Title:

# DISC FILE CONTROL PROCEDURES IN MUSIL

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RCSL No: RCSL: 43-GL 3276
Edition: 1976.10.19.
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Keywords:

MUSIL, DISC CATALOG SYSTEM, CAT76.

Abstract:

This manual is an appendix to the RC3600 MUSIL Programming Guide (RCSL: 42-i0344) describing the MUSIL DISC FILE PROCEDURES used with the new Catalog System CAT76. It should be used with the manual RC3600 FILE SYSTEM, SYSTEM PROGRAMMERS GUIDE, RCSL: 44-RT 1278, which holds the total description of the file system.



Printed by A/S Regnecentralen, Copenhagen

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(For status errors see RCSL: 44-RT 1278
RC3600 FILE SYSTEM, SYSTEM PROGRAMMERS GUIDE)

procedure create entry (file f; size, attribute: integer);

Creates a catalog entry with name given in f.zname. The file length will be set to size segments and the attribute will be set according to the given attribute parameter.

procedure remove entry (file f);

If the file given with name in f.zname is not permanent and no area process exist on the file, the file is removed.

procedure lookupentry (file f, storearea: string (32));

looks up the entry given by f.zname in catalog, and transfer the information to storearea.

Storearea should have the record type:

```
ENTRY = RECORD
                NAME:     STRING (6) ;   ! ENTRY NAME !
                OP1:      STRING (6) ;   ! OPTIONAL WORDS 1 !
                ATT:      INTEGER    ;   ! ATTRIBUTE !
                LENGTH:   INTEGER    ;   ! FILE LENGTH !
                SEGMNO:   INTEGER    ;   ! SEGMENT NUMBER OF INDEX !
                RESV:     INTEGER    ;   ! RESERVED LENGTH !
                OP2:      STRING(12)     ! OPTIONAL WORDS 2 !
    END;
```

procedure changeentry (file f ; store-area : string (32))

Changes the catalog entry given by f.zname. Store-area as for lookup, but only name, attribute and file length can be changed.
If entry name shall be unchanged place <0> in first two bytes of storearea.
File length and attribute will be unchanged if values are less than zero.

Notice that storearea is used as a workspace for CAT, you cannot expect values will be unchanged after the call.

procedure initcat (file f, driveno , mode: integer);

Initialize the disc drive given by 'driveno! Normaly the operation-system take care of the unit initialization either automatic on unit 0 or by the command INIT <driveno>.

Initialization on scratch disc (INITNEW) should be done by an output message to the initialization process CATI. The message byte count is 18 and the mode is 131 (128+3). The message holds following integer words in the given order:

byte no:

| | | |
|---|---|---|
| 0 | 1 | UNIT NUMBER |
| 2 | 3 | NORMAL SLICE SIZE |
| 4 | 5 | INCREMENT SLICE SIZE |
| 6 | 7 | NUMBER OF SEGMENTS |
| 8 | 9 | NUMBER OF FREE SEGMENTS |
| 10 | 11 | FIRST DATA SEGMENTS |
| 12 | 13 | TOP DATA SEGMENT |
| 14 | 15 | MIN SLICE = 0 |
| 16 | 17 | MAX SLICE = 0 |

Transput operations:

Zones is defined in the ordinary way in the MUSIL program, except that kind bit 11 shall be set in order to show the Basic system that the file is of kind disc, and the share length shall be 512 bytes. In all transput operations 512 bytes is transferred.

All standard input output procedures can be used as for any other device types, only open and close operations have some extra effects:

OPEN (file F, mode: integer);

Extra:

A createareaprocess is send to CAT and process is inserted as user of the areaprocess. If mode = output process is inserted as exclusive user of the areaprocess. The OPEN/CLOSE count is increased by one.

CLOSE (file F, release: integer);

Extra:

A removeareaprocess is send to CAT.

If release <>0 the OPEN/CLOSE count is decreased by one.

Note that if release = 0 the OPEN/CLOSE count is unchanged.