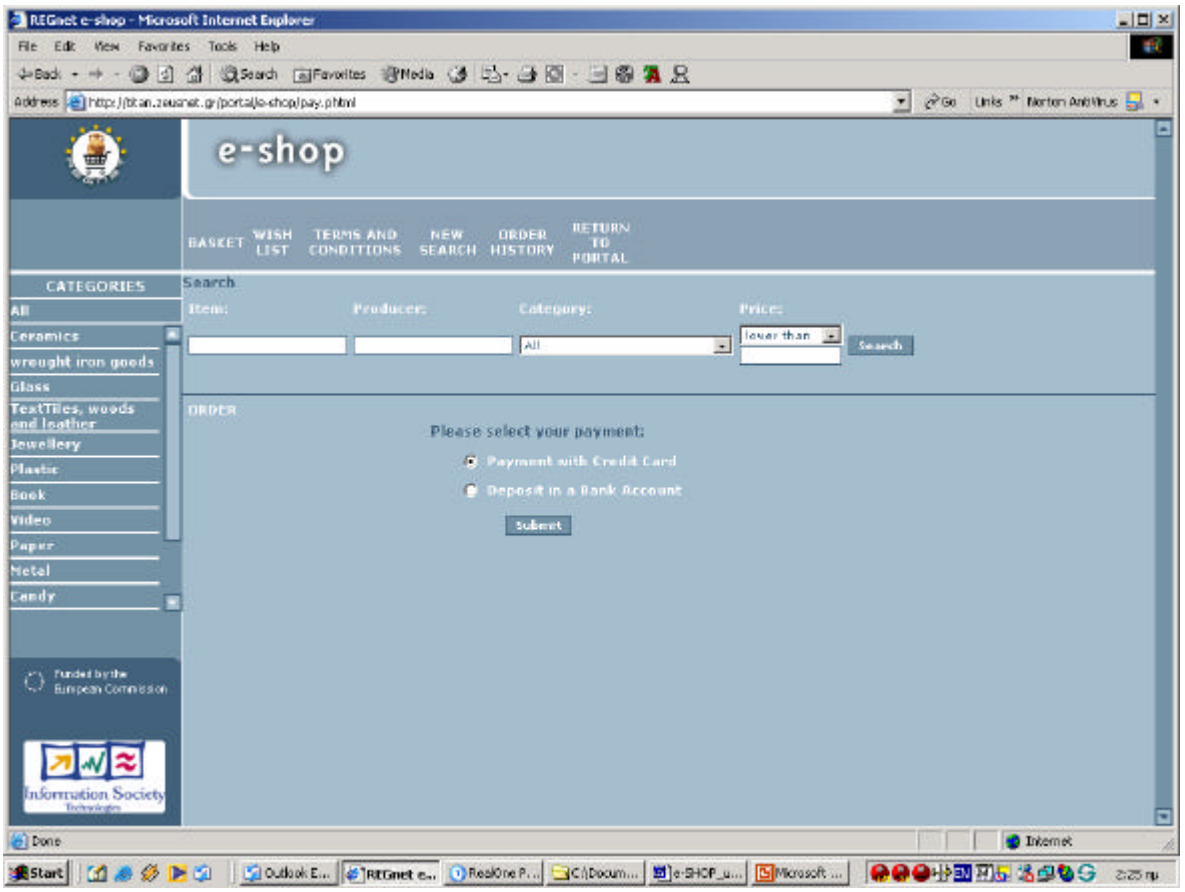


figure 11 – Selection of E-payment method

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

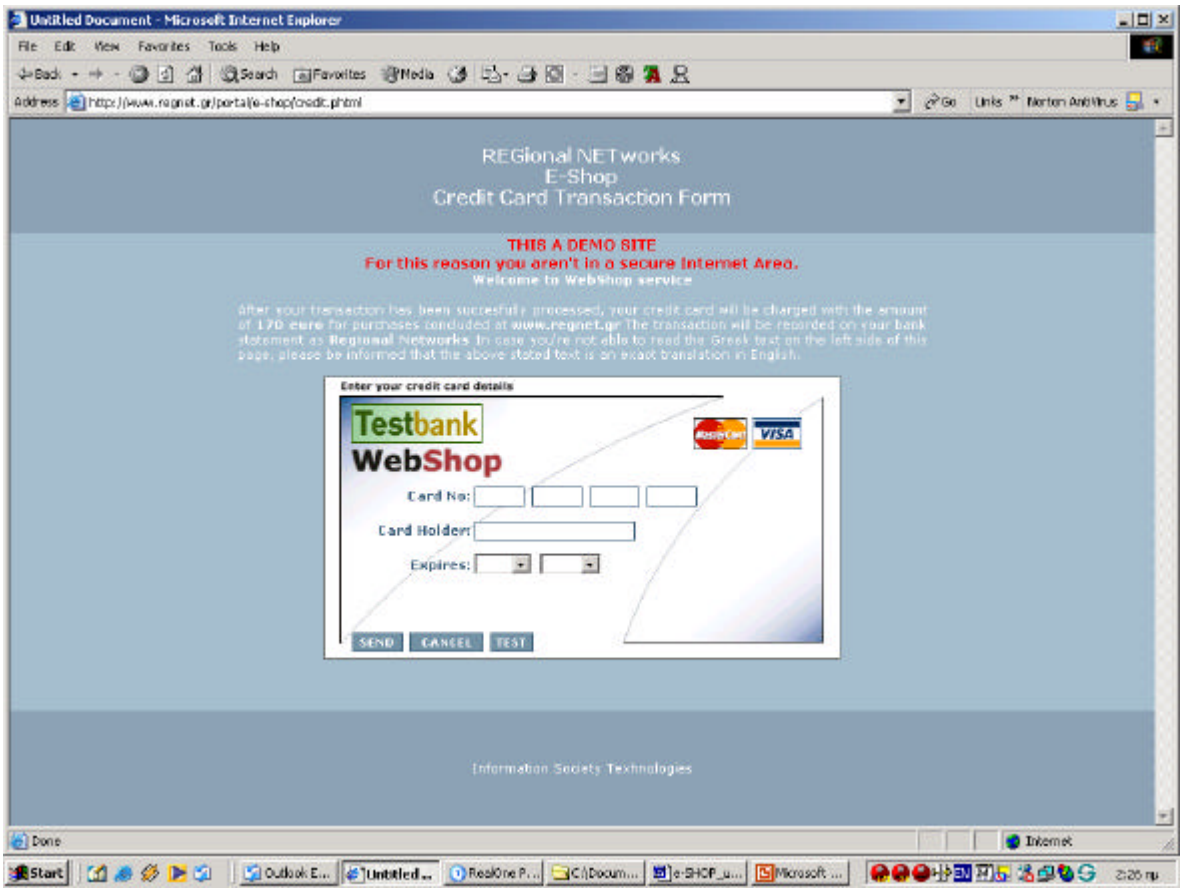


figure 12 – Credit Card Secure Environment

13.8 TERMS AND CONDITIONS

There some terms and conditions that offered to users before they use the functionalities of the specific component. This terms and conditions are very important because they describe the main legal issues for the specific component related to European laws. (You can see figure 13).

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

figure 13 – Terms and Conditions

13.9 EXIT

Users can exit from the eshop component by pressing the button “return to portal” from the main menu of e-shop’s system.

14 E-Business

14.1 GENERAL

The E-Business (EB) gives possibility of advanced search of goods and services and also process orders on the goods and services for registered users (only for suppliers). Only suppliers can do real purchases through the system. The most important aspect of system is the use of the SOAP protocol in the interconnections between the central (administrative database) and the remote (distributed) catalogues (see figure 1). Below are the main capabilities of the system:

- Advanced search of goods.
- Services search.
- Drawing-up of contracts.
- Process of orders.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

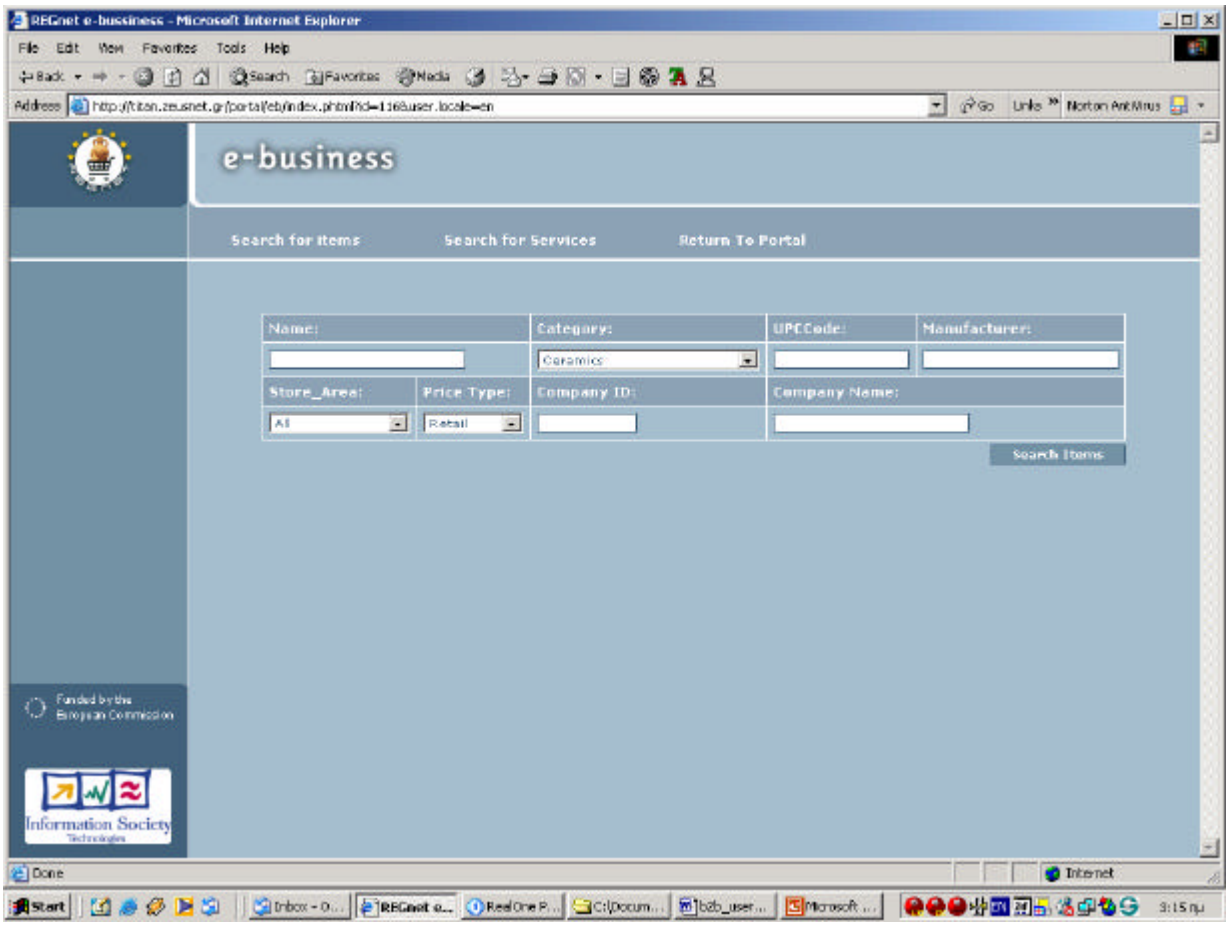


figure 1 – E-business component

14.2 ADVANCED SEARCH OF GOODS

The E-Business gives possibility in search by the name of the items, by the manufacturer, by its category, by giving the UPCCode, with limitation in quantity of goods, and also by the price type and others (see figure 2).

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

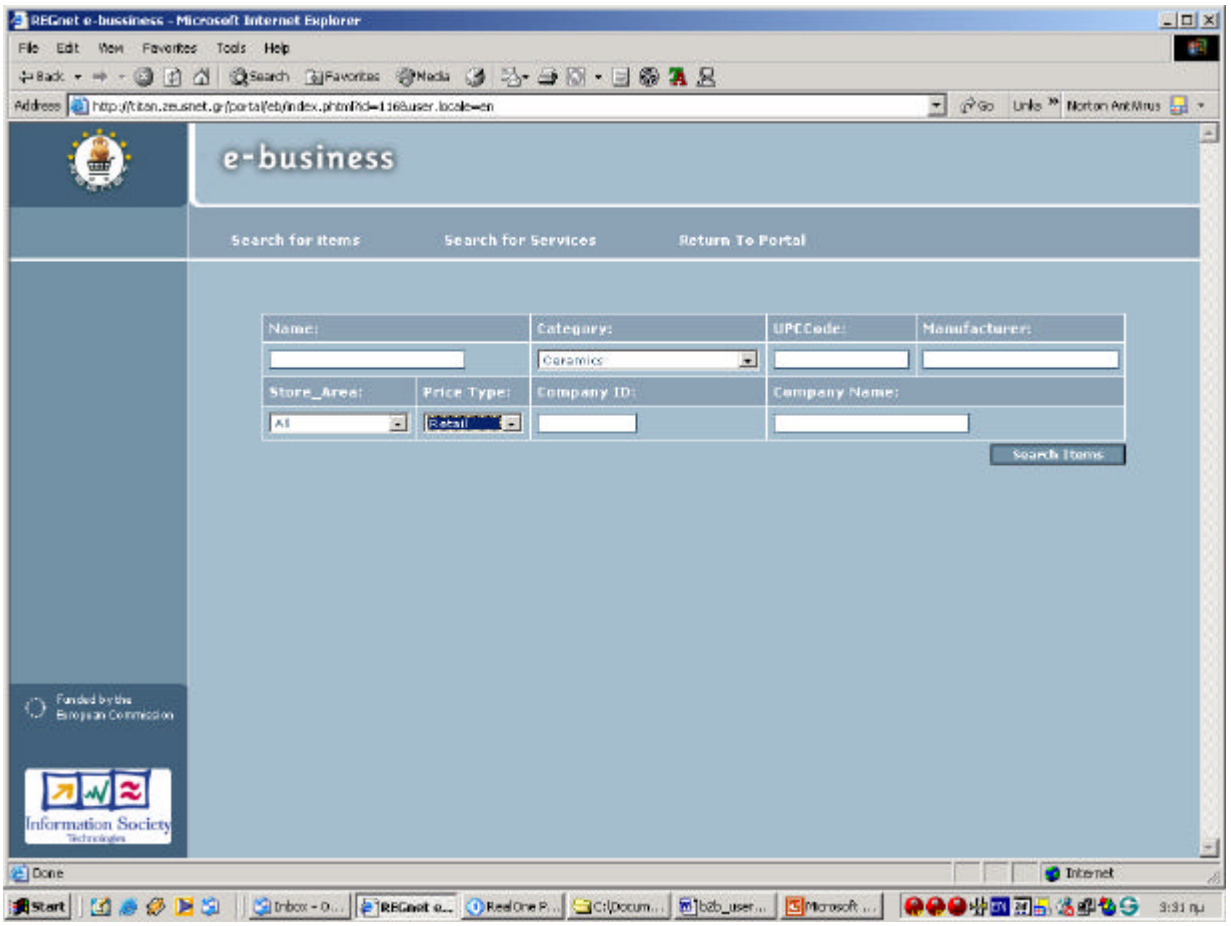


figure 2

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

14.3 SERVICES SEARCH

The system provides also the ability of searching for specific services by giving the name of the specific services. (See figure 3)

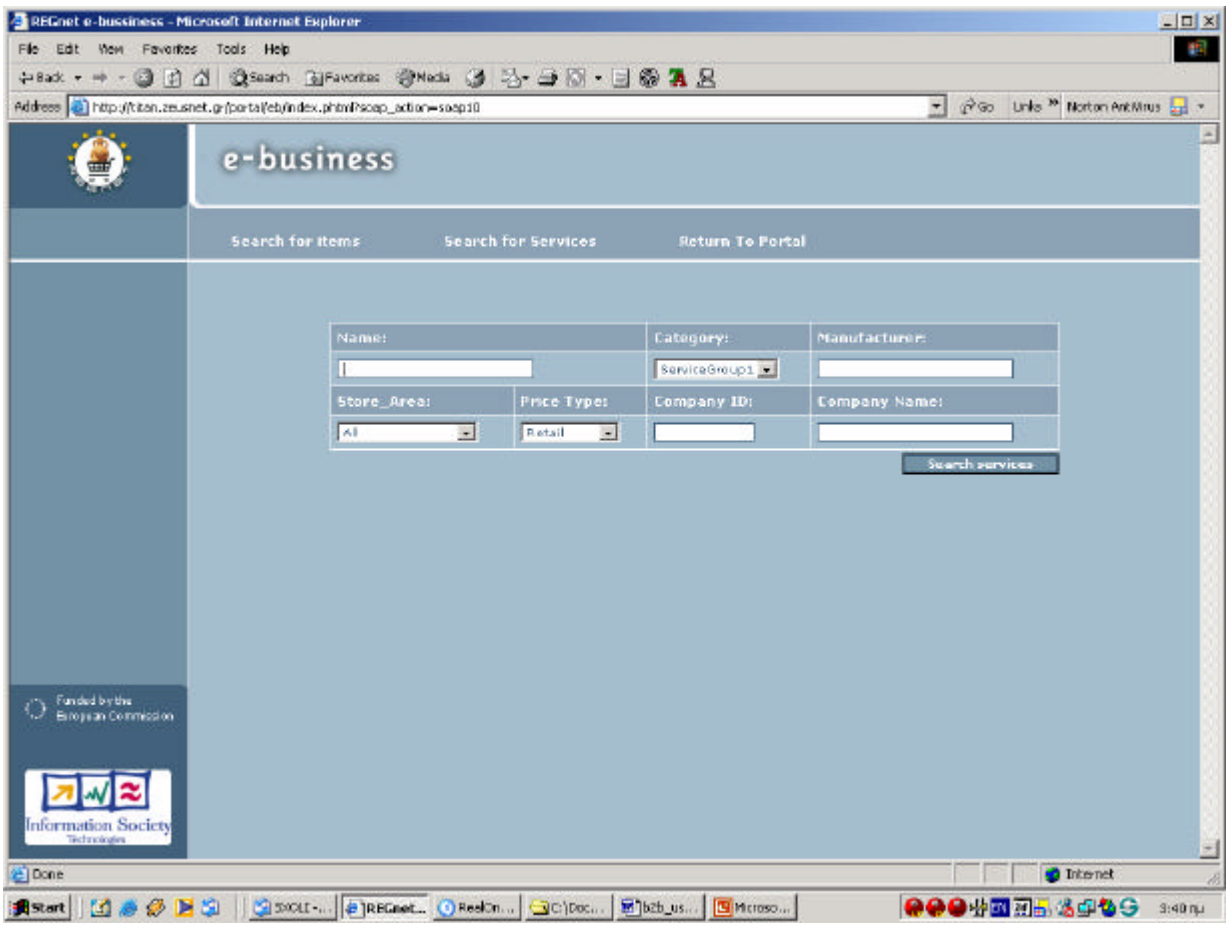


figure 3 – Search for services

14.4 DRAW-UP A CONTRACT

After the functionality of searching for items or services registered users (only suppliers) have the possibility to draw up a contract.

After the contract is drawn the supplier should get to the following page of order processing.

On this page for order processing the supplier gets the information about the contract number, the name of goods or services, the vendor, the quantity or quality goods or services, the warehouse address and others. *(see figure 4 and 5)*

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

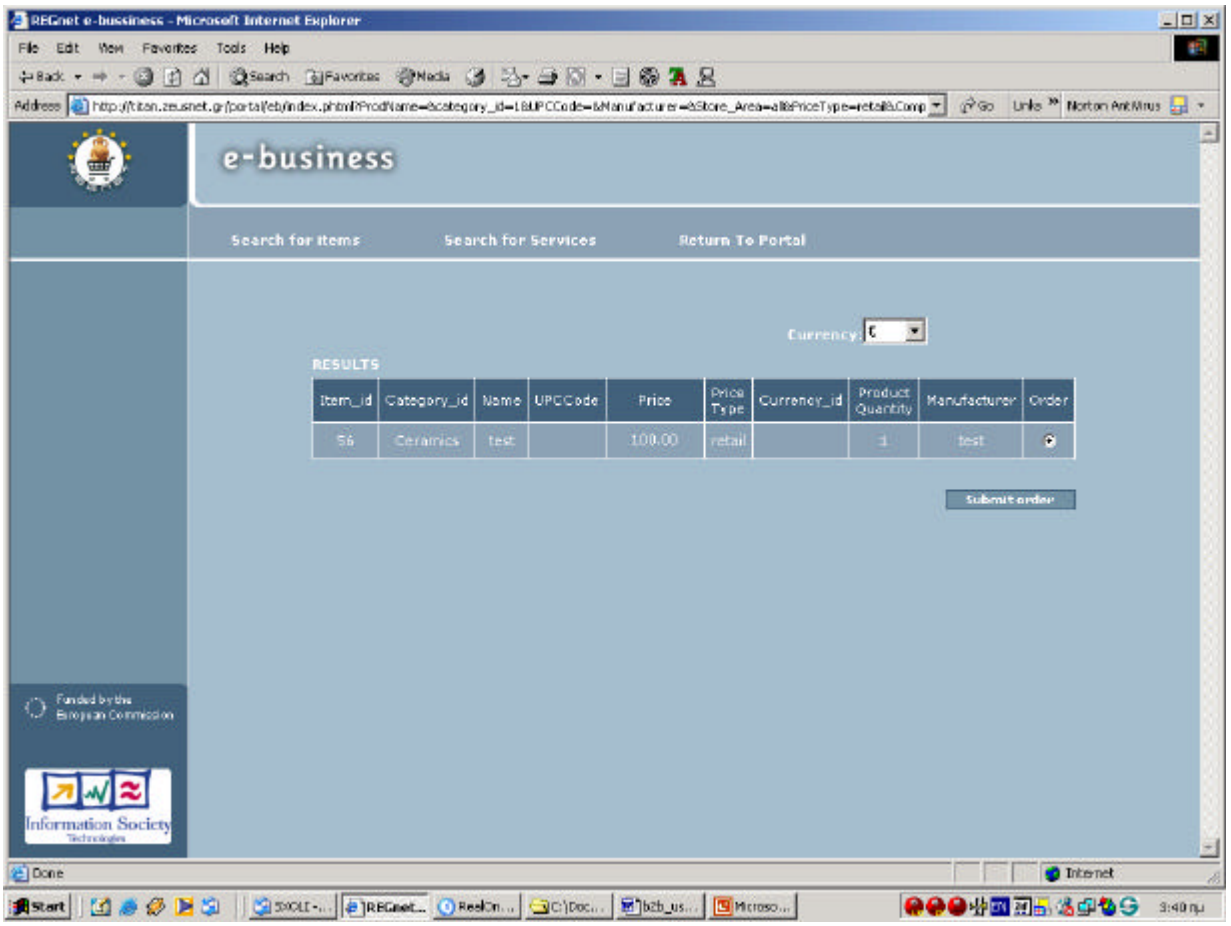


figure 4 – Draw up a contract 1

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

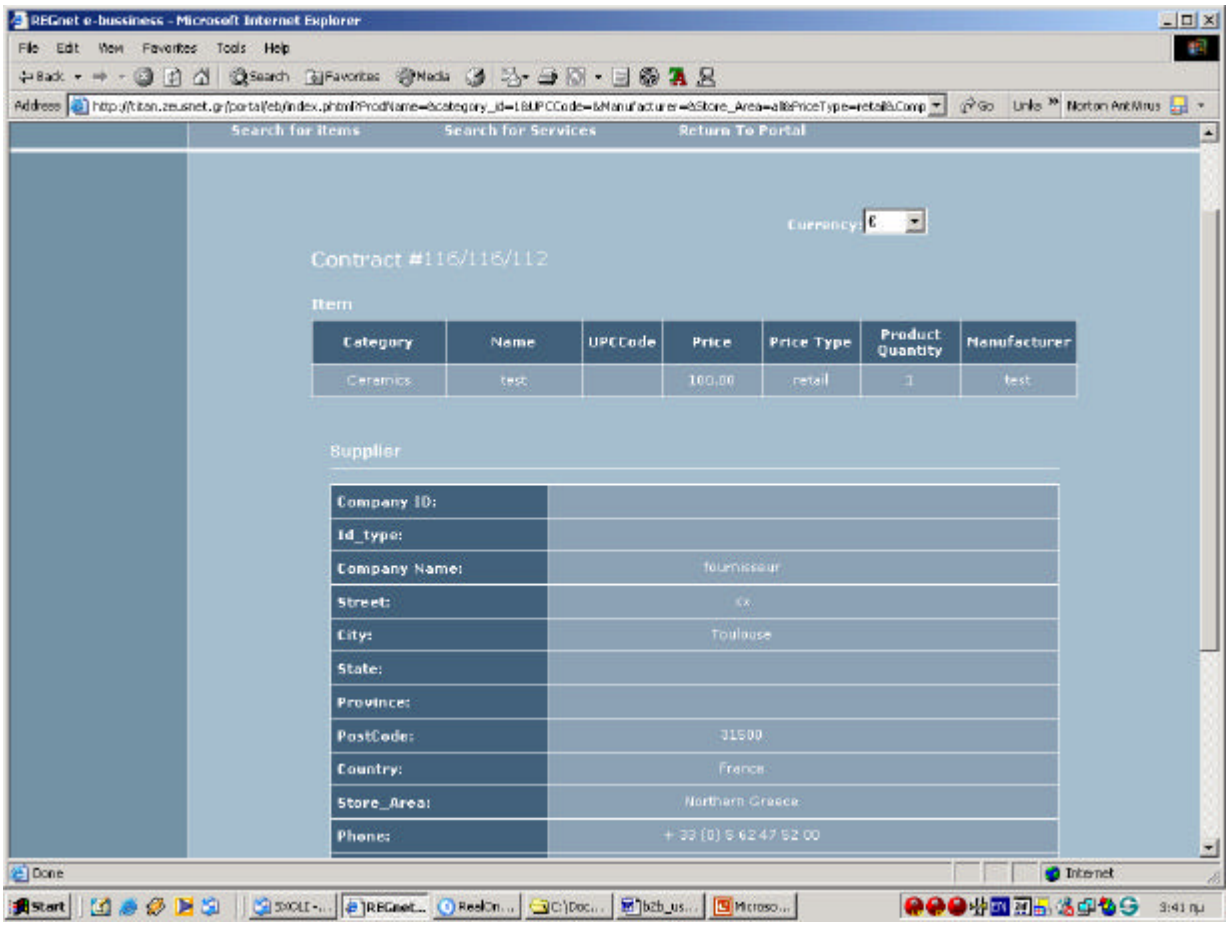


figure 5 – Draw up a contract 2

After the finishing of the order processing, the system can send an email not only to the supplier who offers the specific items or services but also to the person who express his/her interest.

14.5 EXIT

Users can exit from the B2B component by pressing the button “return to portal” from the main menu of B2B system.

15 Auction

15.1 GENERAL

Auction system was build with a purpose to provide clients with the opportunity to bid for different products. Moreover, some clients may apply to the auction administrator in order to obtain the right to display their own items for sale. The administrator has the authority to change users’ rights and the ability to forbid an item to take part in an auction. To be able to bid on a lot, you must register as a user from the main REGNET’s portal.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

As it was mentioned before, the functionality of the auction system is different for different users' groups. The most important difference is that the ordinary user does not have the right to insert a new item to the auction and does not have a menu option. On the contrary users, who have this privilege, can also obtain statistics made for bids regarding their items. (You can see the figure 1)

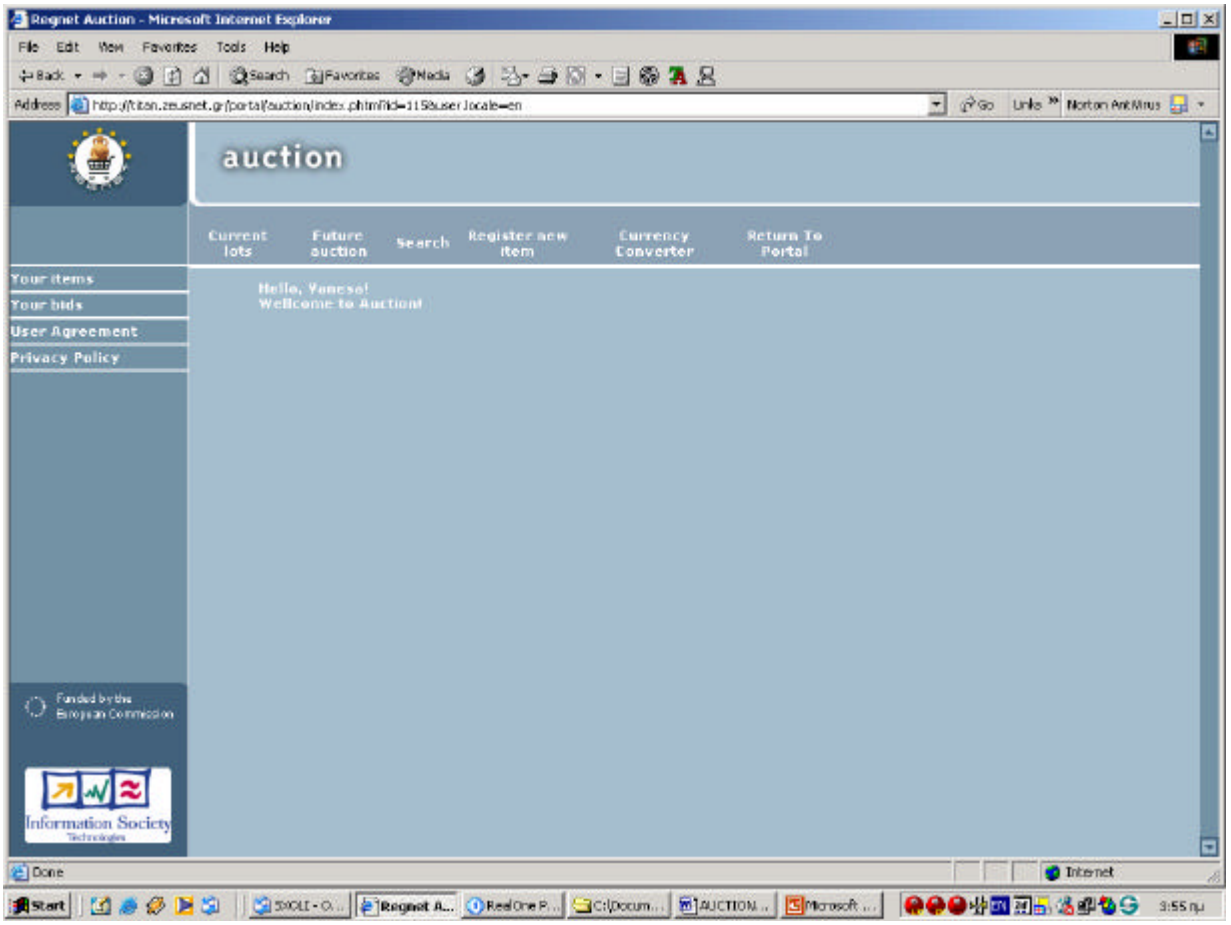


figure 1 – Auction system

15.2 USERS REGISTRATION

The auction system is a subsystem of the portal. That means that firstly any user has register him/her in the portal and then he/she can use the functionalities of the auction system. Our component can connect with the ontology system in order to take the full profile of users. Furthermore if a registered user wants to sell his/her items, he/she has to contact with the system administrator in order to get a specific permission.

15.3 SEEING THE LOTS

The system provides the option to the users to see all current lots, which mean the lots that are in progress by following the specific link "current lots" from the menu framework, provided by the system (you can see the figure 2).

Also users have the option to see future auctions, which are the auctions that have not started yet up to current date and time (see figure 3).

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

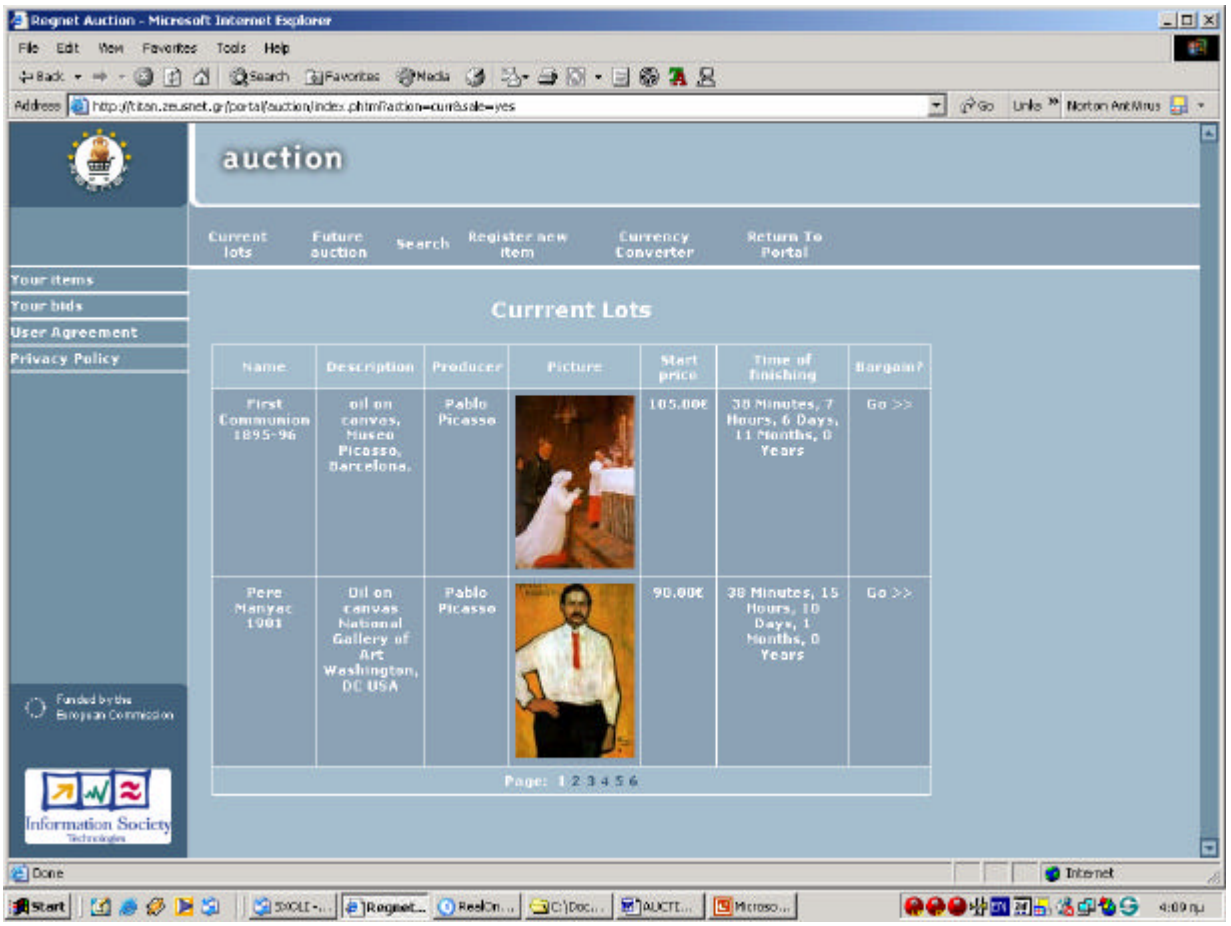


figure 2 – The view of the current lots

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

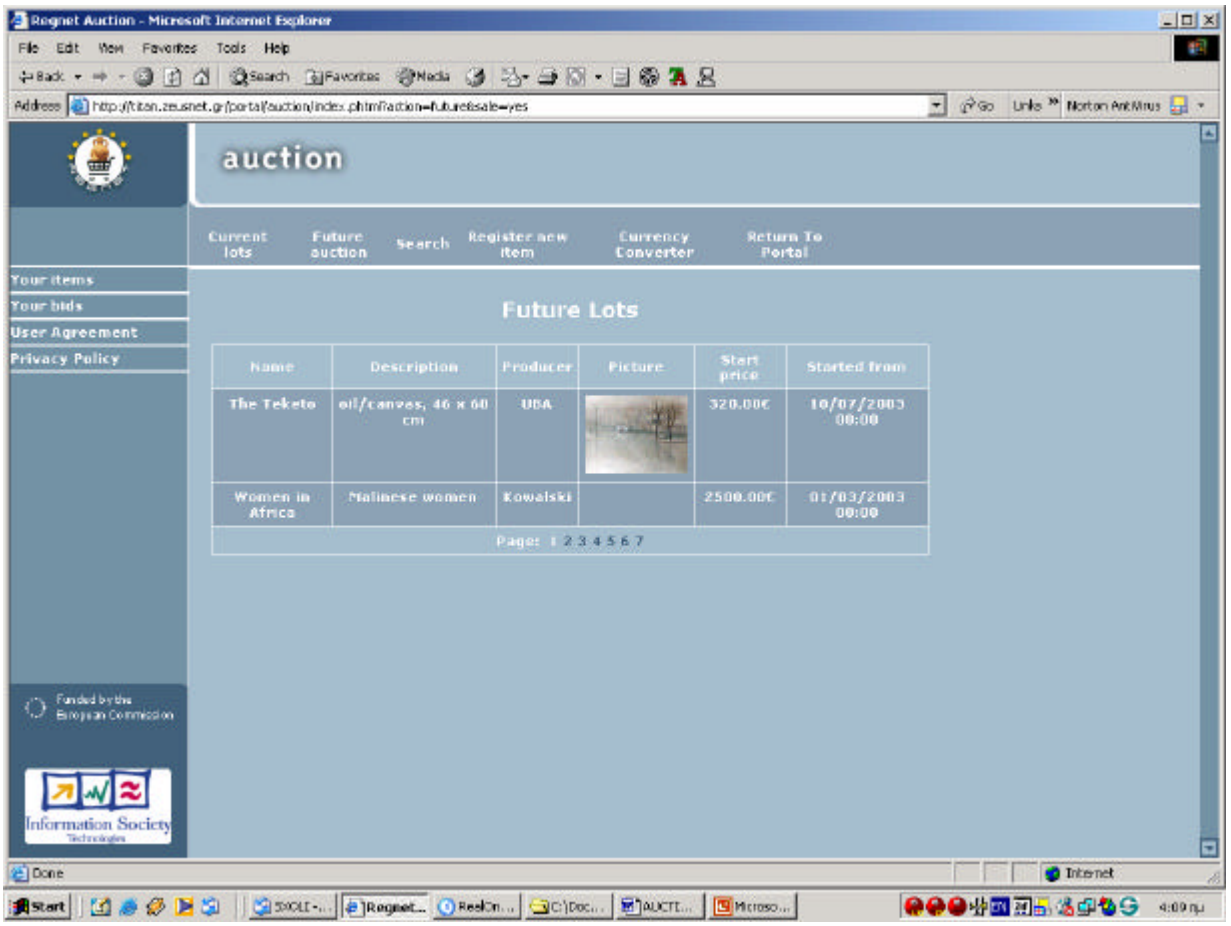


figure 3 – The future auctions

15.4 PRODUCTS SEARCH

The system's searching ability provides the option for a multi-criteria search. These criterions can be the name of the product, its description, category, start and finish auction time, the option to search before, after or at the moment of the appointed date. (You can see the figure 4)

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

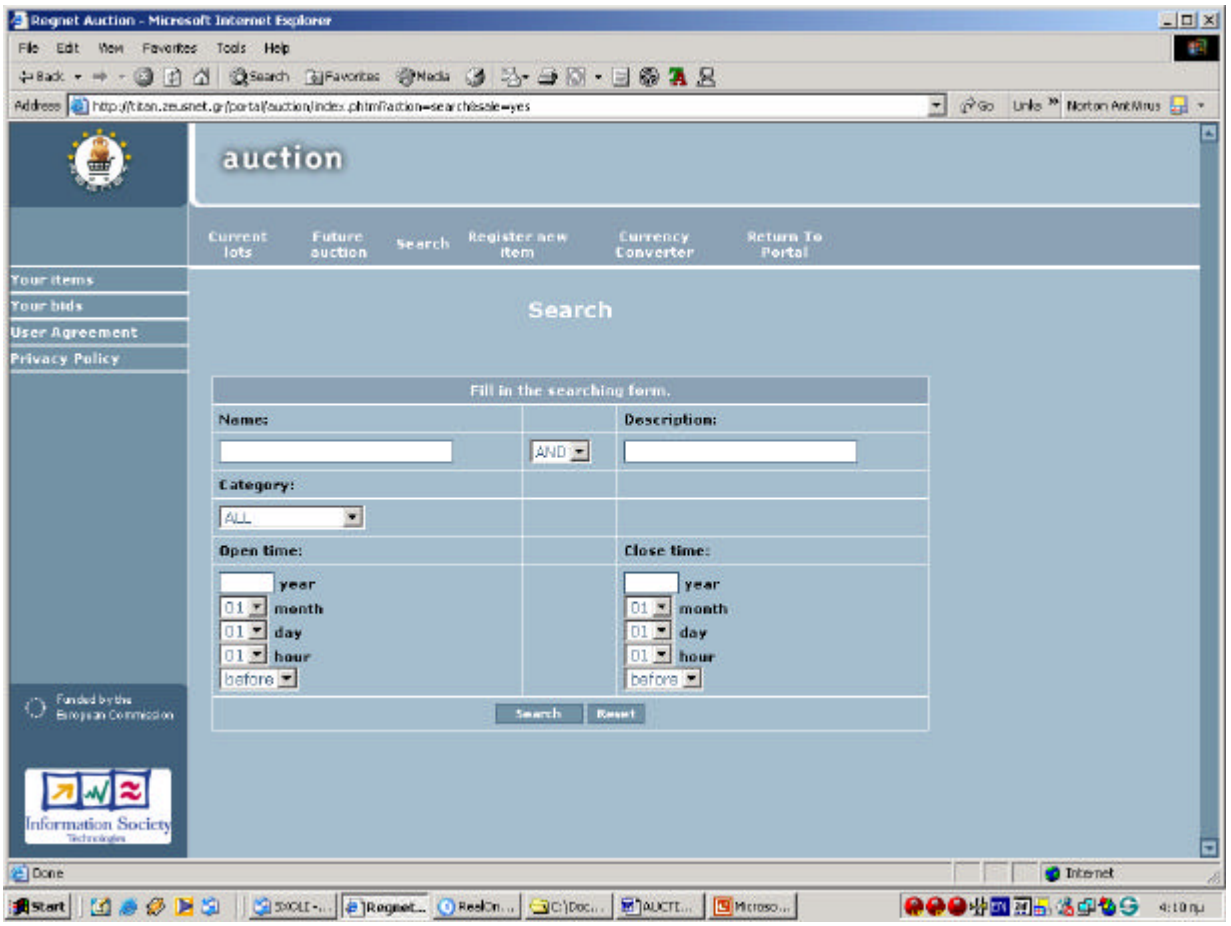


figure 4 – Searching form

15.5 USER'S ITEMS AND BIDS

A Registered user following the links "Your items" and "Your Bids" has the option to see all the specific information concerning their bids (history table) that they have made and also their items (if they have added any items for sale). (You can see figures 5,6 and 7 correspondingly)

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

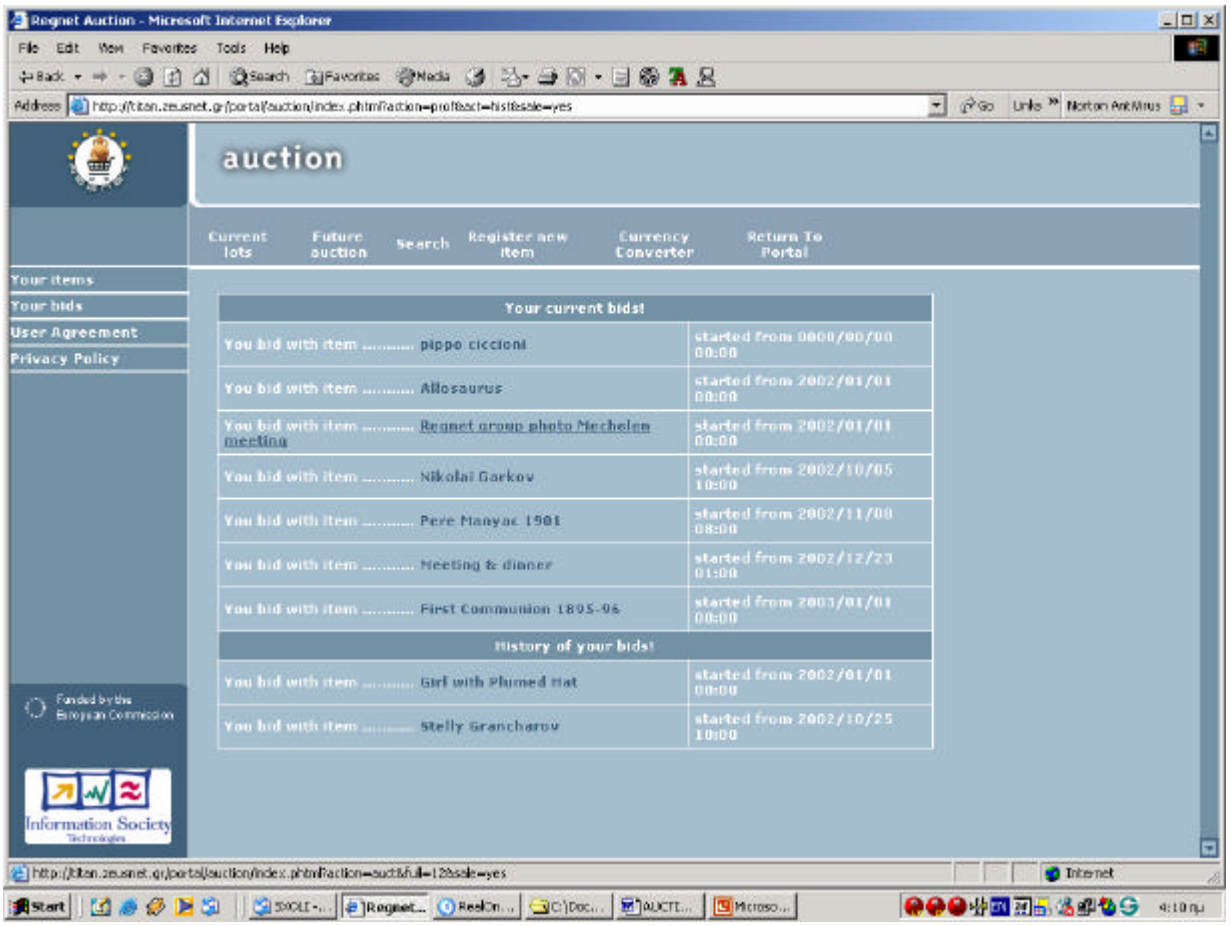


figure 5 – User's bids 1

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

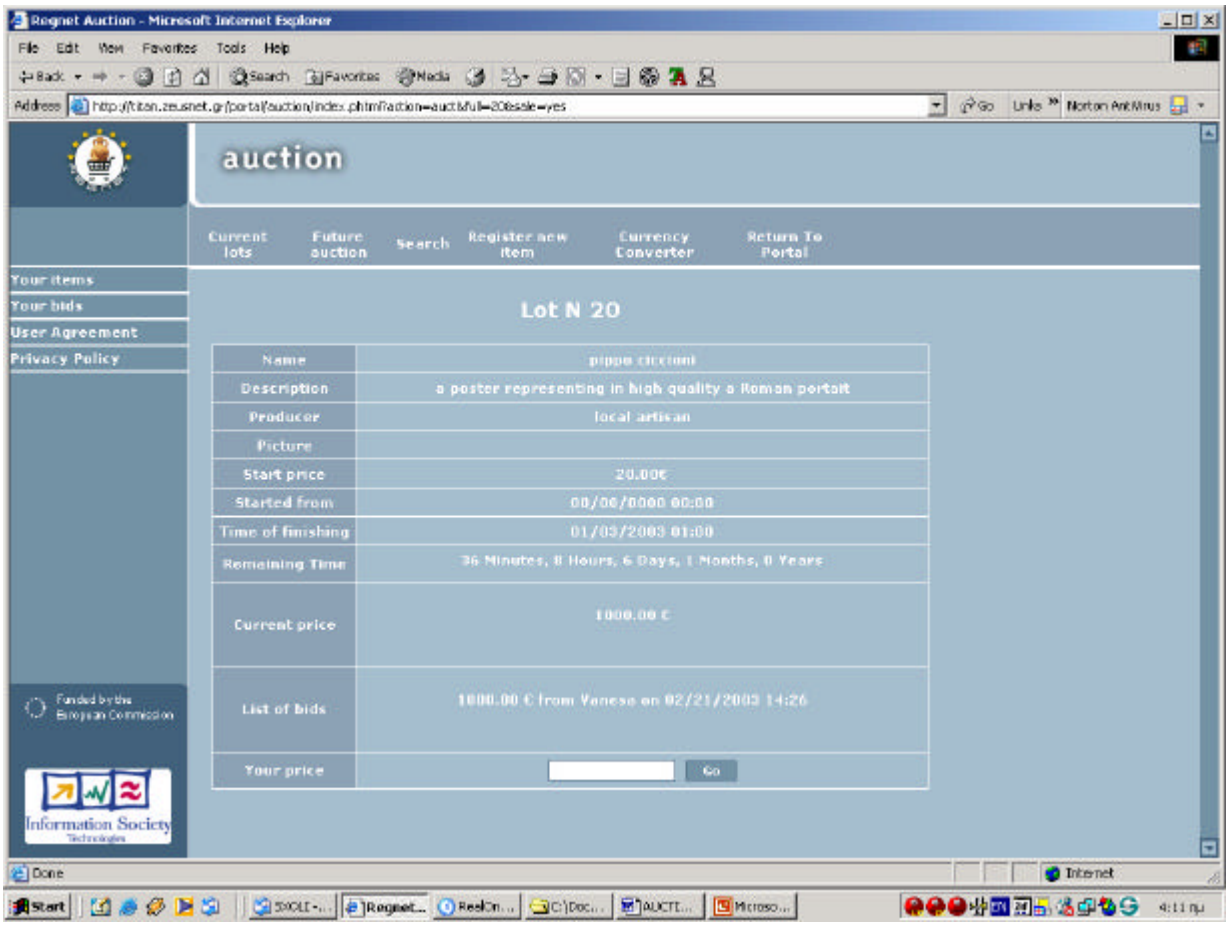


figure 6 – User's bids 2

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

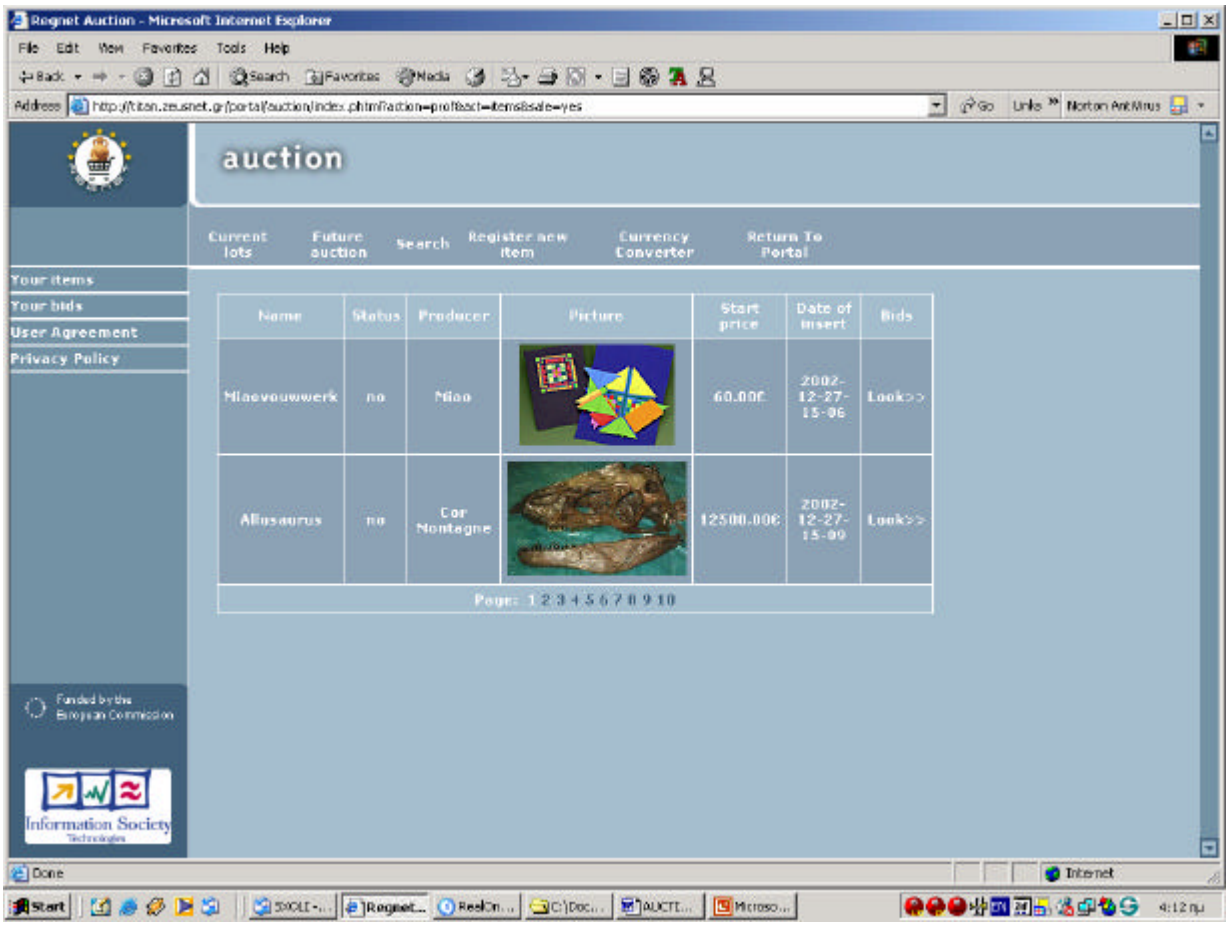


figure 7 – User's items

15.6 ADD ITEMS IN THE AUCTION SYSTEM

Furthermore, the system gives users the ability/ functionality to add the items they want and sell them through the auction system. Thus, if they want to add their items in the auction system they have to fill in a specific form, by following the link "register new item", which is provided by the system. (You can see the figure 8). Also, here we have to mention that this functionality is available only for registered users who have contacted the administrator of the system and have obtain the necessary permissions.

Sellers are obligated to sell an item at the high bid price. The only exception here is reserve price auctions. Moreover, they cannot sell an item to anybody until the end of the auction. If the high bid does not meet seller's reserve price, then they are under no obligation to sell. In all other cases, they are obligated to sell the item to the highest bidder, and deliver the item within the time period specified.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

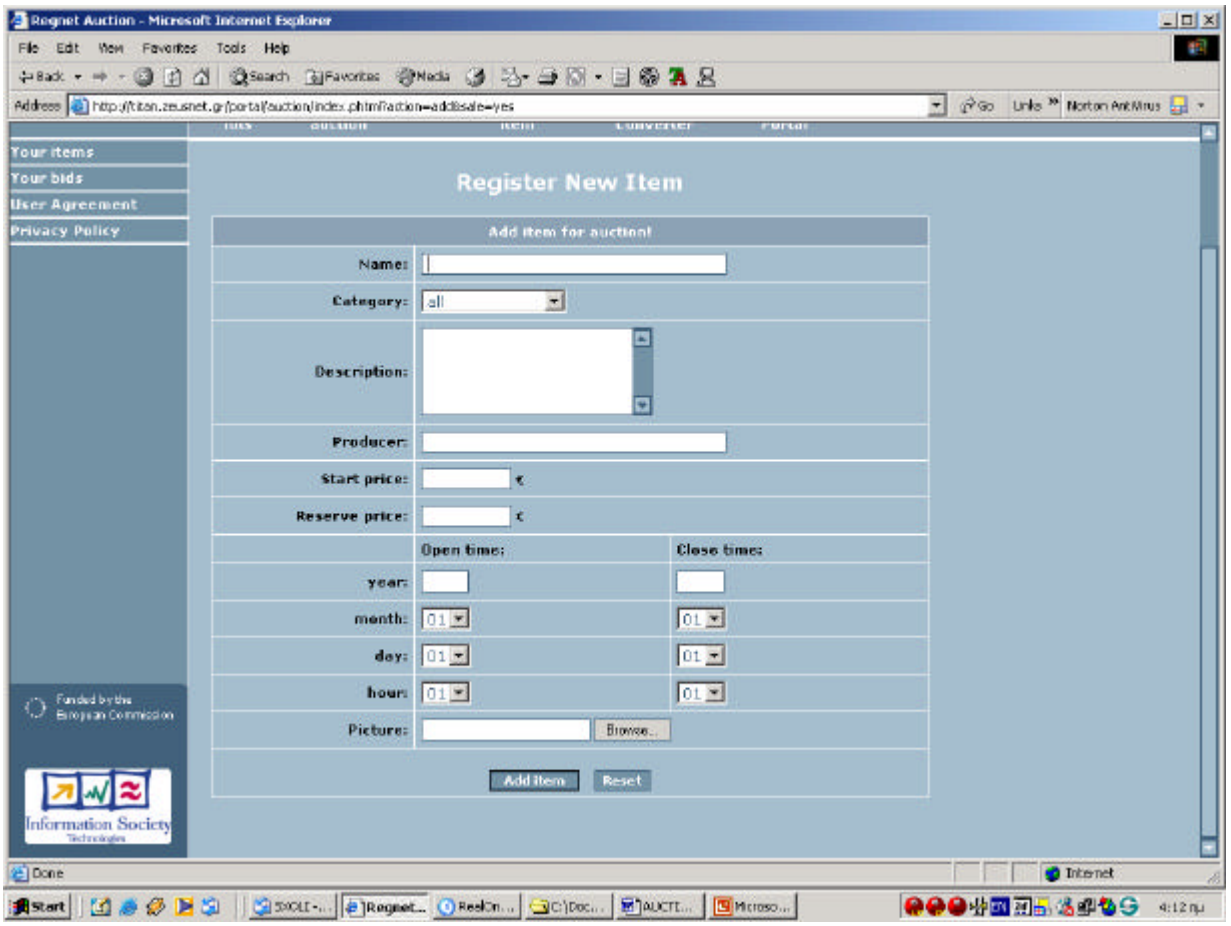


figure 8 – New item registration

15.7 AUCTION PARTICIPATION

If a user wants to bid an item he/she has to choose a specific item that he/she prefers by following the "GO" link (see figure 9) from the currents' lots page, in order to move to the next page where he/she should make his/her bids by giving the desirable price in the price field of the form with the lot's characteristics. (See figure 10). If a user is outbid, or the bid does not meet the seller's reserve price, users are under no obligation to buy.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

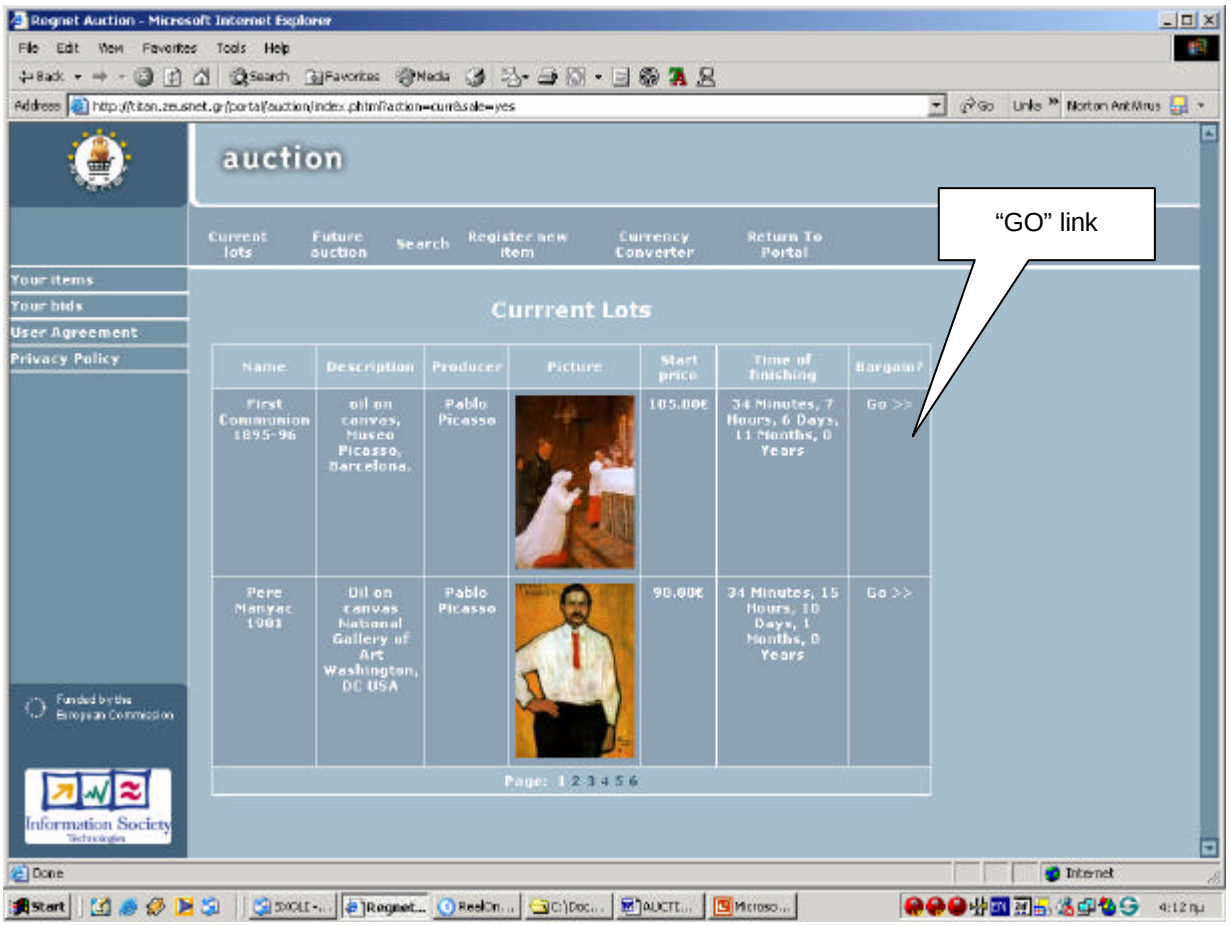


Figure 9 – Current Lots

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

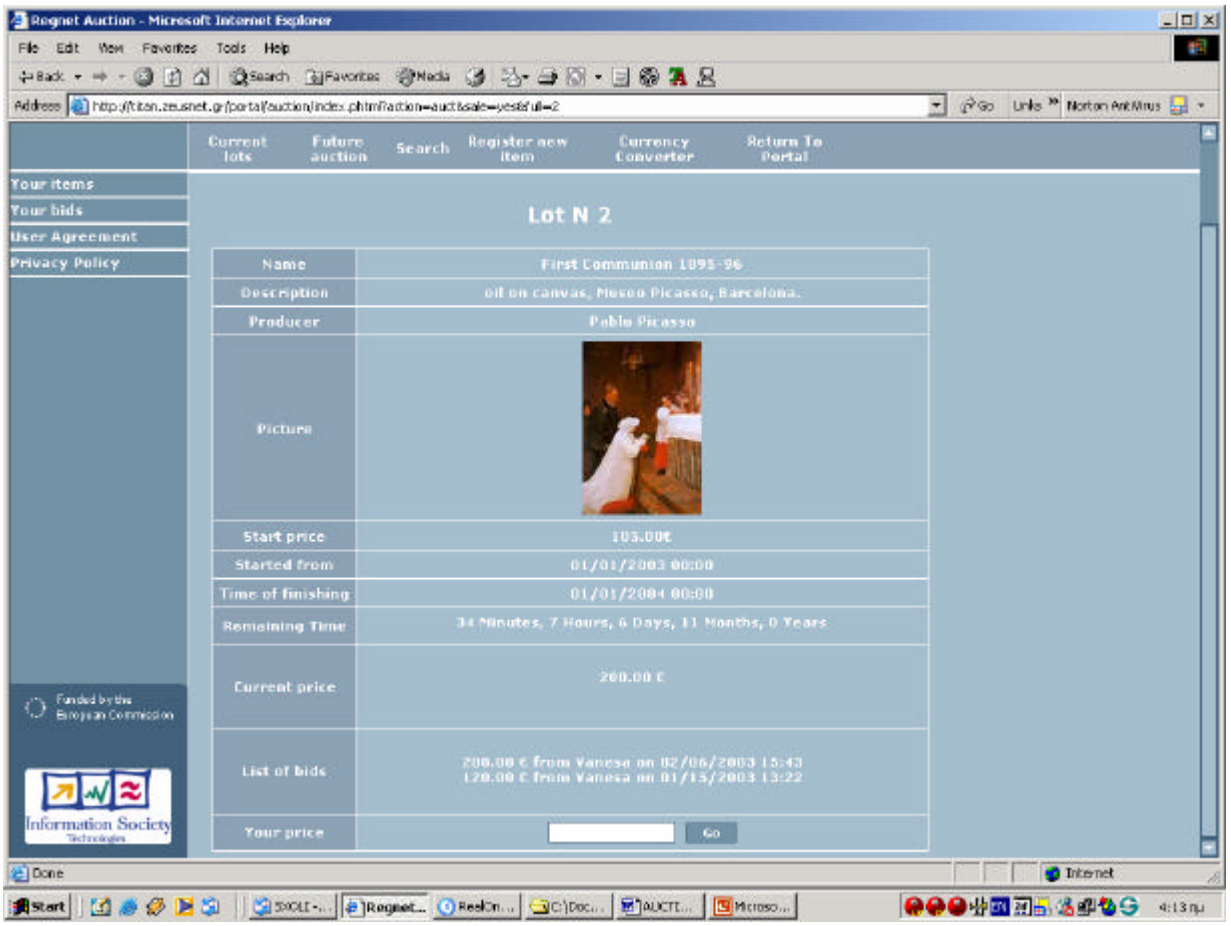


Figure 10 – Bid items

15.8 CURRENCY CONVERTER

The auction system can provide also to user a currency converter in order to convert the specific currency of the available items to their currency. For that reason we have added a user friendly currency converter. You can see the following picture.

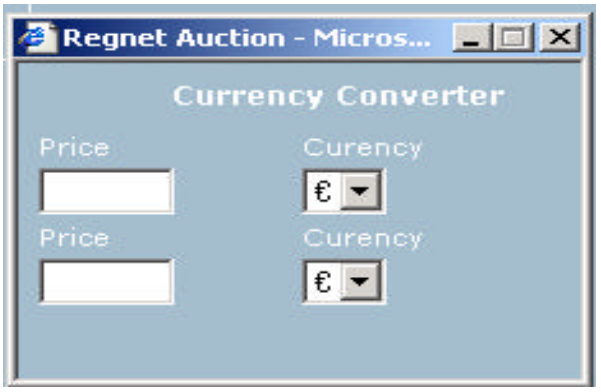


Figure 11 – Currency Converter

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

15.9 USER AGREEMENT & PRIVACY POLICY

The system provides also the forms that contain the user agreement and the privacy policy of the auction system (figures 12 and 13).

figure 12 –User Agreement

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

figure 13 – Privacy Policy

15.10 EXIT

Users can exit from the auction component by pressing the button “return to portal” from the main menu of auction system.

15.11 AUCTION SYSTEM ADMINISTRATION

Auction system has its own administrative system. However, this system is unavailable for ordinary users, while permission is available only to the administrator’s login and password (see figure 14). This system allows the administrator to manage the items, users and add different categories to the database and also it provides a currency admin (see figure 15). Nevertheless, it does not allow the administrator to remove existing categories, since a great number of items may exist at the auction and any removal may destroy existing records.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

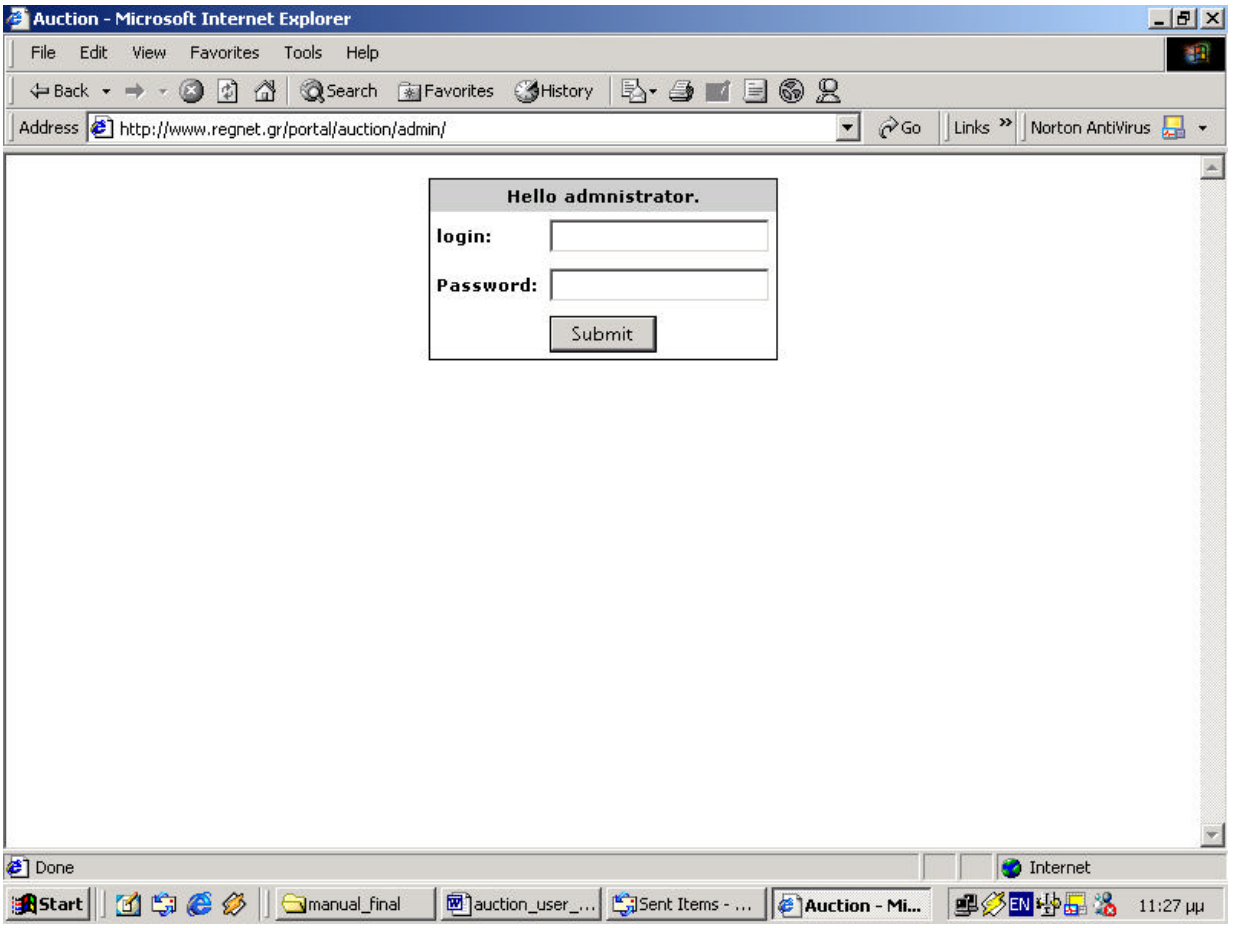


Figure 14 – Administration system

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

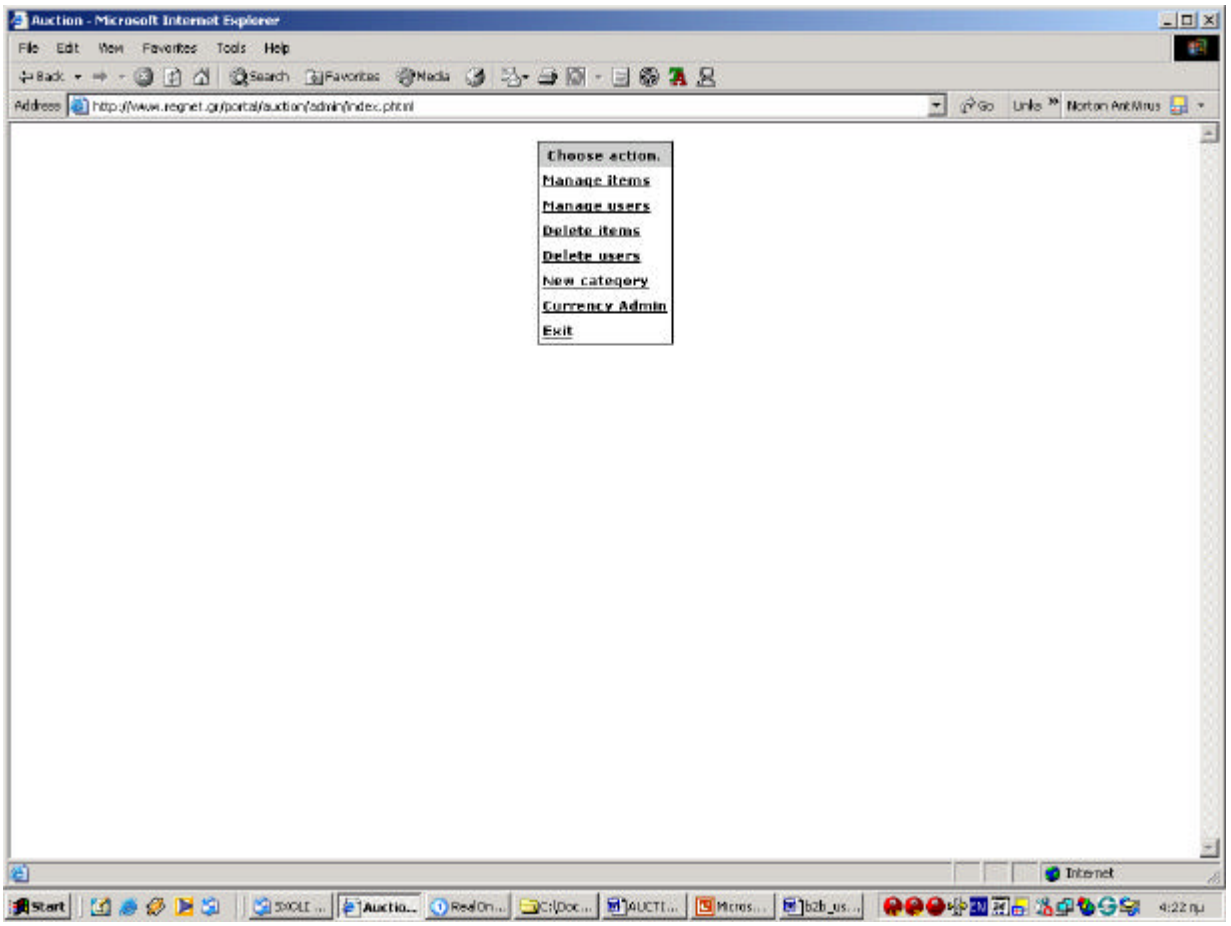


Figure 15 – Administration system

15.12 MANAGE ITEMS

The system's Administrator has the ability to manage the items which are stored in the auction system. The Administrator can view the list of items presented on the auction, containing items description, dates of registration, start and end dates of the auction. (You can see the figure 16).

Furthermore a result field exists, which can take one of the three following values:

- Yes – if an item is sold
- No – bidding with this lot is not finished yet.
- Fin – bidding is finished, but the item was not sold.

Also there is an "Allow" field that enables the administrator to allow/forbid the participation of a lot in an auction (which is accessible, if the auction is not finished).

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

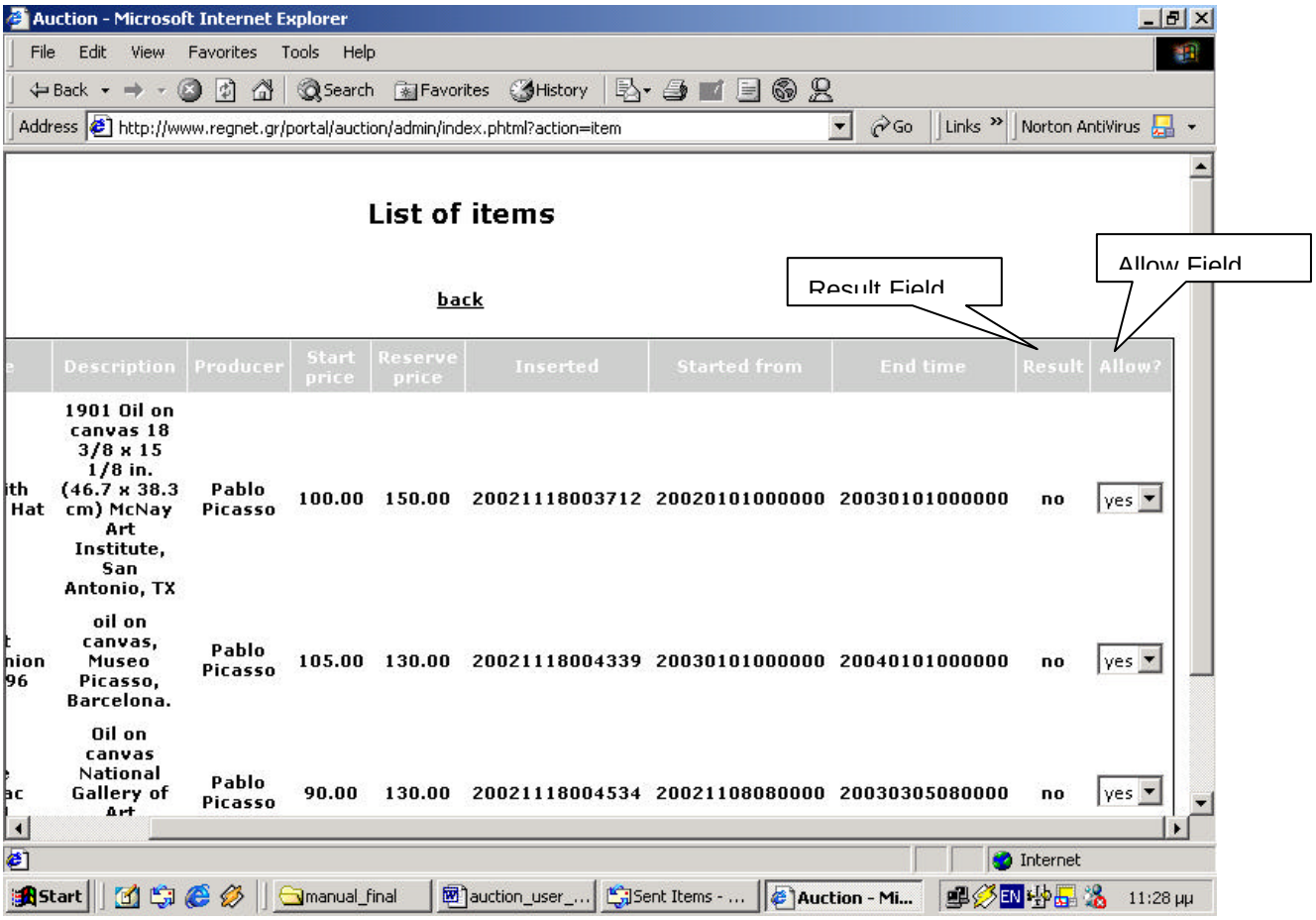


Figure 16 – List of auction's items

15.13 DELETE ITEMS

The administrator has the ability to delete the items he/she wants. The "Delete?" field enables the administrator to delete the marked lots from the list, however this option is unavailable, if the bidding has not finished (you can see figure 17).

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

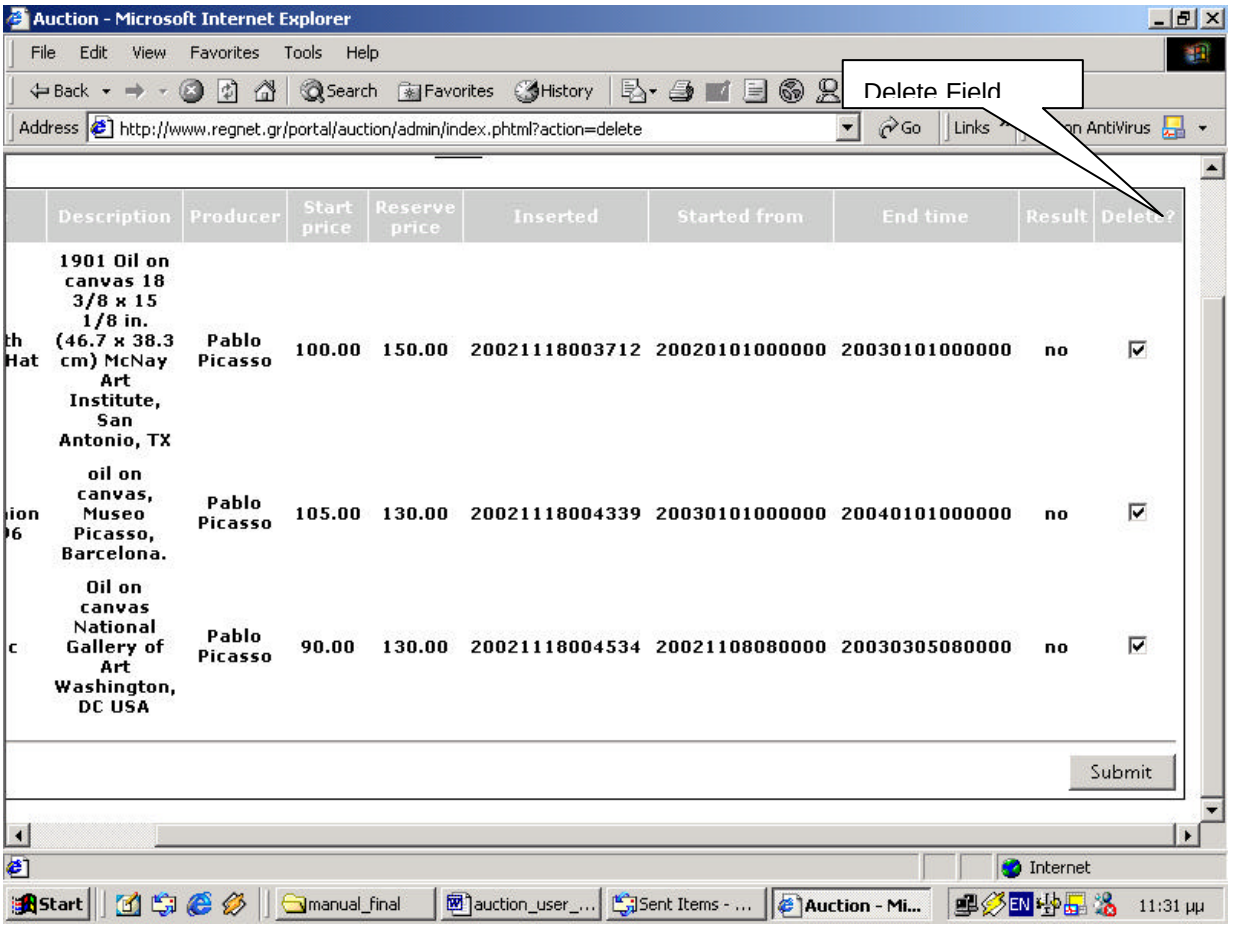


figure 17 – Delete items

15.14 MANAGE USERS

The Administrator of the system can view the list of registered users, which contains information about the profile of a user like the login, the password, the name and all the other specific information.

Furthermore, the field “Sale” exists, which can take the value yes or no in order to enable the administrator to allow or forbid a user to become a seller and hence sell his/her own items (You can see figure 18).

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

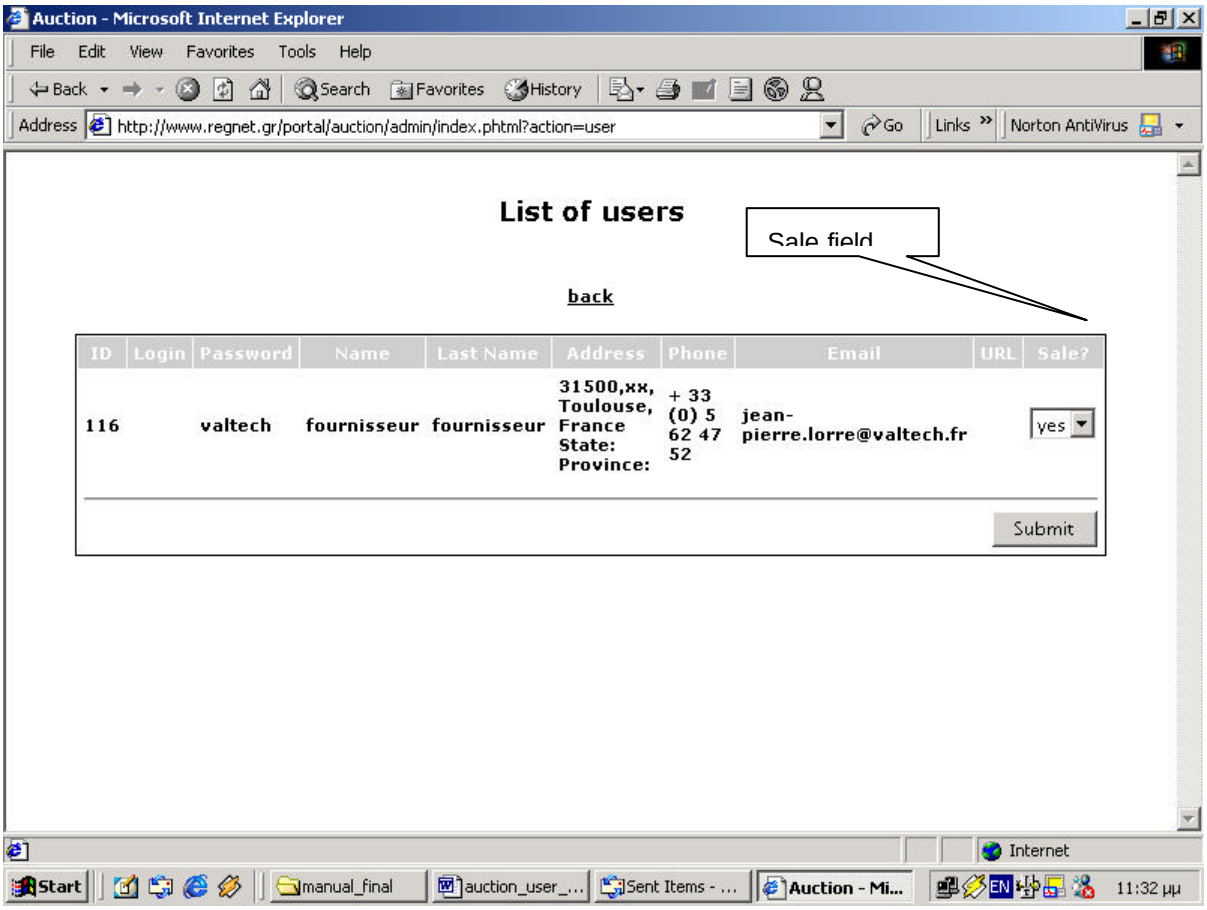


Figure 18 – List of auction's users

15.15 DELETE USERS

Using the "Delete users" reference, the administrator can view the list of registered users, which contains all the information about users and also the "Delete" field, which enables the administrator to delete a user from the auction database.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

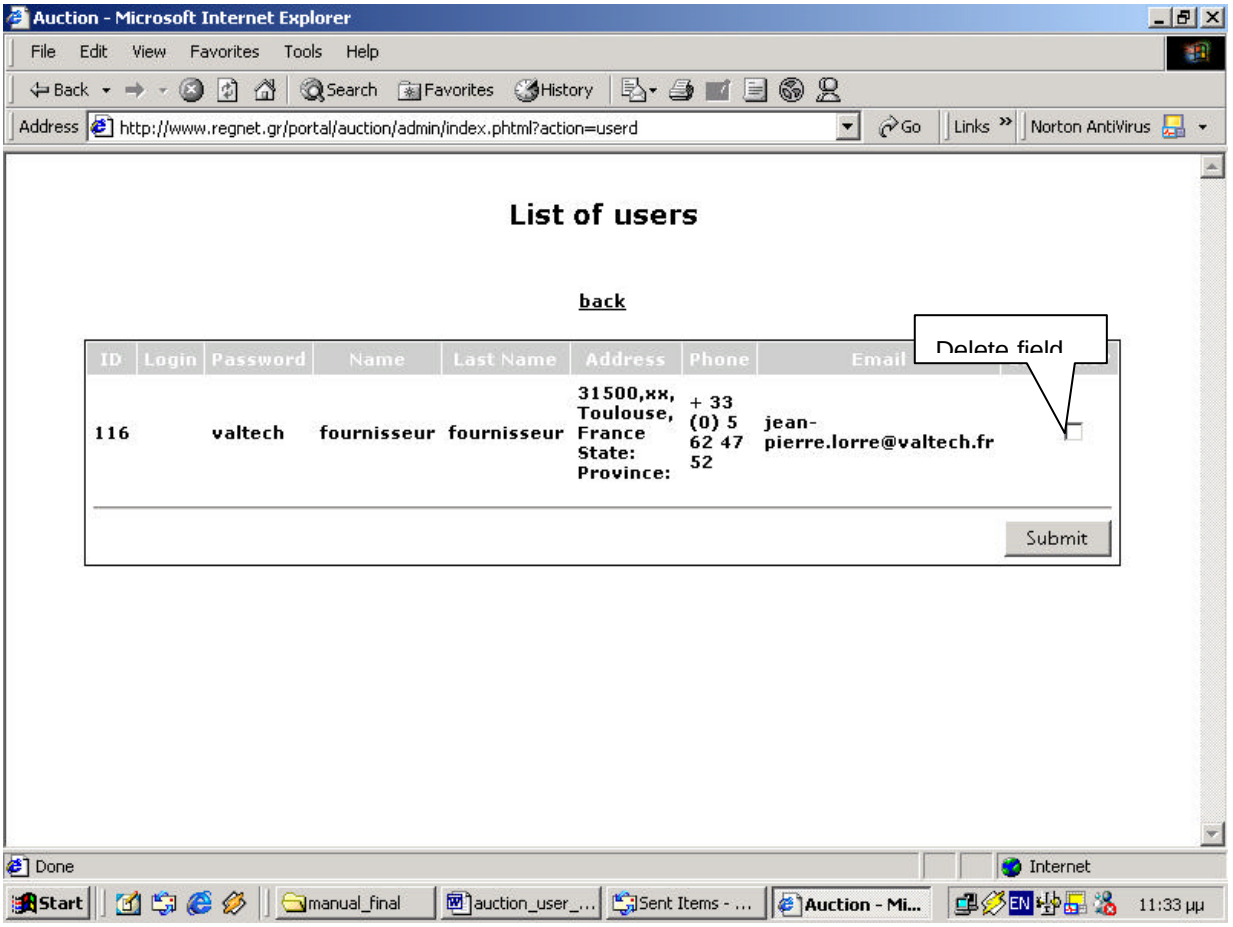


Figure 19 – Delete users

15.16 ADD NEW CATEGORY

The Administrator has also the ability to add new categories of items in the auction system (you can see the figure 20 below).

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

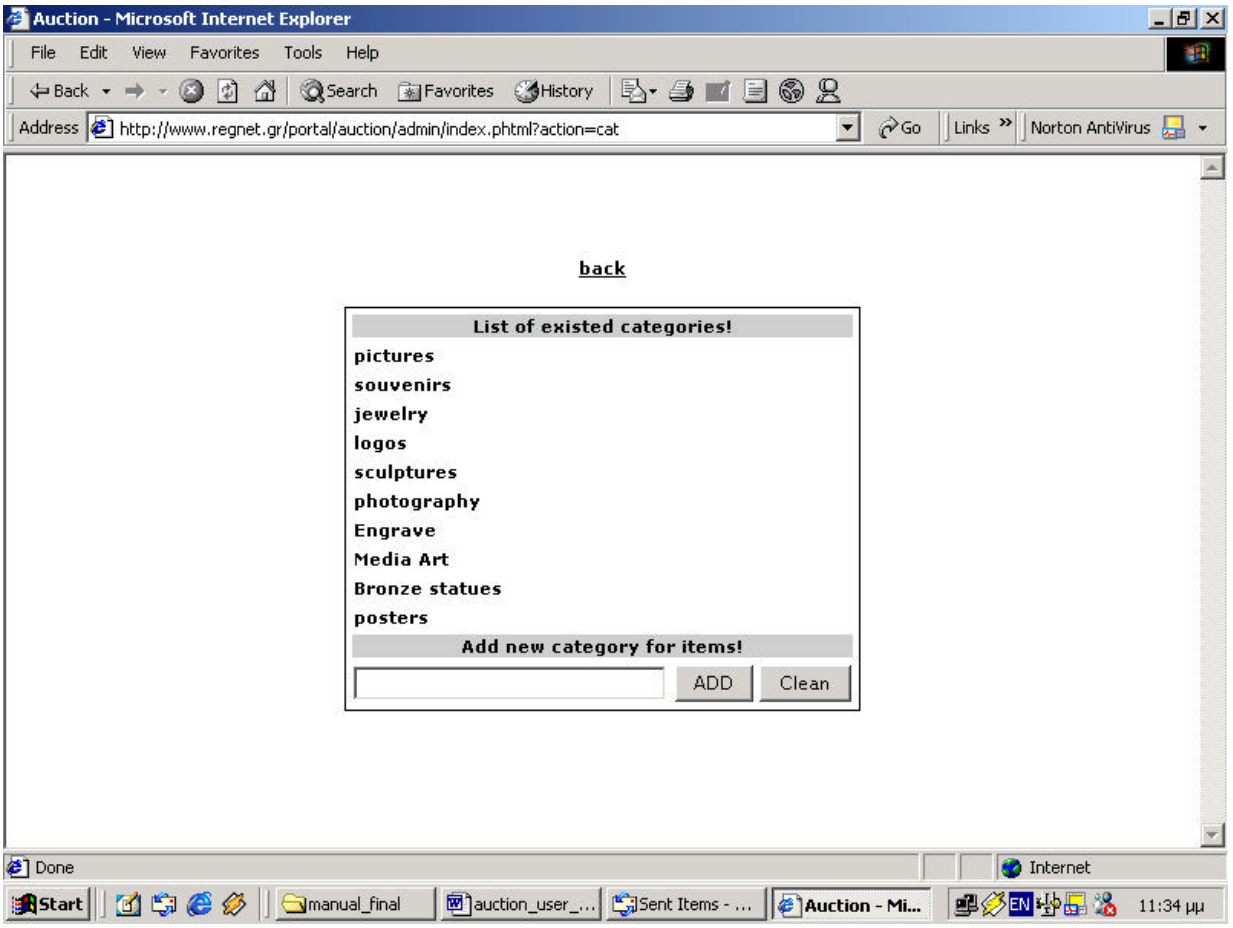


Figure 20 – Add new category of items in the auction system

15.17 CURRENCY ADMIN

There is also a currency admin that can manage the specific currency and also to add a new currency type (figure 21 &22).

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

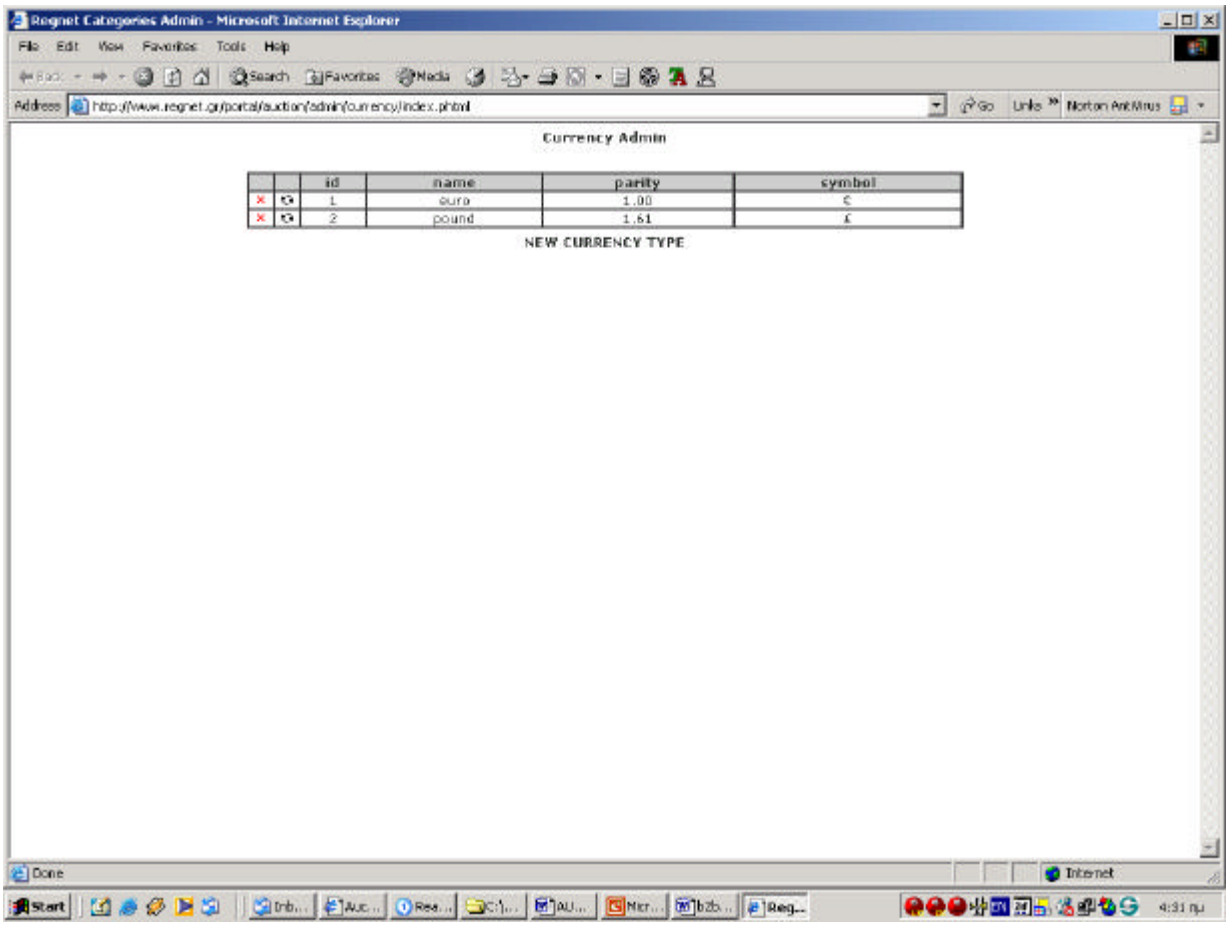


figure 21 – Currency Admin 1

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

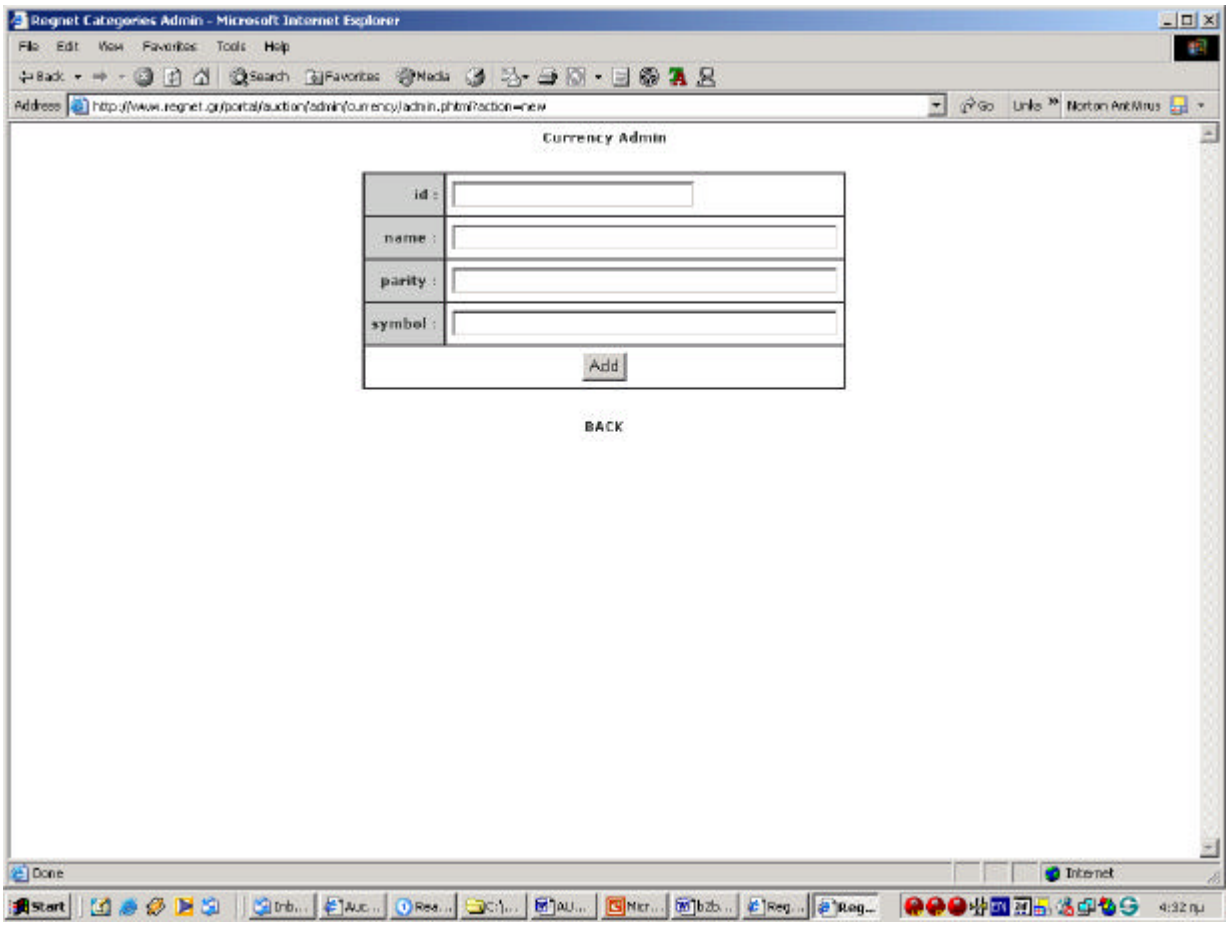


figure 22 – Add new Currency Type

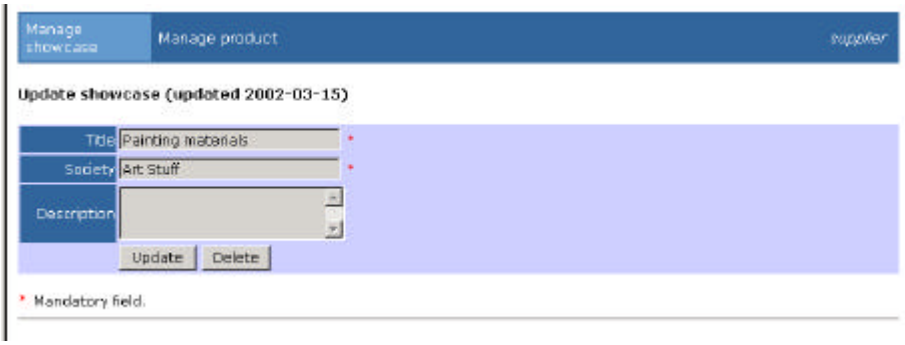
16 Procurement

16.1 Introduction

The procurement application is divided into two parts. One part is dedicated to suppliers and the other one to buyers.

16.2 Supplier part

16.2.1 Managing showcase



Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

This is the first screen displayed when a supplier loggs on.

Screen fields are filled with information retrieved from supplier's showcase if he/she has already created a showcase or are blank if he/she hasn't.

This screen permits a supplier to: create, update or delete a showcase.

16.2.1.1 Create a showcase

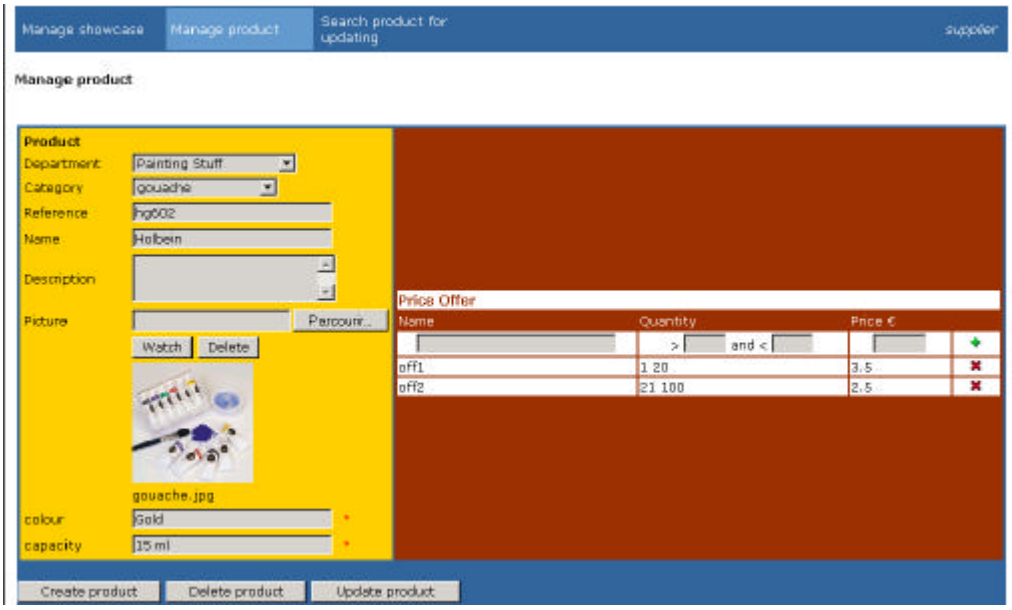
- Fill fields
- Click on 'create' button
- Delete a showcase
- Click on 'delete' button

16.2.1.2 Update a showcase

- Modify fields
- Click on 'update' button

NB : The supplier cannot access to the managing product function if a showcase has not been created.

16.2.2 Managing product



This screen allows the supplier to : create, delete or update a product.

16.2.2.1 Create a product

- Select a department
- Select a category
- Fill characteristics of product
- Select a picture
- Click on 'create product' button
- Add Price offers filling name quantity and price fields and clicking on 'plus' button

16.2.2.2 Update a product

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

- Modify fields
- Click on 'Update product' button

16.2.2.3 Delete a product :

Click on the 'delete product' button.

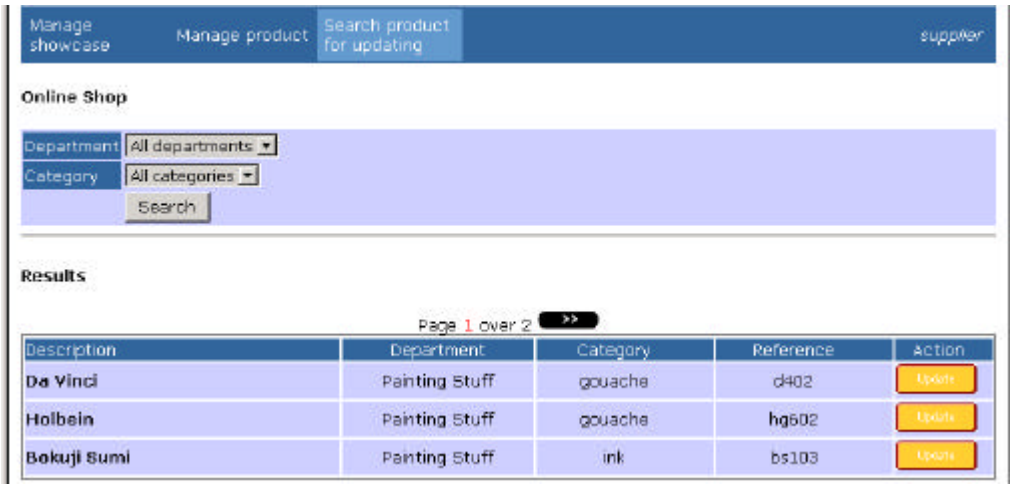
16.2.2.4 Delete an offer :

Click on the 'cross' button.

16.2.2.5 Delete a picture :

Click on 'delete' button next to the picture.

16.2.3 searching product for updating



This screen permits a supplier to: search a product in order to update it

16.2.3.1 Search product :

- Select a department
- Select a category
- Click on the 'search' button.

16.2.3.2 Update a product :

- Click on the 'update' button of the product you want to modify.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

16.3 Buyer part

16.3.1 Searching and ordering products

This screen allows a buyer to : search products in suppliers' showcases and add them his/her shopping cart.

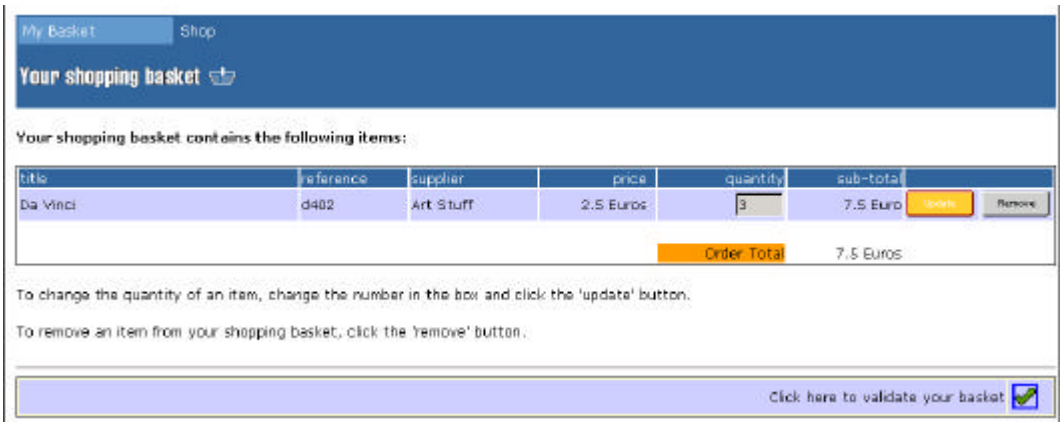
16.3.1.1 search a product from showcases

- Select a showcase
- Select a department
- Select a category
- Click on the search button

16.3.1.2 add a product to buyer's shopping cart

- Enter the quantity in quantity field of the product you want to order.
- Click on add to 'add to cart' button.

16.3.2 Consulting and validating orders



Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

This screen permits to a buyer: to remove a product from her/his shopping cart and to send her/his order to suppliers.

16.3.2.1 Update quantity of a product in buyer's shopping basket :

- Enter the new quantity in quantity field of the product you want to order.
- Click on the 'update' button.

16.3.2.2 Delete a product from buyer's shopping basket :

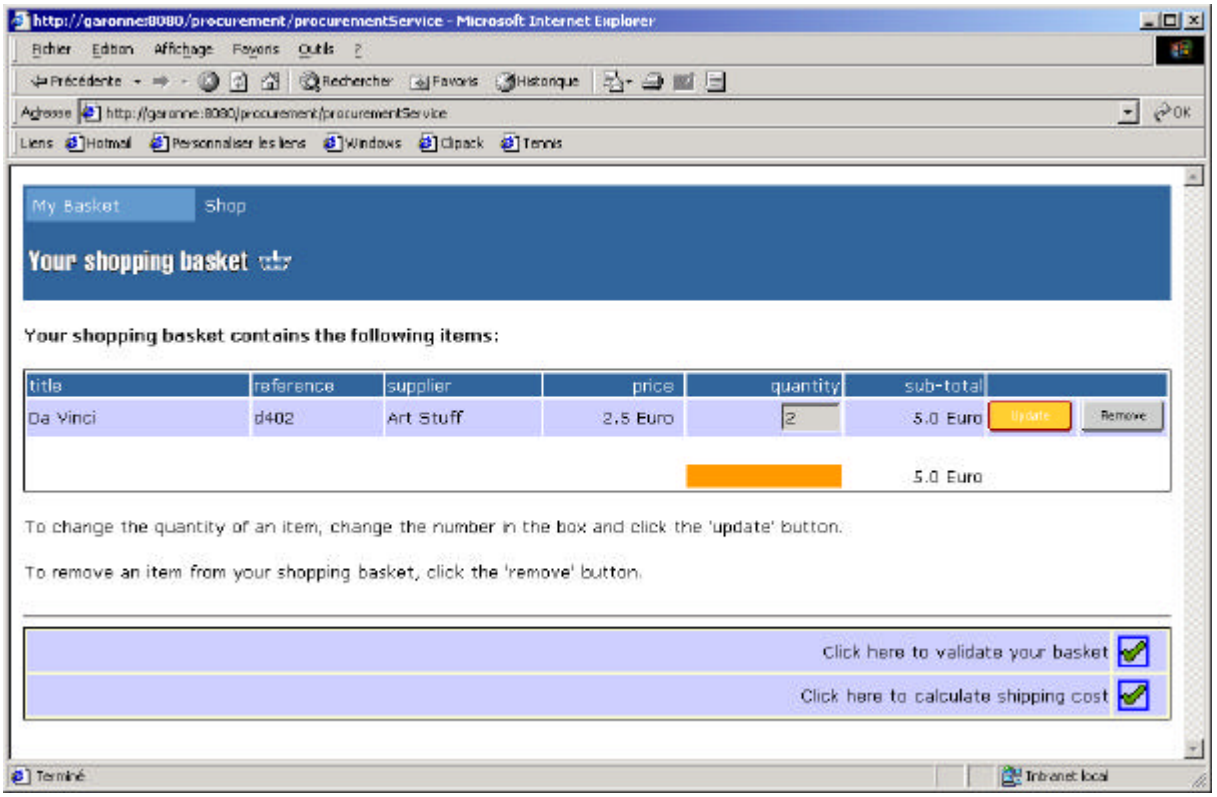
- Click on the 'remove' button of the product you want to remove from basket

16.3.2.3 Validate buyer's basket :

- Click on the validate basket button to send your order to suppliers.

17 Delivery

The Delivery web service is invoked when in the procurement application a user click on the "calculate shipping cost" button in the shopping basket page.



18 Data-Entry and Search

18.1 Scope

These guidelines provide advice and guidance to the end users (chapter 3) and to the expert users (chapter 4 – 6) of the REGNET XML data entry system.

The two main targets of this system are easy management of data in XML format and the preparation of publishing.

This system is designed to store, index and retrieve large quantities of XML documents. With XML at its core the database takes full advantage of XML's extensibility and portability.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

This database stores descriptive data (e.g. Dublin Core), clickable URLs, as well as electronic documents that are totally uploaded to the document base.

The end users access the database through the internet using custom user interfaces. In fact they need a computer, an internet access, a WEB Browser and the authorization to manage data of the virtual catalogue.

18.2 Introduction

18.2.1 What is XML?

"The Extensible Markup Language (XML) is the universal format for structured documents and data on the Web." (W3C)

XML is the preferred technology in many information-transfer scenarios because of its ability to encode information in a way that is easy to read, process, and generate.

- XML is a **markup language** much like HTML.
- XML was designed to **describe data**.
- XML tags are not predefined in XML. You must **define your own tags**.
- XML uses a DTD (**Document Type Definition**) to describe the data.
- XML with a DTD is designed to be **self-descriptive**.

XML allows the author to define his own tags and his own document structure and XML data is stored in plain text format. For this reason XML provides a software- and hardware-independent way of sharing data.

It is important to know that XML was designed to store, carry and exchange data. It was not designed to display data.

Because XML **does not use predefined tags** (we can use any tags we want), the meanings of these tags are **not understood**: <table> could mean an HTML table or maybe a piece of furniture. Because of the nature of XML, the browser **does not know how to display** an XML document.

In order to display XML documents, it is necessary to have a mechanism to describe how the document should be displayed. One of these mechanisms is CSS, but XSL (the e**X**tensible **S**tylesheet **L**anguage) is the preferred style sheet language of XML, and XSL is far more sophisticated than the CSS used by HTML.

18.2.2 An example XML document

This example shows a Dublin Core record:

```
<?xml version="1.0" encoding="UTF-8"?>
<REGNET-document VERSION="1.0">
<dc_type>Presentation</dc_type>
<dc_title>Cultural Heritage in Regional Networks REGNET</dc_title>
<dc_creator>Walter Koch</dc_creator>
<dc_date>2001</dc_date>
</REGNET-document>
```

In the first line, the code between the <?xml and the ?> is called an XML declaration. This declaration contains special information for the XML processor (the programm reading the XML), indicating that

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

this document conforms to Version 1.0 of the XML standard and uses UTF-8 (Unicode optimised for ASCII) encoding.

The second line points out the root element of the document. It typically denotes the documtent's starting and ending point. Finally, the elements <dc_type>, <dc_title>, etc are XML elements we invented. Like most elements in XML, they hold no special significance except for whatever document rules we define for them.

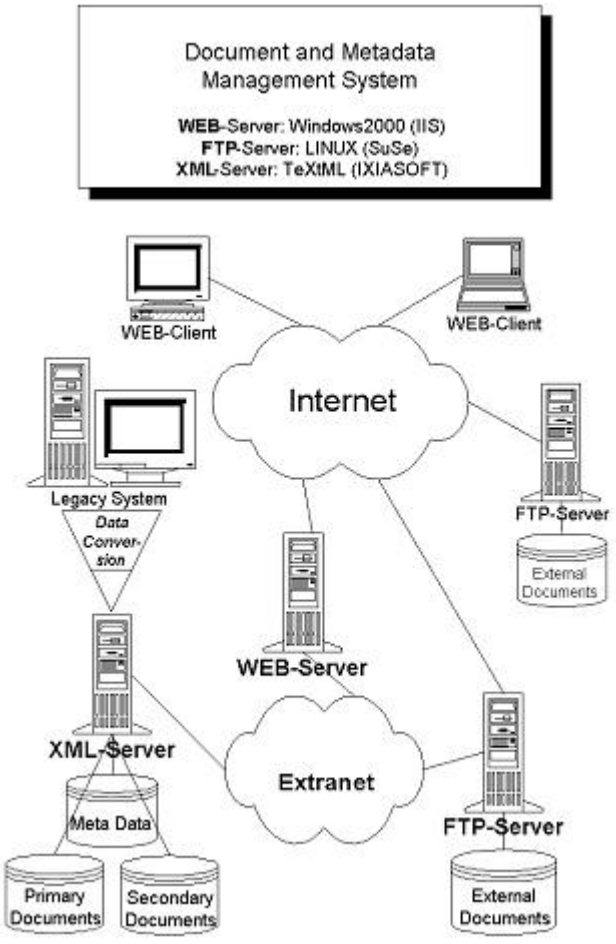
18.2.3 XML and Browsers

In order to display your XSL formatted data you need a browser which supports processing XML: Internet Explorer 5+, Netscape 6.2, Opera 4.

Note: Netscape does not display the XSL formatted documents in general. It will mainly display the XML text. The differences between the browsers are described in the concerning chapters.

18.2.4 System Architecture

The system architecture comprises a webserver, a XML database server (TeXtML Server) and a FTP server (for storing of files/image/documents).



18.2.5 Sample Database used in this manual

REGNET test data entry: http://csc000.cscaustria.at/test

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

This is the REGNET test database. Users who log in with the general REGNET user password can here even access the system administration section. Data contained come from the Feldbrunnen collection provided by IMAC.

18.2.6 View internal XML files

Click XML to view the internal structure of the record.

18.2.7 Accessing the Application

To start the application open your browser and click the URL of the web-application of the database.

18.2.8 General Navigation

There is a navigation bar on top of the interface:

The icon with the key leads to the database administration section, that is in general not accessible for users (only the test collection administration is open for REGNET users).

“Restart” is used for starting a new session.

18.2.9 Security levels – User Types

There are following main user types defined:

public end user – “read access” that means that public end users can perform search & retrieval

REGNET expert user – “full write access”: search & retrieval, add new records, modify records, remove records, batch modify and export search result

database administrator – “full access”

18.3 Search & Retrieval

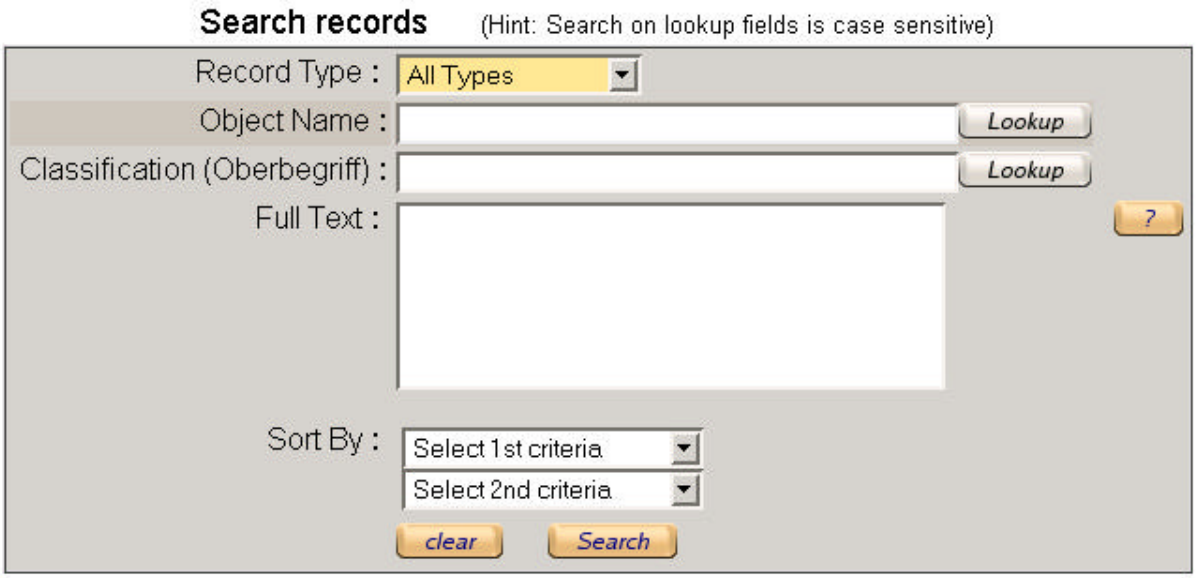
Word and list indexes enable the search functionalities of the TeXtML Server.

The dynamic indexing capabilities of the database update document indexes as documents are added. In this manner, documents can be searched and retrieved immediately.

18.3.1 Search via the Full Text field

The full text field provides the user with search over all data fields available. Left as well as right **truncation** and **search operators** can be used. The system does not care whether there are lower or upper case letters entered.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

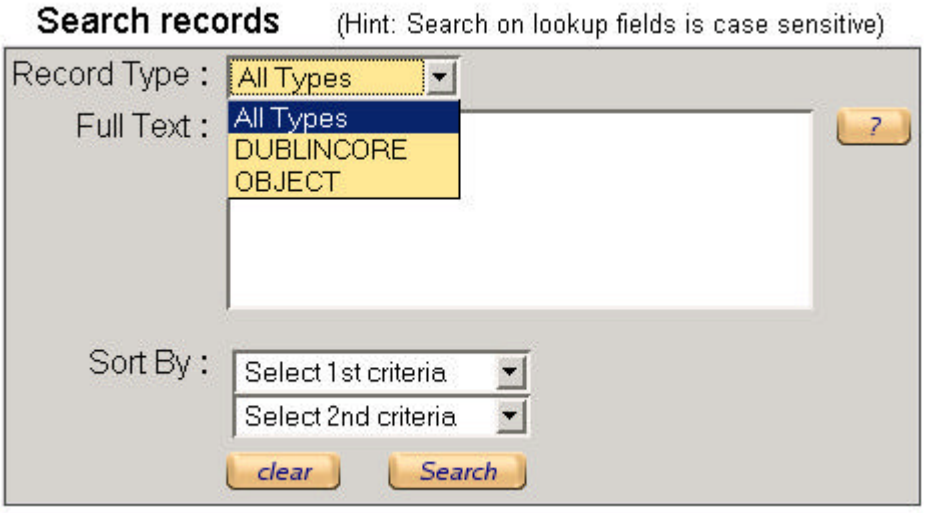


The full text field is available in each search mask. **Help** explaining the search operators can be accessed by clicking on yellow button with the question mark on the right side of the full text field.

Note: the usage of the wildcard ***** ensures that you get **all** matching entries.

18.3.2 **Select a Record Type**

The record types available are displayed after clicking on the record type field. For explanation of the data structure please see the REGNET Deliverable D07 (cited in the references of these guidelines).



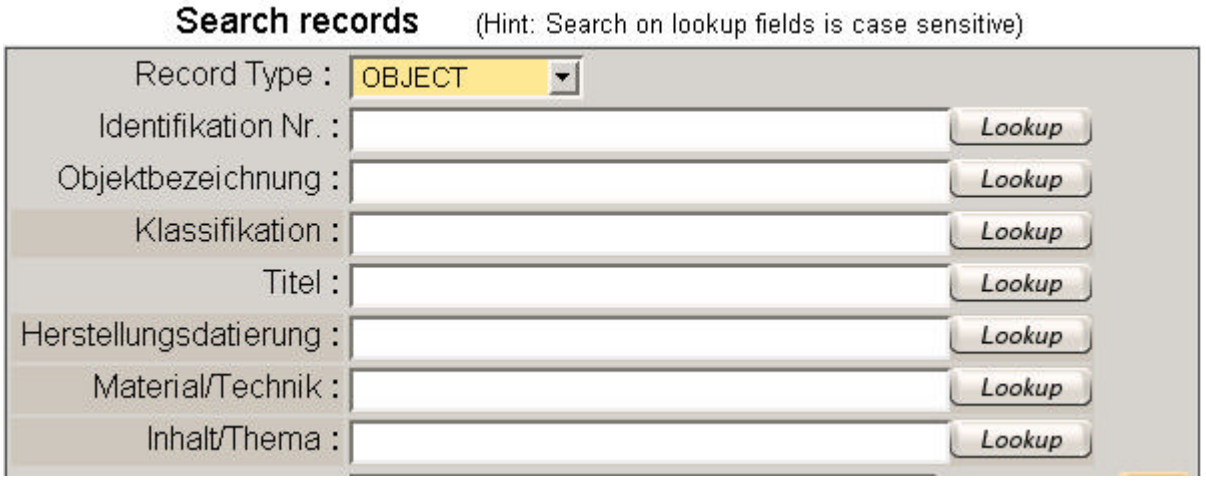
In this example there are two record types available: DUBLINCORE and OBJECT.

18.3.3 Search via Lookup lists

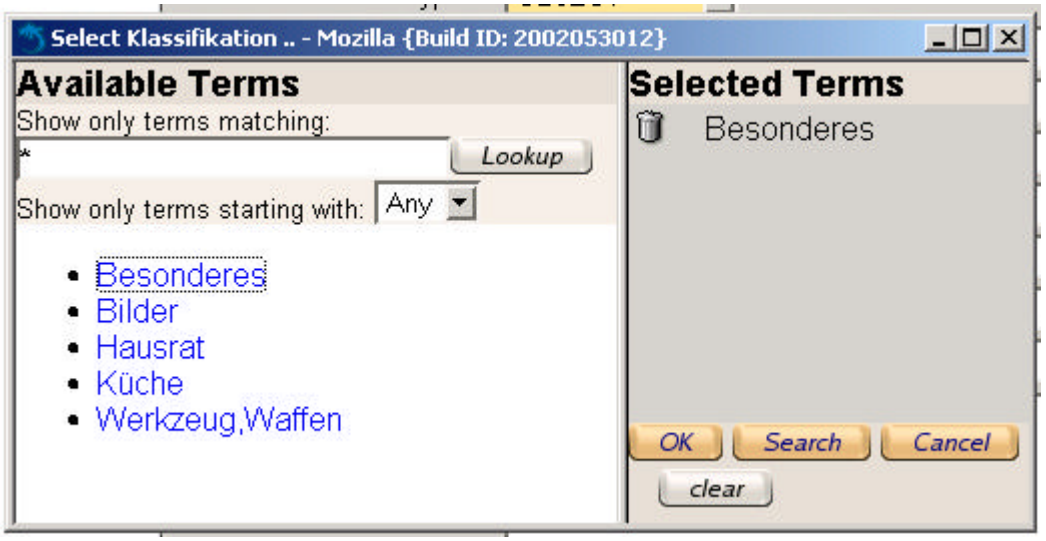
The lookup lists provide the user with a possibility to get a quick overview of the contents of this field.

Note: the indices of the fields are different from the full text field and for this reason these fields are **case sensitive**. To deactivate case sensitive search you can enter a search term with truncation (e.g.: testobject*).

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.



In order to see the contents of a field available just click on the lookup button.

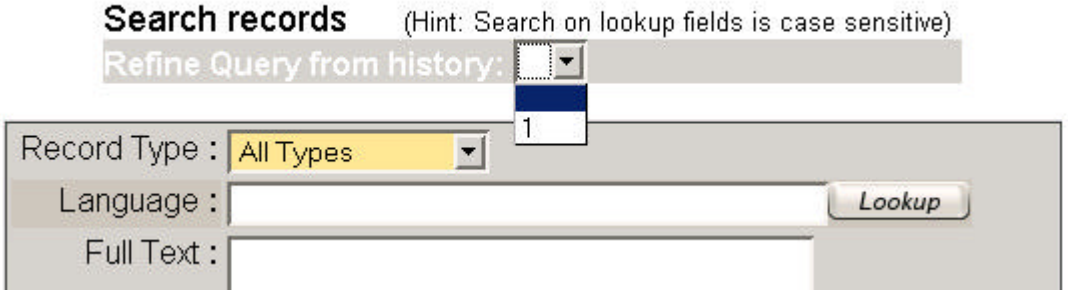


In case that the list is too long the user can enter the term (again with truncation e.g.: Ca* or C*,…) in the top field. If the terms displayed are enough just click on this term/these terms to select them.

If the user wants to define further search criteria in the search mask, click “OK”. If there are no further criteria to be defined, click “Search” to confirm immediately. By clicking on the trash basket on the left of the selected term it will be removed from the list of selected terms.

18.3.4 Refine Query

To refine a previous query a user can select from history and change this query.



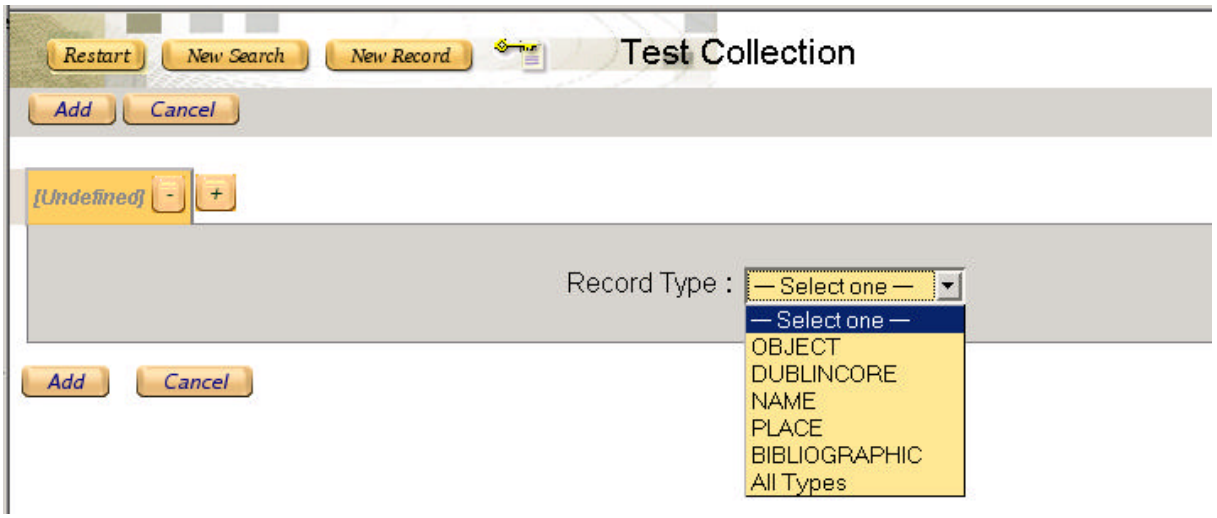
Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

18.3.5 Sort criteria

In the search mask as well as in the mask “detailed view” displaying the search result two sorts criteria can be defined. In the “summary view” mode of the search result can be sorted by clicking on the header row of the result table (for details see chapter 6.4).

18.4 Add a record

18.4.1 Metadata



- click on “New Record” in the navigation bar on the left top of the screen
- select the appropriate “Record Type”
- enter data
- click “Save” to save the new record
- if there are at once changes necessary, change the data and save again
- if a next record has to be added click “New Record” and proceed as described above

Data fields can be **multiplied** as often as required by using the plus button (+). Not used fields can be removed by clicking the button with the minus (-). Lookup lists support consistent data input.

18.4.2 Related Digital Files

There are two ways of adding a digital image, text document etc. to the metadata:

- store the file on a ftp server (done by the database administrator) and add the appropriate **hyperlink** to the metadata. Since database contents are displayed in a web browser, the file can be accessed easily. Example:

Image (Large) : http://csc002.cscaustria.at/plakat/cd00.050/t_s_dsc15525.jpg

Image (Preview) :

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

Image (Large) refers via hyperlink to the according file that can be accessed by clicking. Image (Preview) integrates the image via hyperlink too, but is defined to display it directly within the record.

- **upload** the file directly into the database: files can be uploaded from the local computer of the user.

Note: in general we prefer to store the files at the ftp server and to integrate them via hyperlink. Particularly large files should not be uploaded directly into the database.

18.4.3 Modify a Record

To modify a record:

- perform any search.
- be sure that you are in the “detailed view” mode
- click EDIT and the data entry mask with the data is available (there are two Edit buttons, both can be used. One button is in the left result frame and the second one is just above the data fields in the main frame).
- perform changes
- click “save” to confirm the changes
- a message informs you that the modified record was saved
- click on the red record “title” in the left result frame to view the result

18.4.4 Remove a document

To remove an entry perform a search, get the record displayed and click the REMOVE button. A new page opens prompting you to confirm the deletion. Click OK to delete the document. You may repeat the search if you want to make sure that the document is deleted.

18.5 Features for management of data

18.5.1 Import of data in batch mode

Existing data (in most cases exported from another database system) has to be transformed into the correct XML format (this task is done by the database **administrator**) and can be imported in the **batch mode** of the database. To process data the XML files have to be copied into a directory of the server (a directory within the web interface of the application) and the administrator just has to click “Process”.

Required data format:

“Data format” refers to the transport syntax in which the data is exchanged.

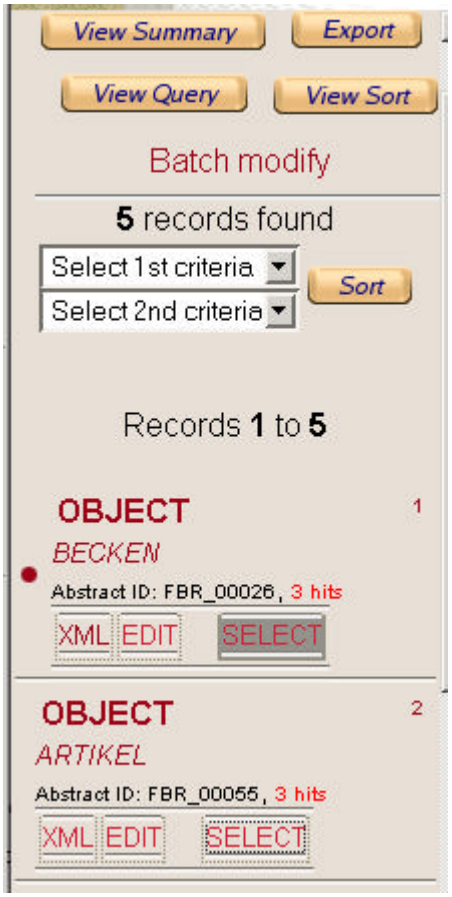
Documents can be imported as a batch in following formats:

- XML our preferred format (http://www.w3c.org/XML)
- MS Access
- MS Excel

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

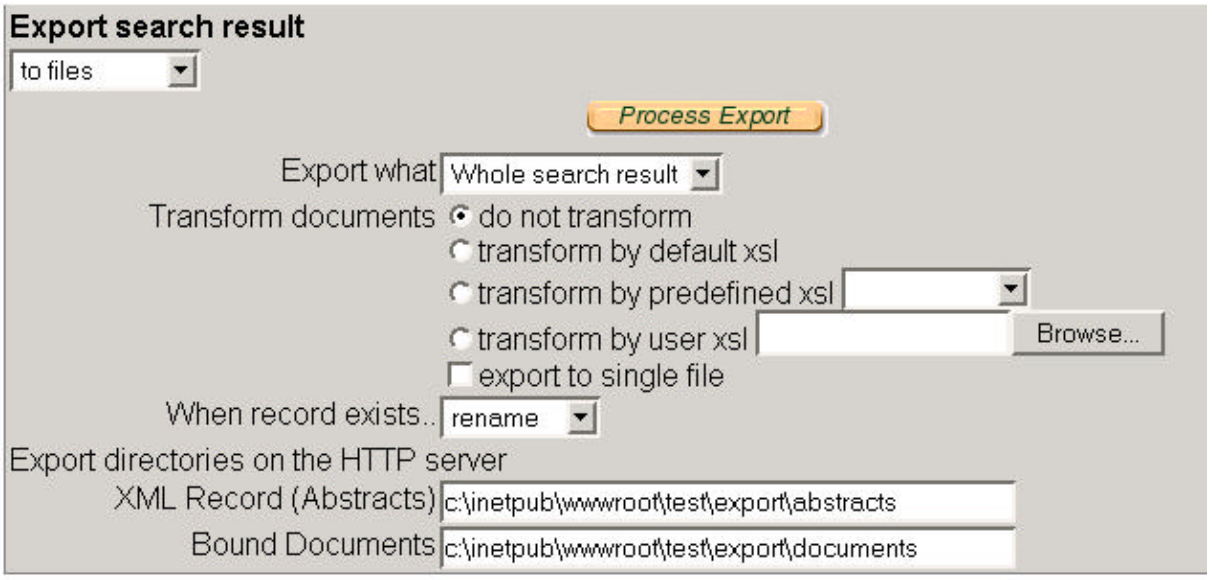
- CSV (comma separated values -the lowest common denominator text format is easily parsed and often adequate, particularly for “flat” or “tabular” data).

18.5.2 Export of data



Compared to the import of data that is only performed by the database administrator, the export of data can also be performed by the expert user.

- perform a search
- be sure to be in the “Detailed view” mode
- click on “Export” at the top of the left result frame to export the whole search result
- if just some records from the search result will be exported, click on “Select” for each record in the left result frame and then click “Export”



Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

For export of data the user has to specify:

- export to files or to topicmap (export to topicmap is described in the manual for topic map generation)
- select whether the files (each record is one files) will be exported as one single file or whether they will remain in the original structure
- define if the exported files will be transformed during export, e.g. formatted as HTML file. (for support in this case please contact the database administrator).
- select what should happen when the record already exists in the export directory

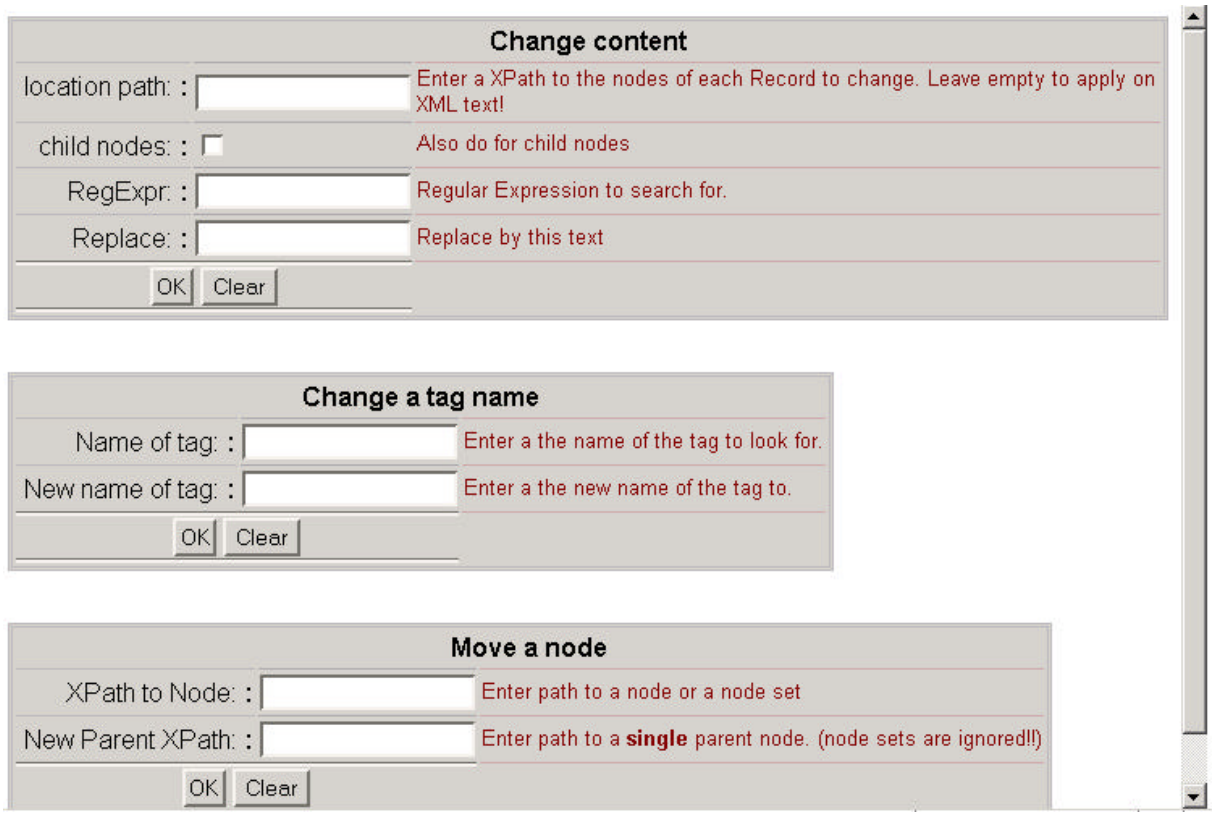
The exported file(s) are stored in the export directory of the server with the database application. To view them just click on the filename(s), for copying please contact the database administrator.

18.5.3 Batch modify

The batch modify feature helps to perform changes in a search result. It is a search-replace routine using regular expressions (for usage of regular expressions please have a look at the references in this document).

To perform changes in all records of the search result be sure to be in the “detailed view mode” and just click on “batch modify” in the left result frame (see the image at page 13).

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.



In most cases just the first routine “Change content” will be important for expert users, “Change a tag name” and “Move a node” will mainly be used by the database administrator.

To perform batch modify the user has to know the internal XML name of the tag. For the location path you have to enter: //name_of_tag (e.g. //name, //state, //ril, …). The two slashes are necessary because of X-Path syntax (for this action you don’t need to know more about it, but to give an overview there are some links in the references).

Enter in “RegExpr” the term to be changed and in “Replace” the new one, confirm with “OK”.

18.6 Important Database features that can be adapted in accordance to user needs

18.6.1 Definition of data field attributes

Data fields can have numerous characteristics, that can be defined as needed:

- **size** of input field (the number of characters contained in one data field is never restricted in this system, but the size of the input field: TextBox, SmallTextArea, LargeTextArea).
- a data field might be **multiplied** as often as need, that is mainly used for multiple entries in one data field.
- **Lookup lists** can be generated from current data field contents to support consistent data input. A second possibility is to refer in this table to a list of controlled vocabulary
- a data field may be prepared for **uploading** electronic files and for displaying them
- a data field can display **hyperlinks** and **e-mail addresses** correctly
- **images** (that are accessed via hyperlink) can be **directly displayed** in the browser
- a field can be **displayed in the search mask** for the according record type

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

- contents of a field may be defined as **sort criteria** that appear for sorting the search result.

18.6.2 Display of records

Most REGNET records are internally divided into so-called sections. For example one section could contain the object data fields, a second one the shop information and a third one the DUBLINCORE data fields. The system could display the information of all section straight in one page of the browser or split them up into three virtual “index cards”.

18.6.3 Controlled vocabulary, Thesauri

A list of **controlled vocabulary** can be added as lookup list to a data field.

A **Thesaurus** can be added to a data field.

This thesaurus is stored in a central database and the system provides a possibility to develop contents in a co-operative way (if needed).

18.6.4 Definition of Search result view

There are two view modes available: the summary view and the detailed view. By clicking on the according buttons the user can change the view mode.

The **detailed view** is the expert view. The screen is divided into a small left frame containing an overview of the search result and into a larger main frame displaying the whole record.

The **summary view** is aimed to public end users. The contents are formatted via stylesheet (XSLT) transformation in HTML and can be adapted as required for each purpose. Currently the most important fields of a record type are displayed in a table. It is possible to make some contents clickable and to enable the access to the full record. Images and hyperlinks can be contained in this view too.

It is possible to define one expert access to the database and one separate public end user access.

18.6.5 Templates

This feature provides the expert user with the possibility to define pre-filled in data field contents. The user can define several different templates and save them.

18.6.6 Synchronisation

In the REGNET system we often deal with so-called “doubled data”. For example there is always a DUBLINCORE version of object data available. To avoid double work with maintaining doubled data it is possible to define which fields are to be updated automatically if anything is changed in the “main record”.

18.7 Guidelines for data recording

These general guidelines are copied parts of the Description Guidelines of Cultural Material Inititaive (Research Library Group).

http://www.rlg.org/culturalres/descguide.html

They may give useful advice and guidance.

18.7.1 General Remarks:

Be consistent. Probably the single most important factor in successfully converting and loading descriptive data into the XML Document Server: If contributed source data is consistent, it is much easier for us to process. This also applies on a more conceptual level to consistency about the "thing

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

being described"; for example, if source data contains descriptions of both objects and photographs of objects and does not provide any way to distinguish between them, it makes the data loading process extremely challenging at best, impossible at worst.

Use standards. Over the years, many standards for data structure, syntax and content have been developed by specific communities for specific applications. Standards should be used wherever possible, and applied as strictly as possible, because this practice will make data more portable across institutions and allow us to develop standardised data loading procedures that can be modified if necessary and re-used, rather than requiring the development of new data loading procedures from scratch.

18.7.2 Character Sets

Data should conform to standards such as:

Unicode™ (preferably UTF-8 encoding)

18.7.3 Dates

- Do not use ambiguous short date formats such as DD/MM/YY or MM/DD/YY (the date "04/07/98" could be the 4th of July or the April 7th, and in the broad context of the Cultural Heritage, could be almost any century!). Use an internationally unambiguous format such as the W3C's Profile of ISO 8601 (http://www.w3.org/TR/NOTE-datetime), which can take forms such as YYYY-MM-DD, YYYY-MM or YYYY, depending on the degree of precision required, e.g.:
  - 1974-12-31
  - 1907-05
  - 1846
  - 0056 *(i.e. use leading zeroes for first millennium dates)*
- Avoid dates containing ambiguous two-digit years (e.g. "May '68")
- Date ranges, for example an individual's lifespan, should be stored in separate start date and end date elements or fields wherever possible. If this is not possible, use a consistent separator, such as "/" or " - " (the W3C Profile referred to above suggests "/", e.g. "1975-12-25/1975-12-31" would represent a period of 6 days during December 1975).
- If possible, express approximate or "circa" dates as an appropriate date range that separates the earliest possible date and the latest possible date (e.g. "circa 1870" could be expressed as "1865 - 1875"; see guidance regarding date ranges above). If this is not possible, please try to denote circa dates in a consistent manner.
- BCE (Before Common Era) dates should be clearly identified by the appending the string "BCE" after the date, e.g:
  - 0075 BCE
  - 2000 BCE
  - 15000 BCE
- If dates are given in the form of named periods (e.g. "Ming Dynasty"), please also supply the approximate corresponding range in years for date sorting purposes. These mapping tables between named periods and numeric date ranges may be supplied separately if preferred.
- We will assume that all dates given are Gregorian, unless otherwise indicated.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

18.7.4 Languages

We recommend the use of the ISO 639-2 Language Codes: http://lcweb.loc.gov/standards/iso639-2/

18.7.5 Subject Terms

Making sense of diverse subject terms is one of the most challenging aspects of distributed catalogues; with such a wide range of institution, collection and description types, there will be very little consistency in the application of subject terms. Ultimately, we hope to add powerful "assisted searching" tools, to help users navigate across different vocabularies and subject schemes, but in the meantime we are simply using whatever subject terms are provided in the source data.

However, although we are loading whatever is provided in the way of subject terms, there are a number of guidelines for contributed data that will allow us to derive maximum benefit from the subject terms in this integrated environment:

- Put each subject heading in a separate, repeated field or element.
- Clearly distinguish between topical subjects, places as subjects, people as subjects or organizations as subjects.
- Clearly identify the source of any controlled vocabulary terms.
- Input subject headings consistently in terms of case, spacing, and punctuation.

18.7.6 Names

Clearly, names will be one of the most important access points; to maximize their effectiveness, it would be helpful if you could follow these guidelines wherever possible:

- Differentiate consistently between personal and corporate names.
- Clearly identify the nature of the relationship between the object described by the record and the named persons or organisations, for example "creator", "depicted" etc. This can be achieved using specific field or element semantics, or through the use of "relator terms" (use standard terms to identify relationships wherever possible—see Annex for examples), preferably in a separate field.
- Invert personal names: last name, comma, first name (e.g. "Gill, Anthony C.") unless the different parts of the name are already stored in separate fields).
- Store prefixed titles (e.g. honorifics such as "Dr.", "Sir", etc.) in a separate field.
- Use authoritative forms of names wherever possible. Sources of authoritative forms of personal names include the Getty Trust's *Union List of Artist Names* and the Library of Congress *Name Authority File* (see Annex).

18.7.7 Object Type, Work Type

Assigning generic names or *types* to objects in cultural collections is a fundamental component of the descriptive process, since it provides a primary access point for collection managers and researchers alike. However, the assignment of object type terms is often highly problematic, since it can be very difficult for the cataloguer to consistently distinguish between related but distinct concepts such as type, form, genre and function. To help address this problem, a plethora of standard vocabularies for object types have been developed by diverse communities to bring some consistency to this important descriptive information.

To reconcile the broad range of work or object type terms in use by members with the need for users to be able to quickly and easily sort and browse large result sets according to a simple set of work types, we are adopting an approach based on dual "sort" and "display" values for work type that hopefully represents an effective compromise:

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

"Work Type" is the data element used to store the work or object type(s) *as supplied in the contributed data* for searching and display. We recommend (but do not require) the use of a standard vocabulary for this data element (See Annex for examples). If there is no data element corresponding semantically to "Work Type" in the contributed records, this data element is left empty.

18.7.8 Ownership

Because institutions do not necessarily own the title to all of the works in their collections (items on permanent loan, for example), RLG will not make any assumptions about ownership when loading descriptions. This means that, unless the descriptive data for items or collections explicitly states ownership information (for example, in an "owner" field), owner information will not be displayed on the screen in results displays.

However, we will **always** display the name of the institution that *contributed* the data to the service in results displays.

18.8 Brief Guide to Controlled Vocabularies & Cataloguing Rules

This section provides a short list of examples of relevant vocabularies and cataloguing rules. This is not intended to be a comprehensive list. Additional information about terminology resources can be found at the mda's WordHOARD site.

18.8.1 Vocabularies

ACRL RBMS BSC Relator Terms
http://www.lib.byu.edu/~catalog/people/rlm/bsc/relators.htm

British Museum Object Name Thesaurus
http://www.mda.org.uk/bmobj/Objintro.htm

Getty Art & Architecture Thesaurus (AAT)
http://www.getty.edu/research/tools/vocabulary/aat/

Getty Thesaurus of Geographic Names (TGN)
http://www.getty.edu/research/tools/vocabulary/tgn/index.html

Getty Union List of Artist Names (ULAN)
http://www.getty.edu/research/tools/vocabulary/ulan/index.html

ICONCLASS
http://www.iconclass.nl/

Library of Congress Name Authority File (LCNAF)
http://lcweb.loc.gov/cds/name_aut.html

Library of Congress Subject Headings (LCSH)
http://lcweb.loc.gov/cds/lcsh.html

Library of Congress Thesaurus of Graphic Materials (I & II)
http://lcweb.loc.gov/pmei/lexico

MARC Code List for Relators, Sources, Description Conventions
http://www.loc.gov/marc/relators/

Revised Nomenclature for Museum Cataloging: A Revised and Expanded Version of Robert G Chenhall's System for Classifying Man-Made Objects ("Nomenclature")
Available from AltaMira Press.

Social History and Industrial Classification (SHIC2): A subject classification for museum collections
Available from mda.

UNESCO Thesaurus
http://www.ulcc.ac.uk/unesco/thesaurus.htm

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

18.9 References

W3 Consortium

www.w3c.org

Research Library Group

http://www.rlg.org/

Robert Eckstein with Michel Casabianca: XML Pocket Reference. 2nd Edition. April 2001.

Description of REGNET data structure

Deliverable 07, Validation of the REGNET System operation & Preparation of the REGNET Demonstration Phase p. 145-160.

Regular expression tutorial

http://www.living-source.com/user/adi/regexp/regexp_tutorial.html

http://www.cc.gatech.edu/classes/RWL/Projects/citation/Docs/Design/regex.intro.1.doc.html

http://xreplace.vestris.com/docs/regexp-tutorial.html

Usage of regular expressions in Perl

http://www.english.uga.edu/humcomp/perl/regex2a.html

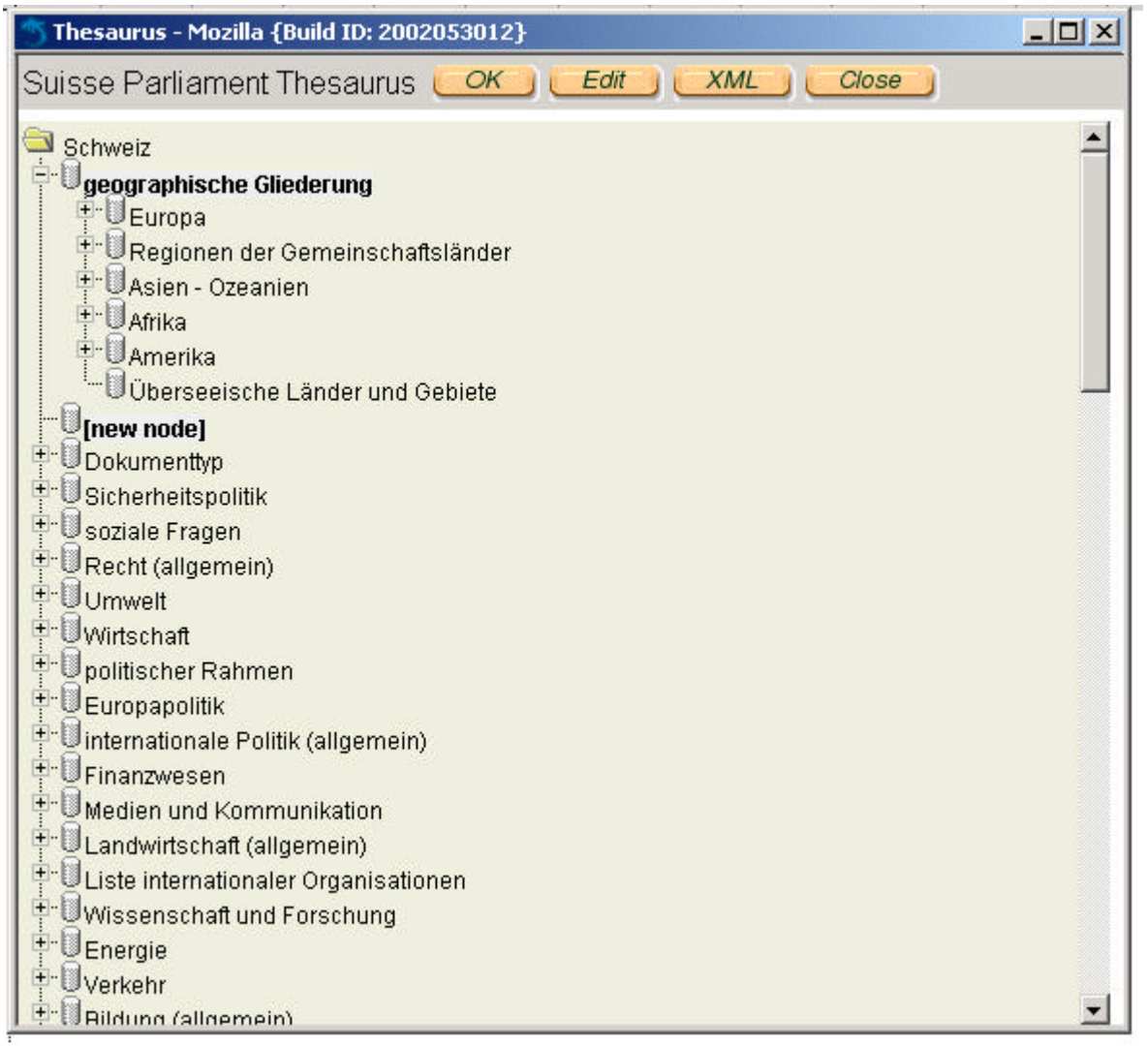
Usage of regular expressions in Phython

http://www.amk.ca/python/howto/regex/

19 Cooperative thesauri

Thesauri are stored in the ontology database.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.



19.1 Navigation

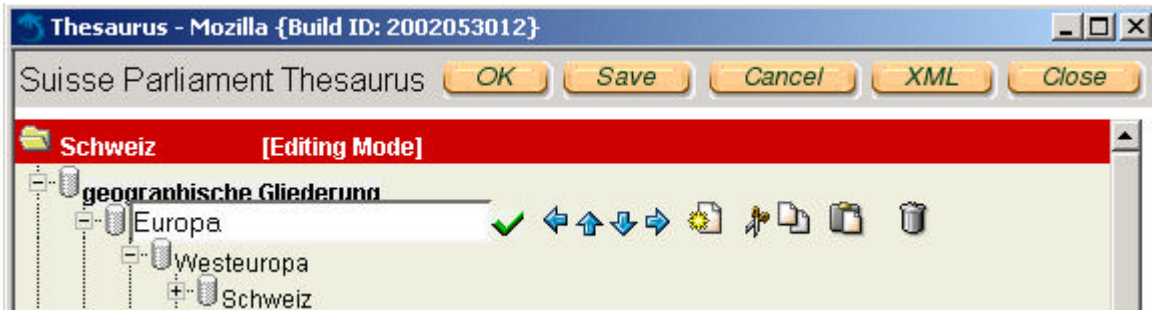
Navigate as you do with the Windows Explorer.

The terms “parent node” and “child node” describe the hierarchy/dependence of terms. For example “geographische Gliederung” is the parent node to “Europa” and “Europa” is parent node to “Westeuropa”. Vice versa “Westeuropa” is child node to “Europa” and “Europa” is child node to “geographische Gliederung”.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

19.2 Adding/updating/deleting entries

Click EDIT.



Click on a term.

For this feature use the symbols at the right side

The blue arrows help to move the thesaurus term to another level or order (parent-child - just try yourself, this is a testversion).

The other symbols are for copying, deleting, adding a new term and saving.

Just one comment: add a new term at the first level of the thesaurus: add a term at a child node and move the new entry with the blue arrow to the first level.

To connect the thesaurus term with e.g. object data:

Add to existing metadata: edit the record click on the yellow/orange button with the + at the right side of the index card name OBJECT and DUBLINCORE, choose document type THESAURUS, click on the lookup list and select a term, add and save/apply.

Create a new record: choose document type OBJECT, enter data, add a new document type (is internally written into the same record!) THESAURUS, proceed as described above.

20 Topic Maps Generator “HOW TO”

This section describes how to create a sample XTM file (part of the well-known ‘Saints’ topic map) from scratch, using only the Topic Maps Generator tool that is specifically implemented for the content providers of REGNET, by CERT.

The tool can be found at the following address and can be used freely for testing purposes. The original location of the tool will be specified in the mailing list after it is being installed to the final server.

http://160.40.50.22:8800/servlet/org.REGNET.ontology.XTMLoader

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

20.1 General rules

Before starting the creation of a new topic map, it would be wise to underline some useful tips about topic maps.

- Every topic map consists of several topics
- Topics within a topic map can be in a relationship (association) with each other
- Topics can play different roles in different associations

The first step for the creation of a topic map is to define topics relative to the theme represented by the topic map (e.g. Saints theme).

20.1.1 What is a topic?

A topic can be anything, regardless whether it exists or not, whether it is of physical nature or just an idea or expression. It can be a person, an item, a place etc. A topic has an internal identification, the *topic id*, which allows the topic being referenced somewhere else in the topic map – and an external name, the *base name* that helps the end user to recognize the topic. Many times the topic id and its base name are similar.

Within a topic, a reference (link) can be added. This reference called, *occurrence*. For example the topic 'Saint Angela' could have an occurrence http://paintings.net/angela/pic.jpg, which represents an image of the saint.

Most of the times it is useful to classify the topics by more general terms. For this purpose the '*Instance Of* ' property is being used. For example the topic 'Saint Angela' is an instance of the topic 'person' and the topic 'saint'.

Finally, topics can participate in relationships, called associations, in which they play roles as members.

20.1.2 What is an association?

Associations are the most important aspect within a topic map, because by defining an association various topics are connected (linked) with each other.

Associations can be rather general like:

- is located in
- lives in
- written by
- born in
- or more specific like:
- is an academic organization within
- requires to have property
- a facility provided by

A simple example for an association could be:

Eiffel tower - is located in - Paris.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

20.1.3 Members and Roles

The topics involved in an association are called members and the members play roles. The roles need to be defined because someone could interpret:

Paris - is located in – Eiffel tower.

In order to avoid such misunderstandings, the following roles should be defined:

- Topic 'Paris' plays the role of 'Location'
- Topic 'Eiffel tower' plays the role of 'Monument'

Remember: As it is previously mentioned, almost everything is a topic. That's why 2 more topics should be defined before assign the above roles to the members. The topic 'Location' and the topic 'Monument'

20.1.4 Scopes

Scope specifies the extent of validity for a topic characteristic. Topic characteristic is a base name, an occurrence or an association. Scope could be considered as a filter that allows those characteristics to be valid only within a certain scope. Scopes are also useful because they could restrict portions of information to be viewed under different group of users. Many times, scopes are used to categorize the data by language.

20.2 A real example

The target of the example is the creation of a topic map with only guide an Excel based TM data structure provided by TARX.

<topic id>	<topic id>
saint	angela
	crispin
	crispinian
person	angela
	crispin
	crispinian
occupational group	leather workers
congregation	ursulines
</topic>	</topic>

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

<topic id>	<association id>
founded	angela founded ursulines
patronises	crispin patronises leather workers
	crispinian patronises leather workers
brother-of	crispin is brother of crispinian
</topic>	</association>

Table 1.

<association id>	<member>	<member>
angela founded ursulines	angela	ursulines
crispin patronises leather workers	crispin	leather workers
crispinian patronises leather workers	crispinian	leather workers
crispin is brother of crispinian	crispin	crispinian
</association>	</member>	</member>

Table 2.

20.2.1 The procedure step by step

At the beginning, all the topics from the first column should be defined:

Press the

new topic button and type ‘saint’ in the topic id and ‘saint’ in the base name box. Don’t forget to press the button in order to stack the base name to the list, before the submit button is pressed.

The above should be done for the following topics as well:

Topic id	Base name
Person	Person
Occgroup	Occupational group
Congregation	Congregation
Founded	Founded
Patronises	Patronises
Brother-of	Brother-of

After the definition of the above topics the visualization of the topic map should be like Figure 18

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

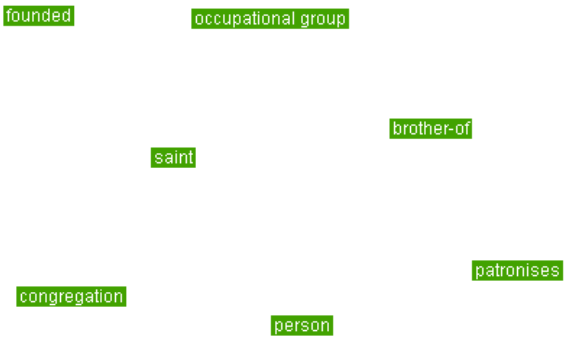


Figure 18 : Topic map visualisation result.

The next step is to define the topics, appeared at the second column of table 1 which is: angela, crispin, crispinian, leather workers and ursulines.

Notice that the topics angela, crispin and crispinian are both instance of saint and person.

In Figure 19 you can see how to define the topic angela

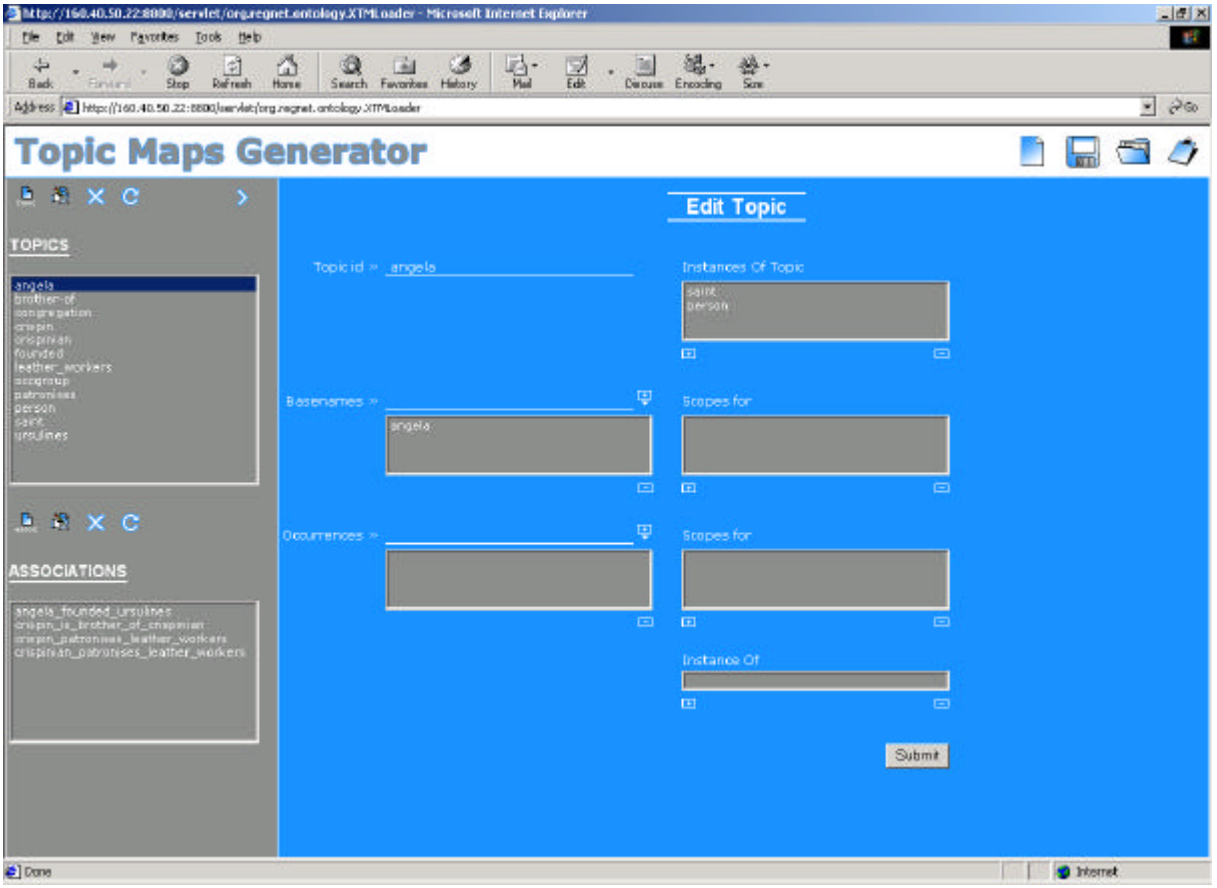


Figure 19: Definition of topic “Angela”.

- Type ‘angela’ in the topic id
- Type ‘angela’ in the basename and press the button
- Select ‘person’ from the topics list (gray left side)

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

- Press the button under the instances of box to add the ‘person’ topic
- Select ‘saint’ from the topics list (gray left side)
- Press the button under the instances of box to add the ‘saint’ topic
- Type the ‘Submit’ button

Do the above procedure for the rest of the topics. After this, the visualization of the topic map should be similar to Figure 20.

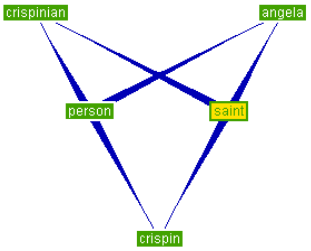


Figure 20 : Topic map visualisation result.

The final step is to define the associations:

- Angela founded ursulines
- Crispin patronises leather workers
- Crispinian patronises leather workers
- Crispin is brother of crispinian

As shown inFigure 21, the association ‘angela founded ursulines’ is defined.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

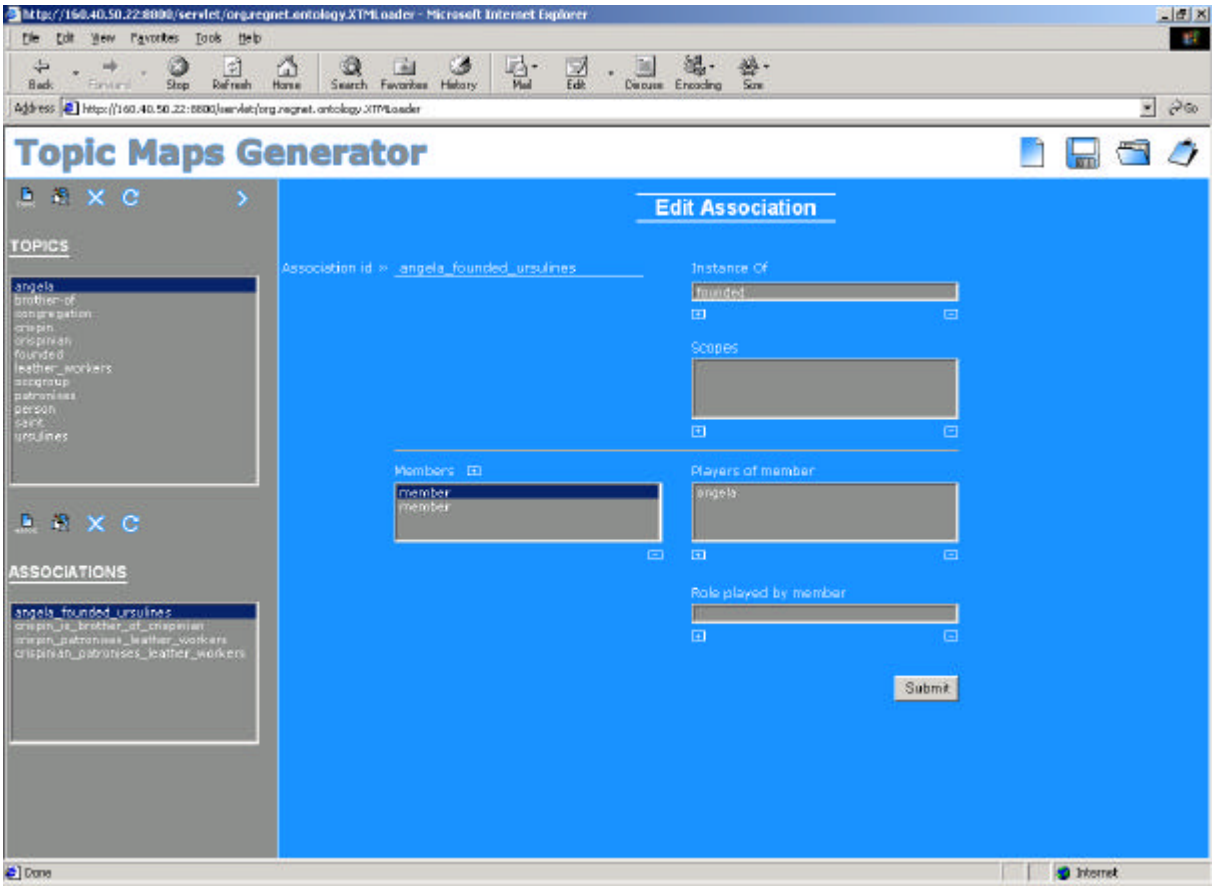


Figure 21 : Definition of the association "angela founded ursulines".

- First click on the new association button
- Type 'angela_founded_ursulines' in the association id
- Select 'founded' from the topics list (gray left side)
- Press the button under the instance of box to add the 'founded' topic
- Click twice the button next to the Members in order to add two members
- Select the first member from the members list
- Select 'angela' from the topics list (gray left side)
- Press the button under the players box to add the 'angela' topic
- Select the second member from the members list
- Select 'ursulines' from the topics list (gray left side)
- Press the button under the players box to add the 'angela' topic
- Type the 'Submit' button

Do the above procedure for the rest of the associations.

After completing all the steps, the visualization of the final topic map file should look like Figure 22

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

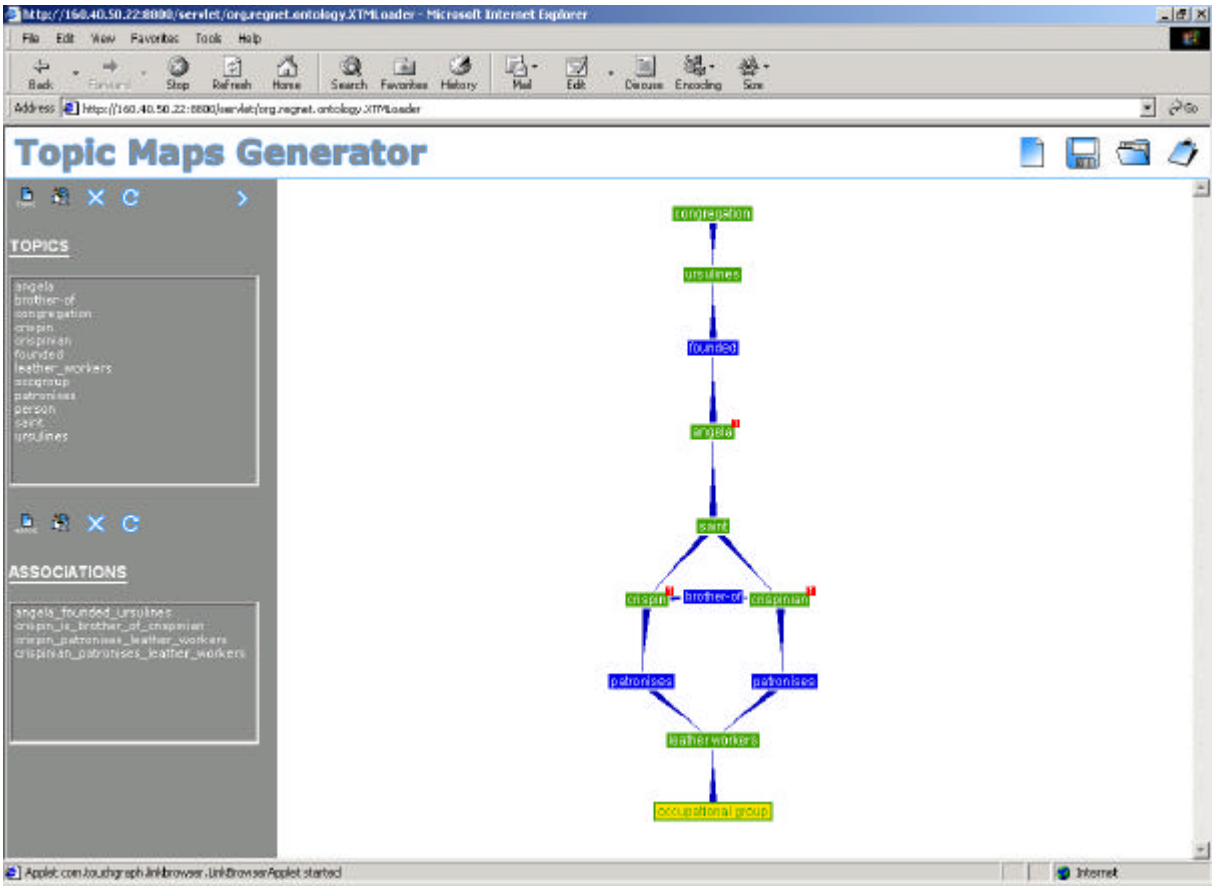


Figure 22 : Topic map visualisation result.

A more detailed description of the tool is provided at http://160.40.50.22/giannhs/tmg.doc

21 How to generate Topic Maps with Mapalizer / Linkbrowser / Webexplorer

21.1 Start

To access the entry page please use the hyperlink to your website. For our example we use:

http://csc000.cscaustria.at/topicmap/_AIT

Each content provider has his/her own website:

http://csc000.cscaustria.at/topicmay/_IMAC

http://csc000.cscaustria.at/topicmay/_ARG

http://csc000.cscaustria.at/topicmay/_KVA

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

21.2 Overview – Steps to create a Topic Map and a Graph

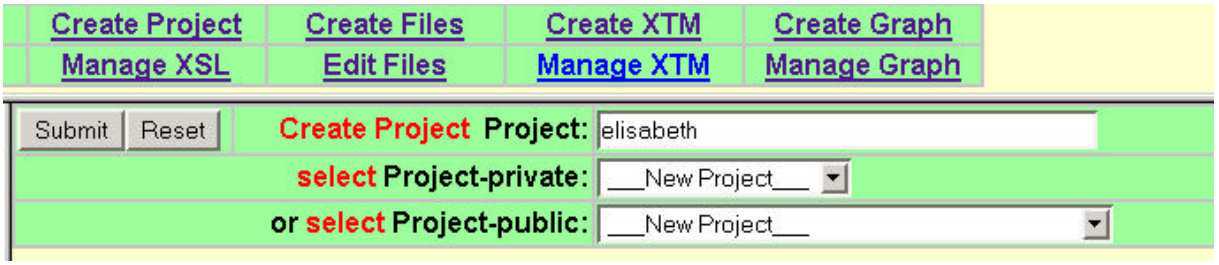
To create a topic map (xtm) and the graph please perform steps as follows in your website:

- Create Project (click on create project)
- Add contents for the topic map in the .concepts and .templates files: define which classes and instances will be available and which associations
- Create Files (click on create files)
- Add occurrences to instances (edit files and add occurrences, that are mainly html files created by yourself) and define concrete associations
- Create XTM (Topic Map File – click on create xtm)
- Create Graph (click on create graph)

Here is the concerning navigation on top of the website:

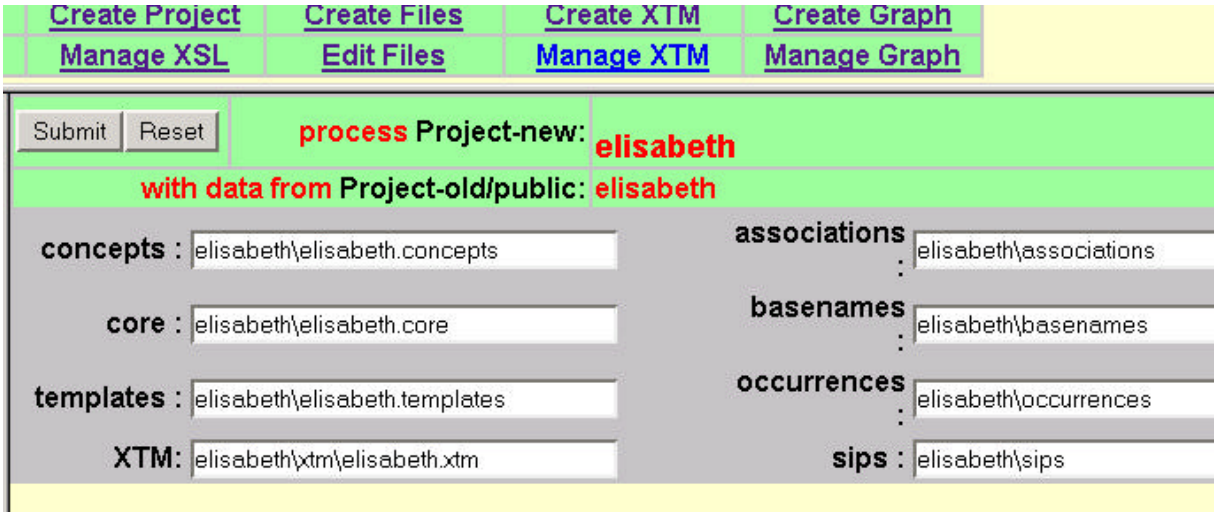
21.3 Detailed description

21.3.1 Create Project



Click on “Create Project”, enter the project name (here: Elisabeth) and click on “Submit”.

Now the following message appears. Click on “Submit” again.



Now all necessary files for the first steps are created.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

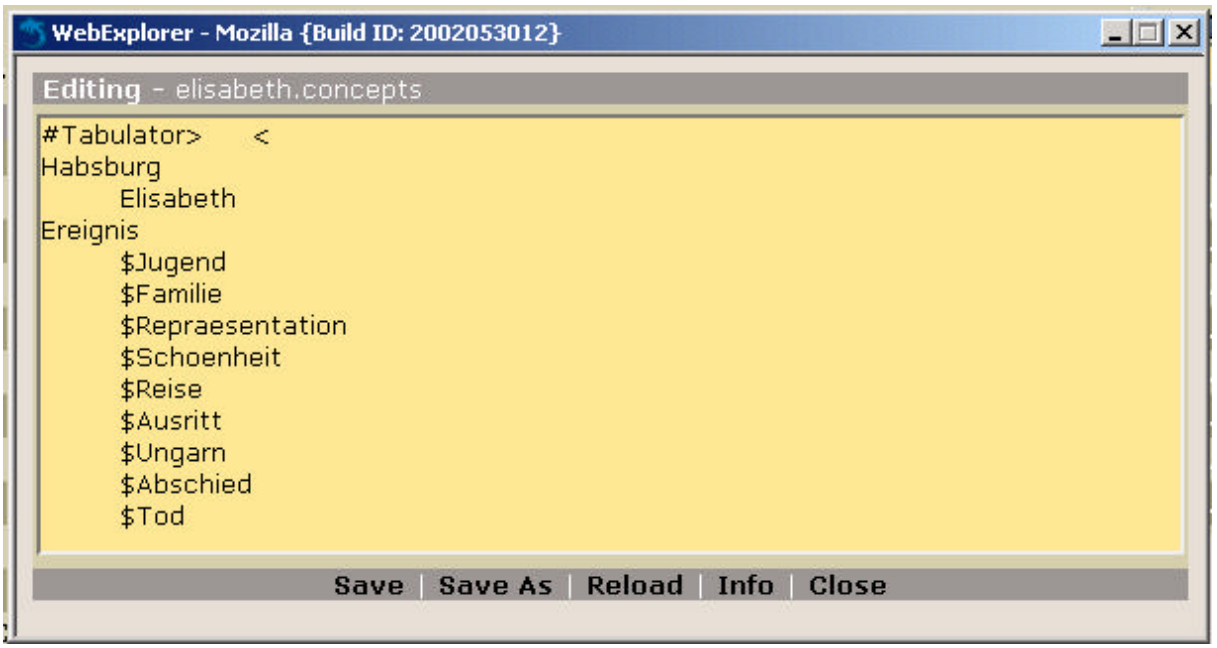
21.3.2 Create Topic Map Files

For accessing the files click on “Edit Files” and select the project you created. Currently there are three files contained:

- projectname.concepts
- projectname.templates
- projectname.core

For the next steps we need the .concepts and the .templates file. The .concepts file will contain the classes and instances and the templates file the associations available for the topic map. For detailed information see the chapter “Mapalizer README”.

The Elisabeth.concepts file:

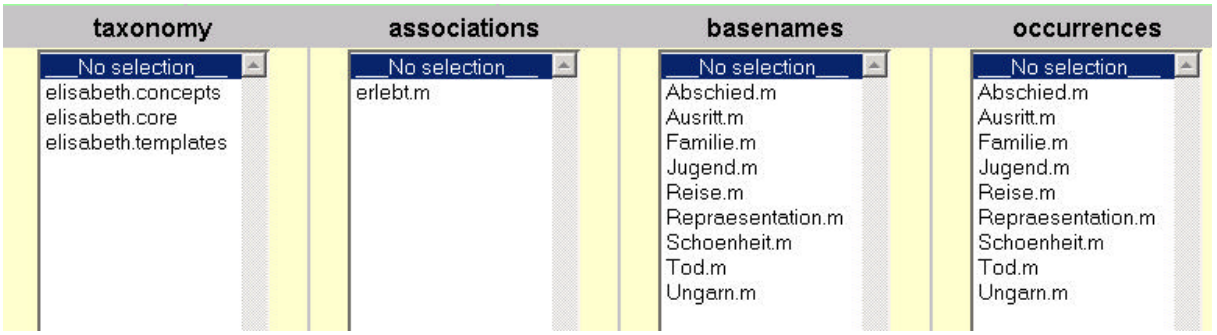


Notet: there must not be more than one character (we recommend to use tabulator) between the classes and instances. Since the editor is yet not capable to add tabulators, they have to be copied. The topic map generator will not tolerate additional blanks, carriage returns etc.

21.3.3 Use “Create Files”

Click on “Create Files” and then click “Edit Files”, select the project and look at the files available. To edit the files listed there just double click on the filename.

For Elisabeth are now these files available:



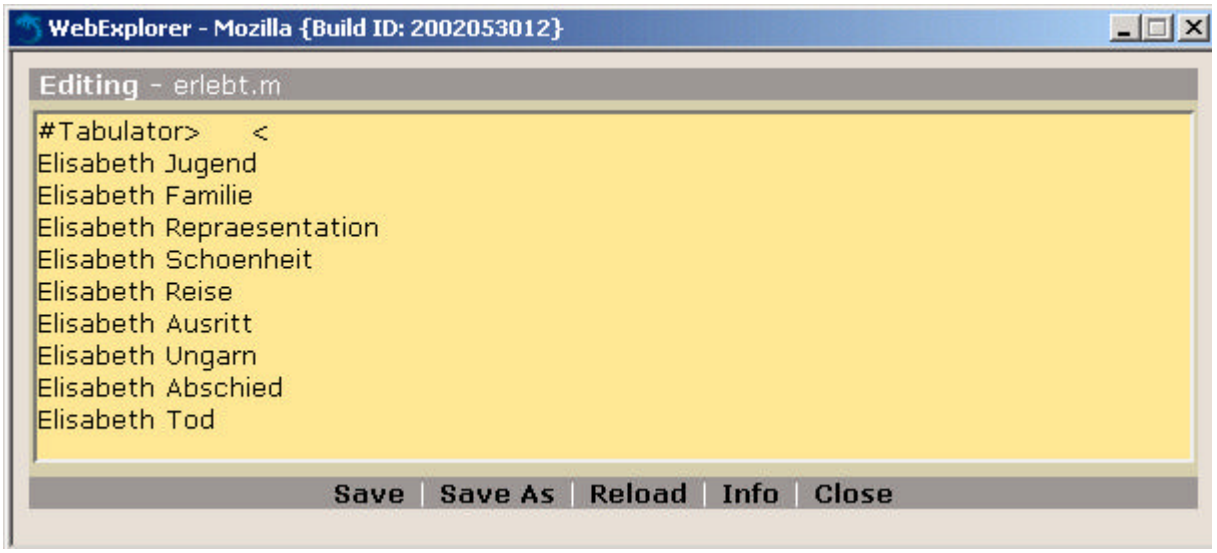
Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

Next steps:

- define in the associations file as described in the README
- add the occurrences is the concerning files (the basenames are not mandatory)

See the README for details. Here are examples from the Elisabeth project:

Association “erlebt”



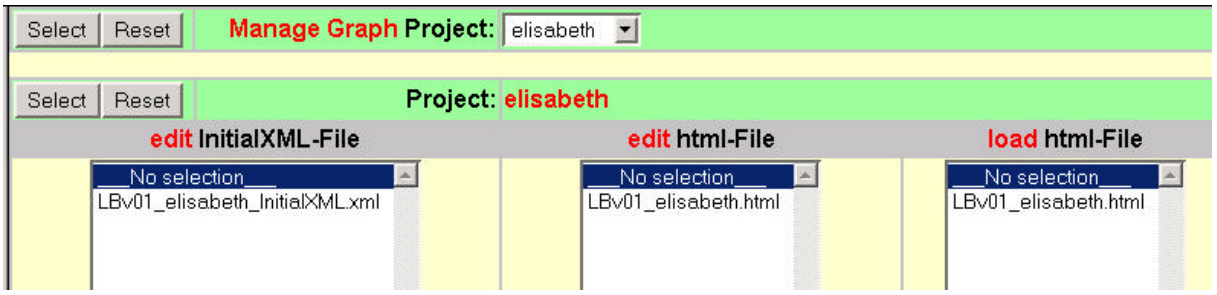
The occurrence for “Jugend” contains the hyperlink to a html file that is stored in a directory of the project. To access this file please use the workspace described below.

21.3.4 Create XTM and create Graph

Now just click “Create XTM” to create the topic map file and then click “Create Graph” to create the visual representation in Touch Graph. You can give the Inkbrowser a version number, e.g. LByyy → LBv01.

By clicking on “Manage Graph” you see the result of the previous actions: there is a xml file created and one html file. To start the graph just double click on the html file in load html-File.

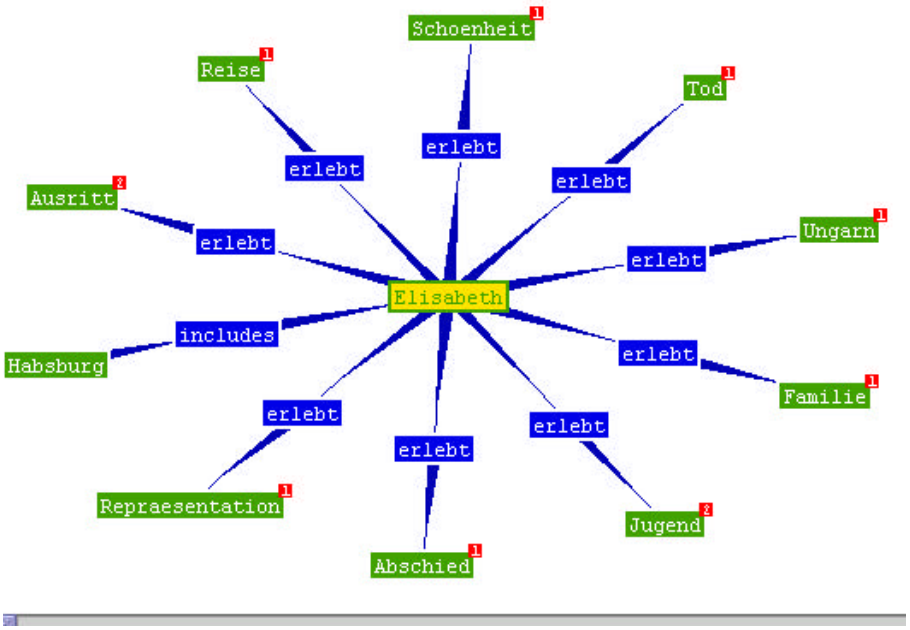
Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.



Note: as an alternative you can produce the xtm file with the second REGNET tool, add it to this website and visualize it via the graph.

The result:

http://csc000.cscaustria.at/topicmap/_AIT%5Celisabeth/LBv01_elisabeth.html?

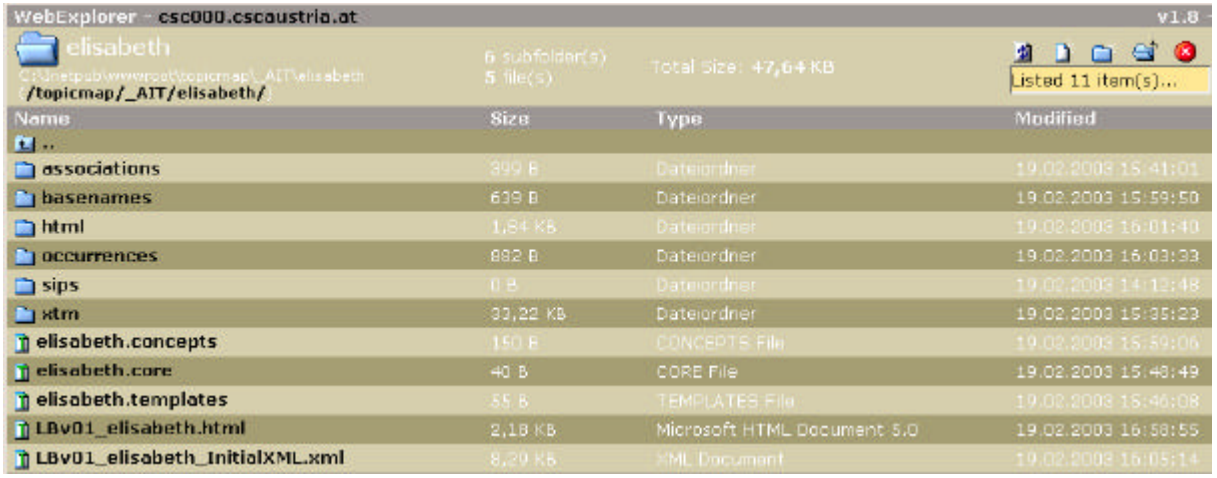


21.4 Topic Map Workspace

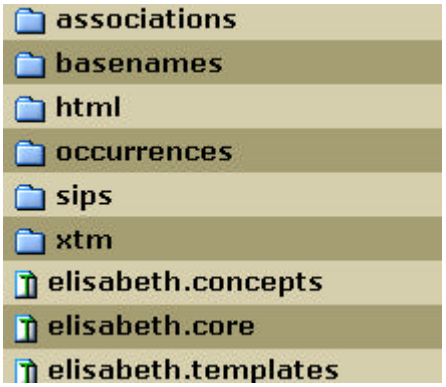
By clicking on “Workspace” you can access the (web) directories containing your topic map files. This is a second way to create, edit and change files for your topic map project; you can also use the “Edit Files” feature of the general Topic Map creation website.

Probably you will need this workspace for adding of occurrences. First of all a directory in the concerning project has to be created for the occurrences. I use to call it html, since there are html files contained. For adding the occurrences to the topic map you just have to add the hyperlink to this directory/file and the path.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.



Edit files:



For editing just click on the left icon with the T.

Note: The editor of the TM-WorkSpace can only edit Files *with* a Filetype (eg: **.m**); the editor cannot provide "tab-stops" (solution: copy and paste a existing tab-stop); the "Mapalizer" can only process Files *without* a Filetype (solution: "save as" the **~.m** Files in addition **without** File-extension).

21.5 Mapalizer README

Here are the detailed instructions for generating contents for the TM file from the Mapalizer website (http://www.topicmapping.com/mapalizer/README)

Description

The outline of the modeling process is this:

1. Identify the types and **instances** of your domain and create a taxonomy. (Place the result in a file called **yourProject.concepts**)

2. Identify the **possible relationships** between these concepts and/or instances and define a set of association templates. (Results go in **yourProject.templates**)

3. Specify the **occurrence types** and **themes** you need (Results go in **yourProject.core**)

4. Add basenames and occurrences as needed

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

5. Add SIPs (subject identity points) as needed

6. Add associations as needed

Now, here is a **more detailed**, tutorial style description:

0. Setting up your project

First, you need to choose a name for your project and create a directory with that name. In that directory, create subdirectories called 'basenames', 'occurrences' and 'associations'. The tutorial will be about the universe, so we need

universe
universe/basenames
universe/sips
universe/occurrences
universe/associations

1. Classes, Instances and the Taxonomy

I find it the easiest to start with identifying the classes, instances and what hierarchy exists between them. This information goes into the file called universe/universe.**concepts** . The mapalizer expects a certain (simple) syntax for that file, here it is:

empty lines and lines starting with '#' are ignored
the first sequence of non-blank characters is interpreted as the ID for a topic and is also used to create a basename in the unconstrained scope. Underscores in the ID will be converted to blanks for this purpose. That means by using 'The_Sun' you will get a topic with the ID The_Sun and a basename 'The Sun'. Note that this limits the characters you may use to those allowed in XML attribute values.
hierarchy depth is determined by indentation. This means that, for example, a topic starting at column 4 will have the last topic starting at column 3 as its superclass. I prefer to indent by tabs but you can also use blanks to save space. Just make sure to use one character per indentation. Note: Since tabs are a single character, the tab width does not matter at all.
topics that begin with '$' are interpreted as instances, the '$' will be removed in the ID and name.
it's possible to repeat IDs to create topics with more than one superclass or class.
instances must have a class, you can't place instances in column 1

I suggest that you now take a look at universe/universe.concepts for clarification.

2. Association Templates

Once you 'know' what concepts and instances exist in your domain, you can start defining the types of relationships that may exist between them. When dealing with compound objects and their parts for example, you might want a part/whole association type.

mapalizer uses the PMTM4 [1] templating mechanism that allows you to specify what roles may be played in an association of a certain type. Templates also allow you to express what type players of a certain role must have (the player type) and how many players of a certain role may/must be present (the player set cardinality) in an association of a certain type.

To define templates you use the file **<project>.templates**, in our case universe/universe.templates. Each row in that file defines a single template, where columns are laid out like this:

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

templateID roleSpec roleSpec roleSpec

each roleSpec column takes the form

roleID,playerTypeID,cardinality

So you might write

at_authorship role_author,person,1 role_work,book,1

Thus saying that in all authorships there must be exactly one author (which must be of type person) and exactly one work, which must be of type book.

If you need not constrain the player class, use the magic token 'ANY':

at_authorship role_author,person,1 role_work,ANY,1

There are various ways to constrain the number of players of a certain role. mapalizer verifies that the cardinality of each role-player-set satisfies the constraints specified in the template.

Role-Player-Set-Cardinality identifiers:

* any number of players
? no or a single player
+ one or more players
n exactly n players
n..m number of players must be within n and m (including m and n)

Have a look at universe/universe.templates for examples.

NOTE: role IDs may appear multiple times, mapalizer avoids generating multiple topics.

3. Other topics you might need

Often there are topics you need that are not part of the domain specific taxonomy, among them occurrence types and themes. These topics go in a special file called **<project>.core**, so in our example: universe.core .

Each line in this file holds one topic. The Id an naming conventions of the concept file are used. Have a look at universe.core .

Additional functionality might be added to this file in the future.

4. Additional Basenames

The approach mapalizer enforces on your authoring process ensures that each topic allways has a name in the unconstrained scope. If you need to have additional names on your topics, you need to use the basenames directory. Simply create a file there that is named exactly like the ID you wrote down in the concepts (or core) file. mapalizer will look in the basenames directory for each topic to see if a basename file is present.

Each line in a basename file contains a name (may include blanks) and the scope in which that name is assigned to the topic. The scope needs to be seperated from the name by an arbitray number of

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

tabs. This makes it easy to align all the scopes. If you need multiple added themes in your scope, seperate them by commas.

Have a look at the universe/basenames/... files to see how it works.

5. Additional Subject Identity Points (SIPS)

This works like adding basenames. Additional SIPs are placed in files in the directory 'sips'. Each line in the file will be included in the topic map via <subjectIdentity>. If the first character of the SIP URI is '&', the SIP is interpreted as being an addressable subject.

Example: universe/sips/galaxies

6. Additional Occurrences

Occurrences are added much like basenames except that there are three recognized columns in an occurrence file: the URI, the occurrence type and the scope. Collumns are seperated by tabs and if you want to ommit the occurrence type but need to specify a scope, use a '-' in the second column. In a literature example, a file literature/occurrences/Hamlet might contain entries like

```
http://www.domain.com/articles/hamlet1.html     #mention  #en,#expert
http://www.domain.com/articles/hamlet2.html     -                   #en,#expert
http://www.domain.com/articles/hamlet3.html     #mention
http://www.domain.com/articles/hamlet4.html
```

Have a look at the universe/occurrences/... files to see how it works.

Occurrence shorthand:
As a convenience, you can also add occurrences in the concept file by starting the entry with '>', followed by the URI that addresses the resource. Occurrences will be untyped and in the unconstrained scope but it is a fast solution, if you are just collecting resources for a certain topic.

Example:

```
animals
        dogs
                >http://www.dogs.org
        cats
                >http://www.cats.org
                $Tom
                        >http://www.xy.com/about-tom1.html
                        >http://www.xy.com/about-tom2.html
        mice
                $Jerry
        birds
---------------------------------------------------------------------
```

7. Add Associations

This also works a lot like basenames and occurrences. Place a file for each template you specified in the <project>.template file in the associations directory and add one association of that type per line.

Each line takes as many columns as the number of roles you have specified in the templates file. The order of players (=columns) in the row must correspond to the order of roles in the template file.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

Example: if your template was specified in <project>.template as

```
at_part_whole  role_part,ANY,1  role_whole,ANY,1
```

the lines in the project/associations/at_part_whole file should look like

```
door car
trunk car
```

If there are several players of a certain role, just delimit the IDs by a comma. So if the template is specified as

```
at_cd role_creator,band,1 role_recording_date,date,1 role_track,song,+
```

the lines in the project/associations/at_cd file should look like

```
cd_1980 gil_scott_heron year_1980 shutum_down,alien,willing,corners,...
```

Take a look at universe/associations/at_central_orbiter for examples.

8. Running mapalizer

Now you can invoke mapalizer by typing:

```
./mapalizer.pl universe   (or whatever your project is)
```

mapalizer needs a directory project/xtm where the maps go, if the xtm directory is not there, mapalizer will abort.

mapalizer creates the following files:

```
psi1.xtm                the topic map containg the mandatory PSIs for
                        PMTM4. It is created from mapalizers __DATA__
                        section.
project-templates.xtm   the templates generated from project.templates
project.xtm             the main topic map
project-master.xtm      the hub topic map to load and merge the above
```

ToDo

- create a processing log and stats
- support resource data
- describe how to validate the map using GwTk
- output other formats (e.g. DAML) ?
- reification of associations

References:
---

[1] The 'Topicmaps.net's Processing Model for XTM" by Steven R. Newcomb and Michel Biezunski. http://www.topicmaps.net/pmtm4.htm

[2] The free GooseWorks topic map toolkit (GwTk)

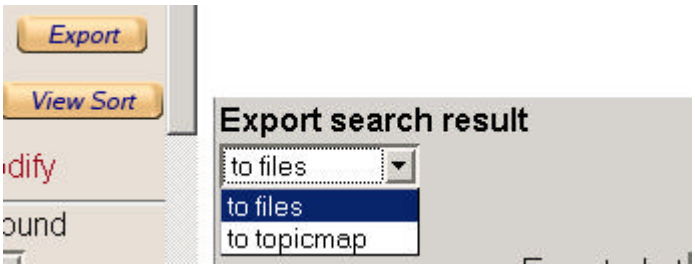
Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

http://www.goose-works.org

21.6 Export Occurrences from the Database

Perform search for the requested records (go to “Detailed view” if you are in Summary view mode), if necessary click on SELECT in the left resultframe to select the records for export, and click on “Export”.

Choose export search result “to topicmap”.



Now you have to specify to which project and which occurrence file the record will be added.

Export what: choose between “whole search result” and “only selected items”

Topicmap project: choose the project

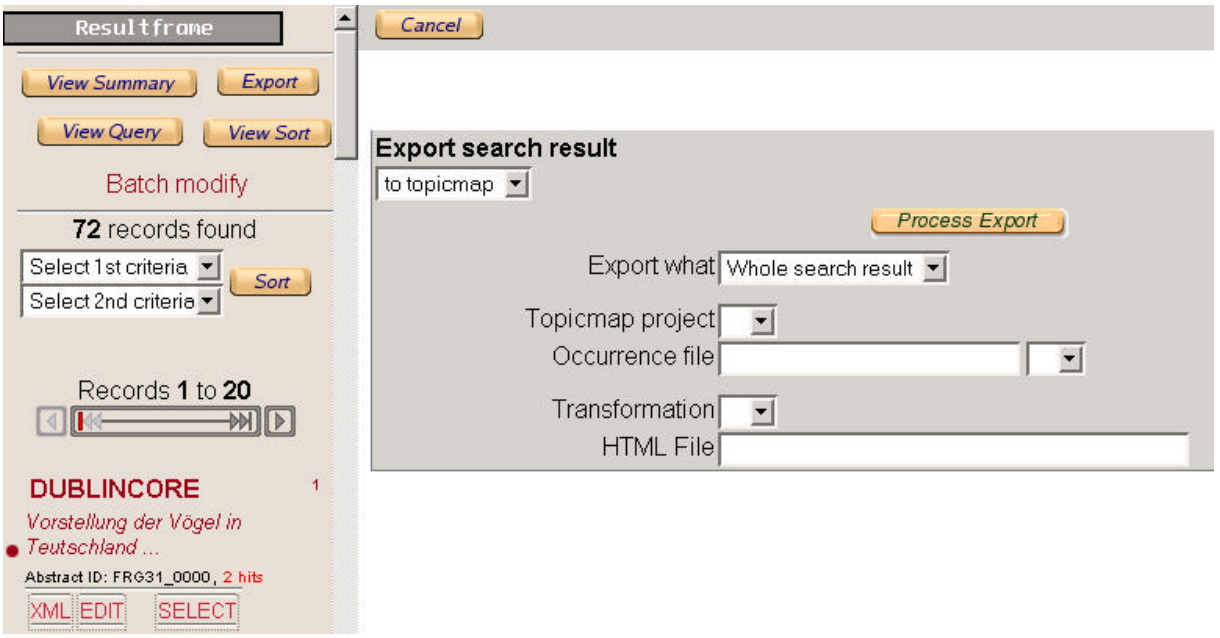
Occurrence file: create a new occurrence file or select an existing file

Transformation: select a stylesheet

HTML File: give a name to the exported search result

Note: the search result will be exported into one single file.

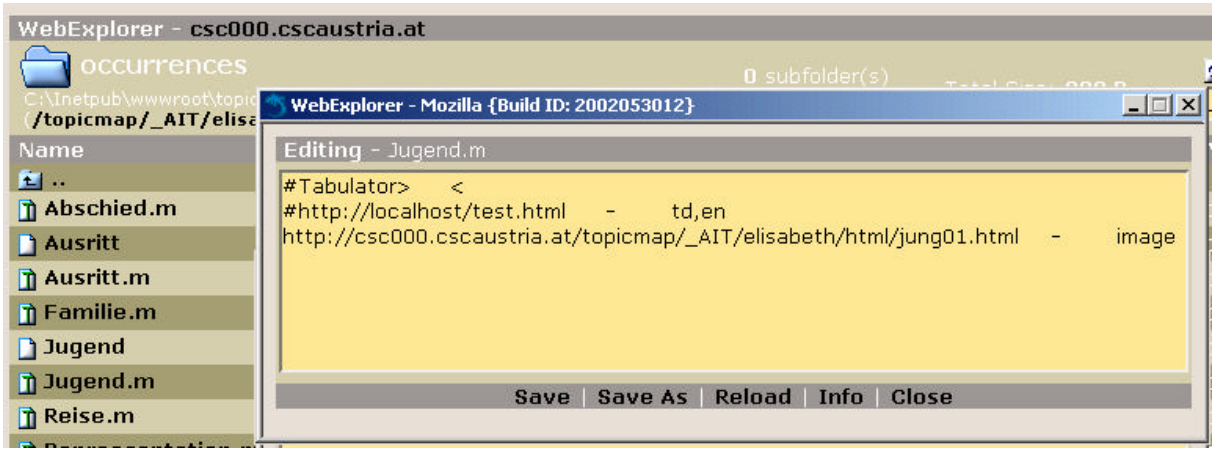
Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.



Note: since records are stored in XML and XML is just simple text with tags and NOT formatted the user needs to have a stylesheet to transform the XML in HTML. There are stylesheets available, but they have to be adapted to the structure of the database. For that task just ask the database administrator.

Add occurrence by hand:

The exported XML-File can be used as occurrence. This can be done by editing the relevant file in the TopicMap-project's occurrences-directory:



Note: Use tabs to separate ***URI*** from "**-**" and scope (="***image***")

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

21.7 General Remarks

These remarks can be found on this website:

http://csc000.cscaustria.at/tm_graphs/tm.htm

NOTE: To process the applet it might be possible to install a JAVA-engine on your computer. The software can be downloaded from: http://java.sun.com/j2se/1.4.1/download.html (JRE). This works with MS-InternetExplorer 5.5.
NOTE: The applet size is around 200KB - be patient when loading the applet ! The file size of the "LB_xmltools-tm-initialXML.xml" is around 1MB - be even more patient when the applet arranges the graph layout for the first time ! During the loading of the xml-file the colors of the graph are in transparent mode. After loading is finished the colors will become bright und you can move the initialNode (yellow) for final layout. (If there is no initialNode move any node for final layout).
NOTE: If you start experimenting with Demo-TopicMaps please use examples having around 50 nodes maximum; when you get lost in the "knowledge-space" simply reload the applet into your browser. "**AIT-REGNET**" might be a choice for novice users. **Advice**: Get at first experience how different "modes" (Zoom, Rotate, Locality) work.
TODOs: Integrate data base (xml) information into the occurrences; integrate a search-mechanism for pointing to nodes in the applet (setting the "InitialNode"); integrate existing tools into the workflow; develop a state of the art application and user interface for the "TM-Generation - Workflow" (eliminate shortcomings of the WorkSpace/WebExplorer-Editor and mapalizer-tool).

NOTE: The editor of the TM-WorkSpace can only edit Files *with* a Filetype (eg: **.m**); the editor cannot provide "tab-stops" (solution: copy and paste some existing tab-stop); the "Mapalizer" (**step 5**) can only process Files *without* a Filetype (solution: "save as" the **~.m** Files in addition **without** File-extension in **step 4**).
NOTE: In **step 6** one html- and one xml-file are generated; the xml-file contains the nodes - look for the node number (nodeID) which provides the "entrance point" (value of the initialNode-parameter in the html-file; comment out the comment if necessary) to the TopicMap.
NOTE: If you operate on the common "TM-WorkSpace" please manipulate your data only. Set up your own Project Infrastructure and use your partner acronym as prefix (eg: "TARX_saints" in step 1); you should use available projects only as "Project-old" when setting up your Project Infrastructure. If you want you can apply for your own private TM-WorkSpace.

22 REGNET Broker

22.1 Introduction

22.1.1 Purpose of the document

The aim of the document is to provide a user guide for the use of the REGNET broker application.

22.1.2 Document overview

Section 2 : this section gives a general presentation of the screen sequence of the REGNET broke application.

Section 3 : this section briefly describes the functionalities available in the REGNET broker application.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

Section 4 : this section gives full instructions for using the REGNET broker application.

22.2 General presentation

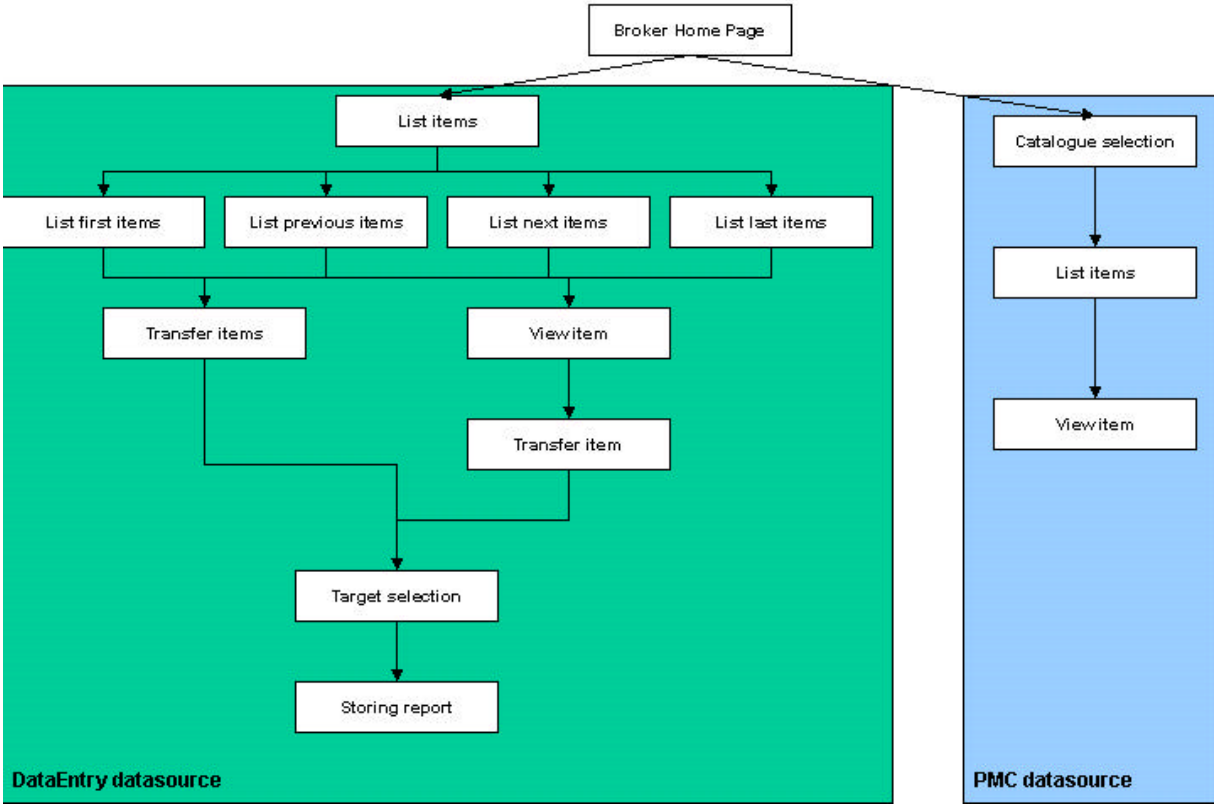


Figure 23 General presentation – Screen sequence

At the start-up of the broker application lists the available datasources on the first page. It is possible to select a datasource in order to handle their data. This picture depicts the sequence screen for PCM and DataEnrty datasources.

22.3 Functionalities overview

22.3.1 Connection

The use of the REGNET broker starts with a login phase. For this, a user must have a login password. The login process is possible thanks to the REGNET portal. Once the user is connected to the REGNET portal he can acces the broker via the appropriate portlet.

22.3.2 List datasources

This functionality allows to list the datasources that are available. After the connection process, the first screen presents the list of the running datasources. Later, and at any time, it is possible to obtain this list.

22.3.3 Catalogue selection

Some datasources provide several catalogues. For these kind of datasources, it is possible to select a particular catalogue amoung a list.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

22.3.4 List items

This functionality allows to list the items stored in a particular datasource. For each item a brief description is given. This functionality could be extended to the transfer of items.

22.3.5 View item

This functionality allows to obtain the whole description of an item. This functionality could be extended to the transfer of an item.

22.3.6 Transfer item

This functionality allows to transfer an item from a datasource to antoher. The broker transform the item to be transfered in order to make it compliant to the target datasource.

22.3.7 Transfer items

This functionality allows to transfer several items between heterogeneous datasources.

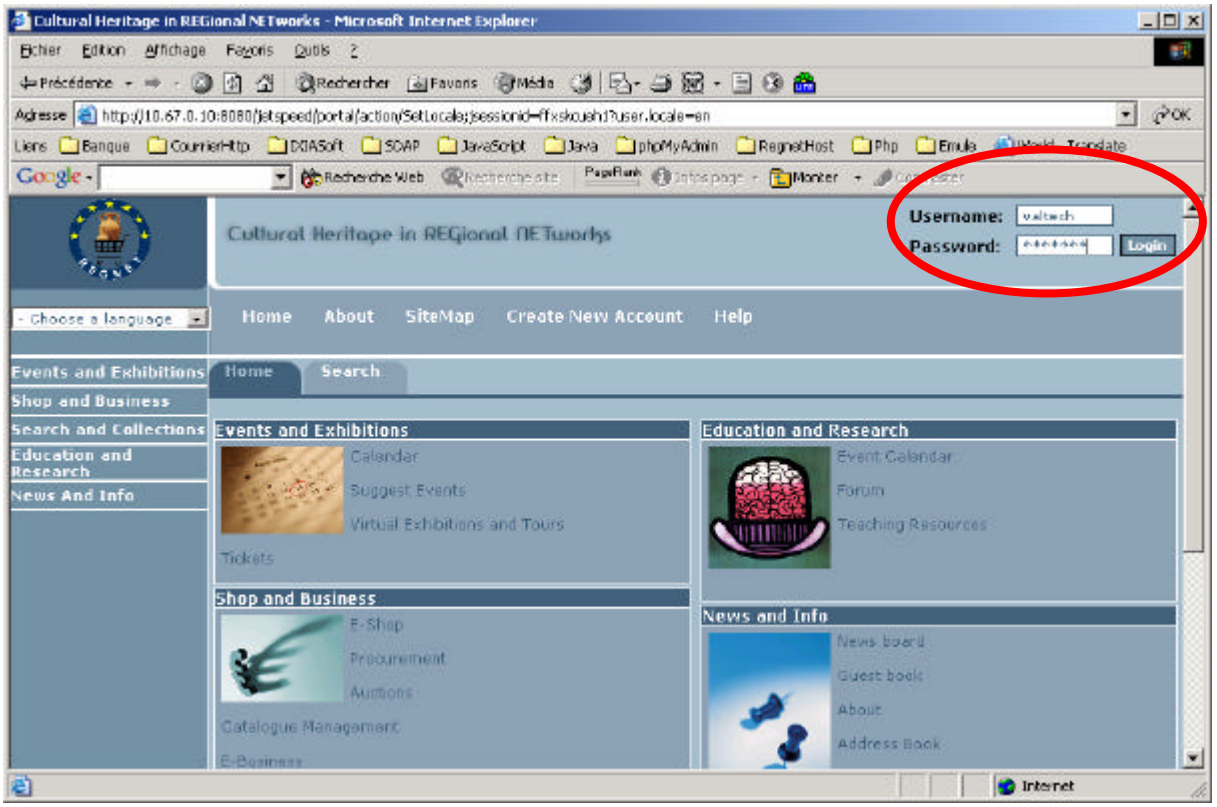
22.4 User guide

22.4.1 Connection

The use of the REGNET broker starts with a login phase. Before connection, the links of the home page are not available.

In order to connect :

- Fill the username field
- Fill the password field
- Click on the login button



Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

Figure 24 REGNET portal home page

Once the login process is complete, the REGNET home page links are availlable. It is now possible to access to the REGNET broker application.

In the “Shop and business” portlet click on the “Data exchange link”.

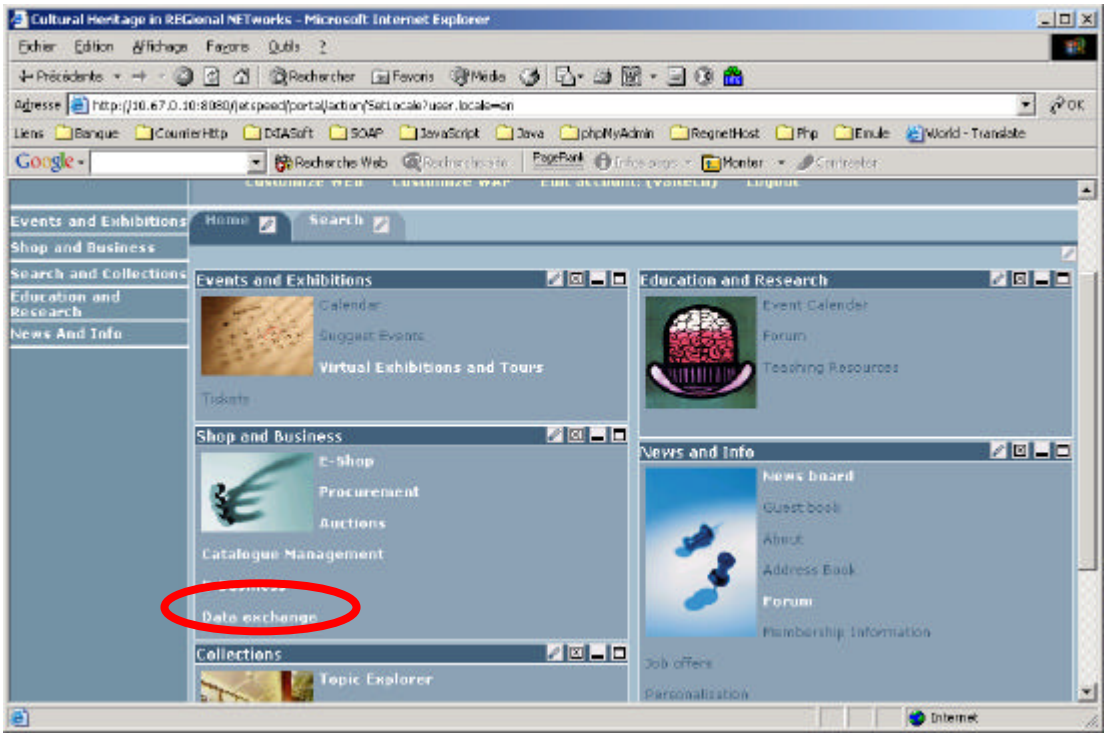
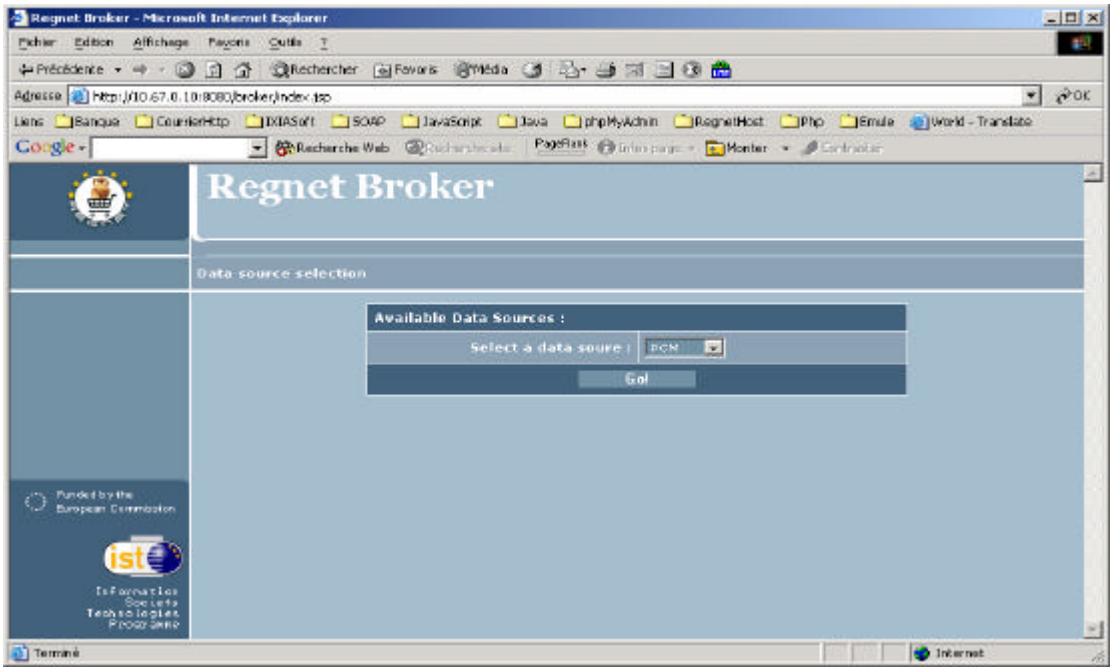


Figure 25 Accessing the REGNET broker

A new window is opened and presents the first page of the REGNET broker application.

22.4.2 List and select datasources

The first page of the REGNET broker application presents the list of the available datasources.



Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

Figure 26 Datasource list

To select a datasource and handle the belonging data :

- Select in the combo box the desired datasource
- Click on the “Go !” button.

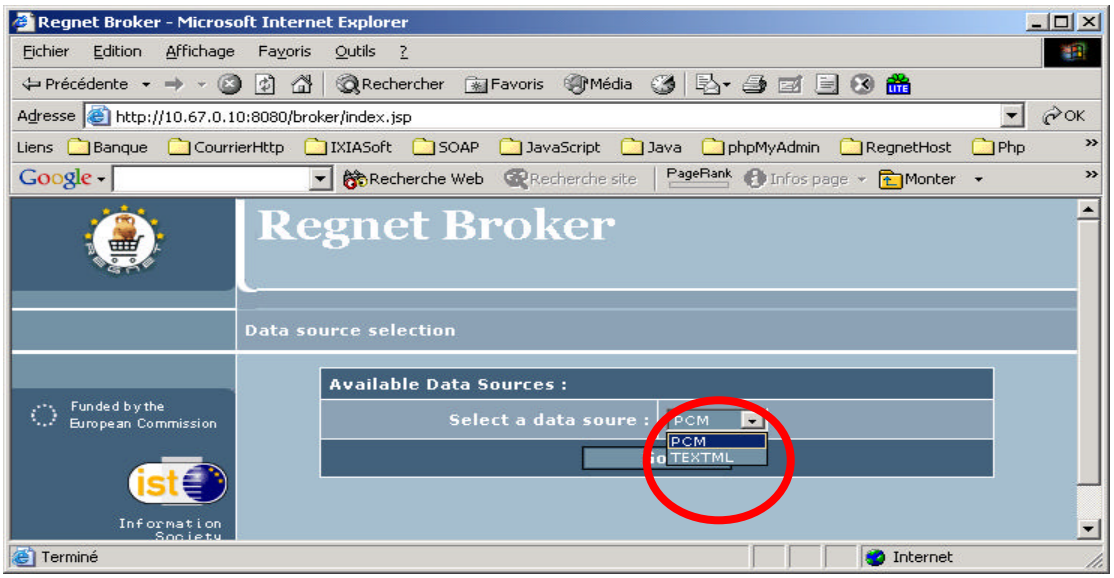


Figure 27 Datasource selection

22.4.3 Catalogue selection

Some datasources allow to select catalogues that belong to them. It is the case of the PCM datasource.

In order to access a catalogue :

- Select in the combo box the desired catalogue
- Click on the “Go !” button

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

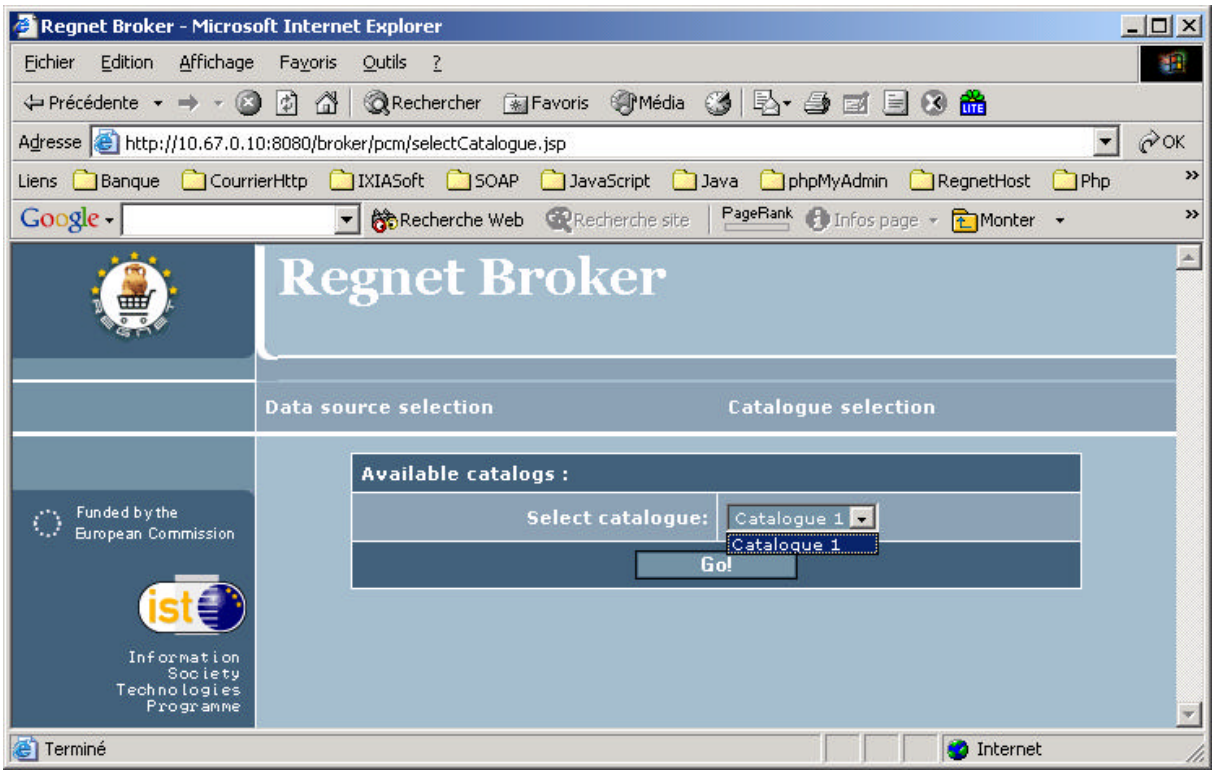


Figure 28 Catalogue selection

22.4.4 List items

A list of items is provided after having selected a catalogue or a datasource, depending of the nature of the datasource.

22.4.4.1 List of items in PCM datasource

After having chosen a catalogue the REGNET broker presents a page on which the whole content of it is presented. For each item a short description is given.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

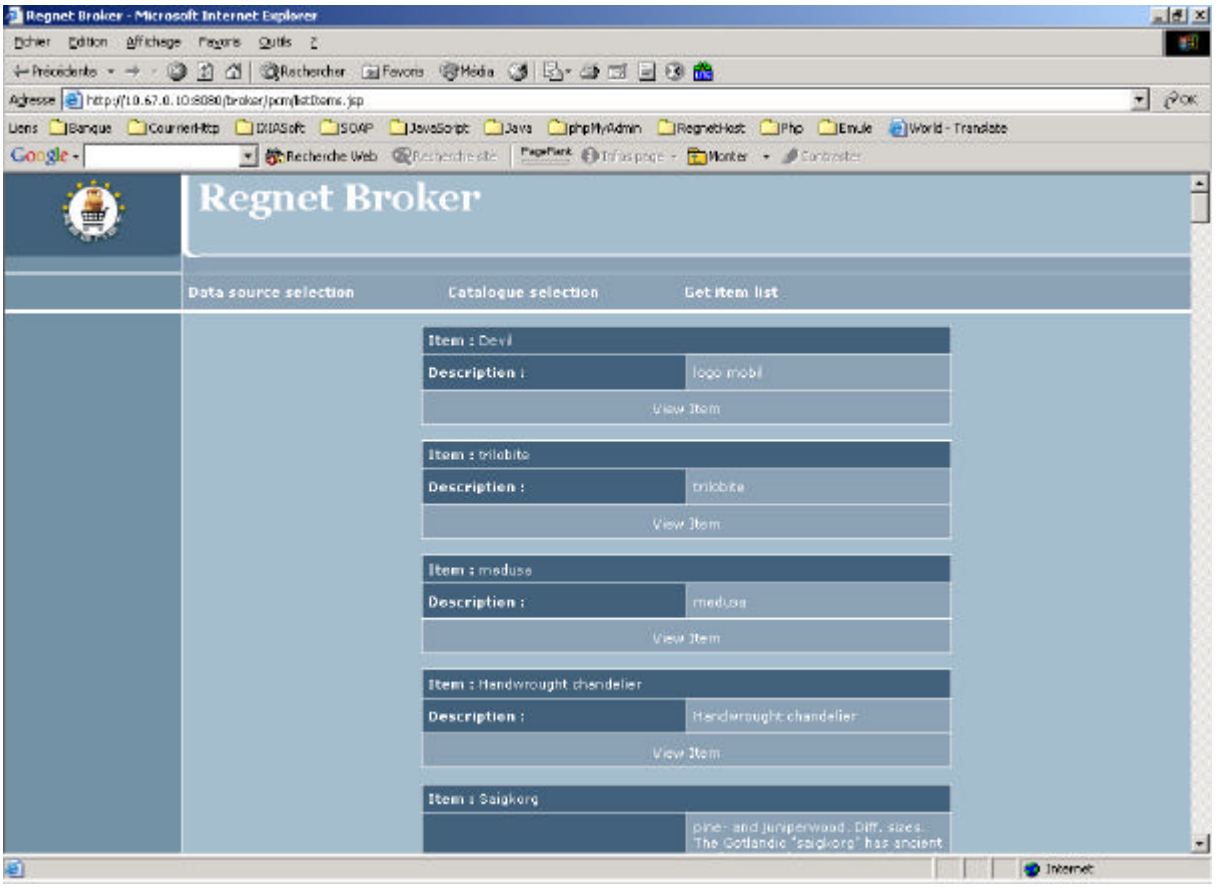


Figure 29 PCM List of items

22.4.4.2 List of items in DataEntry datasource

After having chosen the DataEntry datasource, the broker application provide a page containing some items and for each one gives a brief description.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

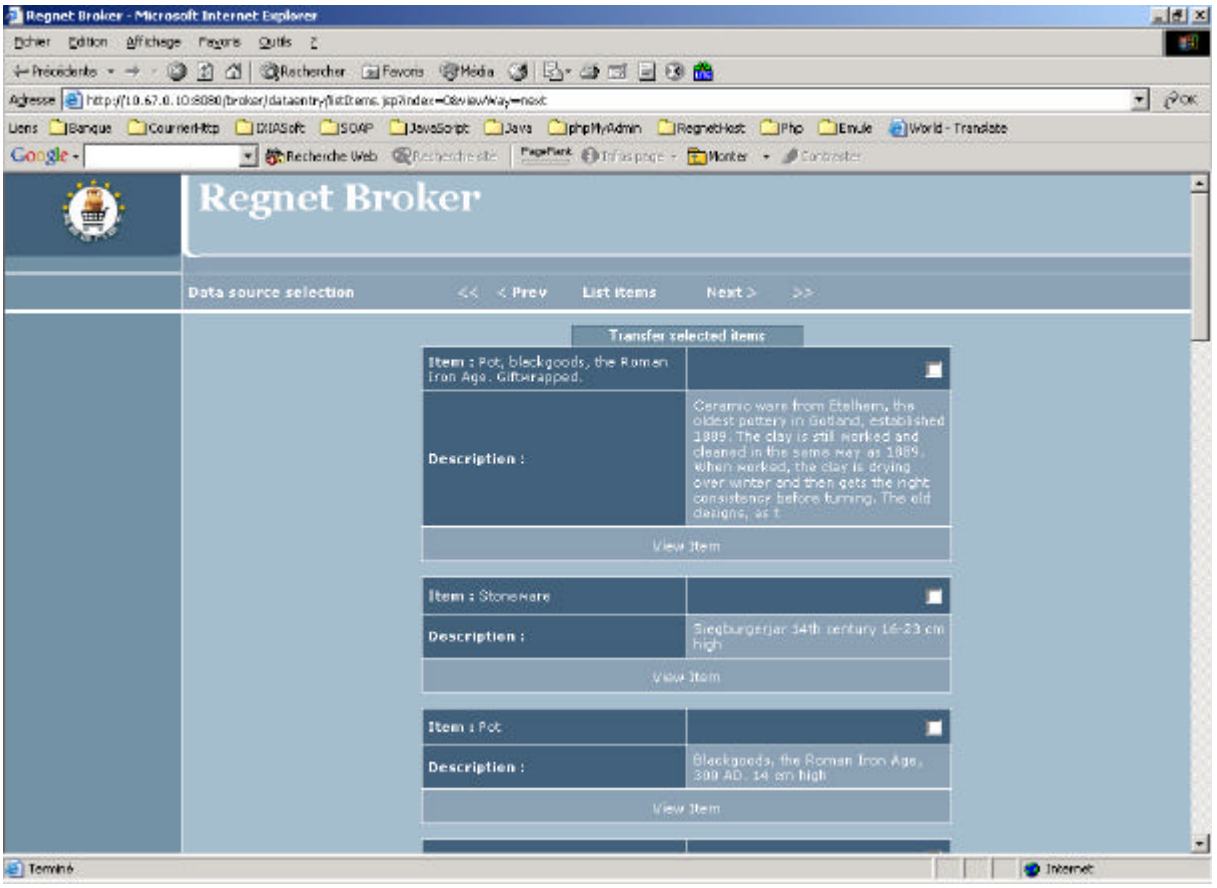


Figure 30 List of items in DataEntry datasource

The broker application presents pages that contain 20 items. It is possible to browse through the whole content of the catalogue using the top menu of the page.

- Browse next items

To browse the next 20 items click on the next hyperlink.

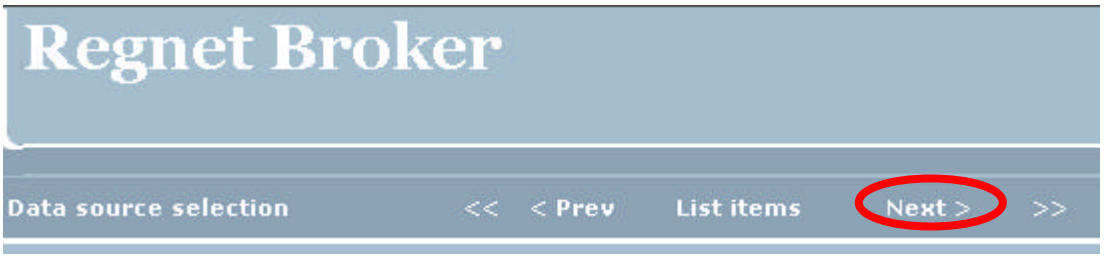


Figure 31 Browse next items

- Browse the last items of the catalogue

To browse the last items of the catalogue click on the “>>” hyperlink.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

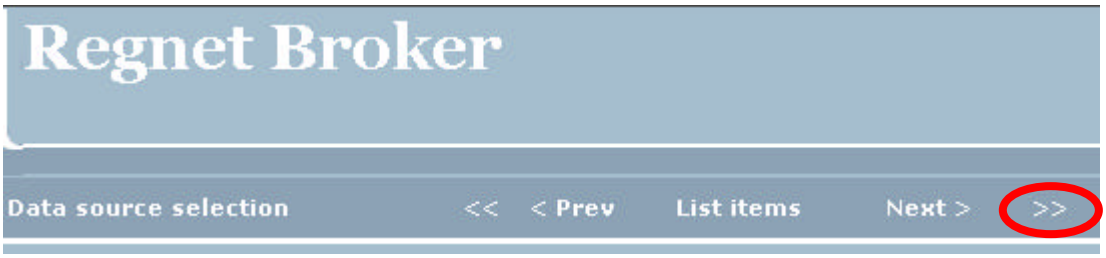


Figure 32 Browse last catalogue items

- Browse previous item

To browse previous catalogue items click on the prev hyperlink

Figure 33 Browse previous catalogue items

- Browse the first catalogue items

To browse the first catalogue items click on the “<<” hyperlink

Figure 34 Browse the first catalogue items

22.4.5 View item

This functionality allows to consult the whole description of an item. It is accessible on the list items pages.

To obtain the whole description of an item click on the “View item” hyperlink.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

Figure 35 View item

Then, the broker application displays a page containing the whole description of the selected item.

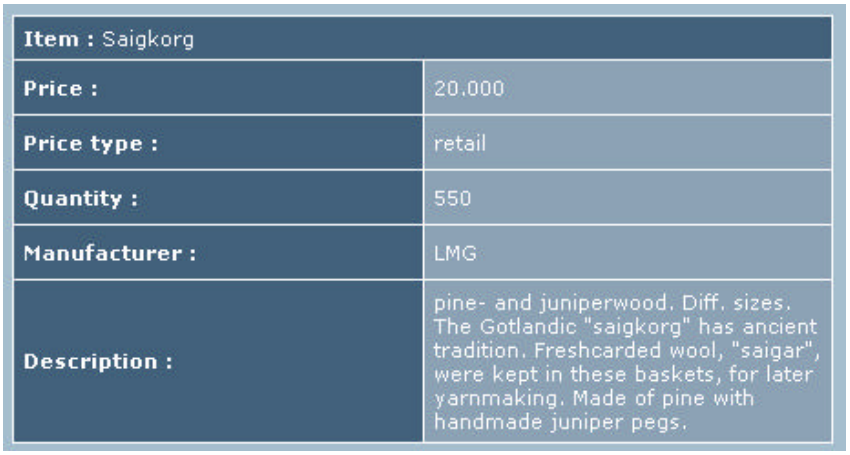


Figure 36 PCM item description

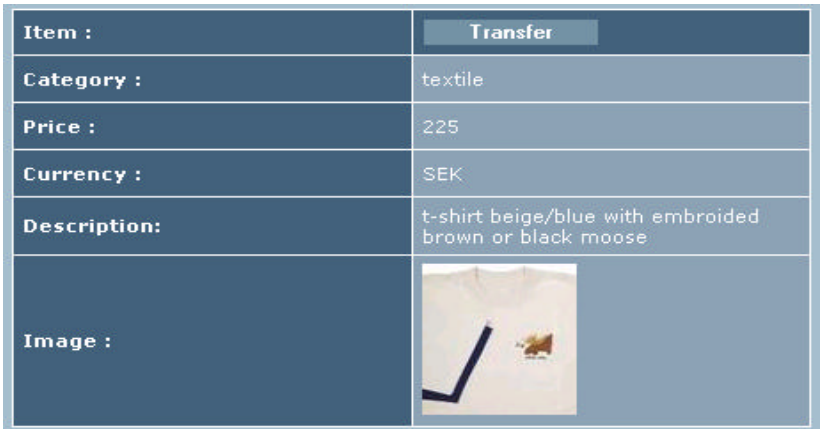


Figure 37 DataEntry item description

22.4.6 Transfer item

This functionality allows to transfer a single item from a datasource to another. It is accessible from the view item page.

To transfer an item :

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

- Click on the transfer button. Then the broker displays a page on which the target datasource and catalogue must be selected.

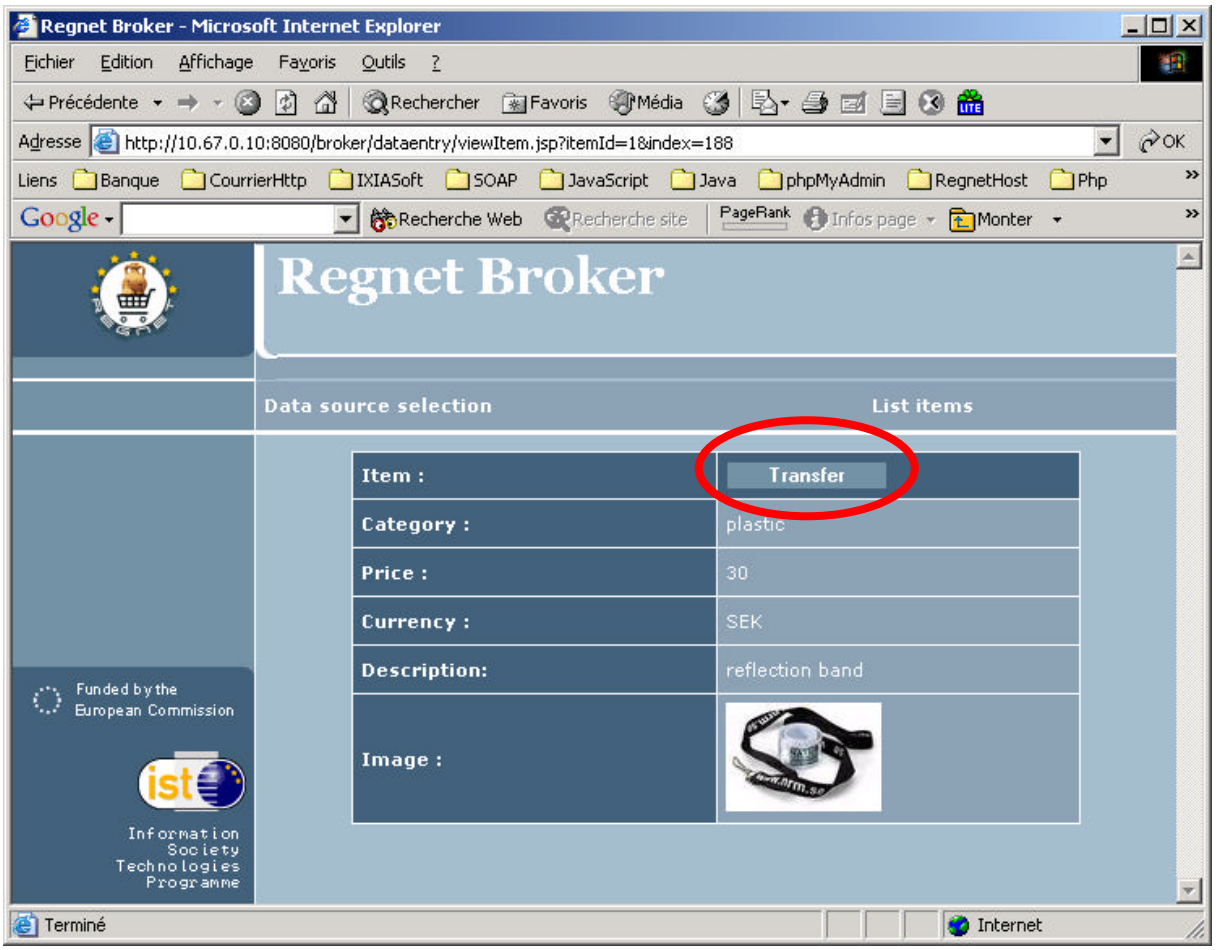


Figure 38 Transfer a single item

- Select the target datasource.
- Select the catalogue in which the item has to be stored.
- Click on the “Go !” button.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

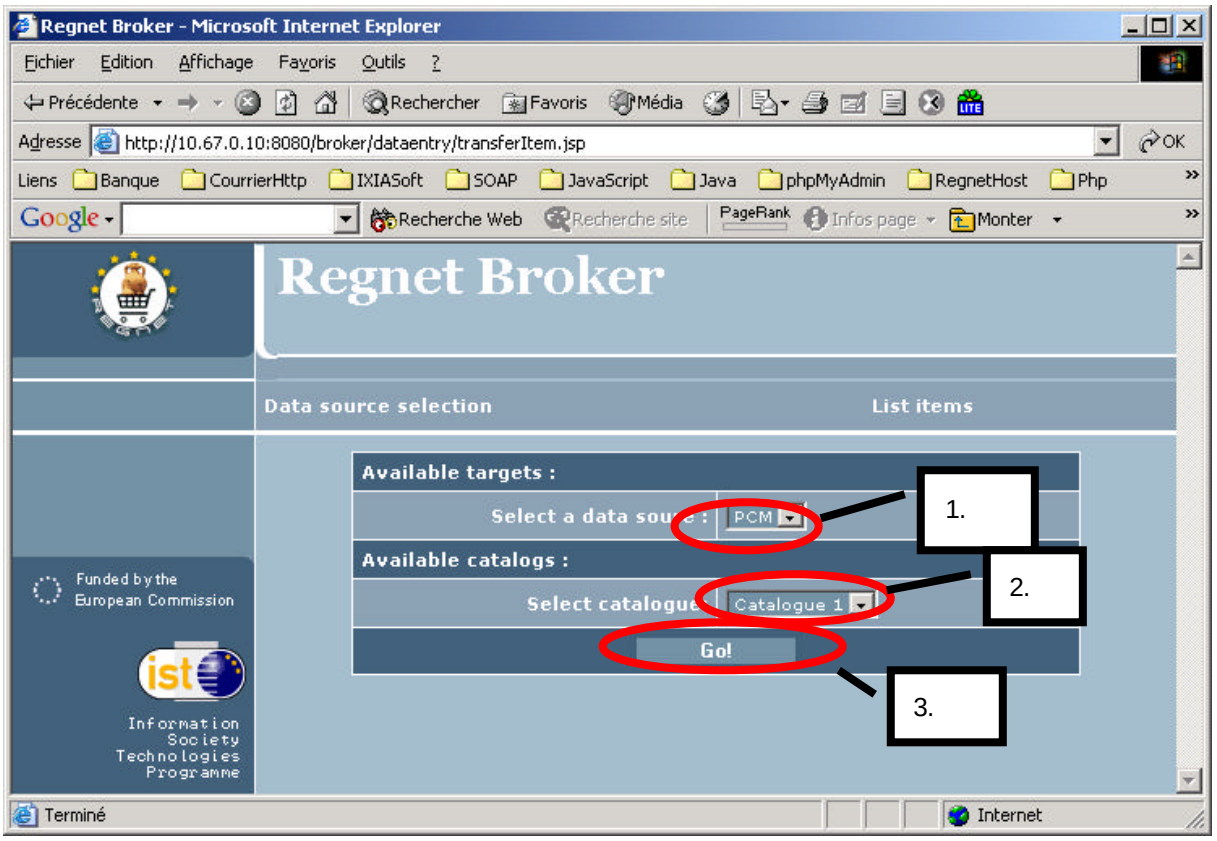


Figure 39 Target destination selection

Finally the broker application displays a report of the transfer operation.

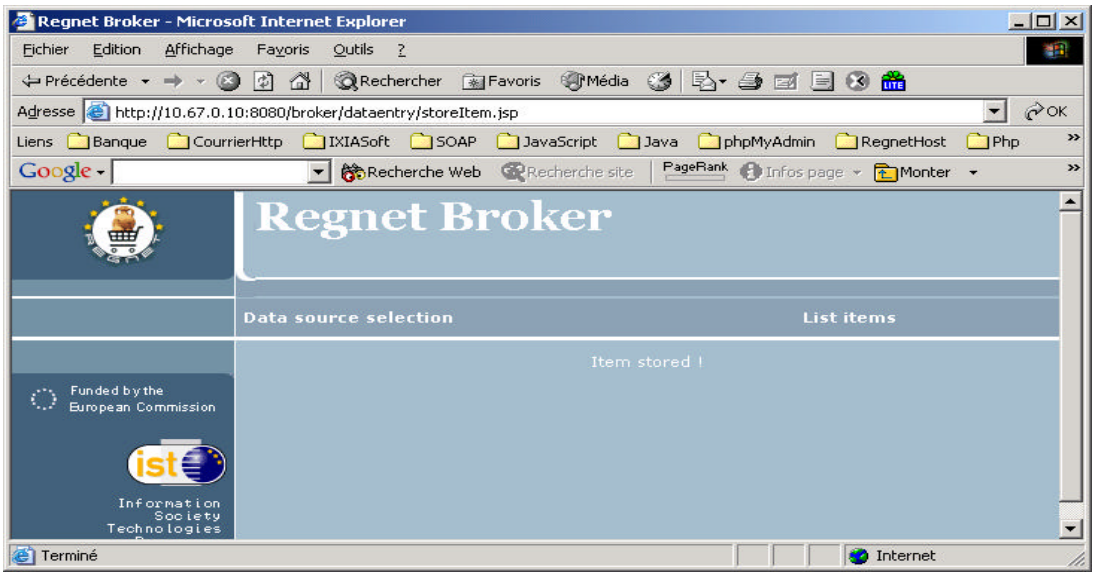


Figure 40 Transfer item operation report

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

22.4.7 Transfer several items

This functionality allows to transfer several items from a datasource to another. It is accessible from the list items page.

To transfer several items :

- Select the items that have to be transferred by marking the associated checkboxes
- Click on the transfer button

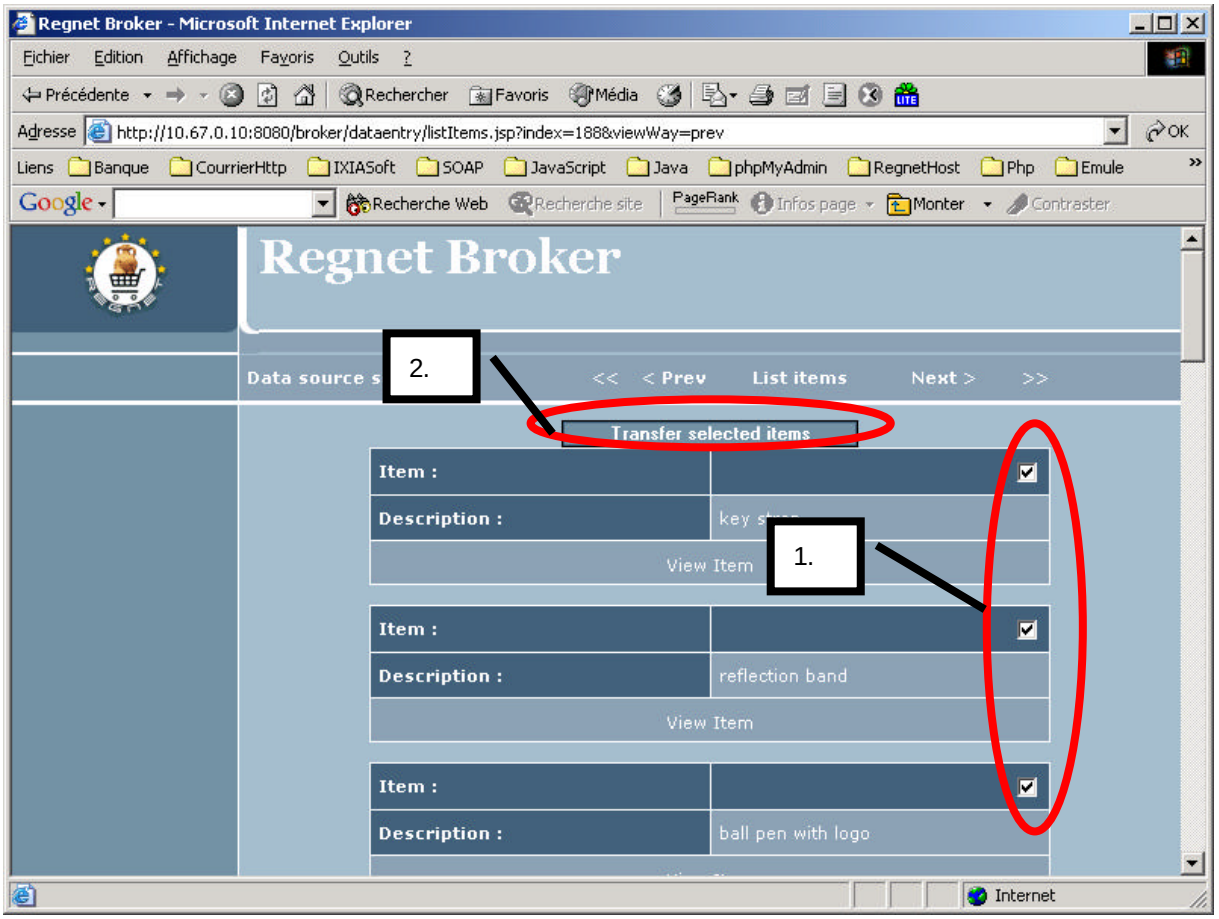


Figure 41 Transfer several items

The next step is to choose the target datasource and catalogue. This operation is done in the same way that is described for the transfer item one.

23 REGNET Connector

23.1 Purpose of the document

This document goal is to provide a user guide for the use of the regnet ebXML borrow/lend application.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

23.2 Document overview

Section 2 : this section briefly describes the functionalities available in the regnet ebXML application, borrower part.

Section 3 : this section gives full instructions for using the regnet ebXML borrow/lend application, lender part.

Section 4 : this section gives full instructions for using the the regnet ebXML borrow/lend application.

23.3 Functionalities overview : borrower part

23.3.1 Request Catalogue

The use of the application starts when a museum wants to borrow an object to another museum. Once logged on the borrower part of the application, the borrower can request a catalogue to the lending museum.

23.3.2 Request Loan

Once the catalogue has been sent, the borrower can choose an item to loan, and send a loan request to the lending museum.

23.3.3 Sign Loan Agreement

If the lender agrees to loan the item, he sends a loan agreement form to the borrower. The borrower has to inform the lender, using the application, that he has signed and sent back the loan agreement.

23.3.4 Schedule Receipt

Once the loan agreement is signed by both parties, the borrower has to chose a date, for the item to be received.

23.3.5 Notify Shipment's Arrival

The borrower has to inform the lender he has received the item. This is done in this part of the application.

23.3.6 Return Item

When the loan is over, the borrower has to inform the lender he has shipped back the borrowed item. This is done in this part of the application.

23.4 Functionalities overview : lender part

23.4.1 Send Catalogue

When the lender receives a catalogue request, he has to send its catalogue to the borrower, using the borrower part application.

23.4.2 Acknowledge Loan

When the lender receives a loan request for an item in its catalogue, he can acknowledge the loan using the application. And then send via regular mail a loan agreement.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

23.4.3 Sign Loan Agreement

When the lender receives back the loan agreement signed by the borrower, he can inform the borrower that the loan can start and ask him to schedule a receipt date.

23.4.4 Accept Receipt Date

Once the borrower has chosen a receipt date, the lender can accept it.

23.4.5 Notify Shipment's Arrival

When the lender is informed that the item has successfully been received by the borrower, he must notify him that he took notice of this information.

23.4.6 Return Item

When the lender has received its item back, he must inform the lender about it. The transaction is over.

23.5 User guide

23.5.1 Request catalogue (borrower)

The borrower can request a catalogue to the lender by clicking "Request catalogue" in the menu.

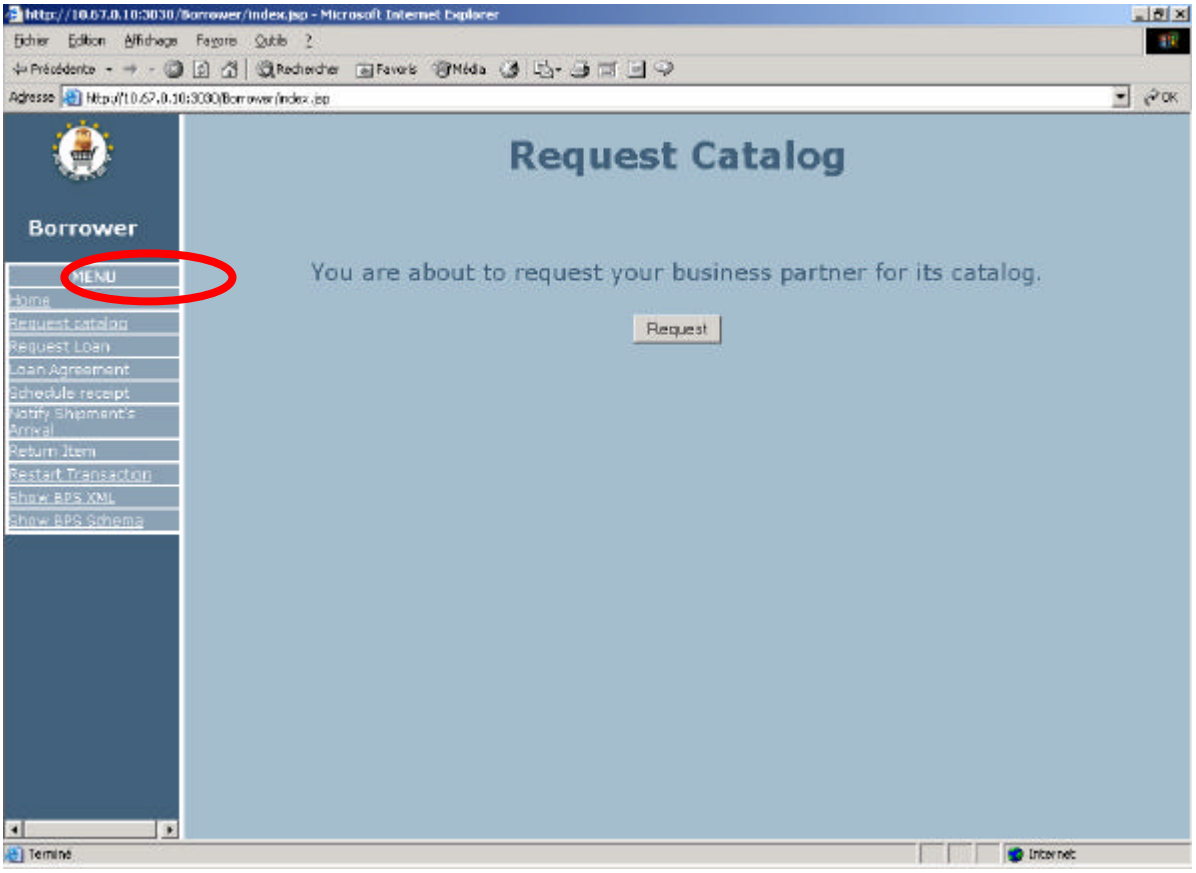


Figure 42 request catalogue

The catalogue request must be validated.

Once validated, the request is sent using ebXML messaging to the partner and a confirmation message is displayed:

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

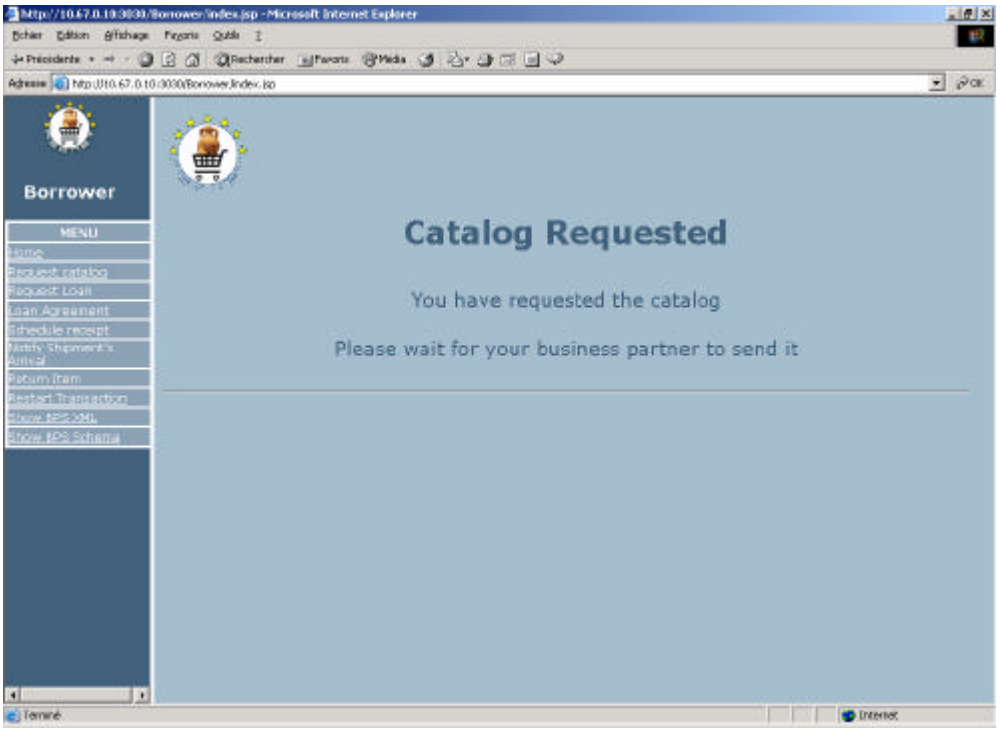
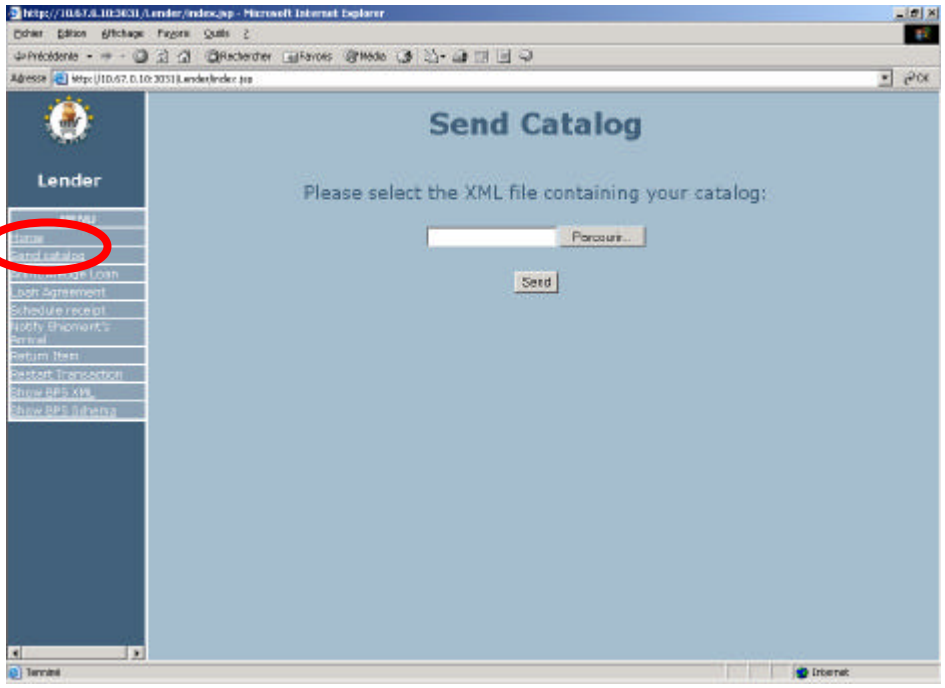


Figure 43 Catalogue Requested Info

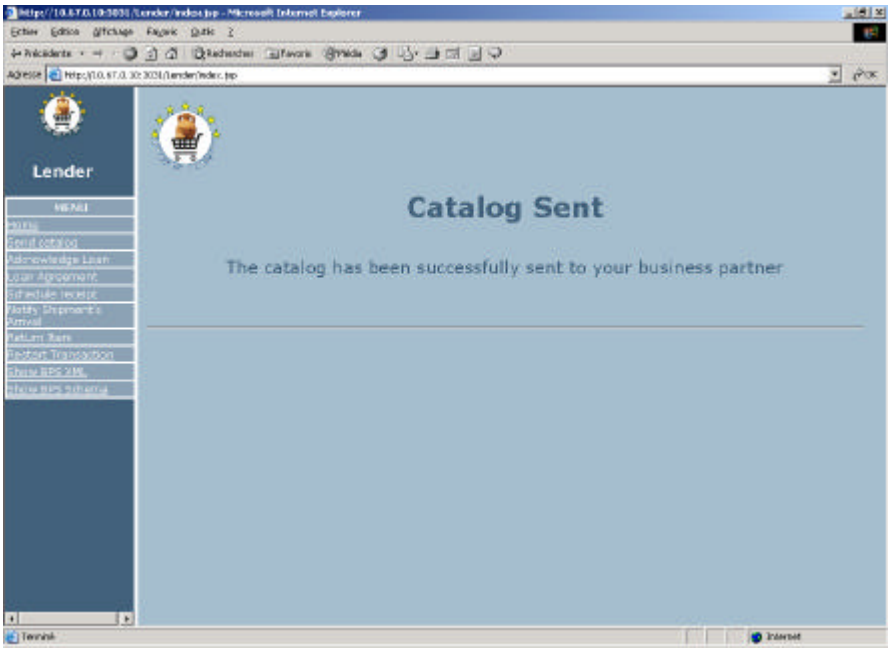
23.5.2 Send catalogue (lender)

When the lender has received the catalogue request, he can send its catalogue by clicking “send catalogue” in the Menu.



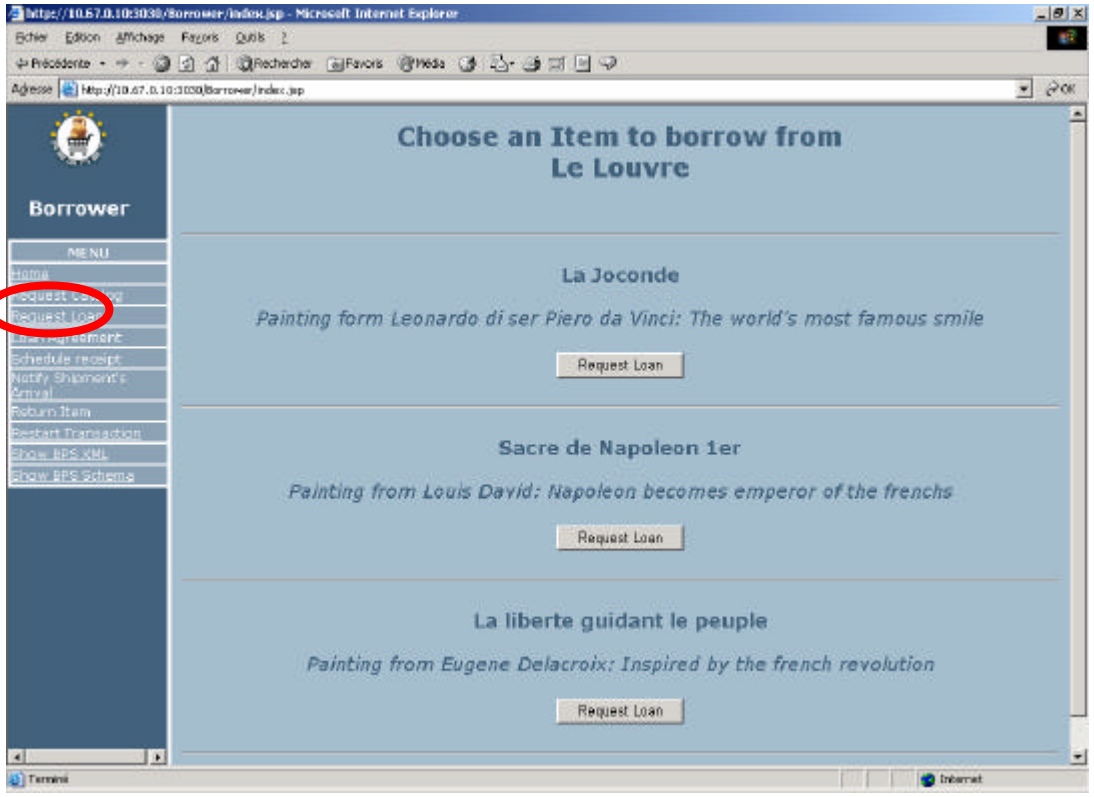
The lender has to choose the XML file containing the catalogue, where it is located on his machine. The XML file must satisfy the DTD “product catalog” as described in the XCBL 3.5 Structure Reference. Then when the catalogue is sent, a confirmation message is displayed.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.



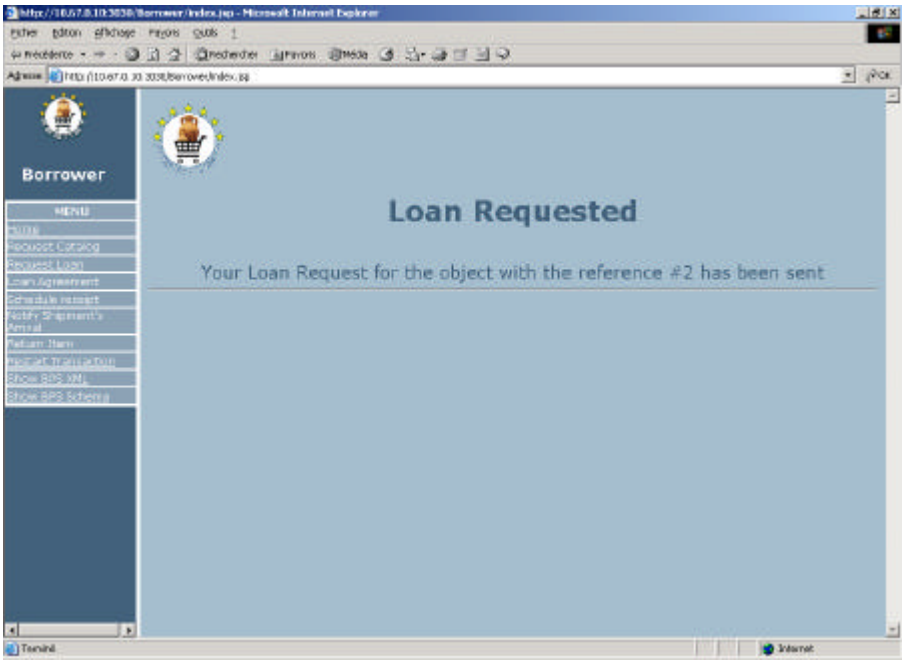
23.5.3 Request Loan (borrower)

When the borrower has received the catalogue, he can click “Request Loan” in the Menu. When he has done so, the catalogue is displayed.



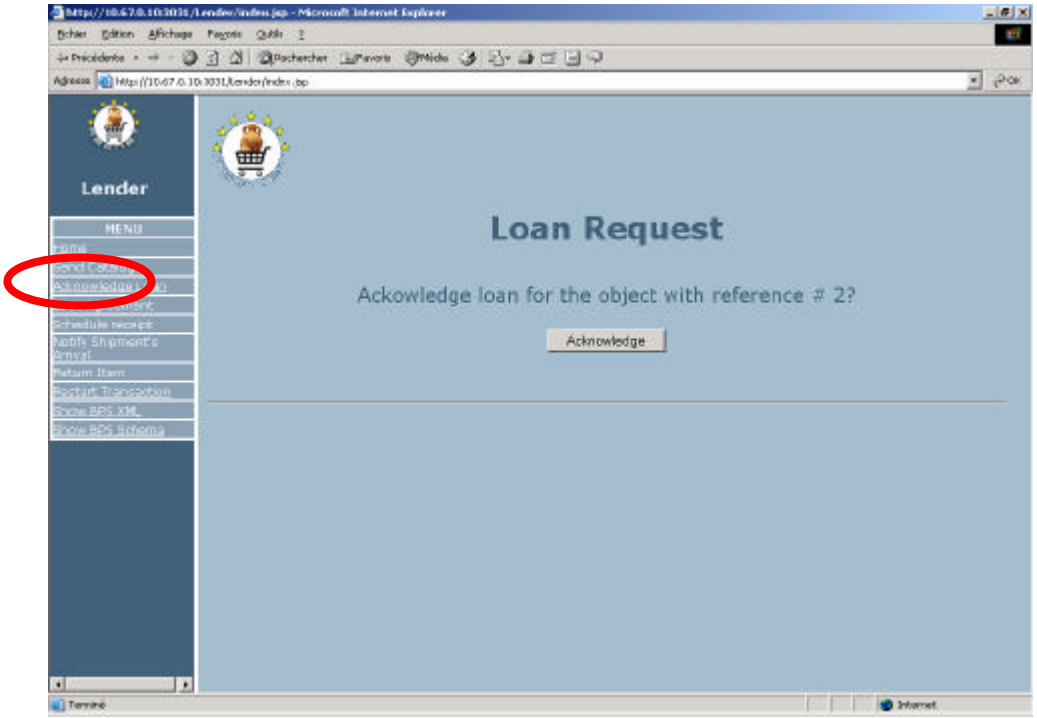
The borrower can now choose an item and click on the corresponding “Request Loan” Button. When he has requested the loan for a particular item, a confirmation message is displayed.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.



23.5.4 Acknowledge Loan (lender)

When the lender has received a loan request, he can acknowledge it by clicking “Acknowledge” loan in the menu.

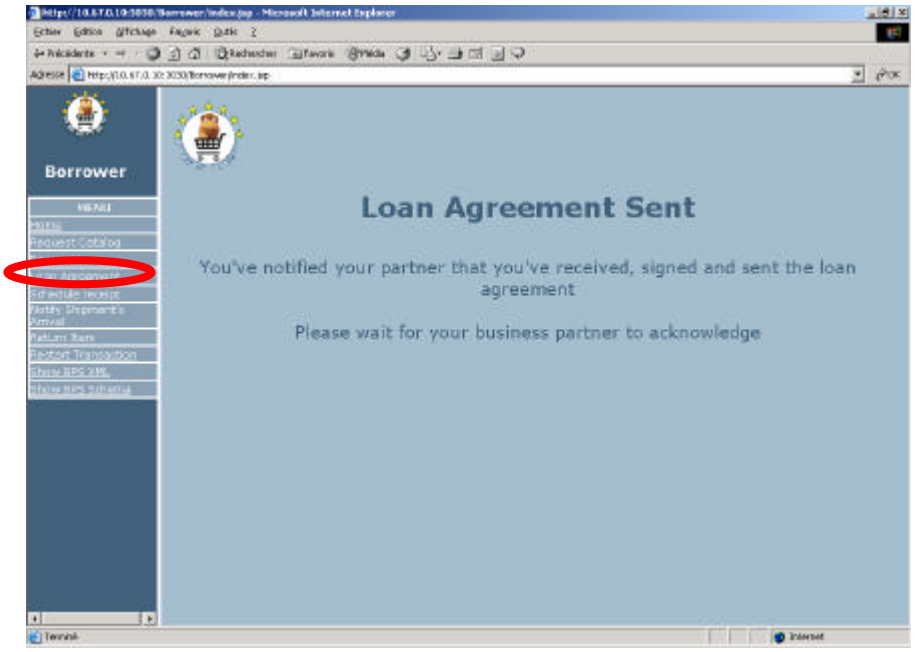


When the loan has been acknowledged a confirmation message is displayed.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

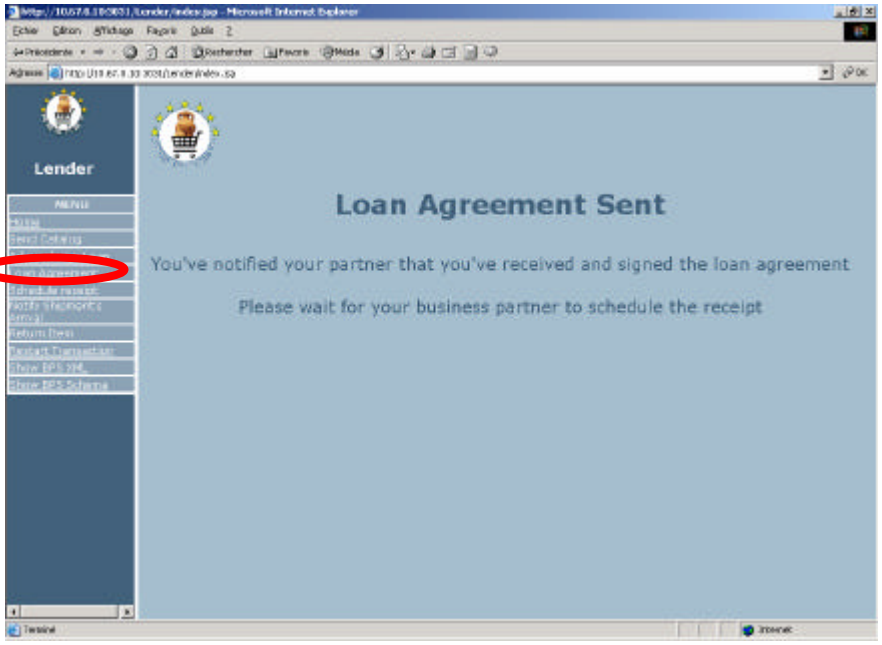
23.5.5 Loan Agreement (borrower)

When the Lender has acknowledged the loan request, the borrower has to wait until he receives the loan agreement. When it is so, he can inform the Lender about it by clicking “Loan Agreement” un the menu.



23.5.6 Loan Agreement (lender)

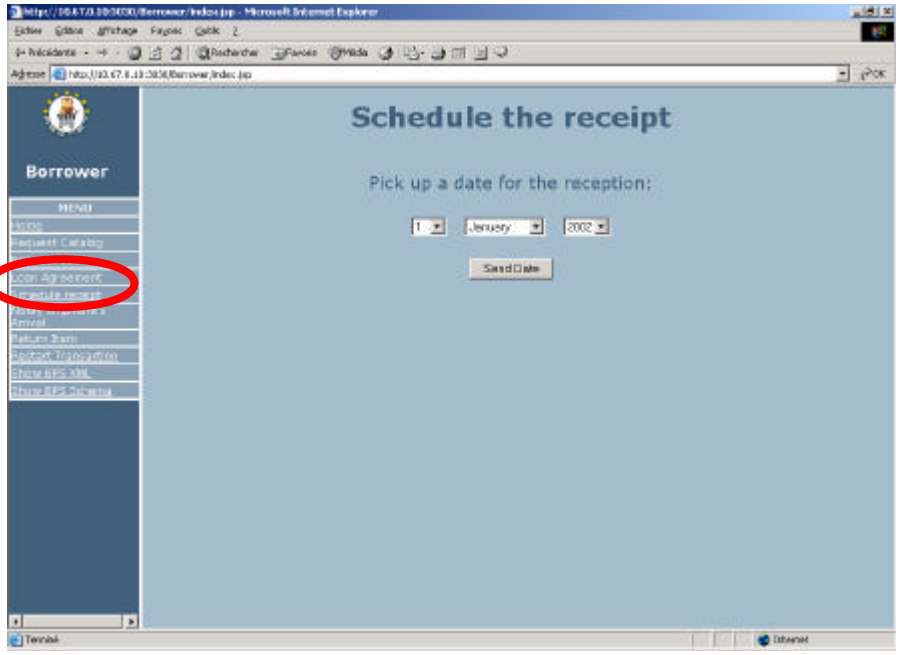
When the Borrower has informed he has sent back the loan agreement to the Lender, the Lender have to wait for it. When he has received it, he can inform the borrower by clicking “Loan Agreement” in the menu.



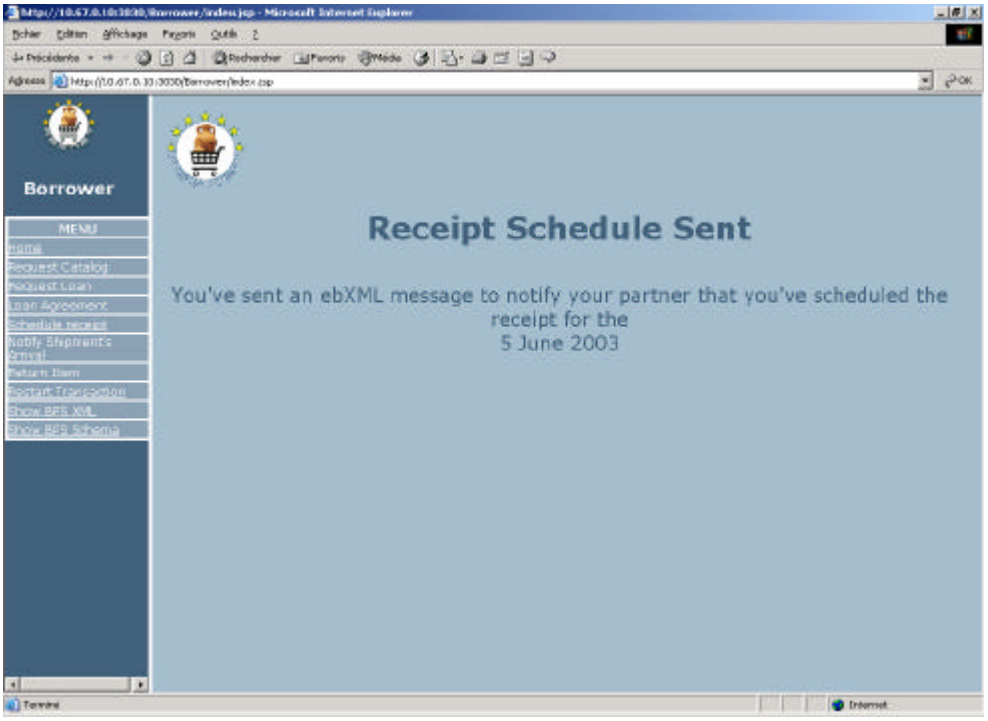
Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

23.5.7 Schedule Receipt (Borrower)

When the Borrower is informed the Loan Agreement has been received, he must schedule a receipt date for the borrowed Item, by clicking “Schedule Receipt” in the menu.



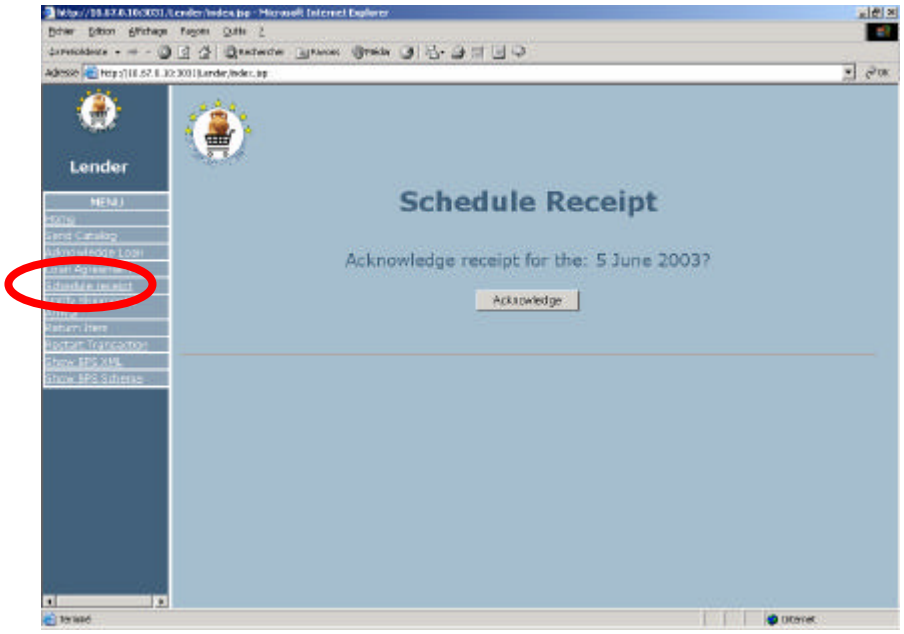
He can choose a date and send it to his partner. When he has done so, a confirmation message is displayed.



Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

23.5.8 Schedule Receipt (Lender)

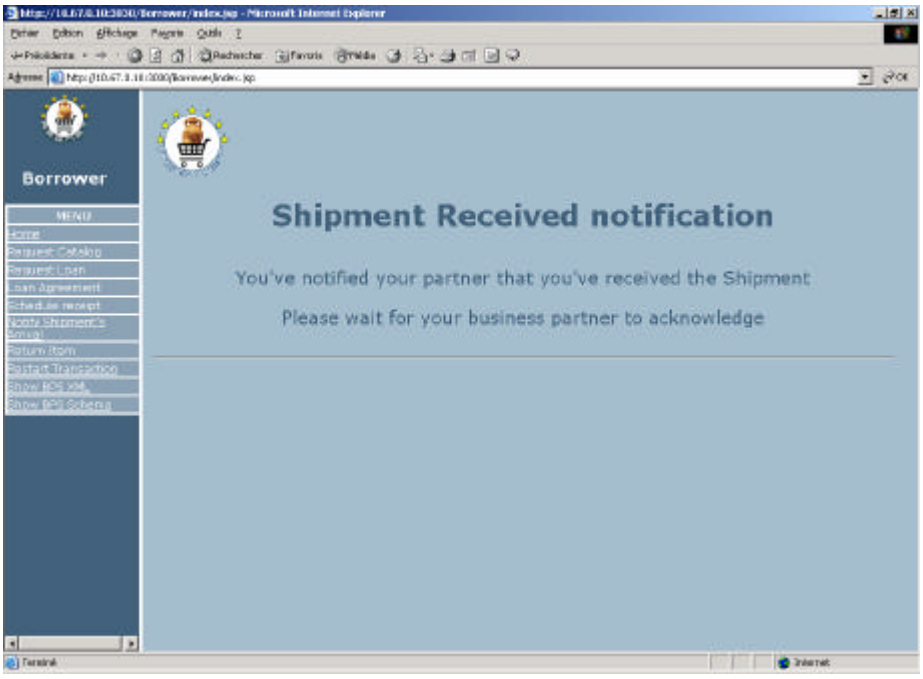
When the Borrower has chosen a date for the receipt, the lender can acknowledge it by cliking "Schedule Receipt" in the menu.



Once he has done it a confirmation message is displayed.

23.5.9 Notify Shipment arrival (Borrower and lender)

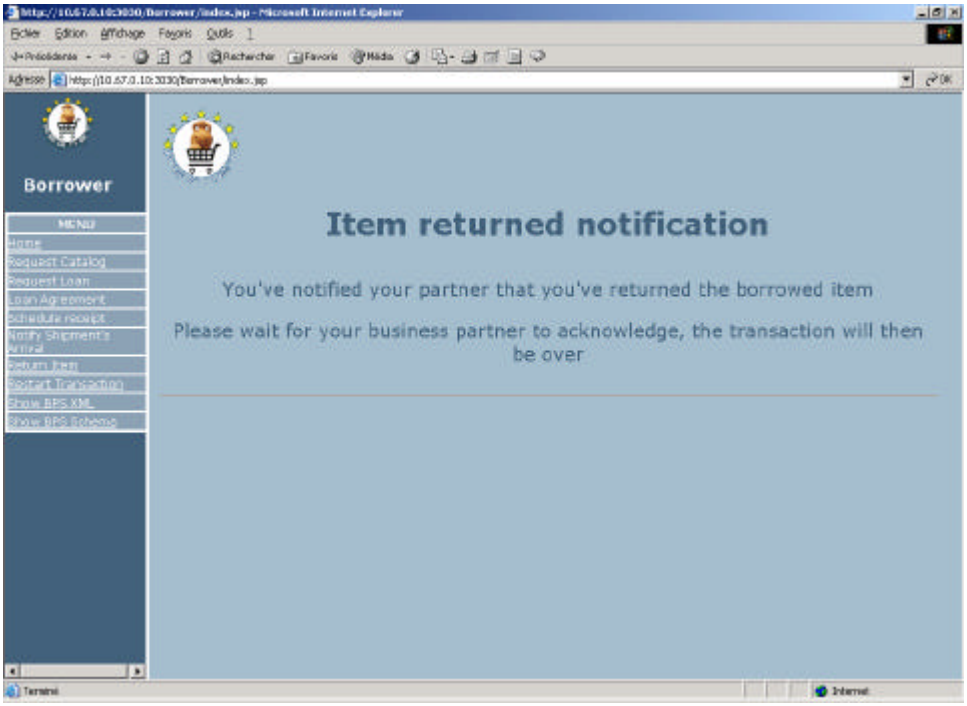
When the receipt is set, the Lender can send the item to the Borrower. The Borrower must informs the Lender about the arrival of the shipment y clicking "Notify Shipment Arrival" in the menu, and the Lender must then tell the Borrower he has taken notice of the arrival by doing the same.



Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

23.5.10 Return Item(Borrower and Lender)

When the Borrower has finished using the item he must return it to the Lender, when he has shipped the Item, he must inform the Lender about it by clicking “Return Item” in the menu. When the Lender has received the Item he must in its turn inform the Borrower by clicking “Return Item”. A confirmation message is displayed. After this the transaction is over.



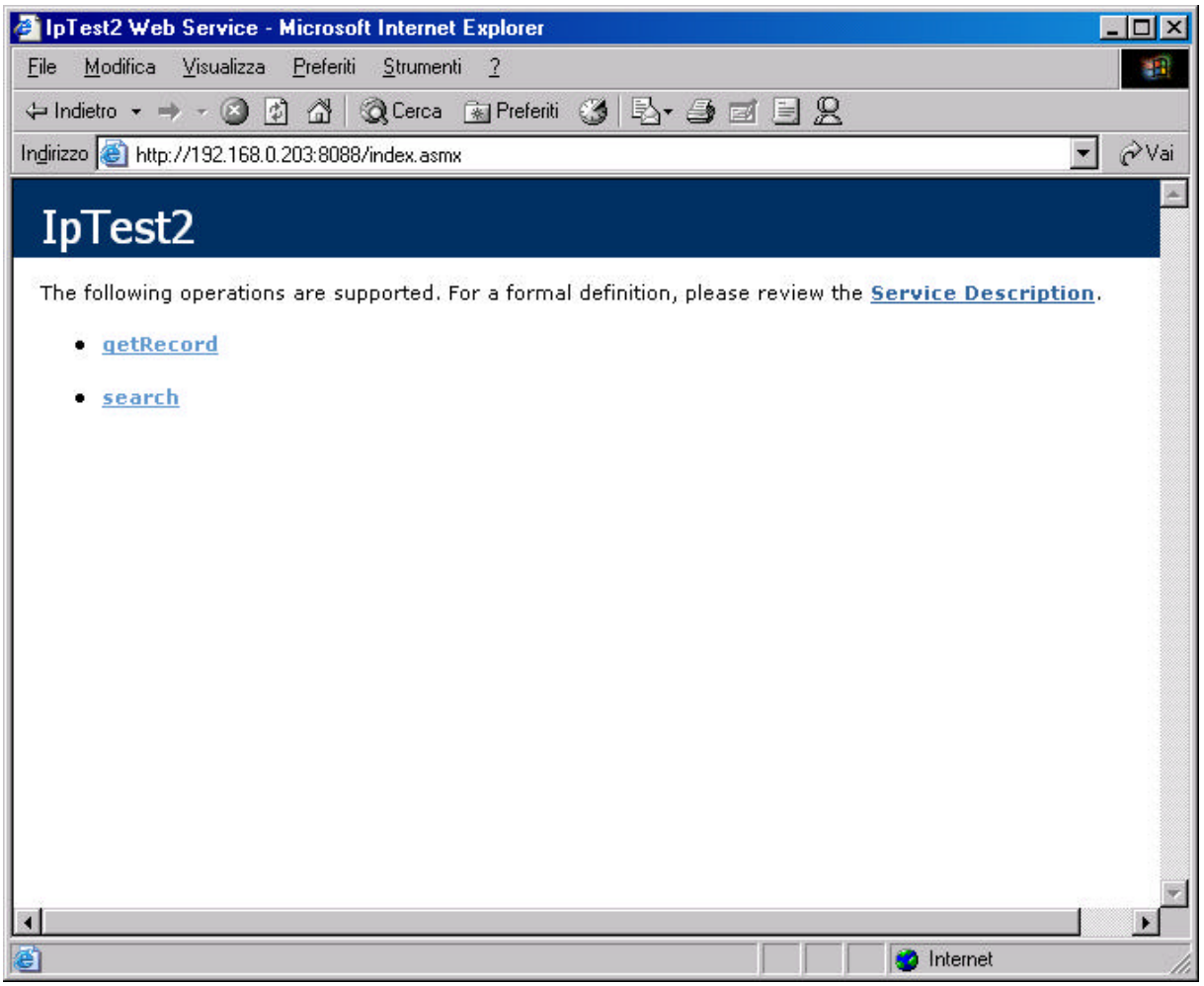
24 Index+ gateway

The index+ gateway webservice component has to be integrated into the Cultural Heritage Data Management node in order to managing retrieval of all digital surrogates stored into the Index+ DB.

Hereafter is presented the screen shot of the webservice installed at Space premises.

The public address to link the web service is http://80.207.84.129:8088

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.



As said in section 12.3 th Index+ gateway provides two simple services for searching and retrieving records in the Index+ DB:

Search

The main method of the Index+ gateway. Returns query hits and the records found respectively. The result of search the key code and size of the array containing records found.

GetRecord

Returns the records specified in the record array by position number (zero-based).

In this way the REGNET platform will be able to explore several catalogues adopted within the clustered OpenHeritage (OH) project and in genaral to browse and retrieve data from Index+ DB.

The Index+ DB used for testing the webservice contains images coming from :

Musée de Bourgoin-Jallieu (France)

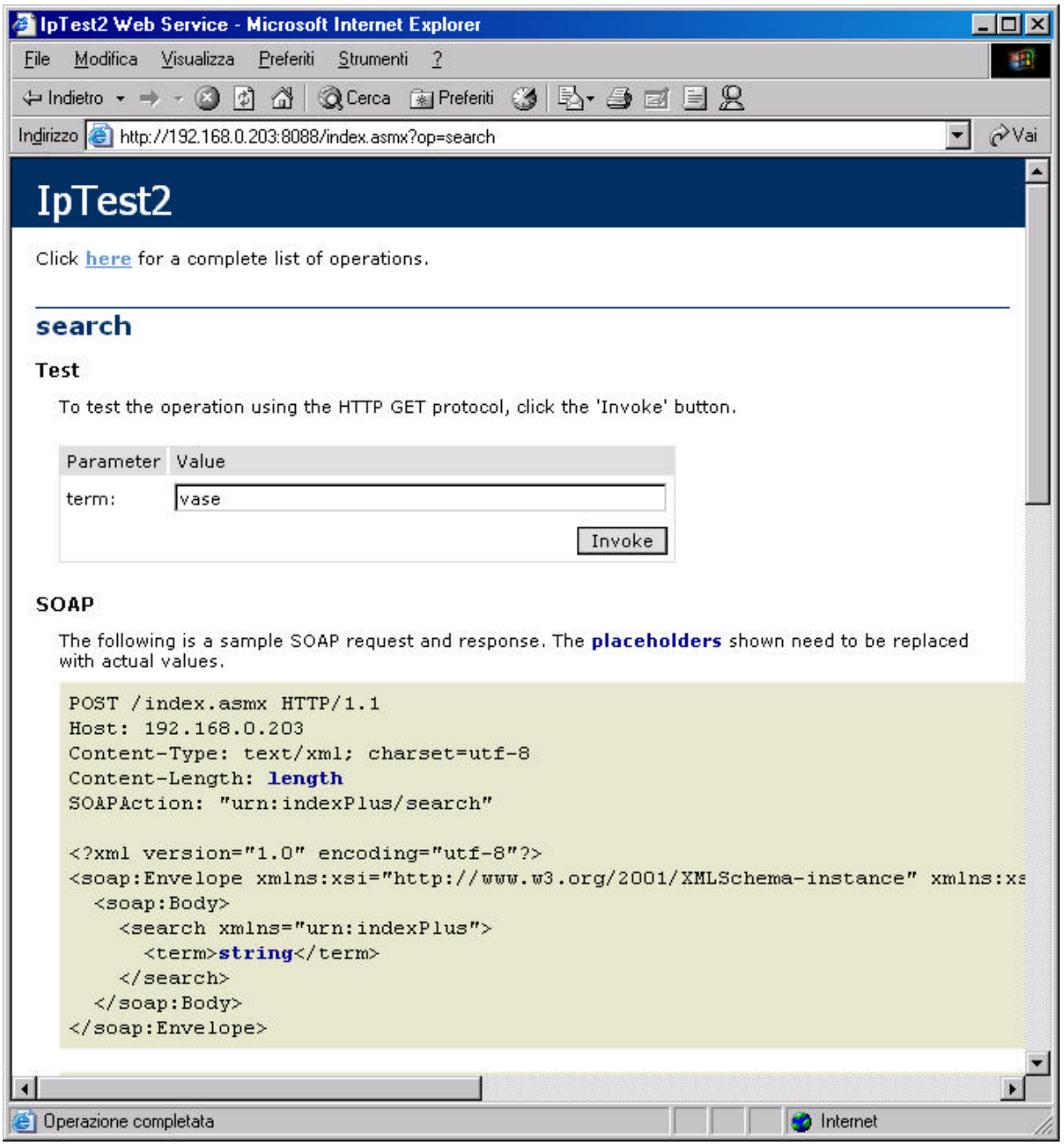
Musée des Tissus de Lyon (France)

Museum of Chini Manufactures, Borgo San Lorenzo (Italy)

On the following is presented an example for better understand the mechanism to browse and retrieve records from part of the Open Heritage collection.

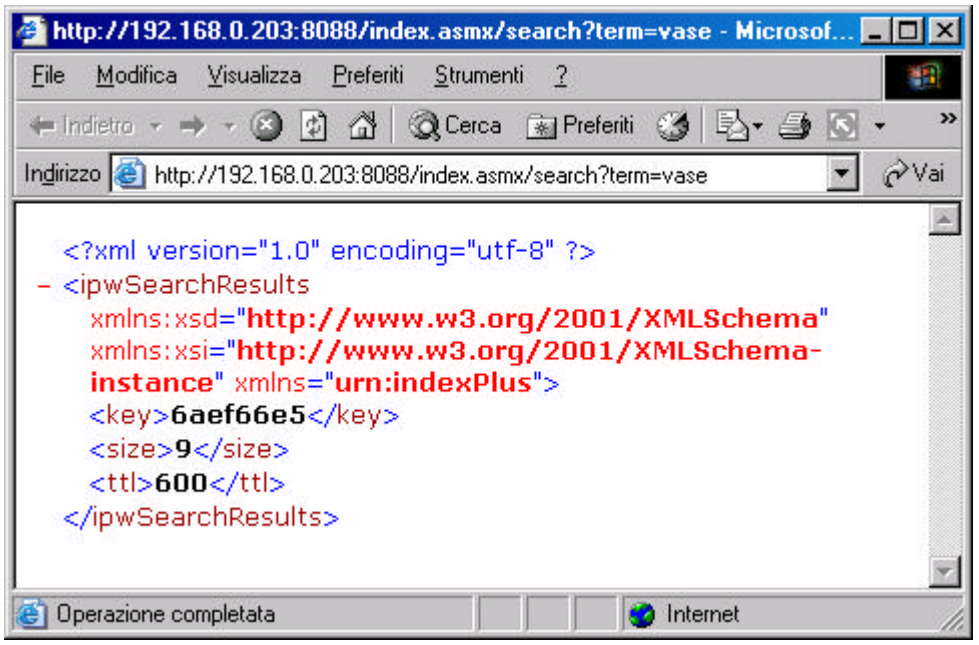
For instance, in the next figure is presented a search request for “vase” term. The index+ gateway will discover all the records containing this term.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.



The response of this kind of query, will appear like in the following screenshot.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.



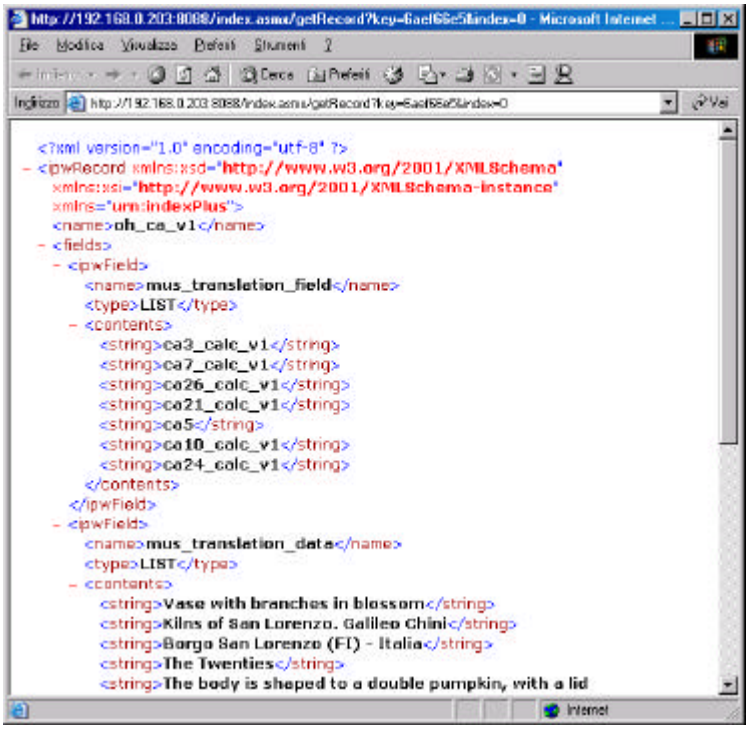
The response message is an XML file containing 3 significant fields:

Key is the generated code that locate the array of records found. This key will allow to recover the single record in the array when reported on the getRecord method.

Size is the array dimension. This field indicates the number of resources present in the array of records found.

TTL is the search Time Span.

With these data we can go to get the related record.




```
<?xml version="1.0" encoding="utf-8" ?>
```


Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

```
<ipwRecord xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="urn:indexPlus">
 <name>oh_ca_v1</name>
<fields>
  <ipwField>
    <name>mus_translation_field</name>
    <type>LIST</type>
   <contents>
      <string>ca3_calc_v1</string>
      <string>ca7_calc_v1</string>
      <string>ca26_calc_v1</string>
      <string>ca21_calc_v1</string>
      <string>ca5</string>
      <string>ca10_calc_v1</string>
      <string>ca24_calc_v1</string>
    </contents>
  </ipwField>
  <ipwField>
    <name>mus_translation_data</name>
    <type>LIST</type>
   <contents>
      <string>Vase with branches in blossom</string>
      <string>Kilns of San Lorenzo. Galileo Chini</string>
      <string>Borgo San Lorenzo (FI) - Italia</string>
      <string>The Twenties</string>
      <string>The body is shaped to a double pumpkin, with a lid and a foot
        shaped as a frustum of a cone. The vase is decorated with
        branches in blossom and clouds.</string>
      <string>Polished turquoise majolica</string>
      <string>Museum of Chini Manufactures, Borgo San Lorenzo (FI) -
        Italia</string>
    </contents>
  </ipwField>
  <ipwField>
    <name>mus_translation_language</name>
    <type>LIST</type>
   <contents>
      <string>English</string>
      <string>English</string>
      <string>English</string>
      <string>English</string>
      <string>English</string>
      <string>English</string>
      <string>English</string>
    </contents>
  </ipwField>
  <ipwField>
    <name>rec_id</name>
    <type>TEXT</type>
   <contents>
      <string>192</string>
    </contents>
  </ipwField>
  <ipwField>
    <name>ca1</name>
    <type>TEXT</type>
   <contents>
      <string>CHINI_019</string>
    </contents>
  </ipwField>
  <ipwField>
    <name>ca3</name>
    <type>TEXT</type>
   <contents>
      <string>Vaso con rami fioriti</string>
    </contents>
  </ipwField>
  <ipwField>
    <name>ca7_1</name>
    <type>LIST</type>
```


Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

```
        <contents>
            <string>Manifattura Fornaci di San Lorenzo. Galileo Chini</string>
        </contents>
    </ipwField>
    <ipwField>
        <name>ca7_2</name>
        <type>LIST</type>
        <contents>
            <string>Maker</string>
        </contents>
    </ipwField>
    <ipwField>
        <name>ca21_10</name>
        <type>LIST</type>
        <contents>
            <string>Anni Venti</string>
        </contents>
    </ipwField>
    <ipwField>
        <name>ca5</name>
        <type>TEXT</type>
        <contents>
            <string>Corpo a doppia zucca con coperchio e piede troncoconico. È
                decorato con rami fioriti e nuvole.</string>
        </contents>
    </ipwField>
    <ipwField>
        <name>ca10_4</name>
        <type>LIST</type>
        <contents>
            <string>Maiolica policroma a lustri</string>
        </contents>
    </ipwField>
    <ipwField>
        <name>ca26_1</name>
        <type>LIST</type>
        <contents>
            <string>Borgo San Lorenzo (FI) - Italia</string>
        </contents>
    </ipwField>
    <ipwField>
        <name>ca54</name>
        <type>TEXT</type>
        <contents>
            <string>CHINI-197</string>
        </contents>
    </ipwField>
    <ipwField>
        <name>ca24_1</name>
        <type>LIST</type>
        <contents>
            <string>Museo della Manifattura Chini, Borgo San Lorenzo (FI) -
                Italia</string>
        </contents>
    </ipwField>
  </fields>
</ipwRecord>
```

Above has been listed the XML file returned from a “vase” research (record 0).

The meaning of fields recovered is resumed on the following table.

For each ipwField code there is a text file that describe the meaning of the code. To access this help just point the browser to http://80.207.84.129:8088/help/caNNN.txt where NNN is the code number

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

ID	Description	CIMI-1	Comments	Field type	Index+ code
Technical					
museum_record_id	Museum record Identifier		Record ID in the museum (in its own system)	Text	
collection_name	Collection name	collection	Orphea package, representative of the collections (according to CHOL/museum agreement)	Text	
Copyright string and restrictions					
right_note	Rights note		Information on the rigths	Text	ca36.2f
rep_right_owner	Reproduction right owner		museum name ?	Text	ca36,3f
photographer	Photographer	"unknown"	Name of the photographer (of the image, not the artist).	Text	
obj_auth_right_owner	Author rights owner	"unknown"		Text	ca36,3f
rep_restrictions	Reproduction restrictions	"not specified"		Text	
copyright	Copyright	copyrightRestriction	Mention of the copyright	Text	
High definition images					
hd_museum_available	HD Image Museum availability		Availability of the HD in the supplier. "YES" or "NO"	Boolean	
hd_museum_format	HD Image format			Text	
hd_museum_size	HD Image size		in Bytes	Integer	
hd_museum_file_name	HD Image name		if hd image not delivered	Text	
hd_path	HD Image path		if hd image not delivered	Text	
hd_scan_author	Scan author		Author of the numerical one	Text	
hd_scan_date	Scan date		Date of digitalization	Date	
hd_scan_type	Scanner type		Scanner type	Text	
hd_editing	Image editing permitted		Image editing permitted	Boolean	
Documentary and descriptive					

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

obj_invent_num	Inventory number	objectID	Museum inventory number	Text	ca1
obj_type	Object type	objectName		Text	ca2
obj_title	Object title	objectTitle		Text	ca4.2
obj_others_titles	Object others titles		Other object titles ("alternate" titles) ; Free text ;for the museums in conformity with OpenMuseum, the value of this field will be generated by the converter, by concatenation of the following infos (with separator to be defined), only if Boolean "Title visibility" of the card OpenMuseum=true : Object title Object title type Language title	Text	if ca4.4, then ca4.1 + ca4.2 + ca4.3
obj_gen_desc	General Description	contentGeneral		Text	
obj_phys_desc	Physical description	physicalDescription		Text	ca5
obj_author	Object author	creatorName	Note: Several possible authors, if collective work	Text	ca7.1
obj_auth_info	Object author additional information	creatorGeneral	Note: Several possible authors, if collective work Free text ;for the museums in conformity with OpenMuseum, the value of this field will be generated by the converter, by concatenation of the following infos (with separator to be defined), only if Boolean "Title visibility" of the card OpenMuseum=true : Object author role Object author certainty Object author remark	Text	ca7.2 + ca7.3 + ca7.4
obj_remark	Object Note	associationGeneral	Notes	Text	ca8
obj_dimensions	Object dimensions	dimensions	Resulting from the 16 Open under-fields Open Museum	Text	ca 9
obj_materials	Object Materials	materialMedium	for the museums in conformity with OpenMuseum, the values of this multi-valued field will be fed by the converter from : Material keywords	Text	ca10.1
obj_materials_info	Object Materials additional information		for the museums in conformity with OpenMuseum, the values of this multi-valued field will be fed by the converter from : Material components Material geographic origin Material name	Text	ca10.2 + ca10.3 + ca10.4

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

obj_color	Object color			Text	ca11
obj_date	Object date	dateOfOrigin	Free text ;for the museums in conformity with OpenMuseum, the value of this field will be generated by the converter, by concatenation of the following infos (with separator to be defined) : Date entries Event date Precise date Interval date Start date End date Before of after JC Date precision Date certainty Date method Added date show	Text	ca21.1 + ca21.2 + ca21.3 + ca21.4 + ca21.4.1 + ca21.4.2 + ca21.5 + ca21.6 + ca21.7 + ca21.8 + ca21.9
obj_named_period	Named period	periodName	for the museums in conformity with OpenMuseum, the values of this multi-valued field will be fed by the converter from : Named period	Open List	21.10
obj_history	Object history	provenance		Text	ca22
obj_assoc	Object association	relateObjects	Places, people, associated events. Free text ;for the museums in conformity with OpenMuseum, the value of this field will be generated by the converter, by concatenation of the following infos (with separator to be defined) : Association type Associated activity Associated concept Associated cultural context Associated date Associated event type Associated event name Associated object Associated person type Associated person name Associated place Other associations	Text	de ca23.1 à ca23.12

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

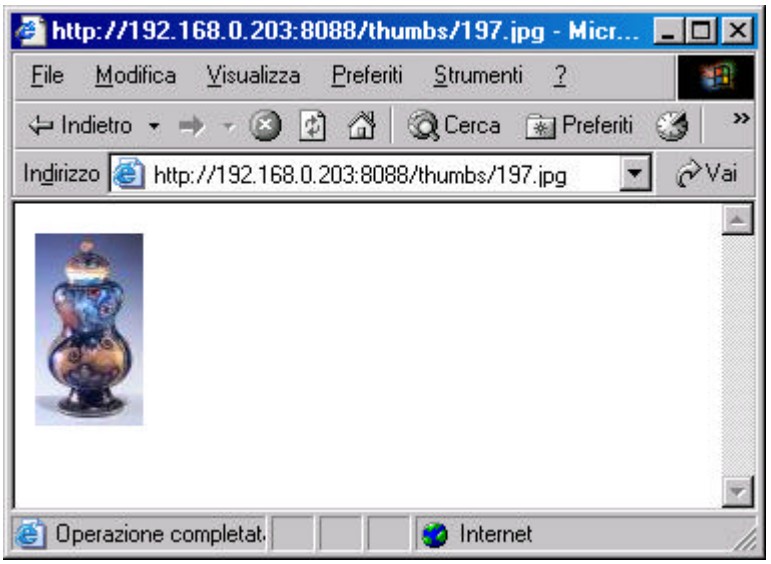
obj_owner	Object owner	owner	The owner of the object is not always the museum where the object is.	Text	ca 24.1
obj_use	Object use			Text	ca25
obj_use_function	Object use function			Text	ca25.1
geo_prod_place	Production or discover place	placeOfOrigin	Place of production or discovery; for the museums in conformity with OpenMuseum, the values of this multi-valued field will be fed by the converter from: Production place	Text	ca26.1
geo_place_info	Geographic presentation		Free text ;for the museums in conformity with OpenMuseum, the value of this field will be generated by the converter, by concatenation of the following infos (with separator to be defined) : Geographic certainty Geographic remark Geographic indication type Geographic coordinates Geographic code	Text	ca26.2 + ca26.3 + ca26.4 + ca26.5 + ca26.6
prod_type	Production type			Text	ca 28
geologic_name	Geologic name	agePeriod		Text	ca 30
rec_type	Record type			Text	ca 39
museum_keywords	Museum keywords		Keywords delivered by the museums (according to their internal classification). For the museums in conformity with OpenMuseum, the values of this multi-valued field will be fed by the converter from : Position Concept Date Description Event type Event name Object Person Person name Described activity Described place	Text	ca46
obj_style	Object style	stylePeriod		Text	ca50

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

tech_type	Technic type	processTechnique		Text	ca71.1

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

The following screenshot is an example of an image retrieved by the record informations.

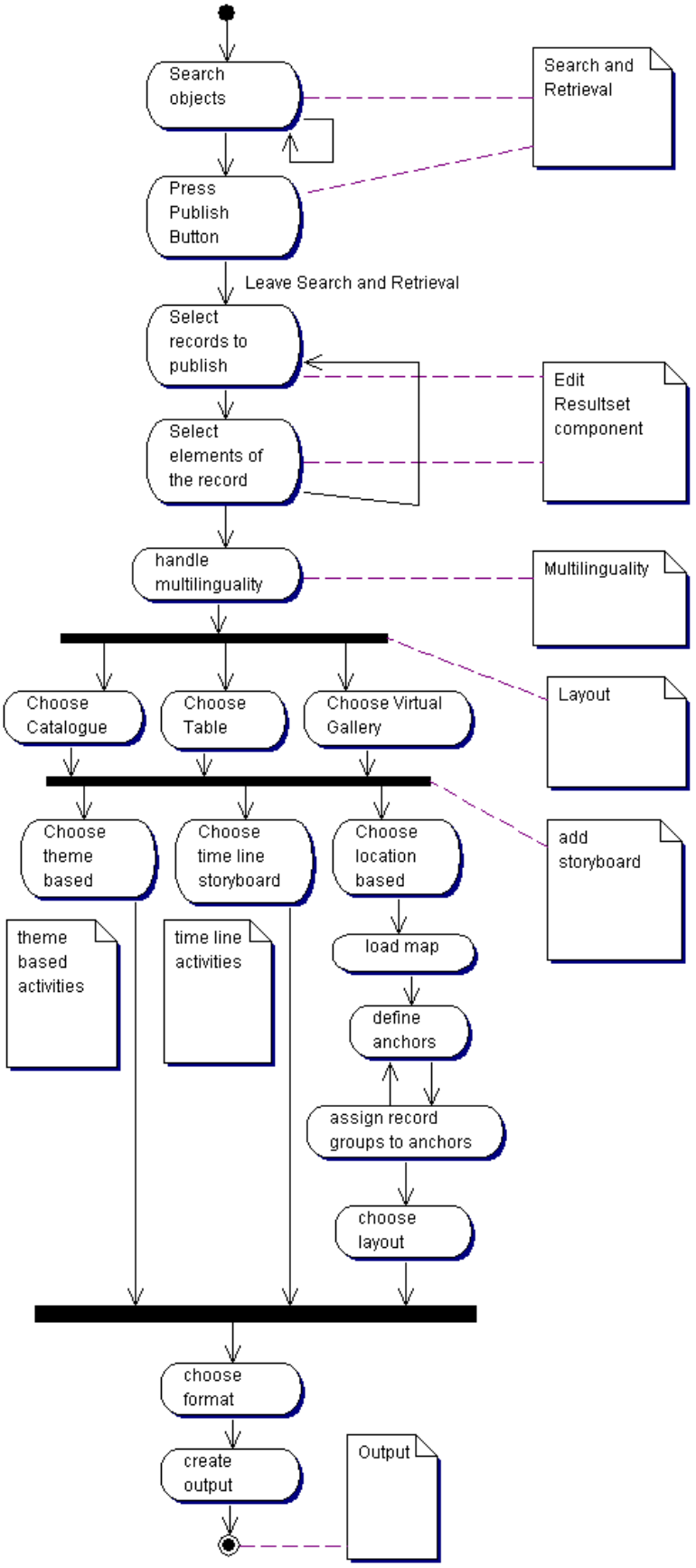


25 Web publisher

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

25.1 REGNET publishing process

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.



Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

The above figure shows the overall publishing process. The "search and retrieval" and "edit resultset component" are provided by AIT and SI respectively. The integration with the Search & Retrieval interface is available in the first version of the publishing prototype, the editing component will be available in the second prototype. Multilinguality is not part of the first prototype and therefore was omitted in the current implementation. In the first prototype a location aware storyboard mechanism is available. The other functionalities are available as shown in the process and are described below.

25.1.1 Search objects

The users issues a search for the objects they want to publish to the Search & Retrieval user interface. If they are satisfied with the data returned, the publication process can be continued. The Search & Retrieval Subsystem provides the data to the Publishing Component in the format of the REGNET DTD.

25.1.2 Edit ResultSet

In the second prototype this step will enable the user to:

Select records:

The records, each represented by a unique identifier, are displayed in a window, and the user can choose the objects not to be published by marking them. This allows a fine grained selection of the data to be published.

Select elements of a record:

The fields of the REGNET DTD, will be shown and can be selected by the user. If the users selects it will be included in the publication prototype. This allows the filtering of content data according to the record structure.

25.1.3 Handle Multilinguality

This part of the process manages the multilinguality of the publication and will be effective in the second prototype of the REGNET system.

Multilingual lookups are used for associating labels with particular fields in a record set using stylesheets. A label is the description which preceeds a record element. For instance, the information included by the element <am_titles>Scherdegen </am_titles> could be displayed in the publication as: >>**Titel:** Scherdegen<<. In an English publication the German label "Titel" would be changed into "title" and it would be displayed as >>**title:** Scherdegen<<. In an italian document this label would be changed to "titolo" and be displayed as >>**titolo:** Scherdegen<<

Selecting the right label depending on the language chosen by the user is called "multilingual lookup".

25.1.4 Handle Layout

The Electronic Publishing provides 3 predefined layouts: Virtual Gallery, Table and Catalogue:

Virtual Gallery: The virtual gallery presents the search result as a interactive, web based presentation either in HTML or in SMIL.

Table: The table layout presents the search result in a table either in HTML or PDF format.

Catalogue: The catalogue presents object data in a catalogue like manner.

25.1.5 Add *Location* Storyboard

In order to sort and group all records or to provide a navigational aid, the user can choose a storyboard, according to the LATCH definition. In the current implementation a location based storyboard is supported. In the second prototype time based and theme based storyboards will follow.

The location based publication is based on a central map from which the items of interest can be reached by clicking anchors spread over the map. This map can be uploaded by the user.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

The location based authoring consists of the following steps: In the first step, the anchors (i.e. location information) are defined and can be positioned on the map. In the second step, records respectively groups of records are assigned to anchors.

25.1.6 Create Output

The electronic publishing component supports three types of output formats depending on the type of publication selected (the layout of the publication).

HTML: Catalogues, Virtual Galleries and Tables can be represented in HTML.

SMIL: Virtual Galleries can be represented in SMIL providing interactive mechanisms and presentation like features.

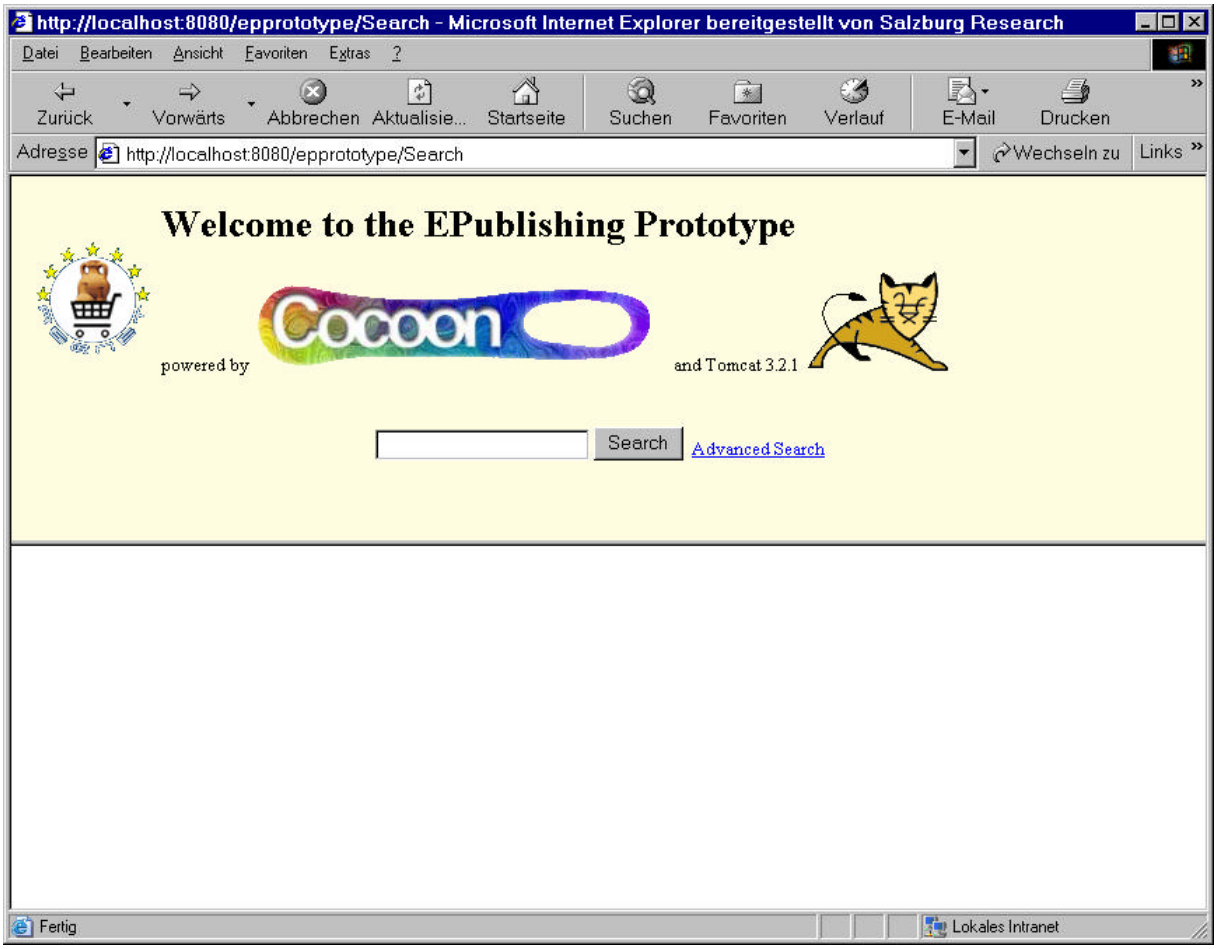
PDF: Catalogues and Tables can be represented in a PDF document.

In the subsequent section the user interfaces of the current prototype are described in detail.

25.2 Publishing user interface

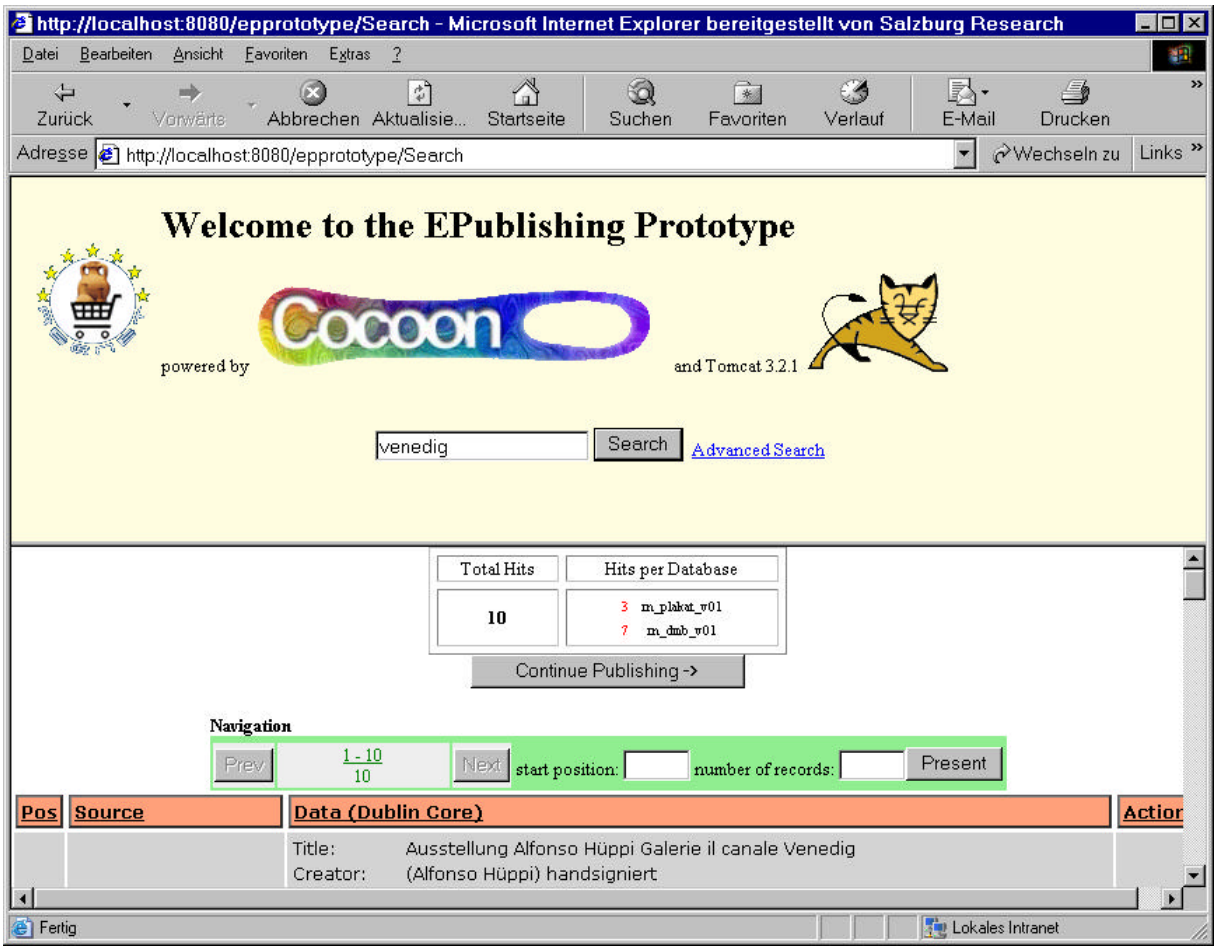
25.2.1 Input

The input data for the Electronic publishing component is produced by the Search & Retrieval subsystem. Due to that, the first step in the publishing process issues a search to the Search & Retrieval subsystem.



After pressing the "Search" Button the result of the search is displayed and a button for continuing the publishing is displayed ("Continue Publishing"):

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.



After pressing the "Continue Publishing" button, the handle layout step is displayed.

25.2.2 Handle Layout

In the handle layout step the user can select the layout type of the publication. In the current implementation 4 layouts are available:

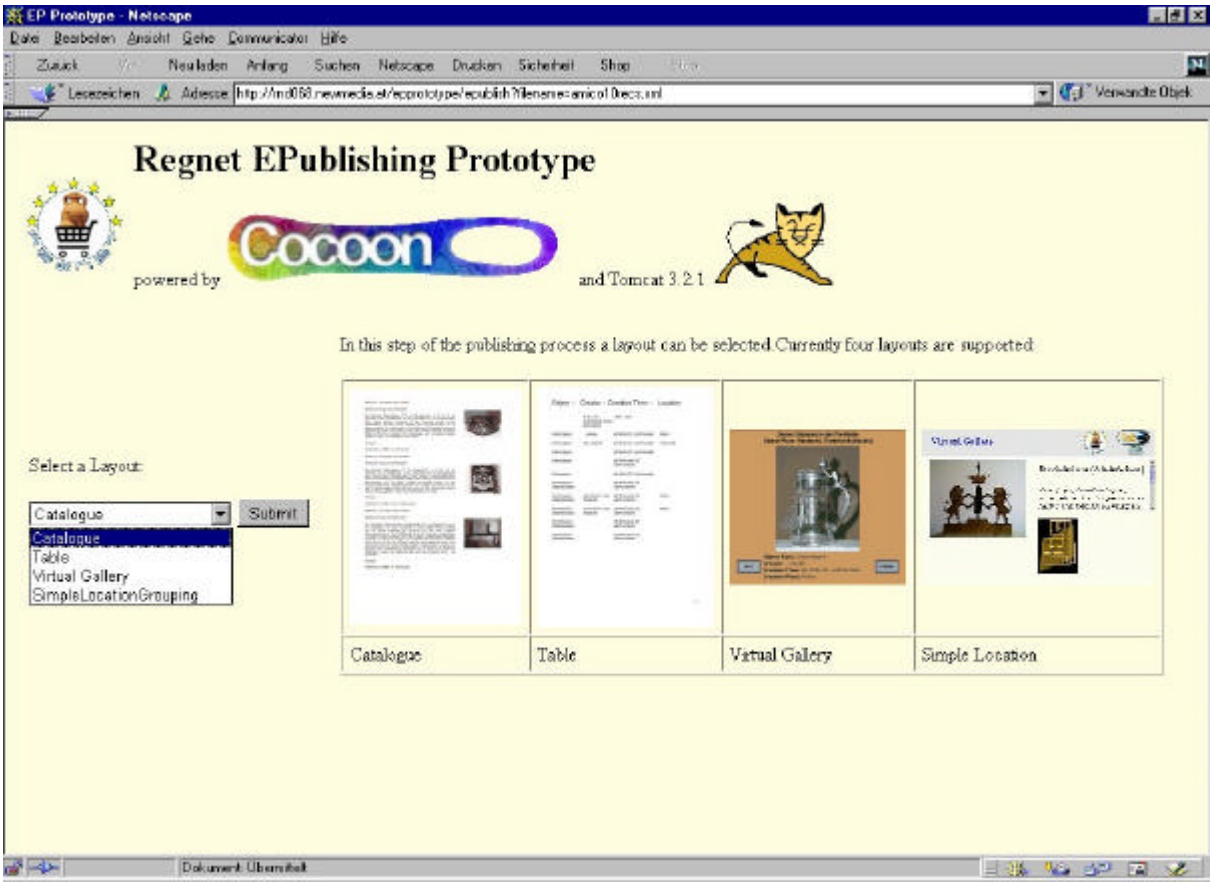
Virtual Gallery: produces a virtual gallery of the selected records.

Catalogue: produces a catalogue of the selected records.

Table: produces a table of the selected records.

Simple Location: produces a interactive map of the selected records.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

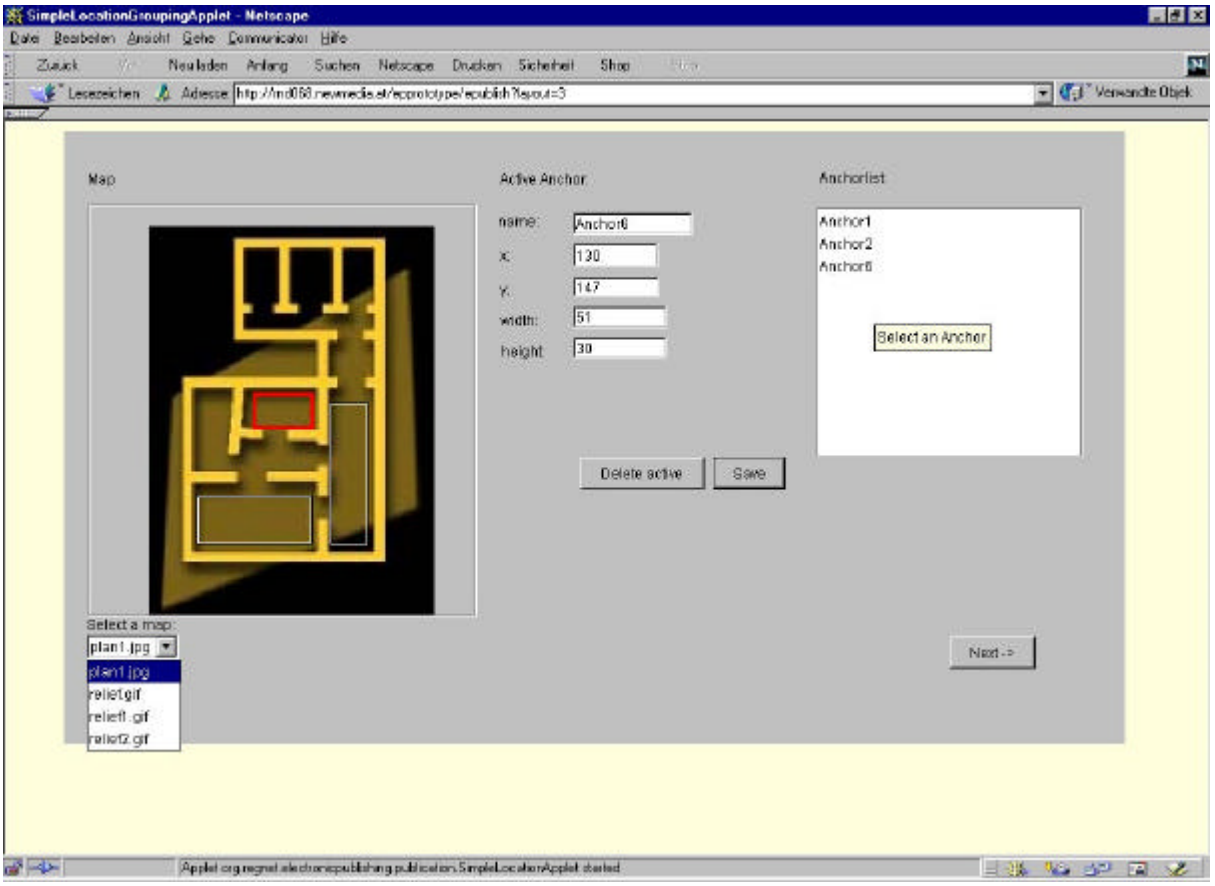


25.2.3 Layouts

SimpleLocationGrouping

Load map and define anchors

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.



A map may be selected for displaying the data on. On the selected map anchors can be placed which are visualised in the right region of the dialog - the anchor list. If an anchor is marked in the list it becomes the "active" anchor and can be edited. At the same time the active anchor is highlighted with red colour on the map. The location of an anchor on the map is defined through x- and y- coordinates relative to the image loaded. Besides a diameter of the visual representation of the anchor can be defined. In addition anchors can be given a name like "Salzburg" or "dining room". If there are already records assigned to the anchor they will be displayed in the text field named "assigned records". This field is not editable, because assigning records can only be done in the following step.

By simply creating a new rectangle in the map a new anchor will be defined and activated. The position of the anchor can be defined by entering the x and y co-ordinates by hand.

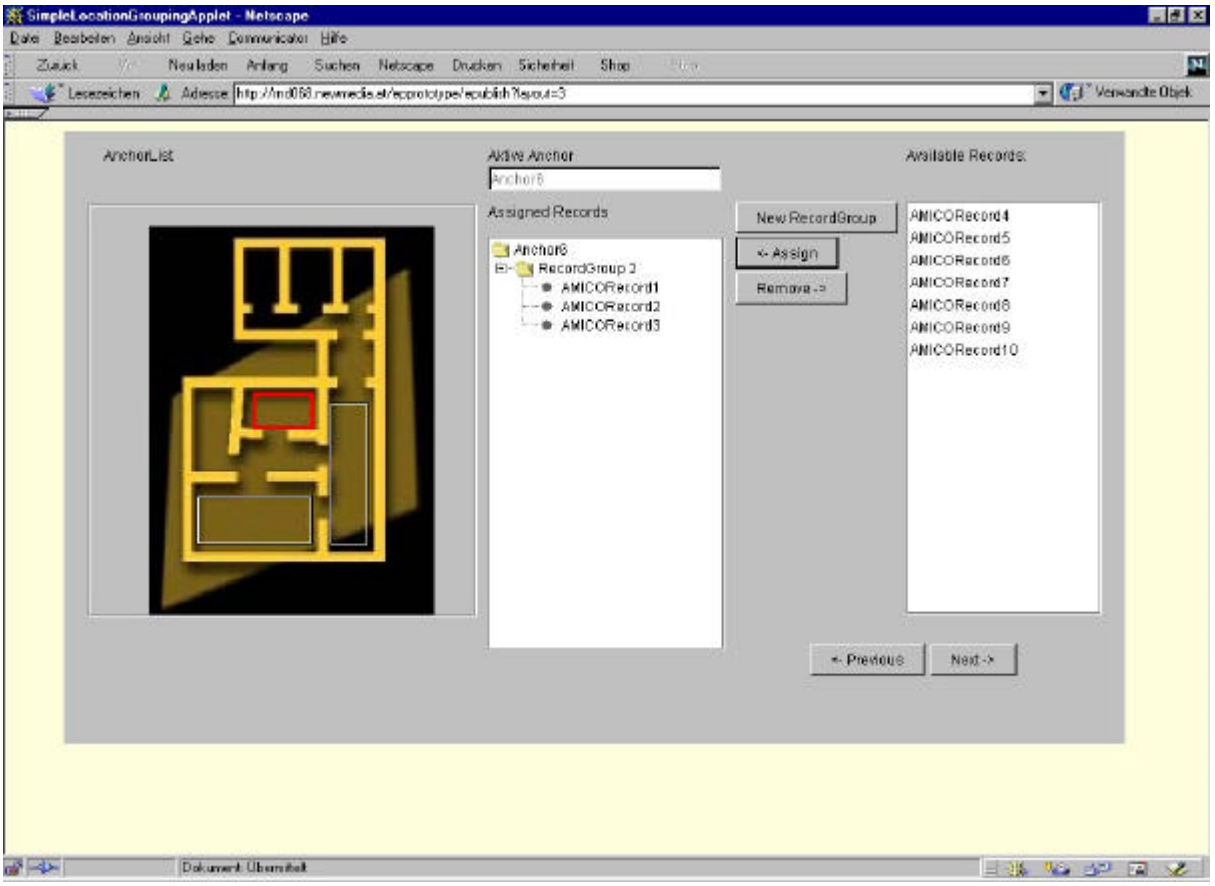
By pressing the "Save" button , the anchor is taken up in the anchor-list on the right.

The button "Delete active" removes the currently active anchor from the map and from the list of anchors.

Pushing the button "Next" moves on to the next editing step - assigning records.

Assign records to anchors

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.



This dialog allows to assign records or groups of records to an anchor. To activate an anchor double-click it on the map on the left side. An activated anchor is highlighted in red.

With "New Recordgroup" the user defines a new record group, that is automatically assigned to the currently active anchor.

Records can be assigned by selecting them in the available records list on the right side of the dialog and clicking the "Assign"-button. The records are then shifted from the "Available records"-list to the "Assigned records"-list in the middle.

The "Remove"-button adds the records selected in the "Assigned records" list to the "Available records" list and removes them from the "Assigned records" list.

If a user wants to define an additional anchor, she can go back to the previous dialog by clicking the "Previous"-button.

Virtual Gallery

For virtual gallery a predefined stylesheet is used for processing. This stylesheet will be configurabel in the second prototype.

Catalogue

For catalogue a predefined stylesheet is used for processing. This stylesheet will be configurabel in the second prototype.

Table

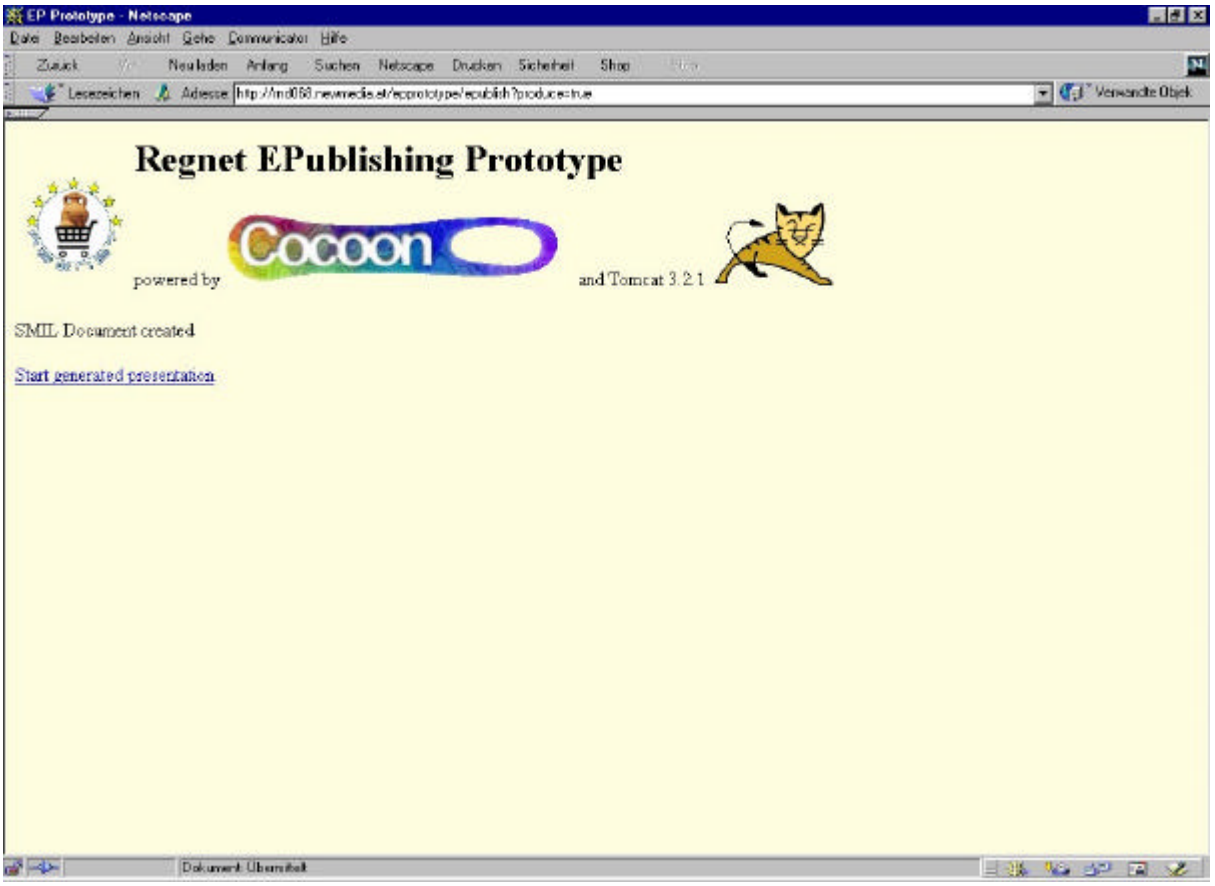
For table a predefined stylesheet is used for processing. This stylesheet will be configurabel in the second prototype.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

25.2.4 Create Output

One of the three supported output formats can be chosen depending on the layout of the presentation. The supported formats are: HTML, PDF, SMIL. After pressing submit the publication is produced an can be previewed by clicking on the according link.

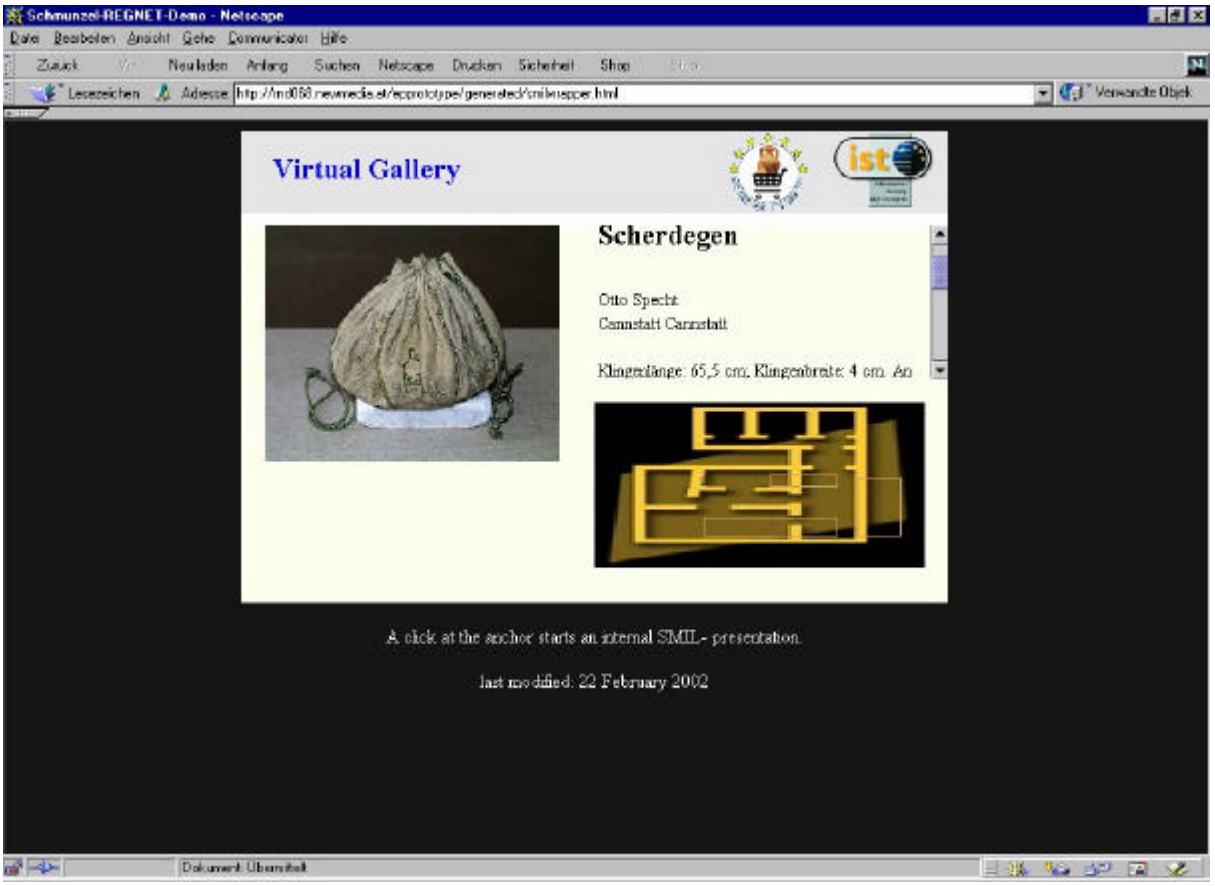
Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.



25.2.5 Preview

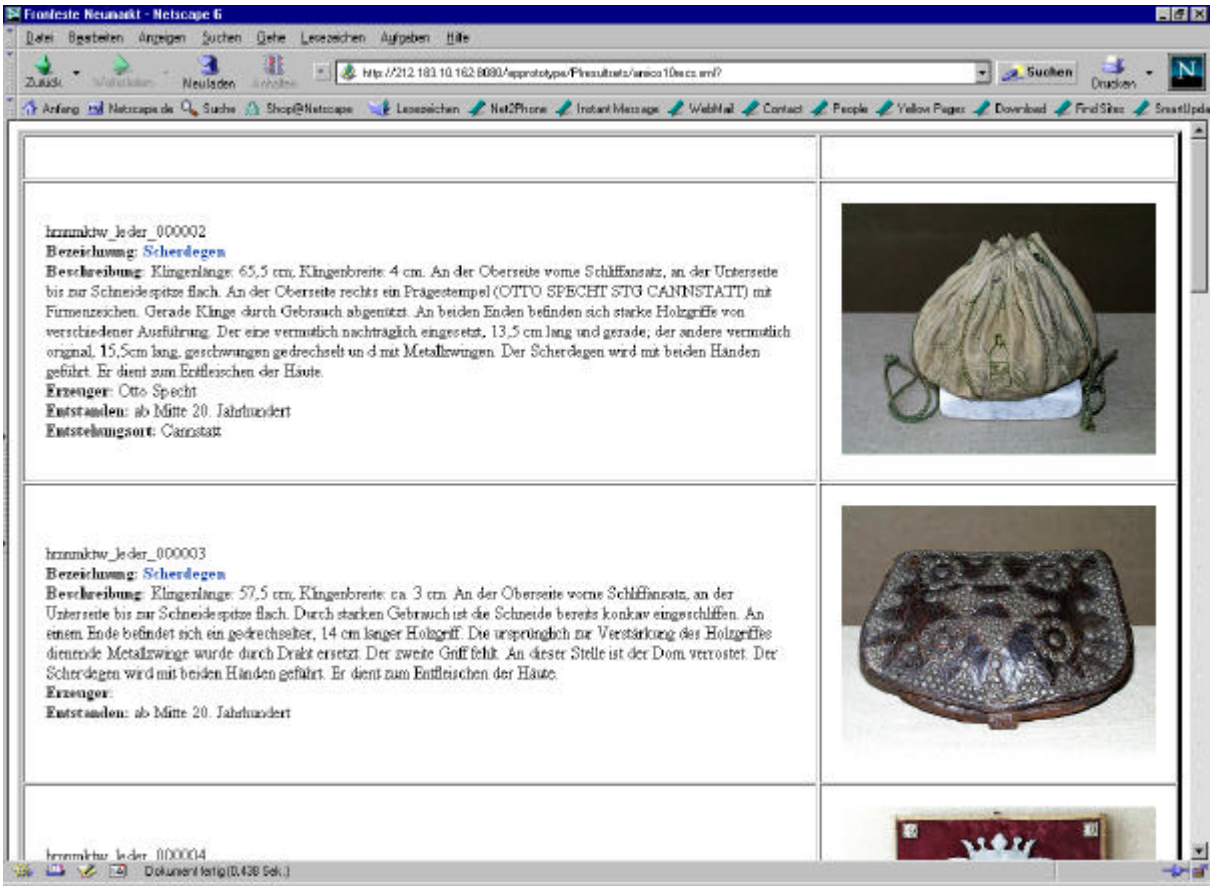
According to the generated output format different preview applications are started (e.g. Adobe Acrobat Reader for PDF). For SMIL presentations a component of SR is used for visualization, the Schmunzel player. The player must be configured to be displayed properly. The subsequent screenshot show SMIL presentation of based data in the Schmunzel player.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.



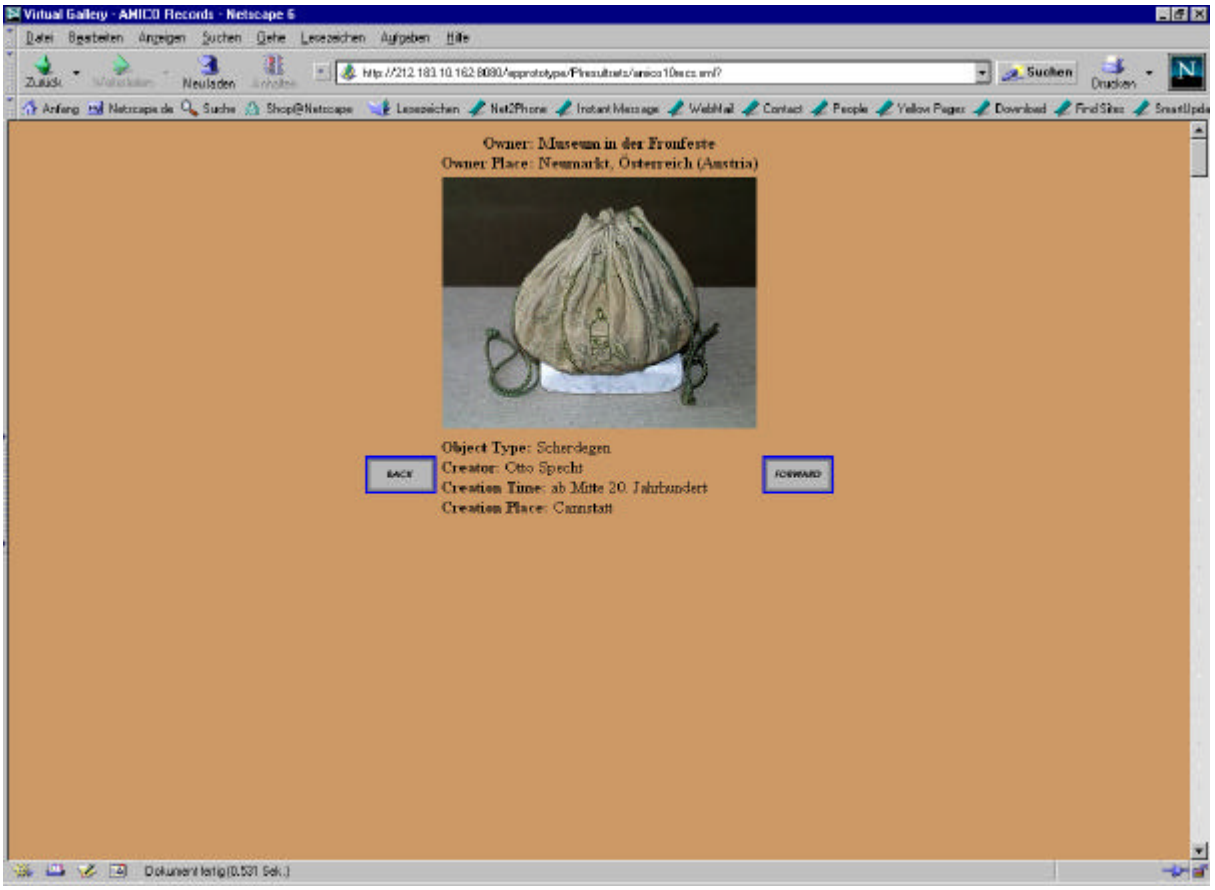
The output of a catalogue in HTML:

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.



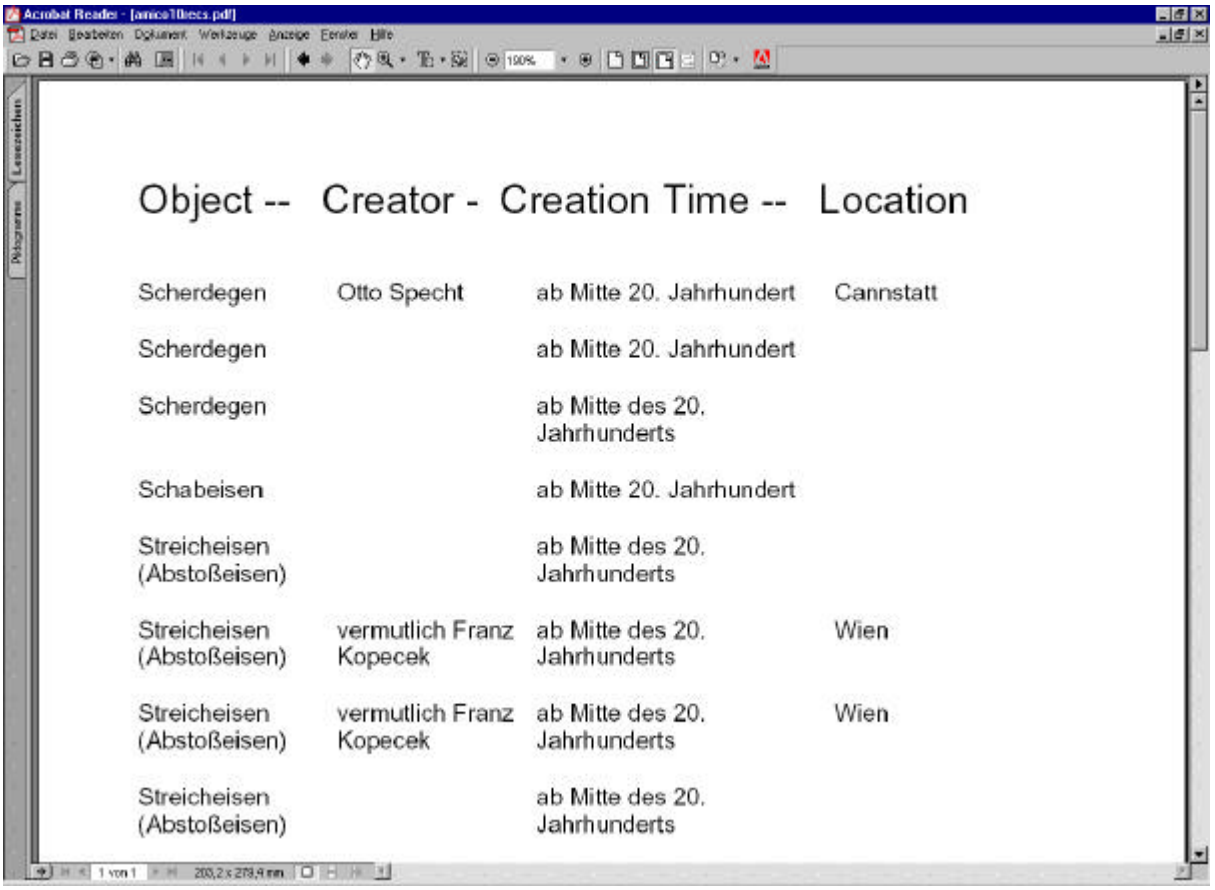
The output of a virtual gallery in HTML:

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.



The output of a table in PDF:

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.



Object --	Creator -	Creation Time --	Location
Scherdegen	Otto Specht	ab Mitte 20. Jahrhundert	Cannstatt
Scherdegen		ab Mitte 20. Jahrhundert	
Scherdegen		ab Mitte des 20. Jahrhunderts	
Schabeisen		ab Mitte 20. Jahrhundert	
Streicheisen (Abstoßeisen)		ab Mitte des 20. Jahrhunderts	
Streicheisen (Abstoßeisen)	vermutlich Franz Kopecek	ab Mitte des 20. Jahrhunderts	Wien
Streicheisen (Abstoßeisen)	vermutlich Franz Kopecek	ab Mitte des 20. Jahrhunderts	Wien
Streicheisen (Abstoßeisen)		ab Mitte des 20. Jahrhunderts	

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

Annexe C: Internationalisation forms

26 E-Shop, PCM, B2B, Auction

Below we insert the specific Internationalisation forms (files) in charge of a REGNET's module. These forms contain words to be translated in the different languages.

Each module is free to manage these forms according to the more suitable algorithm.

So the following forms must be translated from all the the partners, in their natural language and then must be inserted into our system in order to provide the internationalization of e-shop, pcm, b2b and auction components.

26.1 E-SHOP

```
<?
//Common
$currency_label="Currency";
$alert_nothing_selected = "Nothing selected";

//Links of the menu - Top Page menureg.phtml
$basket_link = "BASKET";
$wish_list_link = "WISH LIST";
$new_search_link = "NEW SEARCH";
$order_history_link = "ORDER HISTORY";
$order_logout_link = "RETURN TO PORTAL";
$term_cond_link = "TERMS AND CONDITIONS";
//left.phtml
$lft_categories_label = "CATEGORIES";

//menusearch.phtml
$mnsrch_search_label="Search";
$mnsrch_search_item="Item";
$mnsrch_search_category="Category";
$mnsrch_search_price="Price";
$mnsrch_all_option="All";
$mnsrch_lowers_pr_option="lower than";
$mnsrch_higher_pr_option="higher than";
$mnsrch_search_submit="Search";

//main.phtml
$mn_hello_msg = "Hello";
$mn_welcome_msg = "Welcome to the REGNET e-shop";

//search.phtml
$srch_results_label="RESULTS";
$srch_name_label="NAME";
$srch_producer_label="PRODUCER";
$srch_price_label="PRICE";
$srch_photo_label="PHOTO";
$srch_server_label="SERVER";
$srch_action_label="ACTION";
$srch_submit_selection_addbsk="Add to Basket";
$page_label="Page";
$srch_empty_query_msg="There are no good in this category";
$srch_no_goods_query_msg = "There are no goods for your query";
```


Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

```
$srch_no_quantity_selected = "You have to select a product for adding in the basket";

//basket.phtml
$bsk_title_label="BASKET";

$bsk_name_label="NAME";
$bsk_producer_label="PRODUCER";
$bsk_price_label="PRICE";
$bsk_check_label="CHECK";
$bsk_quantity_label="QUANTITY";
$bsk_total_label="TOTAL";

$bsk_total_bsk_label="Total";
```

26.2 PCM

```
<?

//Menu links
$ins_item = "Insert item";
$ins_warehouse = "Insert warehouse";
$upd_item = "Update, Delete or Look";
$ins_service = "Insert service";
$upd_service = "Update, Delete or Look services";
$order_logout_link = "Return To Portal";

//Boxes for update,look,delete item and services
$mess_upd_item = "For update, delete or look Items, please select catalogue and category";
$mess_upd_service = "For update, delete or look Services, please select catalogue and
category";
$select_catalogue = "Select catalogue";
$select_category = "Select category";
$error_no_catalogues = "Sorry! You do not have catalogues!";
$lets_go= "Go";

//Page with item and choose if update,delete or view
$select_action_title="Please, select an action";
$action_label = "Action";
$select_update = "Update";
$select_delete = "Delete";
$select_view = "Look";
$select_good_title="Please, select a good";
$name_label = "Name";
$submit_label = "Submit";
$error_no_good_category = "Sorry, there are no goods in this category";

//Attributes of an item
$id_of_item="Item_id";
$id_of_Category="Category_id";
$name_of_item="Name";
$upcc_of_item="UPCCode";
$price_of_item="Price per item";
$pricetype_of_item="Insert it to E-shop?";
$id_of_currency="Currency_id";
$quantity_of_item="Quantity";
```


Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

```
$manufacturer_of_item="Manufacturer";
$weight_of_item="Weight";
$measure_of_w="W_measure";
$volume_of_item="Volume";
$measure_of_v="V-measure";
$height_of_item="Height";
$lenght_of_item="Length";
$width_of_item="Width";
$measure_of_d="D_measure";
$export_of_item="Export";
$id_of_wharehouse="Warehouse_id";
$id_of_store_area="Store_area_id";
$id_of_address="Address_id";
$description_of_item="Description";


$insert_eshop_quest_no = "NO";
$insert_eshop_quest_yes = "YES";
//Delete Item Messages
$msg_delete_ok="The good succesfully deleted!";
$msg_not_delete="The good was not deleted!";

//Update or Insert Item action
$msg_update_ok="The good succesfully updated!" ;
$change_picture="You can change its picture";
$click_for_picture="Click Here!";
$msg_update_not_ok="The good was not updated!";
$msg_insert_ok="The good succesfully inserted!" ;
$msg_insert_not_ok="The good was not inserted!";
$add_picture="You can add its picture";

//Insert_Item

$please_select_catalogue="Please, select catalogue";
$not_having_catalogue_contact = "Sorry, you don\'t have a catalogue to put new items.
Please, apply to administrator by <a href=mailto:kvotis@zeusnet.gr>e-mail</a> to create a
catalogue";
$select_warehouse_label="Select WareHouse";
$insert_label="Insert";

//Insert Warehouse
$insert_warehouse_title="Insert new warehouse";
$warehouse_properties_title="Warehouse properties";
$id_of_user_label="User ID";
$catalogue_to_insert="Catalogue to insert to";
$area_of_store="Store area";
$address_label="Address";
$street_of_warehouse="Street";
$city_of_warehouse="City";
$country_of_warehouse="Country";
$state_of_warehouse="State";
$province_of_warehouse="Province";
$post_code_of_warehouse="Post Code";
$warehouse_insert_ok="The warehouse succesfully inserted!";
$warehouse_insert_not_ok="The warehouse was not inserted!";
$not_having_catalogue_contact_warehouse = "Sorry, you don\'t have a catalogue to put new
warehouse. Please, apply to administrator by <a href=mailto:kvotis@zeusnet.gr>e-mail</a> to
create a catalogue";
```


Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

```
//Attributes of a service
$id_of_service="Service_id";
//$id_of_Category="Category_id";
$name_of_service="Name";
$price_of_service="Price";
$description_of_service="Description";

//insert service messages
$msg_insert_service_ok="The service succesfully inserted!" ;
$msg_insert_service_not_ok="The service was not inserted!";

//Update look and delete services
$error_no_service_category="Sorry, there are no services in this catalogue!";

//Delete Services Messages
$msg_delete_service_ok="The service succesfully deleted!";
$msg_not_delete_service="The saervice was not deleted!";

//Update Service Messages
$msg_update_service_ok="The service was succesfully updated!";
$msg_update_service_not_ok="The service was not succesfully updated!";

//NO SUPPLIER MESSAGE
$msg_no_supplier="Sorry! You are not a supplier and do not have permission to manage
catalogues";
?>
```

26.3 E-BUSINESS

```
<?
//common
$currency_label = "Currency";

//Menu links
$search_for_item_menu = "Search for items";
$search_for_service_menu = "Search for Services";
$order_logout_link = "Return To Portal";

//search labels
$name_of_product_label="Name";
$category_of_product_label = "Category";
$manufacter_of_product_label = "Manufacturer";
$store_area_of_product_label="Store_Area";
$price_type_product_label="Price Type";
$id_of_company_label="Company ID";
$name_of_the_comapny_label = "Company Name";
$retail_option="Retail";
$wholesale_option="Wholesale";
$ipc_from_upc_label="UPCCode";
$id_of_item_label="Item_id";
$id_of_category_label="Category_id";
$price_of_product_label="Price";
$id_of_currency_label="Currency_id";
$quantity_of_products_in_stock="Product Quantity";
$order_select_label="Order";
$supplier_of_product_label="Supplier";
$type_of_id_product_label="Id_type";
$name_of_street_label="Street";
$name_of_city_label="City";
```


Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

```
$name_of_state_label="State";
$name_of_province_label="Province";
$name_of_postcode_label="PostCode";
$name_of_country_label="Country";
$name_of_phone_label="Phone";
$name_of_fax_label="FAX";
$name_of_email_label="E-mail";
$name_of_url_label="URL";
$address_of_warehouse_label="Warehouse Address";
$contract_sum_label="Contract Sum";
$order_quantity_label="Quantity";
$sum_of_order_label="Sum";
$tax_of_pr_label="Tax";
$total_price_label="TOTAL";
$search_for_items_submit="Search Items";
$search_for_services_submit="Search services";
$order_for_product_submit="Submit order";

//Error messages
$auth_error_msg = "Authentication error";
$order_no_submit_msg = "The order was not submitted";
$order_ok_submit_msg = "The order was submitted";
$no_goods_in_search_msg="Sorry, there are no goods with your requirments";
```

26.4 AUCTION

```
<?
//alert Try to avoid  using the character '.
//If you want to use it add a \ in front of it.
$alert_enter_pr_name = "Enter product\'s name";
$alert_enter_pr_det =  "Enter product\'s description";
$alert_enter_pr_prod =  "Enter product\'s producer";
$alert_enter_pr_sprice =  "Enter product\'s start price";
$alert_enter_pr_rprice =  "Enter product\'s reserve price";
$alert_enter_wrong_pr_rprice =  "Wrong reserve price for item";
$alert_enter_less_pr_rprice =  "Reserve price can\'t be less than start price";
$alert_enter_year =  "Enter year";
$alert_wrong_year =  "Wrong value for year";
$alert_end_year = "Enter year in the end time";
$alert_wrong_end_year = "Wrong value for year in the end time";
$alert_sdate_sooner_today ="The start day is sooner than today";
$alert_edate_sooner_sday ="The end day is sooner than the start day";
$alert_insert_image ="Please insert a image";
//error links
$no_permission_msg="You dont have a permit for this action.";

//Menu links
$current_lots_link = "Current lots";
$future_auction_link = "Future auction";
$search_link = "Search";
$register_new_item_link="Register new item";
$personal_activity_link="Personal activity";
$converter_link = "Currency Converter";
$order_logout_link = "Return To Portal";
//Main page
$welcome_msg = "Wellcome to Auction";
$hello_msg = "Hello";
```


Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

```
//Current LOts page
$current_lots_title = "Currrent Lots";
$go_item_link="Go";
$page_label="Page";
$no_cur_lots_msg = "There is no current Lots.";

//Item Details labels
$name_of_item="Name";
$description_of_item="Description";
$producer_of_item="Producer";
$picture_of_item="Picture";
$start_price_of_item="Start price";
$start_date_of_item="Started from";
$finish_date_of_item="Time of finishing";
$current_price_of_item="Current price";
$list_of_binds_of_item="List of bids";
$category_of_item="Category";
$open_auction_time="Open time";
$close_auction_time="Close time";
$label_of_year = "year";
$label_of_month = "month";
$label_of_day = "day";
$label_of_hour = "hour";
$reserve_price_of_item="Reserve price";
$picture_of_item_label="Picture";

$put_your_price_label="Your price";
$ask_bargain="Bargain?";

//search bolleans
$boolean_and = "AND";
$boolean_or = "OR";
$option_all="ALL";
$label_of_before = "before";
$label_of_after = "after";
$label_of_justin = "just in";
$search_label_submit = "Search";
$reset_label_submit = "Reset";

$no_items_msg_in_search = "There is no items on your requirements.";
$new_search_link = "New Search";
$no_parameter_search_link = "No parameters to search.";
$no_criterias_search="Sorry! You didn't enter the criterias.";
$search_big_title="Search";

//View LOT in auct.phtml
$lot_num_title="Lot N";

//auction.phtml and list.phtml
$closed_lot_label="Lot closed!";
$lot_sold_on_label="Lot sold on";
$from_label="from";
$on_label="on";

//Put new binds
$bind_finish_ok_msg="OK!";
$bind_approached_price_msg="Sorry! Yor price was aproached before.";
```


Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

```
//Future lots
$future_lots_title="Future Lots";
$no_fut_lots_msg = " There is no appointed auctions.";


//ADD OR UPDATE NEW PRODUCT
$ask_all_choice_select = "all";
$no_file_upload_msg = "File already exists!";
$file_uploaded_msg ="File copied!";
$file_exist_msg = "File already exists!";
$auction_already_start_msg="Auction already started.";
$no_change_pr_of_item_warning="You can't change properties of this item";
$register_new_item_title = "Register New Item";

//your items
$status_label="Status";
$date_of_insert_label="Date of insert";
$bidsof_item_label="Bids";
$look_an_item_link="Look";
$sold_item_label="Sold";

//your bids
$your_current_bids_label="Your current bids";
$you_bid_item_label="You bid with item ";
$started_from_label="started from";
$hist_of_ur_bids_label="History of your bids";
$your_bids_on_item_label="Your bids on item";
$time_of_bid_label="Time";
$bids_on_item_label="Bids on item";
$price_of_bid_label="Price";
$no_have_items_msg="Sorry, you don't have registered items. ";


//left menu no more than 10 chars
$ur_items_left_menu="Your items";
$ur_bids_left_menu="Your bids";
$user_agreement_link="User Agreement";
$privacy_policy_link="Privacy Policy";
$remain_date_of_item="Remaining Time ";
$remain_minutes = "Minutes";
$remain_hours = "Hours";
$remain_days = "Days";
$remain_months = "Months";
$remain_years = "Years";

//converter
$curency_conv_label = "Currency Converter";
$curency_price_label = "Price";
$curency_curency_label = "Currency";
```

26.5 TERMS AND CONDITIONS

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

26.5.1 AUCTION SYSTEM

PRIVACY POLICY FOR REGNET AUCTION SYSTEM

1. A Special Note About Children
Children are not eligible to use our services and we ask that minors (under the age of 18) do not submit any personal information to us. If you are a minor, you can use this service only in conjunction with your parents or guardians.

2. Information We Collect
Our primary goal in collecting personal information is to provide you with a smooth, efficient, and customized experience. This allows us to provide services and features that most likely meet your needs, and to customize our service to make your experience easier.
In general, you can browse our site without telling us who you are or revealing any personal information about yourself. Once you give us your personal information, you are not anonymous to us.
If you choose to use our services, we may require you to provide contact and identity information, billing information, shipping information and other personal information as indicated on the forms throughout our site. Where possible, we indicate which fields are required and which fields are optional. You always have the option to not provide information by choosing not to use a particular service or feature.
If you choose to bid, buy or sell on our site, we collect information about your bidding, buying and selling behaviour. We also collect other users' comments about you in our feedback area.
If you establish a credit account with us to pay the fees we charge, we collect some additional information, including a billing address, a credit card number and a credit card expiration date and tracking information from checks or money orders.
If you send us personal correspondence, such as emails or letters, or if other users or third parties send us correspondence about your activities or postings on the site, we may collect such information into a file specific to you.

3. Our Use of Your Information
We use your information to facilitate the services you request. We use information in the file we maintain about you, and other information we obtain from your current and past activities on the site, to resolve disputes, troubleshoot problems and enforce our User Agreement. At times, we may look across multiple users to identify problems or resolve disputes, and in particular we may examine your information to identify users using multiple User IDs or aliases.
You agree that we may use personally identifiable information about you to improve our marketing and promotional efforts, to analyze site usage, improve our content and product offerings, and customize our site's content, layout, and services. These uses improve our site and better tailor it to meet your needs.
You agree that we may use your information to contact you and deliver information to you that, in some cases, are targeted to your interests, such as targeted banner advertisements, administrative notices, product offerings, and communications relevant to your use of the site. By accepting the User Agreement and Privacy Policy, you expressly agree to receive this information.

4. Our Disclosure of Your Information
Due to the existing regulatory environment, we cannot ensure that all of your private communications and other personally identifiable information will never be disclosed in ways not otherwise described in this Privacy Policy. By way of example (without limiting the foregoing), we may be forced to disclose information to the government or third parties under certain circumstances, third parties may unlawfully intercept or access transmissions or private communications, or users may abuse or misuse your information that they collect from our site. Therefore, although we use industry standard practices to protect your privacy, we do not promise, and you should not expect, that your personally identifiable information or private communications will always remain private.
As a matter of policy, we do not sell or rent any personally identifiable information about you to any third party. However, the following describes some of the ways that your personally identifiable information may be disclosed.
Advertisers. We aggregate (gather up data across all user accounts) personally identifiable information and disclose such information in a non-personally identifiable manner to advertisers and

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

other third parties for other marketing and promotional purposes. However, in these situations, we do not disclose to these entities any information that could be used to identify you personally. Certain information, such as your name, email address, password, credit card number, and bank account number, are not disclosed to marketing advertisers ever.

5. Control of Your Information
You are responsible for all actions taken with your User ID and password, including fees. Therefore we do not recommend that you disclose your password to any third parties. If you choose to share your User ID and password or your information with third parties to provide you additional services, you are responsible for all actions taken with your User ID and password and therefore you should review that third party's privacy policy. If you lose control of your password, you may lose substantial control over your personally identifiable information and may be subject to legally binding actions taken on your behalf.

6. Security.
Auction system uses industry standard practices to safeguard the confidentiality of your personal identifiable information, including "firewalls" and Secure Socket Layers. Auction system treats data as an asset that must be protected against loss and unauthorized access. We employ many different security techniques to protect such data from unauthorized access by users inside and outside the company. However, "perfect security" does not exist on the Internet.

REGNET AUCTION SYSTEM USER AGREEMENT
THE FOLLOWING DESCRIBES THE TERMS ON WHICH REGNET AUCTION SYSTEM OFFERS YOU ACCESS TO OUR SERVICES.

Welcome to the User Agreement. This Agreement describes the terms and conditions applicable to your use of our services. If you do not agree to be bound by the terms and conditions of this Agreement, do not use or access our services.
You must read, agree with and accept all of the terms and conditions contained in this User Agreement and the Privacy Policy, which include those terms and conditions expressly set out below and those incorporated by reference, before you may become a member of REGNET. We strongly recommend that, as you read this User Agreement, you also access and read the information contained in the other pages and websites referred to in this document, as they may contain further terms and conditions that apply to you as REGNET user.

1. Membership Eligibility
Our services are available only to individuals who can form legally binding contracts under applicable law. Without limiting the foregoing, our services are not available to minors or to temporarily or indefinitely suspended REGNET members. If you are a minor, you can use this service only in conjunction with your parents or guardians. If you do not qualify, please do not use our services. Further, your REGNET account (including feedback) and User Id may not be transferred or sold to another party.

2. Fees and Services
Joining and bidding on items at REGNET Auction is free. We may in our sole discretion change some or all of our services at any time. You are responsible for paying all fees associated with using our service and our website and all applicable taxes.

3. REGNET Auction system is a Venue

3.1 REGNET Auction is not an Auctioneer. Although we are commonly referred to as an online auction web site, it is important to realize that we are not a traditional "auctioneer." Instead, our site acts as a venue to allow anyone to offer, sell, and buy just about anything, at anytime, from anywhere, in a variety of pricing formats, including a fixed price format and an auction-style format commonly referred to as "online auctions" or "auctions." We are not involved in the actual transaction between buyers and sellers. As a result, we have no control over the quality, safety or legality of the items

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

advertised, the truth or accuracy of the listings, the ability of sellers to sell items or the ability of buyers to buy items. We cannot ensure that a buyer or seller will actually complete a transaction.

3.2 Identity Verification. We use many techniques to identify our users when they register on our site. However, because user verification on the Internet is difficult, REGNET cannot and does not confirm each user's purported identity. Thus, we have established a user-initiated feedback system to help you evaluate with whom you are dealing. We also encourage you to communicate directly with potential trading partners through the tools available on our site.

3.3 Release. Because we are a venue, in the event that you have a dispute with one or more users, you release REGNET Auction system from claims, demands and damages (actual and consequential) of every kind and nature, known and unknown, suspected and unsuspected, disclosed and undisclosed, arising out of or in any way connected with such disputes
3.4 Information Control. We do not control the information provided by other users that is made available through our system. You may find other user's information to be offensive, harmful, inaccurate, or deceptive. Please use caution, common sense, and practice safe trading when using our site. Please note that there are also risks of dealing with underage persons or people acting under false pretense. Additionally, there may also be risks dealing with international trade and foreign nationals.

4. Bidding and Buying
As a buyer, you are obligated to complete the transaction with the seller:

if you purchase an item through one of our fixed price formats; or

are the highest bidder at the end of an auction (meeting the applicable minimum bid or reserve requirements) and your bid is accepted by the seller, unless the transaction is prohibited by law or by this Agreement.

By bidding on an item you agree to be bound by the conditions of sale. Bids are not retractable except in exceptional circumstances, such as: when the seller materially changes the item's description after you bid; a clear typographical error is made; you cannot authenticate the seller's identity; or when the seller does not confirm your purchase in the Half.com area of our services. If you choose to bid on mature audience items or items that are restricted to adult use, you are certifying that you have the legal right to purchase such items.

5. Listing and Selling

5.1 Listing Description. You must be legally able to sell the item(s) you list for sale on our site. You must describe your item and all terms of sale on the listing page of our site. Your listings may only include text descriptions, graphics, pictures and other content relevant to the sale of that item. All listed items must be listed in an appropriate category.

5.2 Binding Bids. If you receive at least one bid at or above your stated minimum price (or in the case of reserve auctions, at or above the reserve price), you are obligated as the seller to complete the transaction with the highest bidder upon the auction's completion, unless there is an exceptional circumstance, such as: (a) the buyer fails to meet the terms of your listing (such as payment method), or (b) you cannot authenticate the buyer's identity.

5.3 Fraud. Without limiting any other remedies, REGNET Auction system may suspend or terminate your account if we suspect that you (by conviction, settlement, insurance or escrow investigation, or otherwise) have engaged in fraudulent activity in connection with our site.

5.4 Manipulation. Neither you, bidders nor sellers may manipulate the price of any item nor may you interfere with other user's listings or transactions.

6. Your Information

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

6.1 Definition. "Your Information" is defined as any information you provide to us or other users in the registration, bidding or listing process, in any public message area or through any email feature. You are solely responsible for Your Information, and we act as a passive conduit for your online distribution and publication of Your Information.

6.2 Restricted Activities. Your Information (or any items listed) and your activities on the site shall not: (a) be false, inaccurate or misleading; (b) be fraudulent or involve the sale of counterfeit or stolen items; (c) infringe any third party's copyright, patent, trademark, trade secret or other proprietary rights or rights of publicity or privacy; (d) violate any law, statute, ordinance or regulation (including, but not limited to, those governing export control, consumer protection, unfair competition, antidiscrimination or false advertising); (e) be defamatory, trade libelous, unlawfully threatening or unlawfully harassing; (f) be obscene or contain child pornography or, if otherwise adult in nature or harmful to minors, shall be posted only in the Mature Audiences section and shall be distributed only to people legally permitted to receive such content; (g) contain any viruses, Trojan horses, worms, time bombs, cancelbots, easter eggs or other computer programming routines that may damage, detrimentally interfere with, surreptitiously intercept or expropriate any system, data or personal information; (h) create liability for us or cause us to lose (in whole or in part) the services of our ISPs or other suppliers; and (i) link directly or indirectly to or include descriptions of goods or services that: (aa) are prohibited under this Agreement; (bb) are identical to other items you have up for auction but are priced lower than your item's reserve or minimum bid amount; (cc) are concurrently listed for sale on a web site other than REGNET Auction's (this does not prevent linking to or advertising a REGNET Auction item from another web site); or (dd) you do not have a right to link to or include.

6.3 License. Solely to enable REGNET Auction system to use the information you supply us with, so that we are not violating any rights you might have in that information, you agree to grant us a non-exclusive, worldwide, perpetual, irrevocable, royalty-free, sublicensable (through multiple tiers) right to exercise the copyright, publicity, and database rights (but no other rights) you have in Your Information, in any media now known or not currently known, with respect to Your Information. REGNET Action system will only use Your Information in accordance with our Privacy Policy.

7. Access and Interference

Our web site contains robot exclusion headers and you agree that you will not use any robot, spider, other automatic device, or manual process to monitor or copy our web pages or the content contained herein without our prior expressed written permission. You agree that you will not use any device, software or routine to bypass our robot exclusion headers, or to interfere or attempt to interfere with the proper working of the REGNET site or any activities conducted on our site. You agree that you will not take any action that imposes an unreasonable or disproportionately large load on our infrastructure. Much of the information on our site is updated on a real time basis and is proprietary or is licensed to REGNET Auction system by our users or third parties. You agree that you will not copy, reproduce, alter, modify, create derivative works, or publicly display any content (except for Your Information) from our website without the prior expressed written permission of REGNET Auction system or the appropriate third party.

8. Feedback

8.1 Integrity. You may not take any actions that may undermine the integrity of the feedback system. If you earn a net feedback rating of -4 (minus four), your membership may be suspended, and you may be unable to list or bid.

8.2 Export. You acknowledge that your feedback consists of comments left by other users and a composite feedback number compiled by REGNET Auction system, and that the composite number without the comments does not convey your full user profile. Because feedback ratings are not designed for any purpose other than for facilitating trading between REGNET Auction users, you agree that you shall not market or export your REGNET Auction system feedback rating in any venue other than an REGNET Auction system operated website

8.3 Import. We do not provide you the technical ability to import feedback from other (non-REGNET operated) websites to REGNET Auction because a composite number, without the corresponding feedback does not reflect your true online reputation within our community.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

9. Breach
Without limiting other remedies, we may immediately remove your item listings, warn our community of your actions, issue a warning, temporarily suspend, indefinitely suspend or terminate your membership and refuse to provide our services to you if: (a) you breach this Agreement or the documents it incorporates by reference; (b) we are unable to verify or authenticate any information you provide to us; or (c) we believe that your actions may cause financial loss or legal liability for you, our users or us.

10. Privacy
We do not sell or rent your personal information to third parties for marketing purposes without your consent and we only use your information as described in the Privacy Policy. We view protection of users' privacy as a very important community principle. We understand clearly that you and your information is one of our most important assets.

11. Legal Compliance
You shall comply with all applicable domestic and international laws, statutes, ordinances and regulations regarding your use of our service and your bidding on, listing, purchase, solicitation of offers to purchase, and sale of items.

12. No Agency
You and REGNET Auction are independent contractors, and no agency, partnership, joint venture, employee-employer or franchiser-franchisee relationship is intended or created by this Agreement.

13. Notices
Notice shall be deemed given 24 hours after email is sent, unless the sending party is notified that the email address is invalid. Alternatively, we may give you notice by certified mail, postage prepaid and return receipt requested, to the address provided to REGNET during the registration process. In such case, notice shall be deemed given 3 days after the date of mailing.
14. General
This Agreement shall be governed in all respects by the European laws as such laws are applied to agreements entered into and to be performed entirely within EUROPE between European residents. We do not guarantee continuous, uninterrupted or secure access to our services, and operation of our site may be interfered with by numerous factors outside of our control. If any provision of this Agreement is held to be invalid or unenforceable, such provision shall be struck and the remaining provisions shall be enforced. You agree that this Agreement and all incorporated agreements may be automatically assigned by REGNET Auction, in our sole discretion, to a third party in the event of a merger or acquisition. Headings are for reference purposes only and in no way define, limit, construe or describe the scope or extent of such section. Our failure to act with respect to a breach by you or others does not waive our right to act with respect to subsequent or similar breaches.

26.5.2 E-SHOP

Terms and conditions

Our Agreement
This agreement is a legal document which sets out your rights and obligations, and those of REGNET e-shop, in relation to the services offered by us through this site or any of the other REGNET E-SHOP sites to which we link.

Effect of this agreement

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

Viewing of the REGNET E-SHOP site itself is free; but when you register for the site, you agree to the terms of this agreement, and you re-affirm that agreement every time you use the REGNET E-SHOP services.

Making a contract with us

In return for the excellent service we will give you, we ask that you agree to register for REGNET E-SHOP sales using your correct name, address and any other requested details. You may be asked to enter credit, debit or charge card details. You must ensure that (a) you are fully entitled to use that card at the time when you provide those details to REGNET E-SHOP, and when you use the card, and b) the card has available funds to cover all charges incurred on it in the course of buying from us. If any of the information you enter becomes incorrect or is superseded, then please notify us with the corrected information immediately.
In any event, to register for REGNET E-SHOP services, you must legally be able to enter into contracts for goods and services that you may buy here. Generally, this means that you must be at least 18 years old.

Misuse of our site

REGNET E-SHOP reserves the right to suspend or terminate any members account which, is, or appears to us in our absolute discretion, to be, in breach of any of the provisions of this agreement.
When will you be charged?
Your credit or debit card will be charged immediately on completion of the order.

Can I return the goods?
If you are in anyway dissatisfied within a 28 day period of purchase then you may return your print(s) at your own cost for a complete refund.

Tax & Duties

We have to charge VAT on all goods and services where applicable. And if you want your purchase to be delivered outside the European Union, you will automatically be responsible for paying all applicable duties.

Corrections

The descriptions of goods and services included in the REGNET E-SHOP site are accurate to the best of our knowledge. We do our best to correct errors or omissions as soon as we are aware of them. However, you should know that the colours and appearance of images, mounts and frames may vary very slightly from the way they appear on the screen.

Copyright

The images and designs used on the REGNET E-SHOP website are the property of REGNET COMMUNITY or their respective copyright owners, and are used by REGNET E-SHOP pursuant to express authorisation from copyright owners or their agents. You acknowledge that all copyright, trademarks and other intellectual property rights in and relating to REGNET E-SHOP are vested in REGNET E-SHOP or our partners where appropriate. You must not use, reproduce, modify or distribute our images or any part of those images in any manner, whatsoever. In the event that there is any dispute between us in relation to this issue, you agree that until the matter is resolved, an interim injunction will be an appropriate remedy. An Interim injunction is a court order, which would prevent any further use or distribution of the image that we are concerned about, until a final court hearing where the court will make a decision on all the facts.

Loss

Please be aware that we will not be liable to you or any third party for any indirect or loss or damage, or for any loss of data, profit, revenue, business or management time, howsoever caused.

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.

Reasonable Control

REGNET E-SHOP shall not be liable for any failure to perform its obligations under this agreement if caused by matters beyond our reasonable control.

Changes to this Agreement

Due to the fact that some clever clogs is always coming up with new rules and regulations, REGNET E-SHOP reserves the right to change the terms of this agreement from time to time, and post a new version on our website. The new version will take effect from the day of posting on the site. Price and availability information are also subject to change without notice.

Severability

In the event that any term of this agreement is held to be unenforceable or invalid by judicial decree or decision, the remainder of this agreement shall remain valid and enforceable.

Security & Privacy

We want to reassure you that any information you give us during the registration or ordering process as well as any that we know about you by other means will be protected. We also feel it is important that you know exactly how any information you give us is used and that all information is collected lawfully and in accordance with the Data Protection Act 1998.

How we use your data

The privacy policy forms part of the agreement between us, and by purchasing goods from our site, you agree to be bound by the terms and conditions of the agreement between us. You also give your consent to the way we may handle your personal data in the way stated in this policy statement.
REGNET E-SHOP will not use this data, or disclose it to any other party, either during registration or at any other time, without your express permission, given during registration or at some other time.
We may, however, disclose this data if compelled to do so by law, or in response to a valid request (deemed at our absolute discretion) from a law enforcement or government agency.
To provide a service that meets our customer needs, we may collect personal data relating to the popularity and usage of particular aspects of the site or related REGNET E-SHOP sites. However this data will be used or aggregated only on an anonymous basis.

How we protect your data

Any credit card information you give us will be held at a secure and separate site, and once we have authorised your purchase, we will delete part of the number and details, so that even in the highly unlikely event that our site security was breached for any reason your credit card details would be unusable.
If you have any questions about the way information about you is used, please contact us at admin@REGNET.gr

Copyright © 2003 The REGNET Consortium
No part of this document may be reproduced, in any form, or by any means, without prior written permission of the REGNET Consortium.