

Norsk Data

Product Information

Product name

Product number

Operator Environment Menu System

211069B

Description of product

An editable menu system, interfacing to various subsystems and tasks for system supervision and maintenance.

The product includes a tutorial program, which describes the process of editing the menu system, gives an overview of the menu system, and describes how to use MODE and PERFORM with the menu system.

Reason(s) for new product or version

The release of this OE menu system is a part of the process of dissolving the Operator Environment package, and release the various OE modules as independent products.

N O T E !

If you already have the complete Operator Environment package on your system, installation of the new version of the menu system will affect only the menu system of the old OE package. All the other modules are unaffected, and will work with this menu system too.

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1 Prerequisites

In order to use this product, the following are required.

1.1 Hardware prerequisites

Anyone of the following CPU types:

- 100 CX
- 110 Standard
- 110 CX
- 120 Standard
- 120 CX

Floating format: *Any*

N O T E : The tutorial program will not run on CPU-types 100 and 110 standard.

1.2 Software prerequisites

The following software must be available on the system before the product is installed:

Operating system:

<u>Name</u>	<u>Version/Revision</u>
SINTRAN-III/VSX	>= K

Other software:

<u>Product name</u>	<u>Product number</u>
User-Environment (ver. >= C)	210518C

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1.3 Other prerequisites

Minimum Permanent Mass Storage:

User	Space (pages)	Number of files	
ND-Operations	130	5	
System	140	2	*)
Pilot-A	170	3	

Additional space/number of files for each added language:

ND-Operations	90	3	
System	140	2	*)
Pilot-A	45	2	

Additional space/number of files for installation:

System	100	3	
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*) Not necessary if UE-ERMSG-<lan>-C<rev>:ERR and a usable version of DDBTABLES are already installed.

2 Dependencies

In addition, the following dependencies exist between this and other products. The hardware and software listed here may, for example, be necessary to make full use of the product.

2.1 Hardware dependencies

None

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2.2 Software dependencies

(Note: prerequisites are given in each subsystem's PI-sheet).

<u>Product name</u>	<u>Product number</u>
Multi-Machine Operator Environment	211078A
User Area Manager	211070A
Configuration Dictionary	211071A
File System Verification	211073A
Performance Monitor	211074A
Backup Manager	211226A
File Manager	211075C
SIB-DBM	(SIBAS-II) 210160F or 210340F OR
	(SIBAS/R) 211212A
SIBAS-service	(SIBAS-II) 210160F or 210340F OR
	(SIBAS/R) 211212A
SPRINT Spooling System	211056A
UE-PMAN	210518C
UE-FUNC	210518C
DS-service and DS-backup	210691D (ND-110) or
	210794D (ND-500/5000)
ID-service	210192B (ND-110) or
	210792B (ND-500/5000)

Nature of dependency

The above mentioned products are called from the OE Menu System. If one or more of the products are missing on your computer, you can still run the menu system, but it will not have the full functionality. You will receive an error-message and return to the menu system if you try to start a non-existing program from the menu.

2.3 Other dependencies

None

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3 Documentation

Included with the product

Title

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Operator Environment Menu User Guide

860359.1 EN

4 Installation procedure

4.1 Automatic installation

Before you start installation of the menu system, check that all the prerequisites listed above are fulfilled.

The installation must be run from SINTRAN.

To install the OE Menu System, follow this procedure:

- Log in with SINTRAN user name SYSTEM
- Insert the diskette containing the directory name 211069B<rev>-<lang>-01 in the diskette station
Note: <lang> means language suffix (eg. EN or NO)
- Execute the following commands (operator input is underlined and parameters are enclosed with angle brackets)

```
@ENTER-DIRECTORY↓
DIRECTORY-NAME: 211069B-<lang>-01↓
DEVICE-NAME: FLOPPY-DISC-<drive no.>↓
DEVICE-UNIT: <floppy-unit>↓
@(211069B:FLOPPY-USER)IN-OE-<lang>-B<rev>↓
```

The installation procedure will now start. Read the messages that appears on the screen, and follow the directives which are given. After initialization, the main menu of the installation system will appear on the screen:

- 1: Get start information
- 2: Delete product files
- 3: Check environment and resources
- 4: Copy product files
- 5: Exit program
- 6: Get HELP information

Execute the options 1 through 4 in sequence to install the menu system (just press return when you are asked about which option you want to choose, because the sequence 1,2,3,4,5 is defined as

ND-895093.1 EN

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default). If one of the operations fails (for example if deficiencies regarding environment and resources are discovered), you will get a message telling what to do in order to proceed.

4.2 Non-automatic installation

- Assure that user area ND-OPERATIONS has 130 free pages and 5 free object entries.
- Assure that user area PILOT-A exists, and have 164 free pages and 3 free object entries.
- Insert the diskette in the floppy station and copy these files to user area ND-OPERATIONS:

```
OE-MENU-<lang>-B<rev>:NDPF
OE-MENU-<lang>-B<rev>:CONF
OE-MENU-<lang>-B<rev>:MENU
OE-COMMANDS-B<rev>:PROG
OE-COMMANDS-B<rev>:DATA
```

- Copy these files to user area PILOT-A:

```
OE-HELP-<lang>-B<rev>:PIL
OE-HELP-<lang>-B<rev>:PICT
MPDS-A<rev>:PROG
```

- Define MPDS-A<rev>:PROG (the PILOT runtime system) as a reentrant subsystem with the command:

```
@DUMP-PROGRAM-REENTRANT,MPDS-A,(PILOT-A)MPDS-A<rev>:PROG,MPDSA
```

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5 Modifications

5.1 New functions/commands

The following options are added to the OE main menu:

- HELP - starts the PILOT OE-tutorial
- SINTRAN - terminate the menu-system and return to SINTRAN

The following options are added on sub menu level:

- XMSG-command
- Edit host-file (PED)
- Edit SW-CONFIG (PED)

5.2 Changed functions/commands

There are some differences regarding the terms used in the menu options. The changes have been done with the intention of making the menu system more readable/easy to use. We suggest that you check out the details about these changes by examining the menu system itself.

There are also changes regarding the placing of some of the sub options (moved from one submenu to another).

The Backup/Restore program is replaced by Backup Manager.

5.3 Removed functions/commands

Some of the options from the old OE menu have been removed. The old menu system had multiple entrants to some programs (DS-service, ID-service, status program etc.) This menu system has only one entry to these programs.

All entrants to the TRUE-system have been removed

The transfer-file option is removed.

The Status program OES is removed (Multi OE has the same functionality).

5.4 Other modifications

A command handler (same as in version A03 of Operator Environment) is used to execute commands called from the menu system. The program looks up the actions to be performed in the file (ND-OPERATIONS)OE-COMMANDS-B<rev>:DATA.

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NOTE !

If accounting is on, the system will work properly only if there exists a project with blank password. It is possible to run without blank password as well, then the line in the above mentioned file which says 'accounting off' must be changed to 'accounting on'. The menu system will ask for a project password when needed. Note that some of the application programs will not work unless a project with a blank password exists.

6 Errors corrected

None

7 Errors known but not corrected

There is a known error when UE C02 with scratch file integration is not used:

The command handler program has to store and retrieve information when executing a sequence of commands. The information is stored on the scratch file. The information is corrupted by PED, SPRINT and NOTIS-WP (up to and including the M version). The result of this is that in some cases the menu system will not return to the original user area after some program has been called.

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8 How to edit the menu system

The standard OE Menu System should be considered as a basis containing some of the most frequently used operational utilities and tools.

You can either use this basis as it is, and enhance it later with your own tasks/programs or you can change the whole menu system to make it look exactly the way you want, because the system is completely editable on all levels.

Before we go into details on how to edit the system, we will have a brief look at how it works:

The system consists of three "components":

- The UE menu-driver (UE-RUN)
- The command-handler (OE-COMMAND)
- The command file (OE-COMMAND-B:DATA)

@UE-RUN starts the OE Menu System (you have to define the OE-menu as menu system in your user profile).

For every final menu-choice you make, the command-handler is called with one parameter (number) referring (unambiguously) to a section in the OE-COMMANDS-B:DATA-file, and 0 or more parameters related to the command itself.

The command-handler then reads the correct command/sequence of commands from the datafile, executes the command(s) and returns to the OE-menu.

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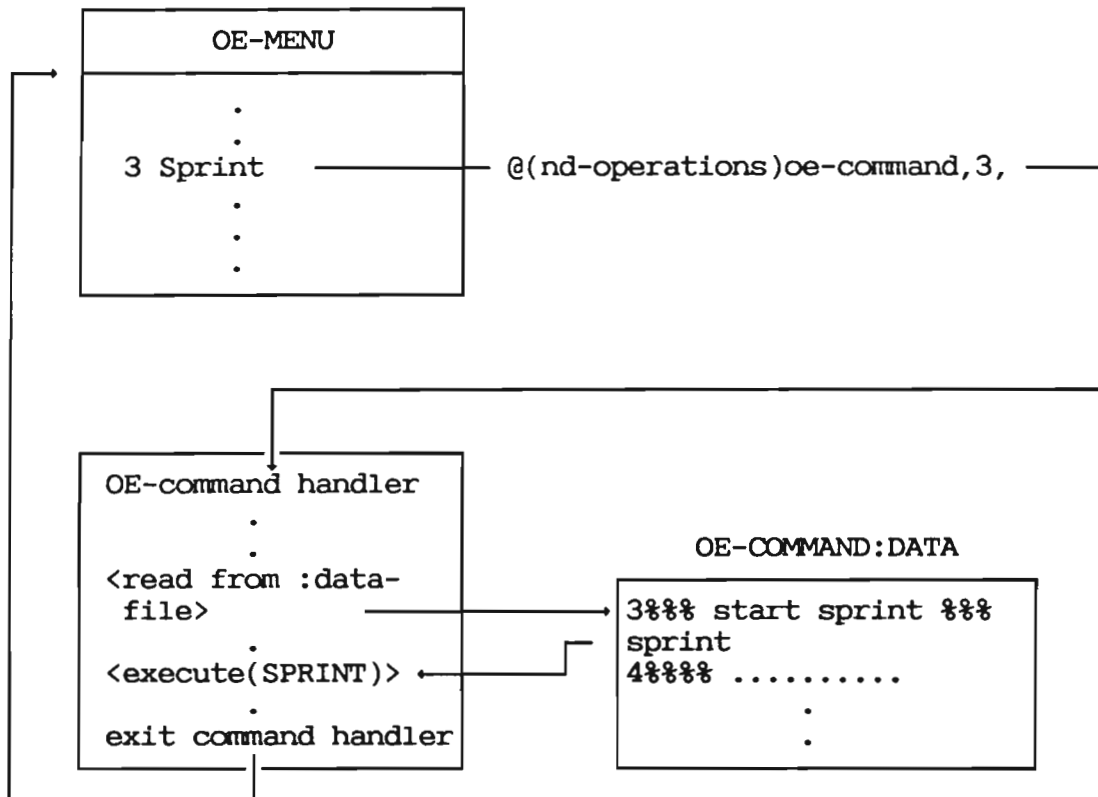
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fig.



This means that if you want to change your menu system, the two operations you have to carry out are :

- Update the menu (using the UE menu editor)
- Update the OE-COMMANDS-B01:DATA file (using PED or NOTIS)

8.1 Editing in the menus

It is assumed that you are familiar with the UE menu editor. If not, have a look in "User Environment Reference Manual" (ND-860194.3) chapter 8.

You are free to decide the look of the menu, number of levels, number of commands on each level, number of parameters to a menu choice etc. The only limitations with respect to this are set by the menu-editor (ref. User Environment Reference Manual).

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One important thing to be aware of is that every final menu choice must be a call to the command handler, which means that the task-line in the menu-editor has to have this format :

Task: @(ND-OPERATIONS)OE-COMMAND,<cnr>,<~a>,<~b>,,,,,,

<cnr> is the unambiguous command number which you choose, and which will correspond to an entry in the OE-COMMANDS-B:DATA file (we will look at how to structure this file in a minute).

As long as the <cnr> is unambiguous, it doesn't really matter which number you choose. We will however recommend that you use the same numbering system as is used in the standard menu system :

```
first the number of the main menu choice
then the number of the first submenu choice
----- " ----- second ----- " -----
a.s.o.
```

Following this system, if <cnr> is 34 it means that it is the fourth menu-choice on the submenu under the third menu-choice on the main menu.

There is a possibility of ambiguity here: Subcommand no. 11 under main command no. 1, and subcommand no. 1 under main command no. 11 will both implicate cnr = 111. If you use this numbering system, you must be aware of these situations, and use other numbers when they arise.

8.2 Editing the OE-COMMANDS-B:DATA file

When you have made your changes to the menu system using the menu editor, the next step of the operation is to update the data file to make the menu choices correspond to the actual command(s).

OE-COMMANDS-B:DATA is a text file, editable with PED or NOTIS-WP. The structure of the file is as follows :

First there is a heading, containing some comments. After the heading follows a number of sections describing the command(s) corresponding to each final menu choice in the OE menu. The number of sections is equal to the number of final menu choices in the OE menu.

Between the heading and the first section, the following message may be present :

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accounting on or accounting off

This message tells the menu system if it has to ask for project password (needed if accounting is on). If the message is missing, default accounting is off.

We will now look in detail on the format of these sections and which commands are allowed here.

Each section starts with the (unambiguous) number corresponding to the menu choice (must start in column one), and is terminated by the start of a new section or by end of file.

After this number, on the same line, you may write a comment describing what this menu choice does. This will also make it easier to separate visually the sections on the file. Comments must be preceded by '%'.
 %

Following this line is the command, or sequence of commands (one on each line) which activates the work corresponding to your menu choice.

These commands may be :

- SINTRAN commands
- Reentrant/non reentrant programs
- Special commands to the command handler

The special commands to the command handler are as follows (all starting with the "hat" character '^') :

```

^to-sys  : go to user area SYSTEM
^to-ndo  : go to user area ND-OPERATIONS
^to-ori  : go to original user area
^wait    : the command handler writes out a message, and holds
           the execution until the user has pressed a key.
^no-esc  : disable escape - don't terminate the following
           commands in a sequence if <escape> is pressed.
^esc     : enable escape (default) - terminate following
           commands if <escape> is pressed.
  
```

The notation for parameters to commands is :

^num

where <num> is an integer ranging from 1 and upwards. (^1 means 1st parameter, ^2 means second parameter a.s.o.)

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There is no limitation on the number of commands in a sequence. You may not enter commands on subsystem level in the sequence (ex. CHANGE-DATAFIELD inside SINTRAN-SERVICE, or LIST-CONNECTIONS inside XMSG-COMMAND program).

To overcome this limitation, you can make a MODE file containing your sequence of commands (also on subsystem level), and run this modefile from the OE menu by putting the command UE-FUNC,MODE,<name of modefile>,, in the OE-COMMAND-B:DATA file.

If you choose this method, there are some points you must notice :

- You must put the command @UE-MENU at the end of the mode file in order to return to the OE menu after the mode job has terminated.
- If you change user area in the mode job (for instance to user SYSTEM), you must put the command @UE-FUNC,CHANGE-USER-AREA,<original user area> in the mode-file to return to your original user area
- If the mode job is aborted before it is finished, you will return to SINTRAN - not to the OE menu.

To make your MODE-files more flexible, you may use the SINTRAN III utility PERFORM, which gives you the ability of parameter substitution (for details about PERFORM, see SINTRAN III Utilities Manual ND-860151.3).

The parameters are picked up in a parameter input field in the OE menu, and transferred to the command-handler in the ordinary way

Task :@(ND-OPERATIONS)OE-COMMAND,<cnr>,˜a,˜b,˜c,....,

The corresponding command in the OE-COMMANDS-B:DATA file must have this format :

<cnr> %%%%%%%%% <comment> %%

UE-FUNC,PERFORM,<macro-file>,<name of macro>,&circumflex1,&circumflex2,&circumflex3,....

The PERFORM program will, as a result of your macro and the parameters, first create a mode file and then run it.

The comments on MODE-job execution from the OE menu also applies to PERFORM :

- put @UE-FUNC,CHANGE-USER-AREA,<original user area> and @UE-MENU at the end of your macro

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- If the resulting MODE-job is aborted, you return to SINTRAN

Now to some examples :

You have a main menu, where choice 1 is "terminals and workstations". This choice has a submenu, where choice 3 is "stop-terminal". This has a parameter input field, where you are asked for the terminal number.

Now, the task command for this, which is a final menu choice, is :

```
@(ND-OPERATIONS)OE-COMMAND,13,~a,
```

The corresponding section in the OE-COMMANDS-B:DATA file will look like this :

```
13 %%%% Stop-terminal %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% parameter 1 : terminal-number
```

```
^to-sys
stop-terminal,^1
^to-ori
```

The first line contains the number which corresponds to the menu choice, followed by a comment.

^to-sys changes user area to user SYSTEM (necessary to perform the STOP-TERMINAL command).

Next is the Sintran command STOP-TERMINAL with one parameter (the terminal-number given in the parameter input field in the OE menu). ^to-ori takes you back to your own user area after the command has terminated. The OE menu comes up automatically after a sequence is completed.

Note that you may put in blank lines in the file. These are ignored by the command handler.

You may also add comment lines (identified by the "percent" character '%' in column 1).

Finally an example showing a section with a sequence of SINTRAN commands and more than one parameter :

You want to install a menu choice called Create-Floppy-Directory (let's say it's choice 9 from the main menu, and choice 5 from sub menu). The functionality behind this menu choice is intended to be :

- create a directory on floppy
- enter the directory

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- c) create a user on the floppy
- d) give user space
- e) release the directory

The OE menu will ask for the following parameters :

- par. 1 (~a) : directory name
- par. 2 (~b) : device name
- par. 3 (~c) : device unit
- par. 4 (~d) : user name
- par. 5 (~e) : number of pages

The task-command in the OE menu will be :

@(ND-OPERATIONS)OE-COMMAND,95,~a,~b,~c,~d,~e,

And the corresponding section in the OE-COMMANDS-B:DATA file :

```
95 %%%% create floppy directory %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
CREATE-DIRECTORY,^1,^2,^3,,
ENTER-DIRECTORY,^1,^2,^3,
CREATE-USER,^1:^4,
GIVE-USER-SPACE,^1:^4,^5,
RELEASE-DIRECTORY,^1,
```