ND SOFTWARE LIBRARY DISKETTE

PAGE

Containing = ACCESS for ND-100

Directory Name : 210185E02-XX-01D

User Name : FLOPPY-USER

Nr	File name	Туре	Т	File ac	Friend	0wn	Pages	Bytes
0 1 2 3 4 5 6 7 8 9 10 11	INST-ACC-100-E02 DDBTABLES-E-E04 ACC-DDI-STOP-E02 ACC-SIB-PROH-100 ACC-SIB-PERM-100 ACCESS-0-E02 ACCESS-1-E02 ACCESS-1-E02 ACCESS-3-E02 ACCESS-4-E02 ACCESS-4-E02 ACCESS-5-E02 ACCESS-DDI-E02 ISAM-SERVICE-I00	PROG VTM PROG MODE MODE PROG PROG PROG	I I I I I I I I I I I I I I I I I I I	RWACD RWACD RWACD RWACD RWACD RWACD RWACD RWACD RWACD RWACD RWACD RWACD RWACD	RWACD RWACD RWACD RWACD RWACD RWACD RWACD RWACD RWACD RWACD RWACD RWACD RWACD	RWACD RWACD RWACD RWACD RWACD RWACD RWACD RWACD RWACD RWACD RWACD RWACD	66 12 5 2 62 72 58 69 69 52 59	189940 20756 8192 191 184 151552 174080 149504 149504 178176 151552 118784 133120
13	files using 594	pages	•	610 pag	jes rese	erved out	of 610	pages.

ND SOFTWARE LIBRARY DISKETTE

PAGE

Containing

ACCESS for ND-100 (English version)

Directory Name : 210185E02-EN-01D

User Name : FLOPPY-USER

	, , , , , , , , , , , , , , , , , , , ,			File a	ccess:		Ÿ	
Nr	File name	Type	T	Public	Friend	0wn	Pages	Bytes
0	ACC-PATCHER-E02	PROG	I	RWACD	RWACD	RWACD	8	14336
1	ACCESS-EN-E02	HELP	I	RWACD	RWACD	RWACD	6.8	135536
2	DBA-EN-E02	HELP	I	RWACD	RWACD	RWACD	2 4	44724
3	UE-ERMSG-EN-BO4	ERR	I	RWACD	RWACD	RWACD	6 6	131,840
4	files using 166	nages		610 page	os rese	rved ou	t of 610	nages

ND Norsk Data

Software INFORMATION Report

Page:

ACCESS for ND-100 210185E

Report no: 1 8

Date: 860703

Program:

ACCESS-E

Subject:

ACCESS will generate key searches on each alternative value given in a keyed column. SFTCH calls instead of SRSOW calls.

ACCESS for ND100 version E01

ACCESS-E will generate key searches on each alternative value given in a keyed column.

Selecting the key for initial search:
When analysing multi table queries, the best key in the top table frame will be picked up for initial search if the cost of solving the joins are the same (or higher) for all other alternatives. If no selection criteria is put on keyed columns in the top table, the longest key among the other alternative keys (with lowest join cost) will be picked up.

Queries against SIBAS : \bullet SFTCH calls will be generated instead of SRSOW calls.

The opening of the command files has been changed to conform with the manual ND-30.022.4 section $6.1.2\,\cdot$

Error in wild character search in keyed columns in ISAM files has been corrected.

ND Norsk Data

Software ERROR Report

Page:

ACCESS for ND-100 210185E

Report no:

Program:

ACCESS-E Manual

Subject:

Errors discovered in the ACCESS DBA Manual 30.022.4 EN

Symptom:

Wrong user names on pages 71,72,74,79 and 80.

Description:

Date: 860703

Errors discovered in the ACCESS DBA Manual 30.022.4 EN

The errors listed below apply to the English version of the manual only.

1) Pages 71, 72 and 74.

The example system delivered with ACCESS is now stored under SINTRAN user DIALOG-DEMO. You will have to log in as user DIALOG-DEMO to inspect or modify the example data dictionary, not as user DATA-DICTIONARY as explained in section 7.1.

The user ACCESS mentioned on these pages is to be substituted with the user DIALOG-DEMO.

The files on which the isam data base containing the examples is stored are renamed from EMPLOYEES to XMPL1-EN (mentioned on page 74 only).

2) Pages 79 and 80. ------

The ACCESS system programs are no longer stored on DATA-DICTIONARY. The program ACCESS-DDI-E:PROG and ACC-DDI-STOP:PROG are stored on the user DIALOG-SYS.

The line numbers mentioned in line 1 and 2 page 80 should be lines 3 and 4, not lines 2 and 4.

Software INFORMATION Report

ND Norsk Data

Page: 1

ACCESS for ND-100 210185E

Report no: 6

Date: 861209

Program:

All

Subject:

Revision E02 may be used in a Multi-user Isam environment. Some errors have been corrected in this revision of ACCESS.

Access 100 Version E02

210185E02

This revision may be used in a Multi-user Isam environment.

Copying of Sibas headings is made optional in DBA. Default is realm heading as table name and item heading as column name. If realm name and item name (8 chars.) is preferred, use the commands in this way.

COPY-DATABASE N
COPY-REALM <realm name>, , N

The parameters must be supplied on the command line, and will not be prompted for. N is an abbriviation of the NO string in DBA--E:HELP.

The following errors have been corrected:

- Under some circumstances, terminal hang during compilation of queries with a join spanning over more than two tables/subqueries.
- Erroneous message "Sibas interface error : -117" occured when running first a "print" query and afterwards an update query against Sibas.
- Sibas error code 870 in queries using several Sibas sets.
- Wrong result when deleting records in Isam tables.

ND Norsk Data

Software INFORMATION Report

Page: 2

ACCESS for ND-100 210185E

Report no:

6

Date: 861209

- Update gueries against Sibas having a selection criteria with alternative values on a keyed field gave wrong result.
- Insert queries on Isam or flat file tables using input example elements resultet in corrupted records if any of the columns had an odd length.
- When doing commands COPY-DATABASE or COPY-REALM on a Sibas realm having group(s) with more than 6 member items, DBA aborted with message "Stack overflow".
- Error in 48 bit floating point (REAL6) handling.
- The installation program sometimes allocated user space on the wrong directory.

Date: 870116

ND Norsk Data Software INFORMATION Report

Page: 1

ACCESS for ND-100

210185E

Report no:

Program: All Subject: German version is now available.

ACCESS for ND-100 revision E02 is now available in the following languages: Norwegian, English, Danish and German.

Date 87.04.	.09 Norsk Data A.S PROGRAM DESCRIPTION	Page	1 of 13			
Product	Name ACCESS for ND-100 ND-1 2103	no. 185E	Category STPR			
Reason		or Correcti ferent Envi				
Documen- tation	Title ACCESS User Guide ACCESS DBA Manual ACCESS Brukerveiledning ACCESS DBA Håndbok ACCESS Anvendarhandok ACCESS DBA Handbok		ND-no. 60.153.4 EN 30.022.4 EN 60.153.4 NO 30.022.4 NO 60.153.4 SW 30.022.4 SW			
Purpose	Query language for ad-hoc interrogintegrated with other ND-DIALOGUE	gation of d tools.	atabases.			
Prerequi- sites		_	Version >=I rev 320			
	ND-no. Product name 210166 SIBAS-II version D or later (Optional)					
. S.S.	Minimum mass storage resources for User Userspace					
s s	SYSTEM 150 pages on DIALOG-SYS 560 pages on DATA-DICTIONARY 200 pages on	17 files				
is .	Minimum mass storage resources per Userspace	rmanent Number of	files			
-	SYSTEM 85 pages on DIALOG-SYS 560 pages on DATA-DICTIONARY 200 pages on	17 files				
	SINTRAN configuration requirements for exclusive use by each DDI process					
	<pre>2 unreserved internal devices 1 batch process 6 free segments</pre>		ψ			
Product consists	MODULE-no. Name		for Source			
of	250140E ACCESS Examples	210369E				

Date 87.04.09

Norsk Data A.S
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PROGRAM DESCRIPTION

Product

Name
ACCESS for ND-100

ND-no.
210185E

Category
STPR

Directory Name: 210185E <rev></rev>	-XX-01D	User Name: FLOPPY-USER
Prog.no. File Name	Type	Containing
205846E INST-ACC-100-E <rev></rev>	PROG	ACCESS installation
203786E DDBTABLES-E-E04	VTM	VTM tables
205857E ACC-DDI-STOP-E <rev></rev>	PRÓG	Utility program
205844E ACC-SIB-PROH-100	MODE *	No SIBAS update
205845E ACC-SIB-PERM-100	MODE	Allow SIBAS update
205854E ACCESS-DDI-E <rev></rev>	PROG	Data-dictionary program
205859E ACCESS-0-E <rev></rev>	PROG	ACCESS main segment
205860E ACCESS-1-E <rev></rev>	PROG	ACCESS 1st segment
205861E ACCESS-2-E <rev></rev>	PROG	ACCESS 2nd segment
205862E ACCESS-3-E <rev></rev>	PROG	ACCESS 3rd segment
205863E ACCESS-4-E <rev></rev>	PROG	ACCESS 4th segment
207856E ACCESS-5-E <rev></rev>	PROG	DBA main segment
203460I ISAM-SERVICE-IOO	PROG	ISAM SERVICE program
Directory Name: 210185E <rev>-</rev>	-EN-01D	User Name: FLOPPY-USER
Prog.no. File Name	Туре	Containing
205440E ACC-PATCHER-E <rev></rev>	PROG	Patcher program
207857E ACCESS-EN-E <rev></rev>	HELP	English ACCESS file
207858E DBA-EN-E <rev></rev>	HELP	English DBA file
204622C UE-ERMSG-EN-B04	ERR	English error messages
Directory Name: 210185E <rev>-</rev>	-NO-01D	User Name: FLOPPY-USER
Prog.no. File Name	Type	Containing
205440E ACC-PATCHER-E <rev></rev>	PROG	Patcher program
207859E ACCESS-NO-E <rev></rev>	HELP	Norwegian ACCESS file
207860E DBA-NO-E <rev></rev>	HELP	Norwegian DBA file
204623C UE-ERMSG-NO-B04	ERR .	Norwegian error messages
t (morr) = gummont manifelia		

^{* &}lt;rev> = current revision

The language independent version delivered on one double-density diskette is compiled of the following single-density diskettes: 210185E<rev>-XX-01S, 210185E<rev>-XX-02S, 210185E<rev>-XX-03S, 210185E<rev>-XX-05S.

The English language version delivered on one double-density diskette is compiled of the following single-density diskettes: 210185E<rev>-EN-01S, 210185E<rev>-EN-02S.

The Norwegian language version delivered on one double-density diskette is complied of the following single-density diskettes: 210185E<rev>-NO-01S, 210185E<rev>-NO-02S.

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1 ERRORS CORRECTED

- Error when a NUMERIC TEXT field was used as an axis in a bar chart.
- National letters (Æ, Ø and Å) may now be used in command names.
- Error when a BCD or NUMERIC TEXT search key was used.
- The KEEP-VALUES command did not work.
- Error in range selection of negative and positive values of search key fields.
- Lost accuracy in certain arithmetic expressions.
- Error in NUMERIC TEXT overflow.
- A NUMERIC TEXT field of length <n> previously accepted only <n-1> digits.
- Error in result of Flat File join.
- Incomplete copying of SIBAS set information.
- Code generation error when using IN('X'?:'Y'?) on search key fields.
- Error in nested EXECUTE commands.
- Error when parameters were omitted for REORDER-COLUMN in COMMAND-BOX.
- Error in the UNIQUE command.
- ACCESS will now ignore parity bits set by other systems (when making print-outs and comparisons).
- Error when ASCII-character 176B was used in DESCRIBE-MACRO-CALL and result files.
- Error when using a SIBAS secondary key to simultaneously search and update.
- Incorrect default values in LOAD-TEXT-FILE.
- Errors could occur when one example element was used in more than 2 locations.
- Using the arrow keys to move in an input form could result in an error.

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- Error in altering the 'responsible'-column in LIST-DATABASE in DBA.
- Error when using an 'X'?-type selection on a CHARACTER-2 SIBAS search key field.

2 KNOWN, BUT NOT CORRECTED ERRORS

- Sometimes, stored queries are corrupted. The corrupted query cannot be fetched and must be deleted and rewritten.
- Ctrl-D Ctrl-C causes the table editor to corrupt the screen picture. When this error occurs, the screen image can be refreshed by using HELP.
- DBA has trouble in distinguishing small and CAPITAL letters. To avoid errors, don't specify names that differ only in the use of small versus CAPITAL letters.

3 MODIFICATIONS

3.1 CHANGED COMMANDS

- COPY-REALM and COPY-DATABASE in dba: realm heading and item heading are now used as table name and field name respectively, when copying SIBAS tables automatically. The storage format is also copied automatically. Multimember sets and groups with more than 6 members are not copied.
- LOAD-TEXT-FILE in DBA: NUMERIC TEXT is right-justified. Only type CHARACTER is now allowed.
- EDIT-USERS in DBA: Other users' passwords can no longer be changed.

. 3.2 NEW COMMANDS

- PRINT-QUERY on result level (***) in ACCESS: writes the REFINE-RESULT query to a file or printer.

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3.3 REMOVED COMMANDS

- CLEAR-PASSWORD, SET-PASSWORD, RESERVE-DATABASE and CONVERT-QUERIES.

3.4 OTHER MAJOR ALTERATIONS

- Remote files may be specified wherever a file name is required.
- User names are fetched from UE (User Environment) or SINTRAN, and the user is not prompted for his ACCESS user name.
- Time of compilation for a query is checked against SIBAS Time Stamp. A message is given if the query is obsolete and needs recompilation.
- Larger EXECUTE and MENU constructions than previously allowed, are now possible.

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4 INSTALLATION

If SIBAS is installed on your computer, you will be able to use ACCESS together with SIBAS.

Note that the notation $\langle \text{rev} \rangle$ is used to indicate a revision number of ACCESS E. This number will be 00 for the first E-release and will be incremented for each revision.

You need the users DIALOG-SYS and DATA-DICTIONARY (the latter name is optional and may be changed).

ACCESS-E<rev> (including DBA) requires 6 free segments.

4.1 PREPARATIONS

ACCESS uses two "internal devices" for communication between processes. You must therefore find two internal devices that are not used by other programs. These devices are numbered from 128 upwards.

If you already have ACCESS installed, you can use PED or WP to read the file (DATA-DICTIONARY)ACC-DDI-D:BATCH. Note the two numbers at the beginning of this file; these are your current ACCESS internal device numbers.

If you want to use different numbers or are installing ACCESS for the first time, you can proceed as follows:

Finding internal devices

- Use the command @LIST-DEVICE to find two internal devices that are not already in use.

@LIST-DEVICE 128 0→
NOT RESERVED
@LIST-DEVICE 128 1→
NOT RESERVED
@LIST-DEVICE 129 0→
NOT RESERVED
@LIST-DEVICE 129 1→
NOT RESERVED

- O means input
- 1 means output

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- When you have found two devices that are "NOT RESERVED" for input and two for output, write the two numbers down. You will be asked for them later.

Finding a batch process

- The data dictionary information is read by ACCESS, via the internal devices from a data dictionary program. This program runs on a separate batch process. The batch process must be reserved exclusively for this use whenever ACCESS is running.
- Use the command @LIST-BATCH-PROCESS! to check which batch processes your machine has, and decide which one you wish to reserve for ACCESS use.

Creating users

- Log in as user SYSTEM.
- Ensure that user SYSTEM has at least 6 unused files, (maximum 248 existing files) and 150 pages.
- Create the user DIALOG-SYS and give it 560 pages. The user DIALOG-SYS is used to hold the ACCESS programs and the original, unmodified help-files and utility-files.
- Create the user DATA-DICTIONARY and give it 200 pages (you may choose not to use this name). If you are using the DATA-DICTIONARY user from ACCESS-D, ensure that it has sufficient space and pages (100 unused pages). For a full description of the role of user DATA-DICTIONARY, please refer to the DBA manual (ND.30.022.4), chapters 2 and 6.
- DATA-DICTIONARY will need additional pages if you plan to enter large data descriptions. Data descriptions are kept in the data-dictionary files. Additional pages are of course not needed if you are re-using your ACCESS-D data descriptions.

4.2 RUNNING THE INSTALLATION PROGRAM

- Insert the floppy 210185E<rev>-XX-01 into floppy unit <no.>.

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- Type:

@ENTER-DIRECTORY 210185E-XX-01 FLOPPY-DISC-1 <unit no.>→ @(210185E--01:FLOPPY-USER)INST-ACC-100-E →

- Follow the instructions given in the installation program. You will be asked whether or not you are using the default user DATA-DICTIONARY for your DDI files. If you choose not to use it, the help, start, stop, log and batch files must be manually copied into your preferred area from user DIALOG-SYS.
- Enter your data-dictionary user (default is the user DATA-DICTIONARY) and define the data structures, users and access rights by using the DBA program. Type:

@DBA-

to start. The data dictionary will be created by DBA, if it does not already exist.

- NOTE: Users accustomed to ACCESS-D should be aware of the change in ACCESS user identification. The ACCESS user name is now fetched from UE or SINTRAN. This may require renaming of users, using DBA.
- The data-dictionary process may now be started by running the mode file ACC-DDI-START: MODE (normally found under user DATA-DICTIONARY).
- ACCESS may then be started by typing:

@ACCESS⊷

- The stored queries from the D version, stored in your query library (default name LIBRARY: TRAN), should be recompiled using the command *COMPILE-QUERIES in ACCESS. Take a safety backup of the library file first!

4.3 SYSTEM CONFIGURATION

Setting the priority of the batch process

The batch process which is to be used by ACCESS should run at a higher priority than ordinary batch processes. Otherwise, response times for the ACCESS users will be unnecessarily long.

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- Decide which batch process is to be used for ACCESS.
- Find the logical unit number of the batch process.

These numbers are assigned according to the following system:

Batch no		Logical	unit	no
1	365	670		
2		672		
3		674		
4		676		
•		•		
•		•		
•				

- Continue as in the following example.

Example	
@SINTRAN-SERVICE— *REMOVE-FROM-TIME-SLICE 674D— MEMORY? Y— IMAGE? Y— SAVE-AREA? Y— *EXIT— @PRIOR BCHO3 42D—	

Logical unit number

Set the priority to 42

- The above procedure should be included in the file (SYSTEM)HENT-MODE: MODE.

Preventing the users from writing on a SIBAS database.

If you use ACCESS with SIBAS, but do not want anyone to use ACCESS to write on a SIBAS database, type:

@MODE (DIALOG-SYS)ACC-SIB-PROH-100:MODE←

This makes it impossible for <u>all</u> users to use ACCESS to write on a SIBAS database. This can also be done in the ACCESS DBA program with the command *EDIT-ACCESS. However, if you are sure that no one is to be given the right to write on a SIBAS database, the above method gives an extra level of protection.

To reverse the effect of this procedure, run the

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mode file (DIALOG-SYS)ACC-SIB-PERM-100:MODE.

These mode files must be run from the user SYSTEM.

These mode files are made to be run under SINTRAN J or later versions. If you have SINTRAN I or an older SINTRAN version on your computer, you must make the following changes in the two mode files:

Give the sintran command

@LIST-REENTRANT⊷

and find the segment number where ACCESS-100-E<rev> is placed. Change the two ACC-SIB--100:MODE files with NOTIS-WP or PED and write the segment number instead of AC_0 E in the files.

Setting xon/xoff on all terminals

- The following procedure should be performed for all TDV 2200/9 terminals from which ACCESS will be used.
 - Enter the "Communication switches" menu in the terminal.
 - Set "Communication Handshake" to xon/xoff.

For further information on the terminal menus, see the manual for the terminal (TDV 2200/9 User's Guide (ND)).

- Continue as in the following example:

Example-@SINTRAN-SERVICE← *CH-DATA⊷ LOG.UNIT NO.: 53D INPUT/OUTPUT: I+ MEMORY? Y⊷ IMAGE? Y→ SAVE-AREA? Y⊷ **MEMORY** IMAGE SAVE-AREA DFLAG/ 1 1 % 1 1001⊷ *EXIT-

Terminal 53 is used as an example

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The above procedure should be included in the file (SYSTEM)HENT-MODE: MODE.

Creating files

- Create the file LIBRARY: TRAN under all SINTRAN users who are to run ACCESS.

These files will be used to store queries.

- ACCESS will be dumped as a reentrant subsystem at the end of the installation. The file (SYSTEM)HENT-MODE: MODE should be edited to contain @MODE (DIALOG-SYS)ACCESS-DUMP-E<rev>:MODE in order to dump ACCESS reentrant after a cold start.

5 DELETING ACCESS VERSION D

After a successful installation of ACCESS E, the files remaining from the D version should be removed. All ACCESS files with the 'D' suffix may be deleted. Similarly, the example files (normally resident under user ACCESS) with suffix :ISAM and :DATA can be removed. Note that there may be :ISAM and :DATA files here that are not example files!

When ACCESS-D was installed, a user called <Convert user> was used to run a special conversion program. This user is no longer needed, nor are any of the ACCESS-files residing there.

The old ACCESS-D segments need to be cleared. Proceed as follows:

- Read the file (DATA-DICTIONARY)ACCESS-DUMP-D:MODE (using PED or WP). Write the first half of it, up to and including the first EXIT statement, to a temporary :MODE file.
- Run this temporary :MODE file from user SYSTEM. It will clear and delete all relevant segments.
- Alternatively, you may do the job manually. First, it is advisable to read the file (DATA-DICTIONARY)ACCESS-DUMP-D:MODE as described above and check that the segment names here and in the example match. Then, enter the RT-LOADER from user SYSTEM and proceed as:

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ACCESS for ND-100

ND-no.
210185E

Category
STPR

5.1 PREPARING THE HELP FILE

Directives specified in your ACCESS-D help files, called ACCESS-HELP: TEXT and DBA-HELP: TEXT, should also be specified in your new help files: ACC-EN-E<rev>:HELP and DBA-EN-E<rev>:HELP, respectively. Replace EN with your local language code, eg. NO, if you are not using the English version.

These directives can be internal device numbers, start-up query (menu), exit SINTRAN command, deleted commands, and renamed commands.

6 ISAM SERVICE

To maintain consistent indices of your ISAM files used in ACCESS, the subsystem ISAM-SERVICE is used. If ISAM-SERVICE is not installed on your computer, it can be installed from floppy-diskette. Proceed as follows:

- Log on as user SYSTEM and ensure this user has 1 free file descriptor, and 65 free pages (at least).
- Insert floppy diskette 210185E<rev>-XX-01D or 210185E<rev>XX-05S (depending on your disk format) into floppy unit
 <no.>, and type:

@ENTER-DIRECTORY 210185E-XX FLOPPY-DISC-1 <unit no.>→
@COPY-FILE "ISAM-SERVICE-IOO:PROG" (210185E-XX:F-U)IS-SER-IOO:PROG→

The function of ISAM and the ISAM-SERVICE program is explained in the ISAM reference manual, ND 60.108.05. For our purpose, the most useful commands in ISAM-SERVICE are:

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- VERIFY: to verify that a given ISAM file is consistent and undamaged. If the file is not healthy, proceed with:
- UNLOAD: to write the data only to file
- LOAD: to load the written data back to an ISAM file while reconstructing the index.

and are used in that sequence.