DEPARTMENT OF SPACE RESEARCH
BIRMINGHAM UNIVERSITY
Asterix Data Analysis
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New HISTORY Routines

Contents

1 Introduction

The HISTORY routines have been rewritten to:

a) Accept any locator as input, and to look for the HISTORY structure.

b) Use an internal common block to preserve locators.

2 Routine Descriptions

The HIST_ routines available are:

HIST_ADD - Add standard record to existing HISTORY structure

```
SUBROUTINE HIST_ADD (LOC, NAME, STATUS)
```

Name = name of calling application A new HISTORY structure will be created if necessary.

HIST_COPY - Copies HISTORY structure from ILOC to OLOC

```
SUBROUTINE HIST_COPY (ILOC, OLOC, STATUS)
```

ILOC obeys point a) above. OLOC does NOT; the HISTORY is copied into the structure located by OLOC.

HIST_FIND - Find current HISTORY record

```
SUBROUTINE HIST_FIND (LOC, RECORD, STATUS)
```

RECORD is a locator to the current HISTORY record. VERY few (if any) applications will need to use this.

HIST_INIT - Initialize HISTORY common block

```
SUBROUTINE HIST_INIT
```

Applications MUST call this or AST_INIT

HIST_NEW - Create a new HISTORY structure (will delete any existing one)

```
SUBROUTINE HIST_NEW (LOC, STATUS)
```

HIST_NREC - Enquire current number of HISTORY records

```
SUBROUTINE HIST_NREC (LOC, COUNT, STATUS)
```

VERY few applications will need to use this.

HIST_OK - Is there a HISTORY structure present?

```
SUBROUTINE HIST_OK (LOC, OK, STATUS)
```

Called by many of the other HIST_ routines. Few applications will need to use this.

HIST_PTXT - Puts text component into current HISTORY record

```
SUBROUTINE HIST_PTXT (LOC, NLINE, TEXT, STATUS)
```

LOC obeys point a) above. NLINE is the number of text lines in the character array TEXT

3 Usage

Most applications will use either HIST_COPY or HDX_RCOPY to copy the HISTORY from input to output file. They will then use HIST_ADD and then HIST_PTXT. Note that USI_INPNAME and USI_OUTNAME should be used to obtain the input and output file names as required.

At present HISTORY, the application, will display ANY component written to a HISTORY record. However, it is preferable to write all HISTORY comments and values into a CHARACTER*80 array, and to add this to the HISTORY record using HIST_PTXT.

4 Converting from the old HISTORY routines

- No longer need to check before calling HIST_COPY; it will work OK if ILOC is to a primitive object; it will simply do nothing if the input file contains no HISTORY, and STATUS is not altered.
- HIST_ADD will work if LOC is to a primitive object; a new HISTORY structure will be created if necessary.
- Applications need no longer call HIST_FIND
- The locator given to HIST_PTXT should be the output locator.
- Don't forget to add a HIST_INIT call, unless you are using AST_INIT.