

§3. A Trial to Establish an Archival Finding Aid Utilizing the Encoded Archival Description - 3 -

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Providing 'finding aids' of archived documents in the Fusion Science Archives (FSA) for internet access is one of major aims of this project. For this, the project has decided to use the 'Encoded Archival Description' (EAD) and it relies on a WEB server system capable of handling EAD based finding aids at the National Institute for Japanese Literature (NIJL), as explained elsewhere. Although this procedure is working quite well so far, it seems that some features can be improved in order for other archives to use this system. And there is another activity performed jointly by FSA and related projects to improve them. The status of this activity is summarized in this report.

To use the system of NIJL, archival descriptions of FSA are transferred to one database maintained by the NIJL, Archival materials information sharing database (AMISDB). The system is setup to transfer them automatically to the EAD WEB server after converting to EAD/XML format (the r.h.s. routes in Fig. 1).

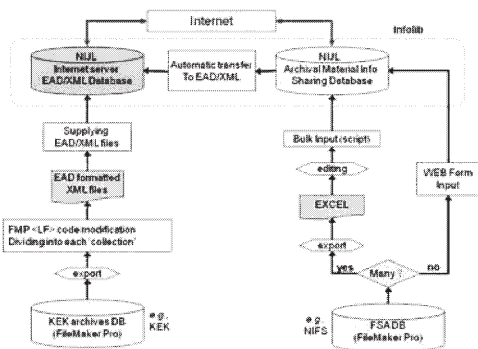


Fig. 1 Two routes to EAD DB server.

One of such features to improve is that the transferring procedure of the FSA data, whose schema is not EAD nor AMISDB, involves mapping data to AMISDB schema. This procedure is sometimes tedious and easy to make mistakes. One improved method for FSA (the second route from the right in Fig. 1), described in a different report, has been developed. In fact, when developing this method some efforts have been put to realize hierarchical structure inherent to archival collections and standard archival description.

The alternative method (the l.h.s. route in Fig. 1) assumes description data are put in a FileMaker Pro (FMP) database in this development trial, and it will create an EAD/XML file for each archival collection directly and it can be brought into NIJL EAD based WEB server without

putting any data to AMISDB.

The idea for this is the following: When an archives has not created substantial amount of description data yet, it may be easy to modify or change it to different schema with less risks; a schema in conformity to a standard EAD. In this case, it is not necessary to transfer data to different schema only to realize EAD format. Standard and commercial database soft wares have a kind of script or methods to construct compound data with its data elements, and using these methods it is not difficult to construct EAD formatted description with data elements defined according to EAD schema. In the current trial, database software is the FMP and the method to construct compound data is the 'calculation fields'.

Introducing the hierarchical structure can be realized by the 'relation' of FMP: top level description of each collection is a record of a 'archival group' table and its all lower level descriptions are saved in a different table 'lower archival group'. The lower level records points to either the top level record or, if they are in the deeper level, to one level higher 'lower archival group' records, recursively. The 'tables' and the 'relations' are shown in Fig. 2.

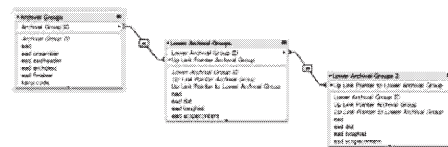


Fig. 2 Tables and Relations

The constructed EAD form for individual collection is put into a file by 'export' utility of the FMP. Last technical remark to this method may be important: the FMP internally uses special 'Line Feed' character, '0D' in HEX, and it has to be replaced by ordinary <LF> (and/or <CR>) to be interpreted as XML properly. For this, independent program has been made. A sample of the EAD by this method is shown in Fig. 3. The method requires more tunings to complete.



Fig. 3 An Example of exported EAD/XML file

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