



Automating Production of Cross Media Content for Multi-channel Distribution

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DE9.5.3

First Prototype of Content Production and Distribution on-demand for Mobiles and new generation PDAs

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Author(s): ILABS (David Fuschi)

Abstract: This document provides the basic information needed to understand the related deliverable that being a prototype cannot be accessed like other reports.

Keyword List: Mobile, PDAs, Distribution, Application.

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1 Executive Summary and Report Scope

The present document represents the accompanying document of the prototype named DE9.5.2 Content production and distribution for Mobiles and new generation PDAs. Aim and purpose of the present document is therefore to provide a basic supportive documentation to describe the prototype.

2 Introduction to the Mobile Demo

Initially focus was placed on the possibility to simplify the management of the process from a client perspective as the present number of constraints for mobile-based delivery of content is quite relevant. The application designed covers primarily two aspects of the process, namely the management side and the end user client. The management side is primarily devoted to the distributor that has to manage the mobile delivery channel and basically covers aspects like content categories selection and activation (this includes the definition of the query that will be executed at run-time and that is associated to each category), device and user profile management.

The end user side covers the search and retrieval of content and is clearly relying on the category definition performed by the distributor. Each category (at client side) is basically representing a special query that is placed at server side when the user selects the category. The query returns the list of objects that the user can access (for preview or acquisition). Once the selection is performed the user can purchase the content and, once completed the process, also access to it using the specific player (eventually downloaded in advance).

The initial version of the Mobile distributor application has been developed and demonstrated (including category management both at server and client side)

2.1 Where to find the demo and other supportive material

The demo application could be found on the project CVS while objects used are to be found in the set of supportive material coming with the Query Support installation pack. Furthermore the Wiki page of the project related to demos provides access to screen based video recording that should support in the process. Hereafter all such references are explicitly reported.

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2.2.1 Demo software location

The software for the demo is to be found on the project CVS (<https://cvs.axmedis.org/newrepos/>) under the "applications" area (<https://cvs.axmedis.org/newrepos/Applications/>) and more specifically inside the Mobile Components section (<https://cvs.axmedis.org/newrepos/Applications/mobilecomponents/>)

It is, nevertheless, necessary to take into account that the application demo makes usage of the underlying infrastructure either locally (that is having the AXMEDIS framework installed locally) or remotely (accessing to it via the provided web-services. To this purpose we will also recall that:

- AXMEDIS framework can be found at the address: <https://cvs.axmedis.org/newrepos/Framework/>
- AXMEDIS web-services can be found at the address: <https://cvs.axmedis.org/newrepos/WebServices/>

Last but not least it will be necessary to find ready made objects to be used for the testing. Such objects are available at the following addresses:

- Generic sample objects: http://www.axmedis.org/documenti/view_documenti.php?doc_id=2056
- Objects included in the Query Support installation:
<https://cvs.axmedis.org/newrepos/Framework/doc/other/axdb/Mysql-4.1.10/SavedObjects.zip>

As previously mentioned, supportive documentation and videos can be found both on the project web-site (<http://www.axmedis.org>) and on the project wiki (<http://www.axmedis.org/tiki/>).

Videos of the early demonstrations on the portal are to be found at the following download address:

http://www.axmedis.org/attivita/documenti/download.php?area_id=1&attivita_id=27&l_s=struttura&gruppo=413&order_by=data&asc_desc=desc where:

- axmedis-mobile-factory1-july2006.avi
(http://www.axmedis.org/documenti/view_documenti.php?doc_id=2187)
- axmedis-mobile-factory2-july2006.avi
(http://www.axmedis.org/documenti/view_documenti.php?doc_id=2188)

Videos of the early demonstrations on the wiki are to be found at the following download address:

- Distributor point of view (http://www.axmedis.org/documenti/view_documenti.php?doc_id=2187)
- End User point of view (http://www.axmedis.org/documenti/view_documenti.php?doc_id=2188)

2.3 The overall scenario

How does it work distribution to Mobiles in AXMEDIS? Well this is a specialised distribution channel operating at B2C level and covering a quite dispersed set of user needs and activities. In more details it represents a point of service where users will connect to search and retrieve content related to their activities and interests with a common usage of technology and distribution tools. Users will have a very simple and self-explanatory interface that will present content by category, where each category basically represents a specific query that will return a list of objects matching the criteria used to define the category. Contents will be adapted to end user device in order to maximise the efficiency in the delivery phase. User preferences will be taken into account at content production and organisation level so to define proper categories in the light of end-user selections.

How does the distribution to mobile area fit in to the rest of AXMEDIS? It sits at the Distributors level (as shown in the following figure)

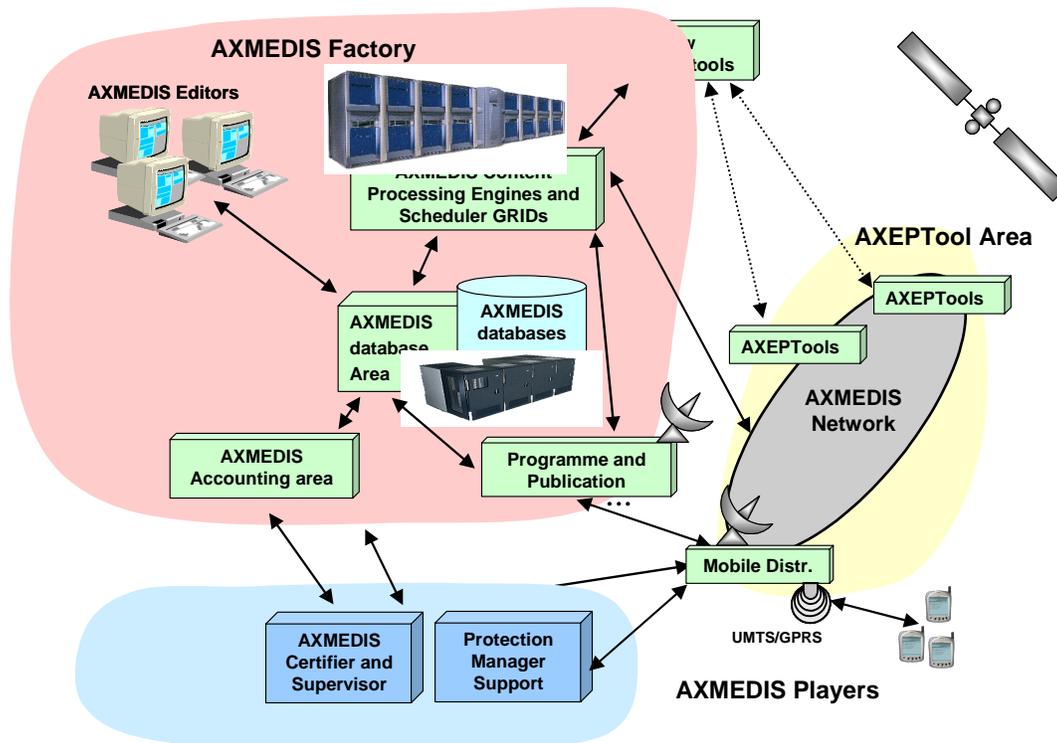


Figure: AXMEDIS Architecture highlighting the Mobile Area

To deliver AXMEDIS objects using through mobile devices, there are two scenarios:

Scenario 1. In the first scenario a publisher prepares content that wants to distribute to mobiles. The publisher needs to select a list of objects, arrange them into categories, define the query needed to retrieve such objects, create the needed categories and activate them. User performed operations (download and acquisition) will have to be monitored and then used to further enhance the content selection and offer step.

Scenario 2. In the second (On-Demand) scenario, a user selects an object in the AXMEDIS Distribution Area. The request from the distribution area starts a series of events behind the scenes where the user sees the object requested.

2.3.1 Mobile content selection, categorisation & distribution

A publisher prepares content that wants to distribute a particular set of content via mobile. The publisher needs to select a list of objects, arrange them into categories, define the query needed to retrieve such objects, create the needed categories and activate them. User performed operations (download and acquisition) will have to be monitored and

then used to further enhance the content selection and offer step. The publisher needs to select a list of objects, create/modify the categories to be seen by the end-user, create the query to connect to the created category. Last but not least activate the category. So operatively the publisher, by using the AXMEDIS Query support, searches the desired objects and selects the one to be used for the distribution via mobile. By using the AXMEDIS Editor and a specific application the publisher produces the categories that the user will see and the related queries. On completion, the publisher activates the desired categories that from that moment on will be available to the end-user for selection.

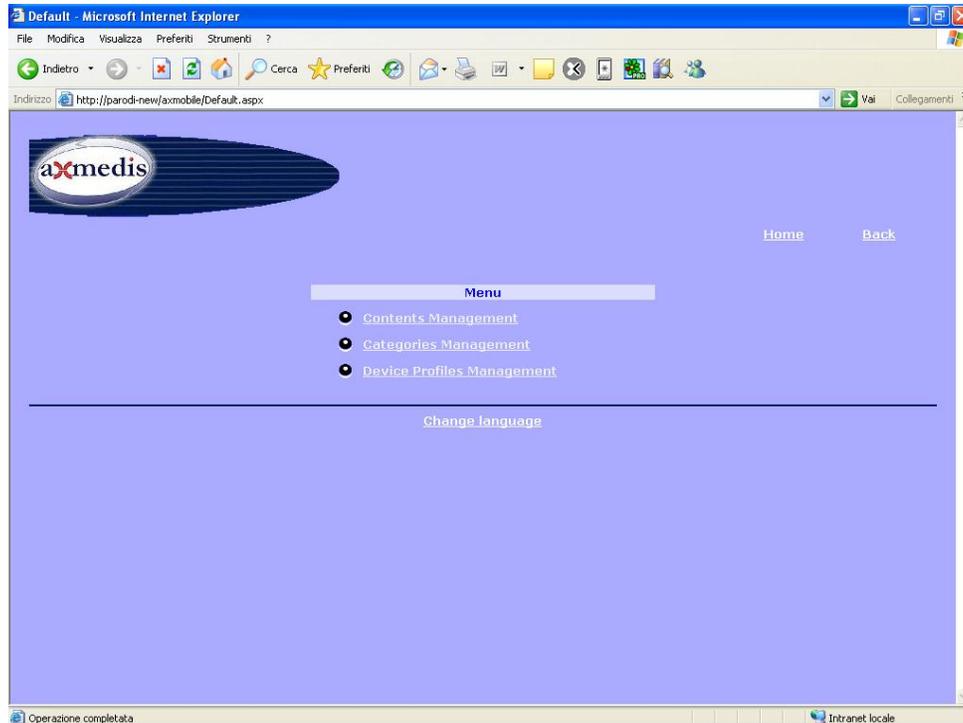


Figure: Publisher's application home page

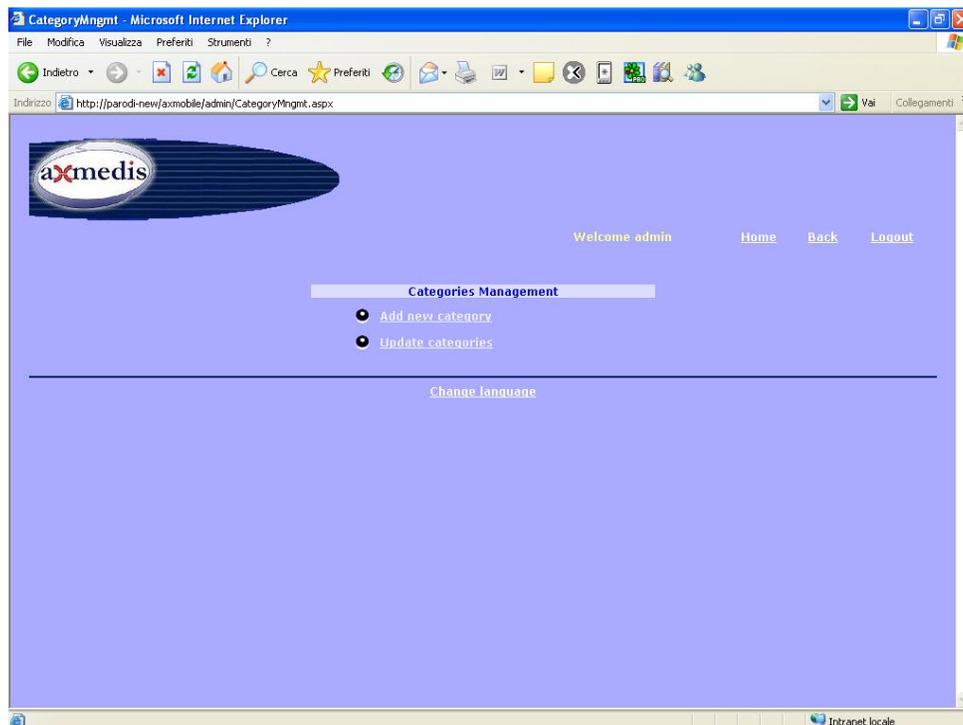


Figure: Categories management home page

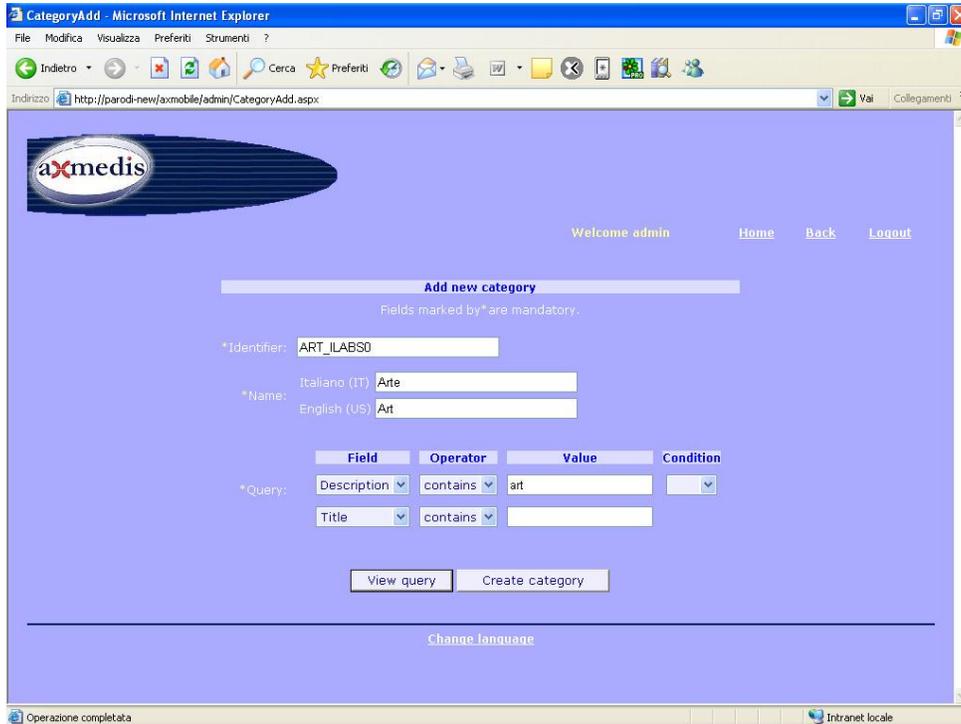


Figure: Adding a new category

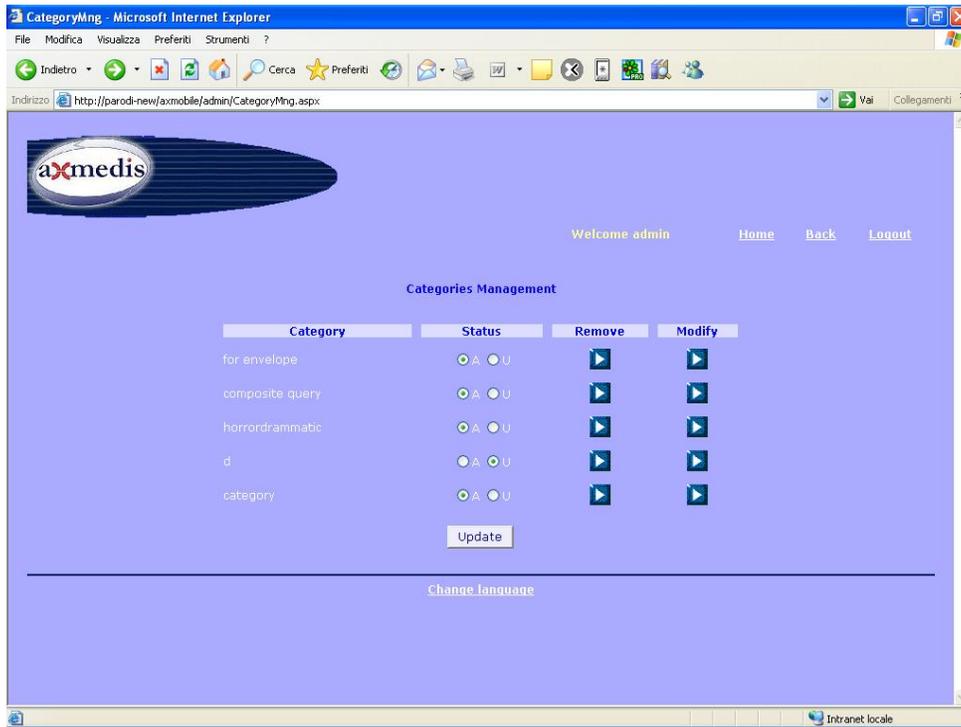


Figure: Updating a category

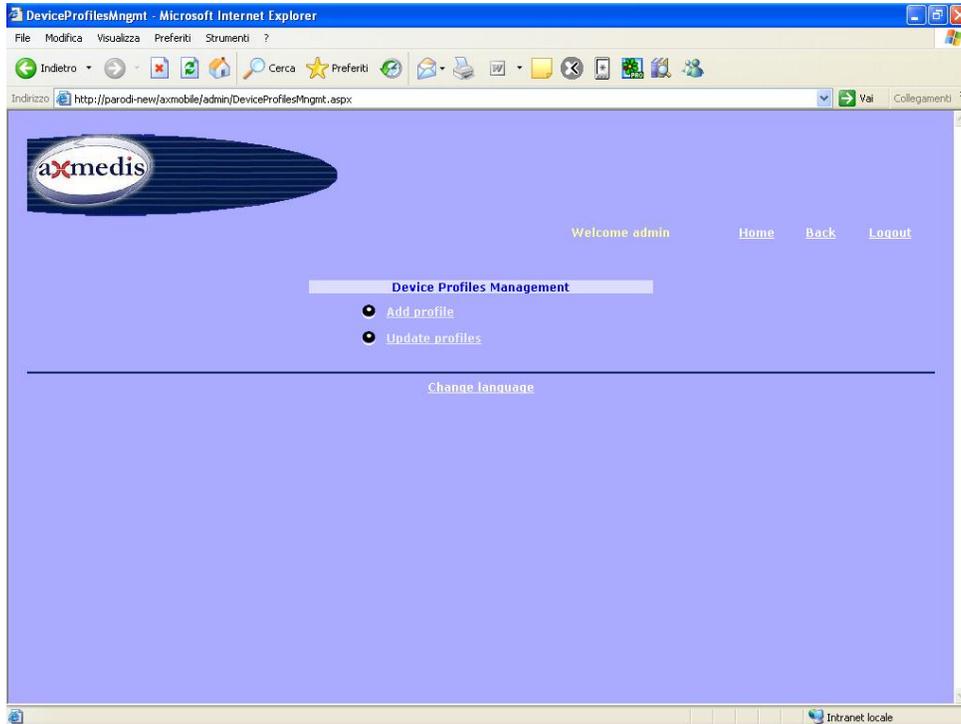


Figure: Profile management home page

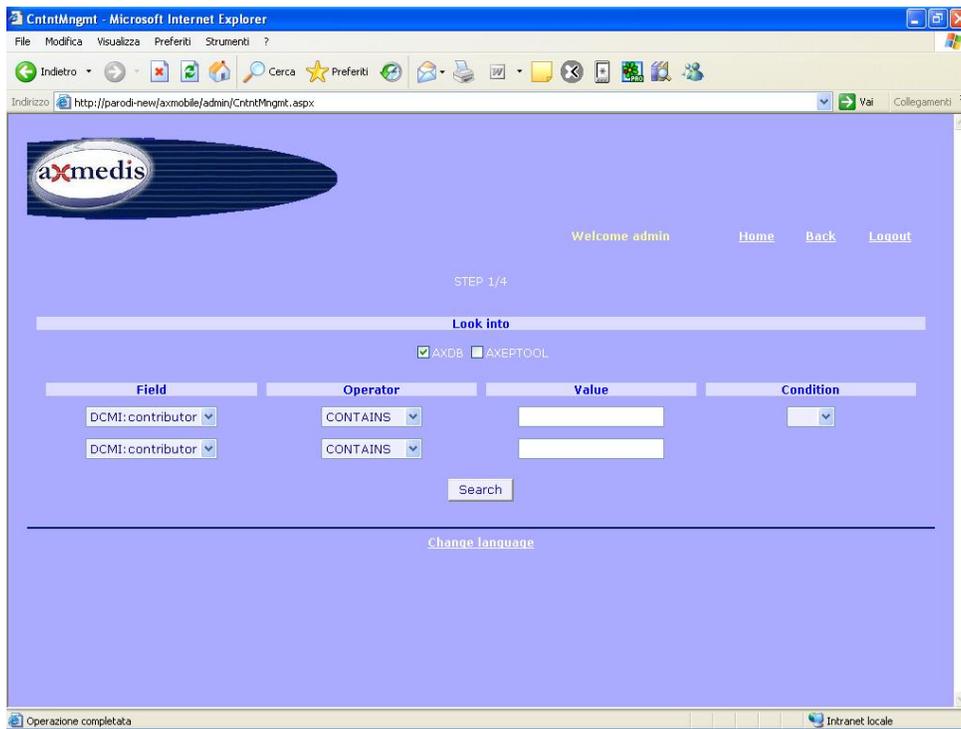


Figure: Content selection & distribution process step 1 of 4

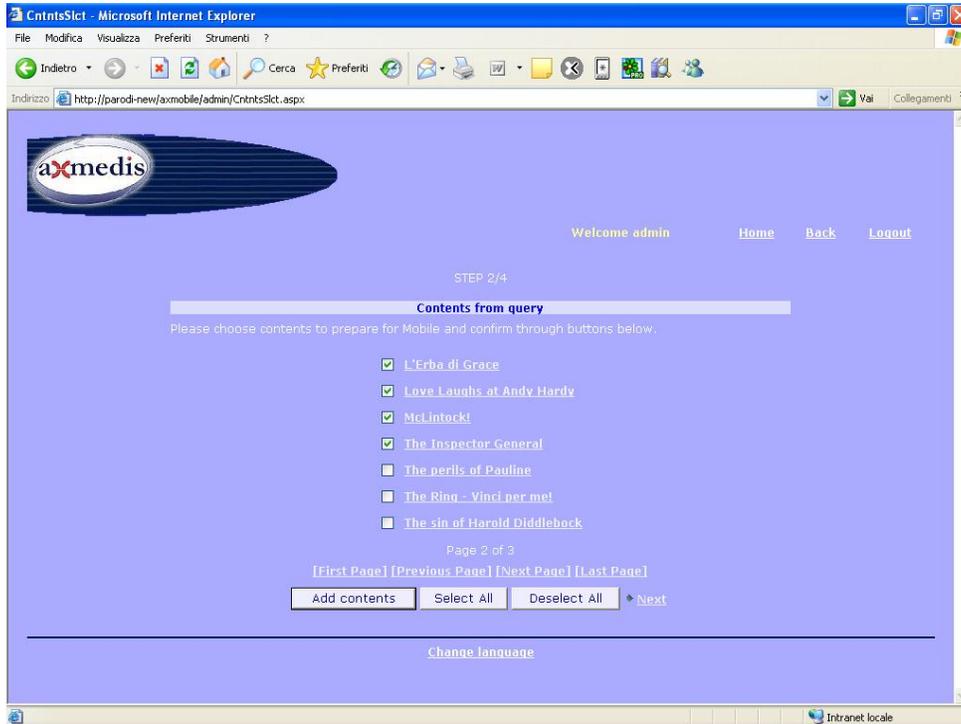


Figure: Content selection & distribution process step 2 of 4

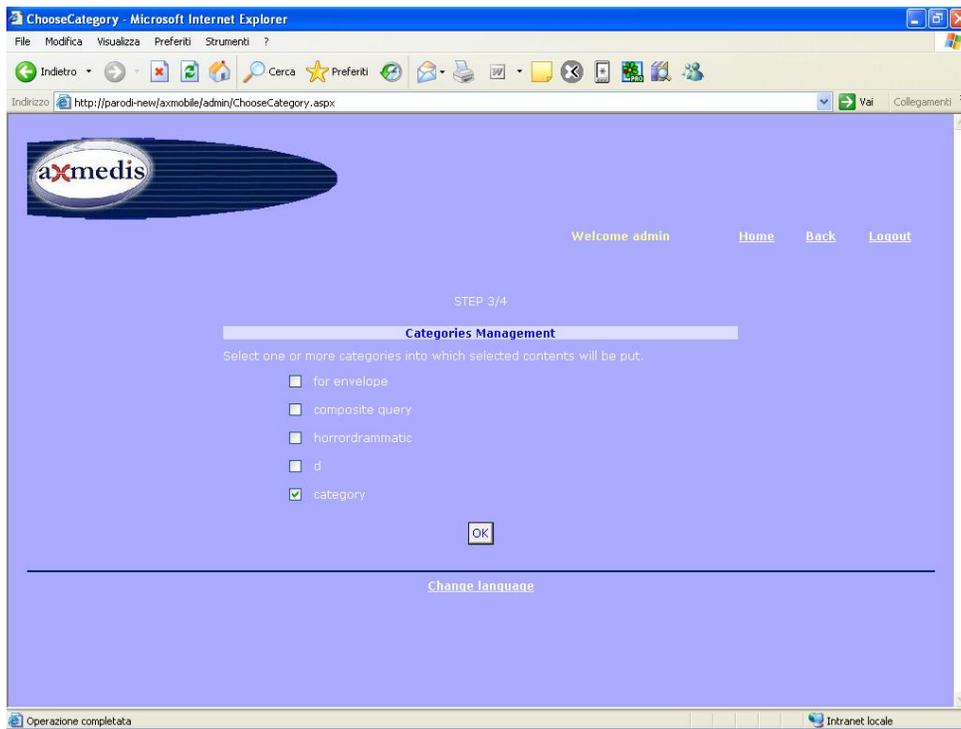


Figure: Content selection & distribution process step 3 of 4

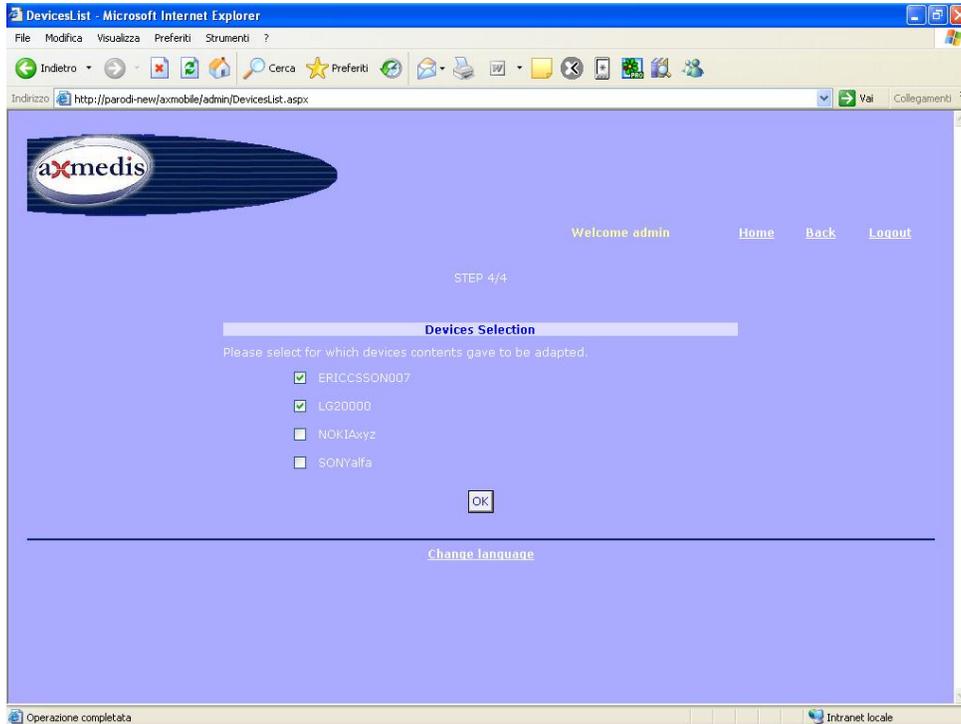


Figure: Content selection & distribution process step 4 of 4

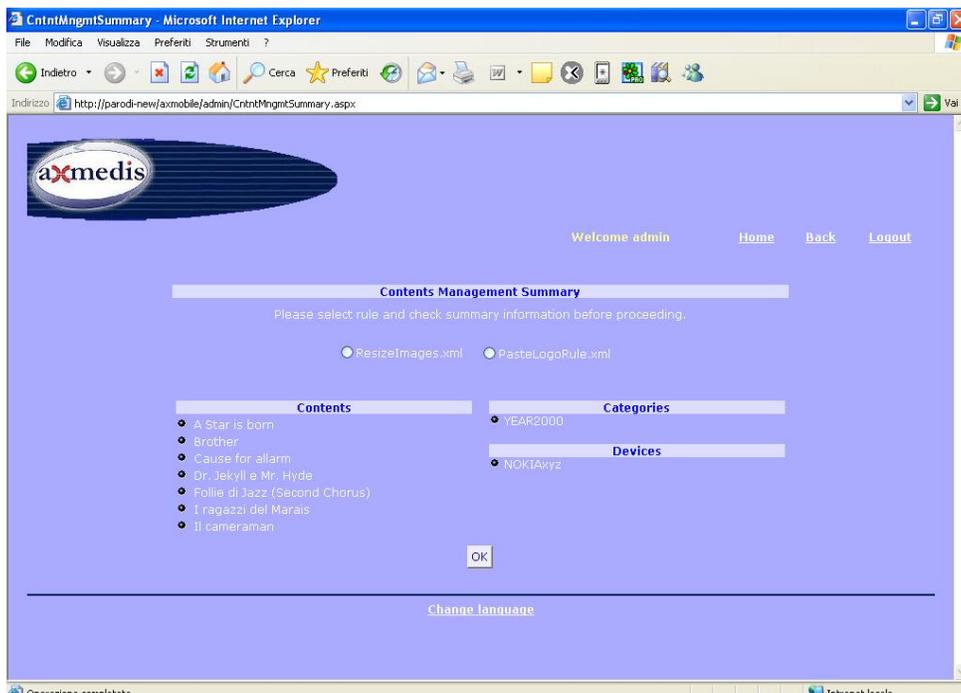


Figure: Content selection & distribution process: summary and activation

2.3.2 Mobile content Distribution & fruition

So what happens when a mobile distribution channel is used? The user shall register or log onto the mobile distribution portal to be recognised and authorised to access to provided services. The user will be able to browse the available categories and select one. This will automatically activate the related query for content retrieval, delivery and fruition. In this latter phase the user will be able to select also the fruition model (acquisition, rental, pay per use...) and experiment what it looks like a DRM empowered system specifically designed to cover the whole value-chain from production to fruition. As a matter of facts the system will show how only allowed operation can be performed while all others are inhibited.

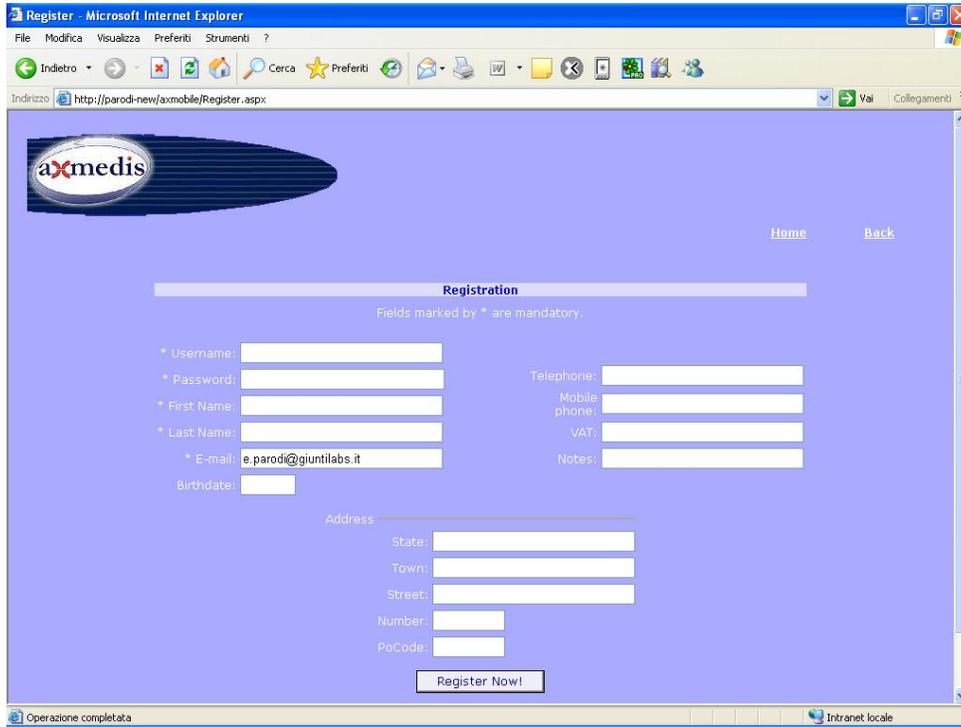


Figure: User registration on the distributor portal



Figure: content accessing via Mobile 1/8



Figure: content accessing via Mobile:login 2/8



Figure: content accessing via Mobile: registration 3/8



Figure: content accessing via Mobile 4/8



Figure: content accessing via Mobile 5/8



Figure: content accessing via Mobile 6/8

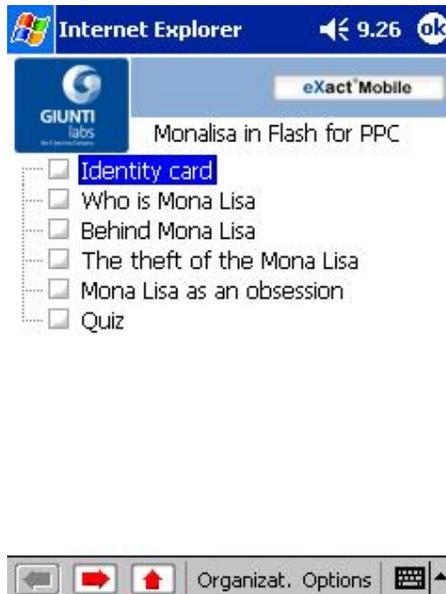


Figure: content accessing via Mobile 7/8



Figure: content accessing via Mobile 8/8

2.3.3 Conclusion

The mobile distribution environment shall enable to test basically all components of the AXMEDIS framework in the content preparation and distribution at distributor level, browsing, acquisition and fruition at mobile-end user level. At user level this demonstrator will trial solution related to combination of business model merging into a mobile-based infrastructure for content search, selection, acquisition and fruition.

3 Bibliography and references

AXMEDIS-DE2-1-1a-UserRequirements-v1-0.pdf

AXMEDIS-DE2-1-1b-UseCases-v1-6.pdf

AXMEDIS-DE3-1-2I-AXFW-Spec-(Distribution-and-Portal)-Part-I-v3-0-closed.pdf

AXMEDIS-DE9-5-1-2-Spec-Prod-Dist-on-Mobile-v1-7.doc

AXMEDIS Public documents

Framework Specifications

(http://www.axmedis.org/area_4/doc.php?l_s=struttura&gruppo=14&order_by=data&asc_desc=asc)

Framework basic technology

(http://www.axmedis.org/area_4/doc.php?l_s=struttura&gruppo=17&order_by=data&asc_desc=asc)

Test cases

(http://www.axmedis.org/area_4/doc.php?l_s=struttura&gruppo=15&order_by=data&asc_desc=asc)

Tutorials

(http://www.axmedis.org/area_4/doc.php?l_s=struttura&gruppo=18&order_by=data&asc_desc=asc)

Content guidelines

(http://www.axmedis.org/area_4/doc.php?l_s=struttura&gruppo=16&order_by=data&asc_desc=asc)

Other documents

(http://www.axmedis.org/area_4/doc.php?l_s=struttura&gruppo=2&order_by=data&asc_desc=asc)

Sources

Mobile distribution demo: <https://cvs.axmedis.org/newrepos/Applications/mobilecomponents/>

AXMEDIS framework: <https://cvs.axmedis.org/newrepos/Framework/>

AXMEDIS web-services: <https://cvs.axmedis.org/newrepos/WebServices/>

Sample objects

Generic sample objects: http://www.axmedis.org/documenti/view_documenti.php?doc_id=2056

Query Support related: <https://cvs.axmedis.org/newrepos/Framework/doc/other/axdb/Mysql-4.1.10/SavedObjects.zip>

Videos

axmedis-mobile-factory1-july2006.avi (http://www.axmedis.org/documenti/view_documenti.php?doc_id=2187)

axmedis-mobile-factory2-july2006.avi (http://www.axmedis.org/documenti/view_documenti.php?doc_id=2188)

Distributor point of view (http://www.axmedis.org/documenti/view_documenti.php?doc_id=2187)

End User point of view (http://www.axmedis.org/documenti/view_documenti.php?doc_id=2188)

4 Terminology

Not applicable, for reference it is always possible to access glossaries provided for previously reported deliverables.