

§7. Utilization of Cloud-type Archival Finding Aid for Fusion Science Archives

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Fusion Science Archives (FSA) at NIFS was established in 2005. Since then historical materials on fusion research and/or organizations related to fusion research have been collected and preserved at FSA. They are expected to serve as the evidence of various facts or actions taken by fusion research community in the past. However, in order to access to these historical materials an appropriate catalogue of registered materials and a convenient electronic finding aid available through Internet are required.

In general, archival material is originally produced as a record of a certain action taken by the organization. And after completion of this action, these materials are preserved as archival materials. Thus these materials essentially include circumstances of the action or processes, in other words, archival materials have hierarchy structure reflecting the structure of the action and/or that of the organizations. This means that archival materials should be understood in the context of original actions. Finding aid for the historical materials should reflect the specific features of these materials.

Encoded Archival Description (EAD) is a de-facto standard for data of archival finding aid and is accepted as an international standard as DTD (*Document Type Definition*) for XML (*Extensible Markup Language*). EAD allows us to describe the hierarchy structure of archival data: they are 1) information on the original organization, which produced the document, 2) the history of the documents, 3) person who preserved the documents, 4) place, where the documents are stored and so on. In the past several years, an intensive collaboration with Sokendai, National Institute of Japanese Literature (NIJL), High Energy Accelerator Research Organization (KEK) and Institute for Molecular Science (IMS) has been performed in order to establish the archival database based on EAD. Through this collaboration, we successfully established a common database for materials information as a prototype, utilizing a tool developed at NIJL, so called “Archival materials information sharing Database (AMISDB)”.

Based on these experiences, in 2011 we started to establish a database using so-called cloud-type server for an archival finding aid. Namely we utilized “InfoLib-ASP”, a EAD-based finding aid of commercial application service provider (ASP) type, and essentially the same system as we tested at NIJL (We used at NIJL, customized “InfoLib-DBR” system). Thus, data sets prepared by us previously were easily transported to a new server using CSV files. Our

new archival database “SOKENDAI Archival Information Database”, constructed utilizing “InfoLib-ASP” under the collaboration with Sokendai, KEK and other researchers from universities, is now available through homepage of FSA at URL = <http://www.nifs.ac.jp/archives/index.html> (Figs. 1a, 1b). Further, the “InfoLib-ASP” system allows dealing with image data such as PDF, JPEG and others, so we introduced a new field of image type for some records as is shown in Fig. 2. This gives users visual image of document.



(Fig. 1a)



(Fig. 1b)

Fig. 1 Screen view of the top page of “SOKENDAI Archival Information Database” (a) and that of NIFS (b).

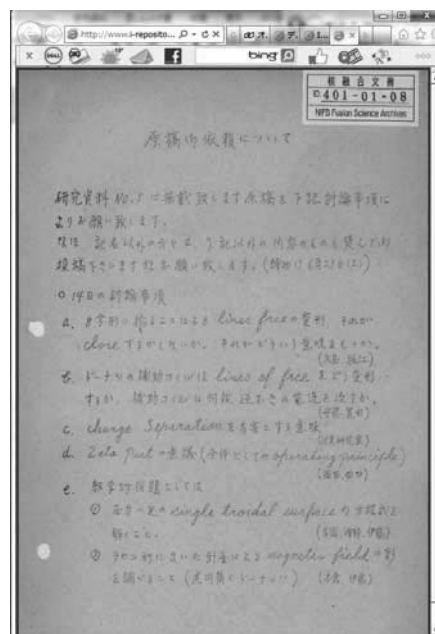


Fig. 2 An example of scanned image in PDF of an archival material, which gives visual image.

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