



## Deliverable D19.0.2

### Notification of Delivery of the PrestoSpace Orchestrator (PSO)

DOCUMENT IDENTIFIER	PS_WP19_EURIX_D19.0.2_PSO_v1.4
DATE	08/01/2008
ABSTRACT	This document notifies the delivery of the PrestoSpace Orchestrator component of the PrestoSpace Factory. This component, also known as PSO, is a software layer which automates the communication and the interaction among the PrestoSpace factory's components, namely PRE, RES, and MAD units. In this deliverable we describe in detail functionalities, architecture, implementation and usage of PSO.
KEYWORDS	metadata, web services, modular components, digitisation, metadata extraction, multimedia data access, multimedia data delivery, software integration, work flow management system
WORKPACKAGE / TASK	WP19
AUTHOR, COMPANY	W. Allasia, A. Damiani, S. Ridolfi, F. Toscano, M. Vigilante, euriX Group
NATURE	Prototype
DISSEMINATION	Confidential

#### DOCUMENT HISTORY

Release	Date	Reason of change	Status	Distribution
0.1	2004-02-27	First Draft	Living	Confidential
1.0	2004-12-20	Working Draft	Living	Confidential
1.1	2005-01-24	Release Candidate	Living	Confidential
1.2	2007-07-31	Release Candidate	Living	Confidential
1.3	2008-01-08	Final Release	Closed	Confidential
1.4	2008-02-25	Disclosed as public	Closed	Public

Contents Table

- 1. Document Scope..... 3
- 2. Executive Summary ..... 3
- 3. Archives – PSO interaction ..... 3
  - 3.1. Human interface..... 4
  - 3.2. Machine-to-Machine interface..... 8
- 4. Units – PSO interaction ..... 9
- 5. Delivery of software ..... 9
- 6. Licensing ..... 10
- 7. Bibliography..... 10
- 8. Glossary ..... 10

# 1. Document Scope

---

This deliverable is about the PrestoSpace Orchestrator (PSO) component of the PrestoSpace factory. The PrestoSpace Orchestrator is a software component whose role is to coordinate all the units of the PrestoSpace factory, namely the PREservation unit, the REStoration unit and the MAD unit.

It's possible to find a complete description of the architecture of the PSO in the deliverable **[D19.1]**.

The main aim of this document is the description of the way the PSO is delivered and some instructions on how it can be used.

In this document will be described the interaction between Archives and PSO and the interaction between PSO and Units.

The PSO is only a prototype, a proof of concept of the possibility of making the process of preservation of audiovisual contents in a almost automatic way.

# 2. Executive Summary

---

The PSO is prototype software developed for the integration of Units of the PrestoSpace project.

The Units are Preservation, Documentation and Restoration Units whose aim is the preservation and enrichment of audiovisual contents.

# 3. Archives – PSO interaction

---

As described in document **[D19.1]** the PSO provides some web interfaces to Archives and Units. In the case of communication between Archives and PSO we can have a human interaction and a machine-to-machine interaction.

Probably small Archives will prefer the first type of interaction (human-to-machine interaction) because it's simpler. Big Archives will prefer the machine-to-machine interaction.

The use of Web Services interface for communication between actors of the process it's useful because in this way we can not be link to any specific technology. Today almost all programming languages have support for web services.

The use of Java as programming language and Apache Axis for publishing the web services makes the PSO totally unlinked from any OS or architecture.

## 3.1. Human interface

---

Human-to-machine interaction will be preferred by small Archives for some reasons: the number of items that should be worked by these Archives is small. Also the money they can spend for preserving their contents is small, so in order to keep costs low it's preferable to use the human interface. In this way it's not necessary the development of specific software that is capable to directly interact with the PSO. The human interface of the PSO is provided through a Java Web application. This web application is based on the web services provided by the PSO (it's possible to find WSDL of these web services in document [D19.1]).

Functionalities provided by this interface are:

- Registration of a new Archive into the system
- Submission of a new order
- Submission of new contents
- Submission of new batches
- Basic functionalities of monitoring of process status
- Configuration of some archive specific information (accesses to audiovisual contents for example).

Now some of the pages of the web application will be showed.

Today is: 2008-01-08 09:39:06

Username

Password

Don't have an ID?  
[Sign Up](#)

**REGISTRATION:**

ORGANISATION  
 PERSON

Username

Corporate Name

Line Name

Postal Code

Country

Town

Phone Number [0-3]

Fax Number [0-3]

Email [0-3]

Web address [0-3]

Validity Date (yyyy-MM-dd)

PrestoSpace - An integrated solution for Audio-visual preservation and access - Web Application Developed by www.eurixgroup.com - prestospace@eurix.it

**Figure 1: Page for the registration of a new Archive into the PSO**

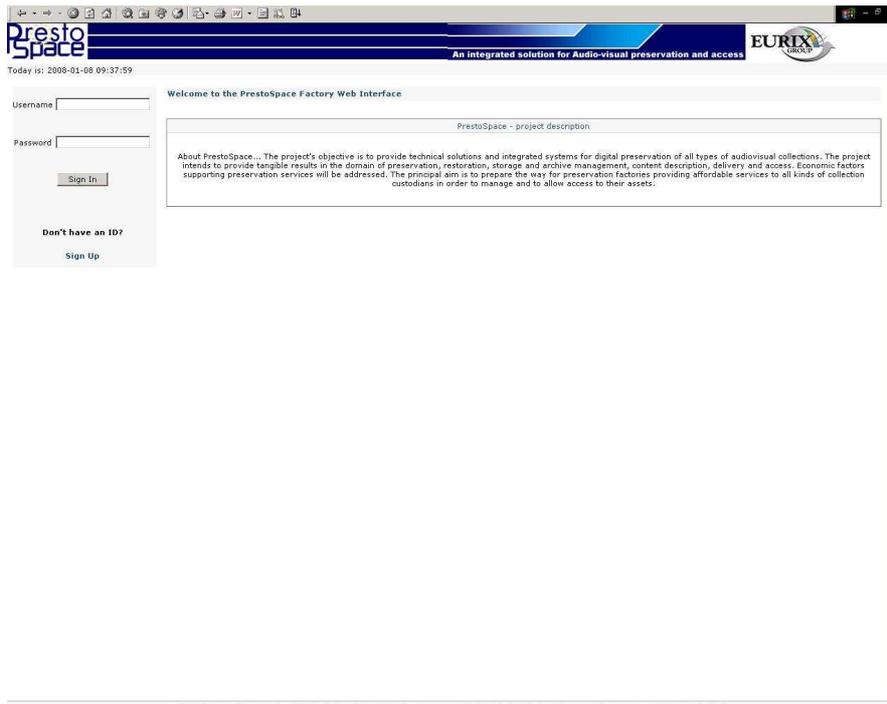


Figure 2: Login page

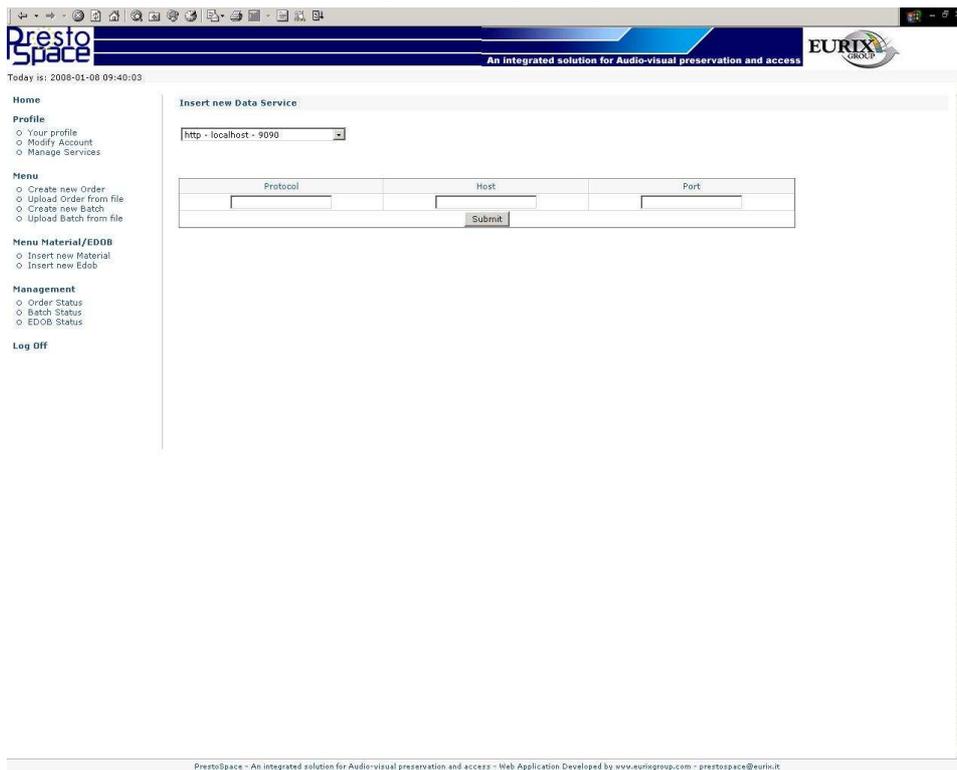


Figure 3: Parking area configuration

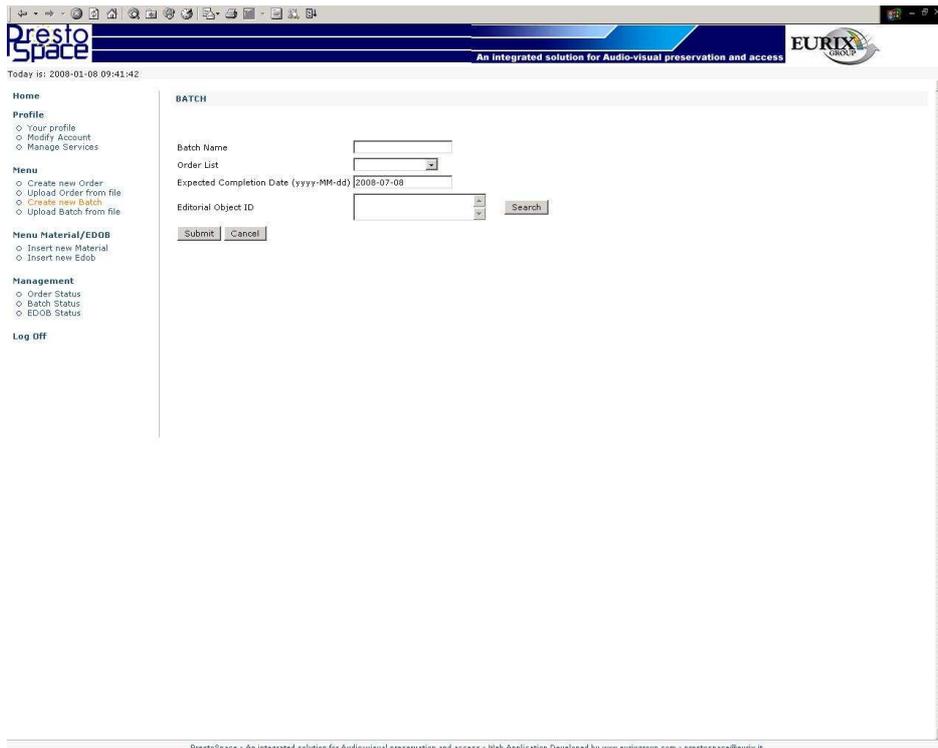


Figure 4: New batch registration page

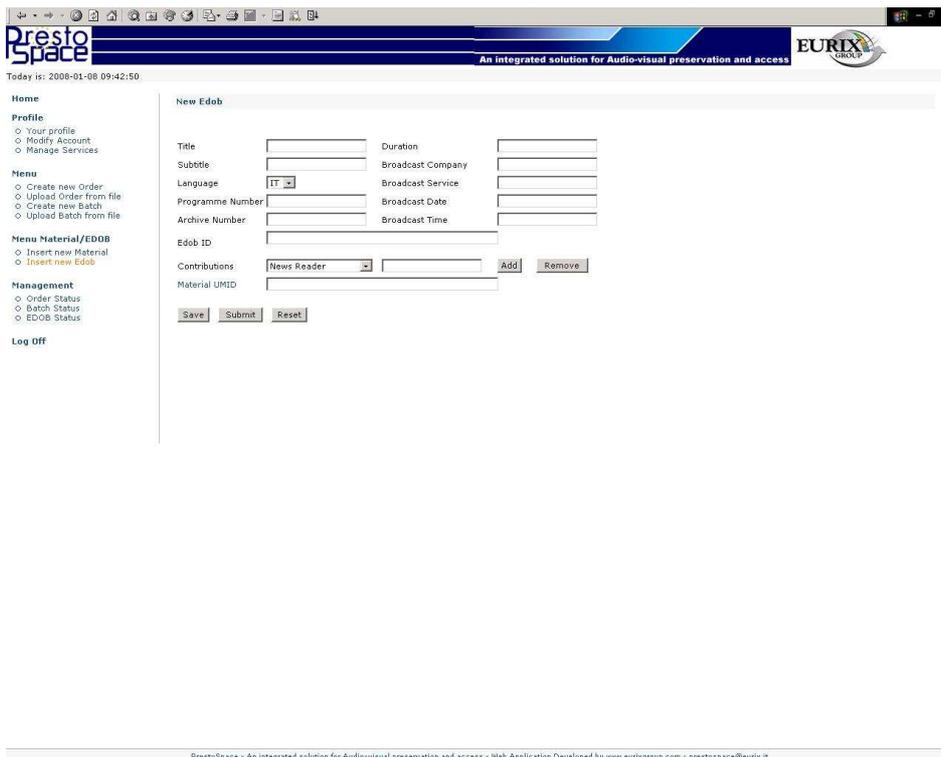


Figure 5: New EDOB registration page

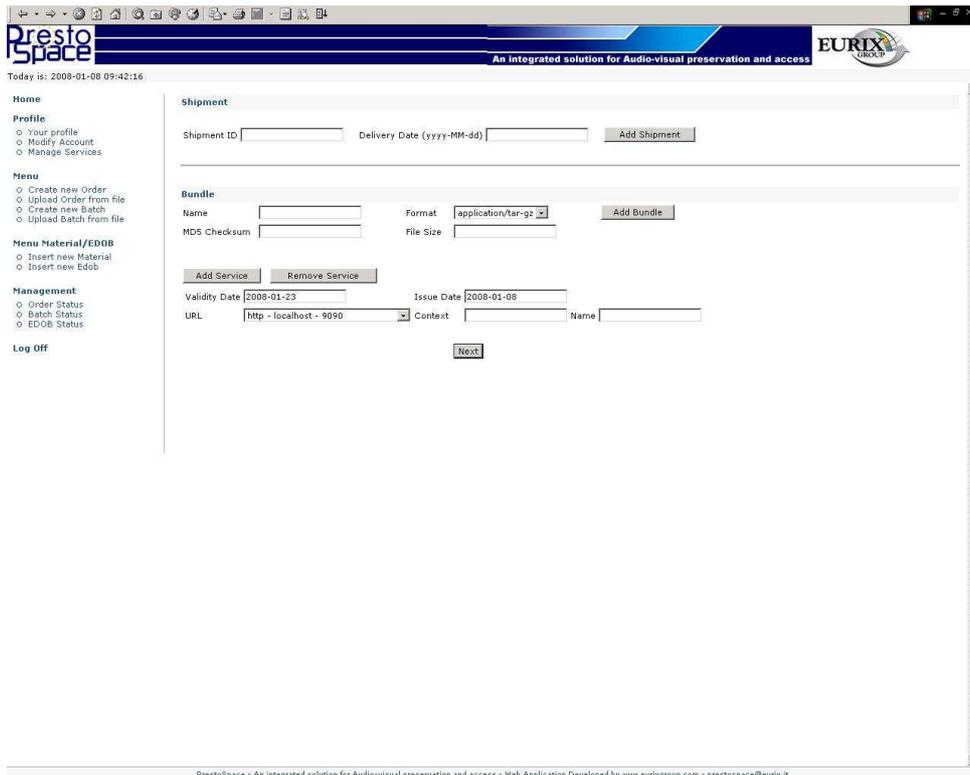


Figure 6: New material registration page

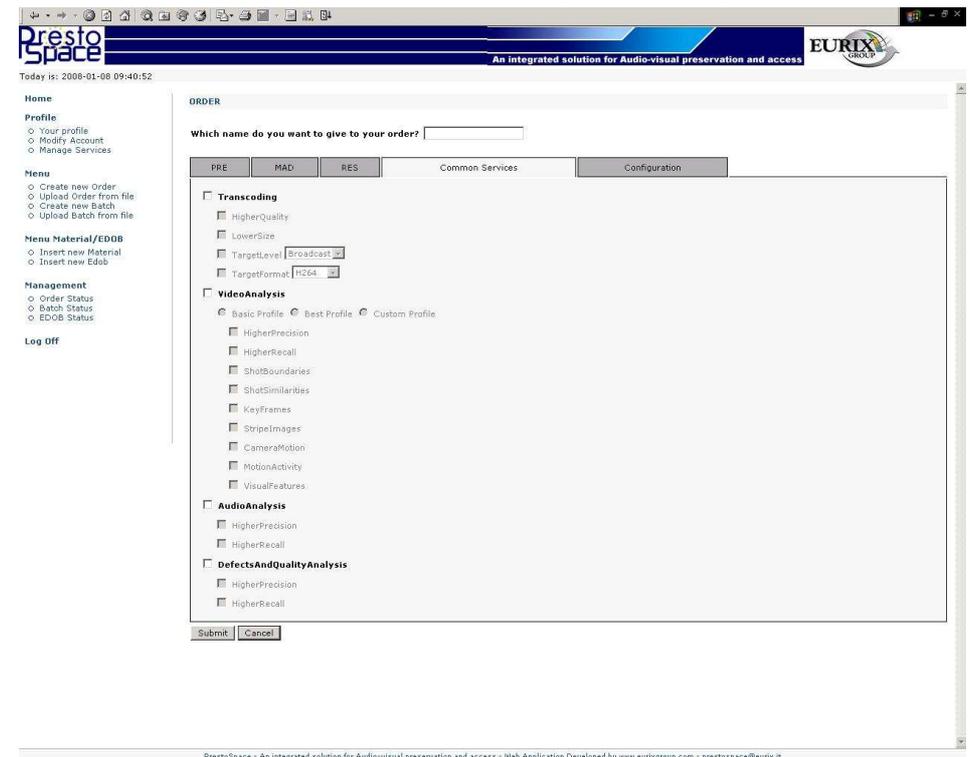


Figure 7: New order registration page

## 3.2. Machine-to-Machine interface

---

The machine to machine interaction is preferable when the amount of audiovisual contents that should be worked is big. Big Archives have their own information systems so with the development of this kind of communication the process of registration of contents to be worked can be automatic.

The web services interface provided by the PSO has the same functionalities of the web interface.

Large Archives will probably use the web service interface for registering contents and the web interface for monitoring the process.

## 4. Units – PSO interaction

---

The interaction between Units (MAD, PRE, RES) and the PSO is only a machine to machine interaction. The communication is done using web services interface (the WSDL of these web services are available in the deliverable **[D19.1]**).

All the messages exchanged between PSO and Units are XML documents based on the datamodel developed during the PrestoSpace project.

These XML documents are exchanged as strings so we avoid the problem of using complex object that can be mapped in different ways from different clients.

## 5. Delivery of software

---

The PSO is a prototype at this moment. A further amount of work should be done in order to make it a complete “solution”.

Software like the PSO cannot be thought as software that can be downloaded and installed. It's more realistic thinking to the PSO as a solution that should be customized for needs of every Archive.

The ideas and concept and technology solutions adopted for this prototype are valid for every Archive that what to use this solution. But Archive's environments are so different that probably a fine tune for the single Archive should be done.

At this moment the PSO prototype is delivered as a service reachable at these links

- <http://pso.eurix.it/pso> for the web service interfaces provided by the PSO to Archives and Units
- <http://pso.eurix.it/PSOWeb> for accessing the web interface for human interaction with the PSO.

## 6. Licensing

---

The software product described in this deliverable is a prototype in an advanced state of implementation. In order to engineer this software, some further implementation steps have to be performed. As an example, an improvement of the feedback machinery is needed.

## 7. Bibliography

---

- [D15.4] Content Analysis Tools.  
 [D18.1] The Documentation Platform for the MAD Factory.  
 [D18.2] Publication Platform for the Results of Digitization and Documentation  
 [D19.0.1] External and Internal Models and Protocols for the PrestoSpace Factory.  
 [D19.1] Results of Integration

## 8. Glossary

---

Term	Description
<b>Core Platform</b>	The component of the Documentation Platform offering a workflow management service and interacting with PSO's components EMS and CVS. This software component represents the middleware which is publishing web services interfaces. It has a built in work flow engine for managing all the activities done within the MAD platform (content analysis, semantic analysis, annotation, delivery, etc...).
<b>Documentation Platform</b>	The component of the MAD Factory which is responsible of extracting metadata from audiovisual content by means of different GAMPs.
<b>EMS</b>	Essence and Metadata Storage System, the system which is responsible for storing the essence within the PSO.
<b>MAD Factory</b>	Facilities where massive documentation, metadata enhancement, and preparation of publication for audiovisual contents are performed.
<b>Preservation Factory</b>	Facilities where massive A-to-D migration of audiovisual contents is performed.
<b>PSO</b>	This is the PrestoSpace Orchestrator, which is the administrator of the PrestoSpace factory, coordinating all its components PRE, RES, and MAD.