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ISEE-3/GSFC/EKE/Blocking Library Tapes/86/MAY/20

Specification for Blocking Library Tapes

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ABSTRACT

This is an informal specification document to build a software system to reblock ISEE-3 library tapes. Currently the ISEE-3 library tapes for the regular encyclopedia data base and the datapool data base is unblock. In the current state, the record format of the library tapes are inefficient and costly.

This software system, once applied to the library tapes, would become obsolete. Therefore, this software system will not need extensive documentation. There will be no need for a user's guide or a maintenance guide.

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1.0 OVERVIEW

The library tape database of the regular encyclopedia and the datapool database is part of the data processing system for ISEE-3. The data processing system for ISEE-3 is regulated by an automatic log. There is a separate log for the regular ISEE-3 encyclopedia and the datapool encyclopedia. The log tracks the processes and location of each chunk of data in the database.

The objective is to lessen the number of I/O charges when reading the library tapes. Since the library tapes are not blocked, the best way to lessen the charges is to block the data.

The ISEE-3 library tapes have IBM standard labels with multiple files. As a precaution, each file has a unique data set name. A datapool library tape may have up to 200 files. The regular encyclopedia library tape has between 7 to 8 files.

2.0 SUPPORTING DOCUMENTS

The following is a list of reference materials.

Title	comments
ISEE-3 Production Guide	ISEE-3 procedures guide
Voyager Log attended	format of Voyager automatic log The ISEE-3 automatic logs are <i>patterned</i> after the Voyager log

3.0 RELATED SOFTWARE

The following is a list of IBM software libraries that may be helpful.

Title	comments
EDRSAVE	ISEE-3 software that creates the library tapes
DPTSAVE	ISEE-3 software that creates the datapool library tapes
'SB#VG.GENERAL.SOURCE'	Voyager and ISEE-3 utility software for accessing the automatic log
ENCGEN	ISEE-3 software that reads the library tapes ENCGEN requires that the library files be in data time order
DPTENC	ISEE-3 software that read the datapool library tapes DPTENC requires that the library file be in data time order

4.0 ISEE-3 LIBRARY TAPE RE-BLOCKING REQUIREMENTS

- The original tapes will create reblocked copies.
- The IBM standard labels will be preserved.
- Each file will preserve the original dataset name. However original job name and date may be lost.

5.0 HELPFUL INFORMATION

- The automatic log has volume serial, dataset name and file information