

Authenticity and Preservation Orchestration Manager

- slide 1** Luigi Briguglio, from Engineering, speaks about the Authenticity and the Preservation Orchestration Manager tools, showing the best practice in order to address the preservation planning which is a key entity in functionality in the OAIS reference model.
- slide 2** Several important key aspects are shown: the Authenticity Protocols (APs), how a change event can have an impact on the preservation of a digital object within an OAIS archive and how it is possible to address the preservation planning using some key components i.e. the Authenticity and the Preservation Orchestration Manager.
- slide 3** In Giovanni Michetti's statement APs are discussed in detail. The intention of this speech is to focus on the aspects concerning Event Occurrences and Event Types which can have an impact on a specific kinds of objects, can corrupt it and create problems in their maintenance and in guaranteeing their authenticity within the OAIS archive during its life cycle.
- slide 4** One of the OAIS mandatory responsibilities is to follow documented policies and procedures which ensure that the information is preserved against all reasonable contingencies.
- slide 5** A crucial question is "what must be done to preserve the digital content object and guarantee that it could be used and understood in the future?"
- slide 6** One of the most important aspects in preserving digital objects is to understand what the preservation steps are. The digital content object within the digital archive has to be maintained in order to be assessed, used and understood for whatever changes may take place during its long life cycle. This implies that any impacting change in the real world needs to be identified and notified to the person responsible for the preservation in order to consider taking the appropriate corrective measures, according to the defined preservation plans.
- slide 7** In practice, the actions that have to be accomplished are: to notify changes, perform corrective action according to the preservation plan and then update the Archival Information Package (AIP) and the Preservation Description Information (PDI).

- slide 8** It is important to say that preservation is only one of the key aspects in the OAIS model and that other key activities which are needed are the monitoring of the Designated Community and of eventual changes in the technology, and the development of preservation strategies and standards.
- slide 9** The CASPAR project provides several of the best practices to address the Preservation Planning; one of these in particular involves the Authenticity and the Orchestration tools.
The Authenticity is implicated mainly in the identification of the APs for specific objects.
The Data Curator is the person who is charged with the task of monitoring and checking the specific object for Event Occurrences. When an event occurs, the Data Curator can notify the change event by using the Orchestration Manager.
Then a Data Preserver, that is a person who is subscribed for a specific Event Occurrence, can trigger or carry out the preservation activity according to the APs already defined.
Finally, the authenticity of the maintained object can be checked and evaluated.
- slide 10** The Orchestration and Authenticity tools work together and have a role between the Preservation Planning and the Administration. Moreover, they cover the communication management aspect together with the Knowledge Management System and the Representation Information Registry.
As shown in various training videos, it is important to highlight that the evidence of the authenticity management has been collected.
- slide 11** Other aspects which may be impacted by change events are those related to the Designated Community; in this perspective there is the Knowledge Management System which may be involved together with the Orchestration and the Authenticity in managing changes for the Designated Community.
- slide 12** Finally, there is the Security Management, as, in some cases, changes may have an impact on the user account, role, profile and security aspect.
These components, the Data Access Manager & Security (DAMS), the Digital Rights Manager (DRM) and the Authenticity, can work together in order to trace these changes.
- Two interesting websites are pointed out: the developer website <http://developers.casparpreservers.eu:8080> and <http://sourceforge.net/projects/digitalpreserve>.