

# **File Level Metadata Standard**

## **Current Status**

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**THIC Meeting at the Amberley Suite Hotel, Albuquerque NM**  
**April 21, 1998**

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# Background

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- **File Storage Management Systems (FSMSs), such as AMASS, HPSS, etc. write files to sequential media in proprietary formats**
- **Not all tape marks represent end of file**
- **Not all files end with a tape mark**
- **Files broken up into file segments**
- **Control blocks embedded in the file segments**
- **Use of tar in some implementations**

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## Background (Continued)

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- **Differing formats cause a problem in (at least) two cases**
  - **Physical movement of cartridges to a different location where there is a different FSMS**
  - **Replacement of the FSMS with another one in the same location**
- **In either of the two cases above, copying the data is the only solution - but you have to copy it twice**

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## **Background (Concluded)**

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- **Need for a standard, non-proprietary way of representing the proprietary format, so as to avoid the copy operations**
  
- **Also, need for a representation of the directory and file structure, so that it may be transferred also**

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# History

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- **After some preliminary discussions, a study group started April 1, 1996 at the AIIM conference in Chicago**
- **The study group became a standards committee, AIIM C21.1**
- **Document representing the proposed standard is currently in its ninth draft**

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# Ballots

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- **There have been two ballots**
  - **First ballot: "No with comments" from AMASS and HPSS. Revision according to comments .**
  - **Second ballot: "No with comments from HPSS." Addition of rationale sections based on their comments. Some confusion concerning full path names. Addition of an annex of examples.**
- **Current deadline for additional comments is May 1, after which there will be a new draft and ballot.**
- **Current draft at <http://www.ses-inc.com/~joelw>**

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## **Additional Proposed Activity: Conformance Testing**

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- **Problem: How do you know that you are able to write the metadata export correctly, and to read someone else's export correctly?**
- **Standard has a conformance section, but no test.**
- **Development of conformance tests might help in the developing of utilities which write and read the metadata**

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# Description of the Metadata Export

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- **Four parts:**
  - **Description of the metadata export itself**
  - **Description of the cartridges**
  - **Description of the file segments**
  - **Description of the directory and file structure**
- **Collection of records, each named, and with named fields in some cases**
- **Some records are selectable, and not all record types apply to all implementations**
- **Unicode or ASCII**



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# Record Format

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- **Flexible, and easy to add additional records to extend the metadata to cover something that we have not yet heard of**

- **Example:**

**CART\_VOL\_GROUPØNAMEØMedical ImagesØ**

**BLOCKSIZEØ4096Ø**

**COMPRESSION\_ALLOWEDØNOØ§**