

ND SOFTWARE LIBRARY DISKETTE

PAGE 1

Containing :
ND-500/5000 Swapper

Directory Name :
211034I03-XX-01D

User Name : FLOPPY-USER

No	File name	Type T	Public	Friend	Own	Pages	Bytes
0	SWAPPER-H02	PSEG I	RWACD	RWACD	RWACD	11	19895
1	SWAPPER-H02	DSEG I	RWACD	RWACD	RWACD	55	109709
2	SWAPPER-I03	PSEG I	RWACD	RWACD	RWACD	16	30649
3	SWAPPER-I03	DSEG I	RWACD	RWACD	RWACD	85	201729

4 files using 167 pages. 610 pages reserved out of 610 pages.

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Date 87.12.14		Norsk Data A.S PROGRAM DESCRIPTION		Page 1 of 6																													
Product	Name ND-500/5000 Swapper	Reg. no. 211034I	Category STIN																														
Reason	. New product X Change/Addition . Other: Error Correction X Different Environment																																
Documen- tation	Title ND-500 Loader/Monitor	Reg. no. 60.136.4 EN																															
Purpose	Memory management in ND-500. This version is now capable of handling the ND-5000 series as well.																																
Prerequi- sites	General: Since this Swapper can be used for both ND-500 and ND-5000, and the ND-500 part of this release is the same as Version H02, then only the changed areas will be described here.																																
	Computer and Operating system: <u>ND-5000:</u> must use <u>SIII/VSX K Workmode 406</u> <u>ND-500:</u> must use <u>SIII/VSX K Workmode less than or equal to 312</u> (ND-100 part of ND-5000 must be ND-1x0/CX)																																
	Any microprogram that goes with the computer will do																																
	Minimum permanent mass storage resources: <table border="1"> <thead> <tr> <th>Computer</th> <th>User</th> <th>User space</th> <th>Number of files</th> </tr> </thead> <tbody> <tr> <td>ND-5000</td> <td>System</td> <td>100 pages on</td> <td>2 files</td> </tr> <tr> <td>ND-5000</td> <td>System</td> <td>67 pages on</td> <td>2 files</td> </tr> </tbody> </table>					Computer	User	User space	Number of files	ND-5000	System	100 pages on	2 files	ND-5000	System	67 pages on	2 files																
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203166H	SWAPPER-H02	DSEG	Swapper data segment																														

NOTE: <rev> is to be replaced by the current revision of the DIRECTORY or FILE. The revision level is found on the preceding "ND SOFTWARE LIBRARY DISKETTE" pages.

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1 CHANGED PREREQUISITES

- The ND-5000 requiries SINTRAN III/VSX 500 K workmode 406.

2 MODIFICATIONS

- NOTE: No changes for ND-500 computers

2.1 IMPROVED FUNCTIONALITY

- The new computer serie ND-5000 are supported.
- When it is avaiilable in Sintran, then Norsk Data's new domain format can be handled with this swapper.

2.2 IMPROVED PERFORMANCE

- Improved utilisation of the CPU (TSB handling).
- Improved algorithm to handle segments which mostly are accessed sequential (File as segment).

2.3 ETC.....

- Internal changes.

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3 INSTALLATION PROCEDURE

Log in as user system.

Make sure you have enough free disk space left on user system.

@USER SYSTEM,,

```
USER 0 : PACK-ONE-6799:SYSTEM
        CREATED 11.49.24  MAY 14, 1985
        LAST DATE ENTERED 15.19.58  NOVEMBER 5, 1987
        DEFAULT PUBLIC ACCESS : READ
        DEFAULT FRIEND ACCESS : READ, WRITE, APPEND, COMMON, D.
        DEFAULT OWN ACCESS : READ, WRITE, APPEND, COMMON, DIR..
        28587 PAGES USED OUT OF 29021 PAGES
        MAXIMUM NUMBER OF FILES : 512
```

The difference of the two numbers given on the second to last line gives the number of free pages. In the example above the number of free pages is 434.

On a ND-5000 the swapper requires 100 free pages and on a ND-500 the swapper requires 67 free pages.

Insert the floppy

211034I<rev>-XX-01D

in FLOPPY-DISC-<drive-no.>.

```
@ENTER-DIRECTORY↓
DIRECTORY NAME: 211034↓
DEVICE NAME: FLOPPY-DISC-<drive-no.>↓
DEVICE UNIT: <unit no.>↓
```

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If you want to install the swapper on a ND-5000 system.

@COPY-FILE
 DESTINATION FILE: SWAPPER:PSEG
 SOURCE FILE: (211034:FLOPPY-USER)SWAPPER-I<rev>:PSEG

@COPY-FILE
 DESTINATION FILE: SWAPPER:DSEG
 SOURCE FILE: (211034:FLOPPY-USER)SWAPPER-I<rev>:DSEG

If you want to install the swapper on a ND-500 system.

@COPY-FILE
 DESTINATION FILE: SWAPPER:PSEG
 SOURCE FILE: (211034:FLOPPY-USER)SWAPPER-H02:PSEG

@COPY-FILE
 DESTINATION FILE: SWAPPER:DSEG
 SOURCE FILE: (211034:FLOPPY-USER)SWAPPER-H02:DSEG

And

@RELEASE-DIRECTORY↓
 DIRECTORY NAME: 211034↓

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4 POSTMORTEM DUMP OF ND-5005000 SWAPPER

After a fatal error from the swapper (Message 'SWAPPER STOPPED'), the swapper's data segment may be dumped to file for later analyzis by ND.

The error flag in the 500 datafield must first be reset. Address of the datafield is found in B register of RT-program 5SWAP. The error flag has displacement 13B in the datafield.

Use the following procedure to reset the error flag: (User input is underlined>)

Log in as user SYSTEM

@LIST-RT-DESCRIPTION 5SWAP

ACTIVE I/O-WAIT

	SEGMENTS	1	AND	2	REENT	NPIT	APIT	RING	PRIORITY
INITIAL :		0B		0B		5B	7B	2	100B
ACTUAL :		0B		0B		5B	7B	2	100B

START ADDRESS: 35533B LAST STARTED: 5928 MINS 28 SECS
ND-100 CPU TIME USED: 51 SECS

P X T A D L S B
034511 061411 000062 000004 042031 035577 000001 021422

RESERVED DATAFIELDS LOGICAL UNIT FIRST WAITING
100655B

% In this example, B register = 21422B
% The address of the error flag is thus 21422B + 13B = 21435B
% Calculate the address on your installation.

@ND

ND-500 MONITOR Version H00 86. 5. 6 / 86. 5.14
N500: SET-ND-500-UNAVAILABLE

N500: @LOOK-AT S3DPIT

READY:

21435/ 2047 0
177777 .

-END

N500:

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% Now the swapper may be dumped as follows.
 % The dump file will normally require between 100 and 180 pages,
 % dependent of the system configuration.

N500: DUMP-SWAPPER↓
 File name: "SWAP-DUMP"↓

Dumping physical segment nr. : 1
 Octal byte address for physical segment table = 210000
 Logical page : 0 - Physical page : 1

.
 .
 .
 Logical page : 726 - Physical page : 1770
 N500:

% The dump is completed. Copy the file to a diskette and send it to ND
 % along with a description of the error situation.

% ND-500 (ND-5000) must be restarted before it can be used :

N500: STOP-ND-500↓
 @ND↓

ND-500 MONITOR Version H00 86. 5. 6 / 86. 5.14
 N500: START-SWAPPER↓

.
 .
 .
 .
 N500: EXIT↓

@

