# DNOS TIFORM Object Installation

Part No. 2272096-9701 \*D February 1984

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# Printed in U.S.A.

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READ THIS DOCUMENT BEFORE ATTEMPTING TO USE THIS OBJECT KIT. ITHIS DOCUMENT DESCRIBES RELEASE LEVEL 3.3.0 OF THE DNOS TIFORM: OBJECT INSTALLATION MEDIA, PART NUMBERS 2250327-1603, 2250327-1604, AND 2250327-1605 (DISKETTES) OR 2276477-1601 (OTHER).

TEXAS INSTRUMENTS ASSUMES NO RESPONSIBILITY FOR MODIFICATIONS: MADE TO THIS OBJECT KIT.

#### Introduction

#### 1.1 GENERAL INFORMATION

Be sure to copy and/or write protect the installation media. For copy procedures, refer to the <u>DNOS</u> <u>Operations Guide</u>, part number 2270502-9701. Also, consult the <u>TIFORM Release Information</u>, part number 2276479-9901 before beginning this installation.

Some System Command Interpreter (SCI) commands in this document are presented in batch format. You can execute them by entering the commands exactly as shown or by using interactive prompting from SCI. For a discussion of the batch command format, refer to the <u>DNOS</u> System Command Interpreter (SCI) Reference Manual.

# 1.2 MEDIA DEFINITION

Product shipments are made in four formats:

- \* Hard Disk -- A disk pack that contains the object.
- \* <u>Diskettes</u> -- Three double-sided, double density (DSDD) diskettes that contain the object:
  - TIFRMNF1 Contains the TIFORM object directories.
  - TIFRMNF2 Contains any patches needed to make TIFORM perform correctly.
  - TIFRMNF3 Contains four directories that are not installed: DEMOINS, LINKD, PASCAL, and TESTFORM. These are used for developing and testing TIFORM applications as explained in the Release Information. (On other media, these directories are on the same volume as the object.)
- \* Magnetic Tape A magnetic tape that contains the object.

\* Add-On - A disk pack that contains the TIFORM object along with one or more other products.

The installation instructions in this document assume that the object files are accessible by a synonym. Section 2 describes how to prepare the media so that the files can be accessed by a sunonum.

# 1.3 INSTALLATION PROCEDURE

Before you can install TIFORM you must prepare the media and assign the synonym TIFRMINS to the volume or directory that contains the object directories and installation batch streams. The installation itself involves the following steps:

- Install the TIFORM object by executing the ITIFORM command.
- Patch the TIFORM object by executing the PTIFORM command.
- 3. Verify the installation by testing the FDL Compiler, Form Executor, and Interactive Screen Generator/Editor.

#### 1. 4 SYSTEM REQUIREMENTS

To successfully perform this installation procedure, you must have a functioning DNOS system, version 1.2.0 or later. Your DNOS system must contain key indexed file (KIF) support in order to build the TIFORM message file. TIFORM installs this message file on your DNOS system disk under the directory . S\$MSG.

## Preparing for Installation

#### 2.1 INTRODUCTION

Before you install the TIFORM object, you must install the object media and assign the synonym TIFRMINS to the volume or directory that contains the object. The following paragraphs describe how to prepare each type of media.

#### 2.2 DISK FORMAT

The name of the TIFORM object disk is TIFRMNH. It contains all the object modules needed to run TIFORM, a file of TIFORM patches, and some additional directories used for developing and testing TIFORM applications. To prepare for the installation, perform the following steps:

- 1. Load the disk in an available drive on a functioning DNOS system, version 1.2.0 or later.
- 2. Install the disk by executing the following command:

IV UNIT=DSxx, VOLUME=TIFRMNH

where:

DSxx is the device name of the drive where the disk has been loaded.

3. Enter the following command to assign the synonym TIFRMINS to the object installation disk:

AS SYN=TIFRMINS, VALUE=TIFRMNH

# 2.3 DISKETTE FORMAT

The names of the TIFORM object diskettes are TIFRMNF1, TIFRMNF2, and TIFRMNF3. TIFRMNF1 contains all the object modules needed to run TIFORM. TIFRMNF2 contains the file of TIFORM patches. TIFRMNF3 contains some additional directories used for developing and testing TIFORM applications. To prepare for the installation, perform the following steps:

- Load the diskette labeled TIFRMNF1 in an available drive on a functioning DNOS system, version 1.2.0 or later.
- 2. Install the disk by executing the following command:

IV UNIT=DSxx, VOLUME=TIFRMNF1

where:

DSxx is the device name of the drive where the diskette has been loaded.

3. Enter the following command to assign the synonym TIFRMINS to the object installation diskette:

AS SYN=TIFRMINS, VALUE=TIFRMNF1

# 2.4 MAGNETIC TAPE FORMAT

When your receive the TIFORM object on a magnetic tape reel or cartridge, you must first move the object files and directories to a disk before you begin the installation process. To prepare for the installation, perform the following steps:

 Enter the following command to assign the synonym TIFRMINS to the pathname of a scratch directory:

AS SYN=TIFRMINS, VALUE=<volume>. TAPECOPY

In this command, <volume> must be the volume name of the disk that is to contain the scratch directory.

Enter the following command to create a scratch directory for the installation:

CFDIR PATHNAME=TIFRMINS, M=50

- Load the magnetic tape reel or cartridge in an available drive on a functioning DNOS system, version 1.2 or later.
- 4. Enter the following command to move the contents of the magnetic tape reel or cartridge to the scratch directory you created:

RD SEQ=MTxx, DIR=TIFRMINS, LIST=<pathname>

where:

MTxx is the name of the tape drive containing the TIFORM release tape.

<pathname> is the pathname for the listing of the
 directory restored from the magnetic
 tape. You can examine this file by
 executing a Show File (SF) or Print File
 (PF) command.

5. Unload the magnetic tape.

# 2.5 ADD-ON FORMAT

In an add-on package, the TIFORM object is in the directory TIFRMNH on the installation disk. The other directories on the disk contain other products. To prepare for installation, perform the following steps:

- Load the add-on disk in an available drive on a functioning DNOS system, version 1.2.0 or later.
- 2. Install the disk using the following command:

IV UNIT=DSxx, VOLUME=<volume>

where:

DSxx is the drive where the add-on disk is loaded.

<volume> is the volume name of the add-on disk. You
 can find the volume name marked on the disk
 or you can execute a Show Volume Status
 (SVS) command to obtain the volume name.

3. Enter the following command to assign the synonym TIFRMINS to the directory that contains the TIFORM object:

AS SYN=TIFRMINS, VALUE=<volume>. TIFRMNH

# Installing the Object

This section describes the procedure for installing the TIFORM object on a DNOS system. The installation process deletes any previously installed version of TIFORM and installs the new TIFORM components on the system disk. To install the TIFORM object, perform the following steps:

 First, enter the following SCI command to gain access to the TIFORM installation menu and command library:

. USE TIFRMINS, . S\$CMDS

2. Assign the synonym DSC to the volume name of the DNOS system disk:

AS SYN=DSC, VALUE=<volume>

where:

<volume> is the volume name of the system disk where you want to install TIFORM.

3. Enter the Install TIFORM (ITIFORM) command and respond to its prompts as described below:

[ ]ITIFORM

where:

<volume> is the volume name of the system disk
 where you want to install TIFORM. The
 initial value of this prompt is the
 pathname that you assigned to the synonym
 DSC.

If ITIFORM detects no errors, the following message appears:

# TIFORM OBJECT INSTALLATION IN PROGRESS

This process takes about eight to twenty minutes to execute. During this time you can check the progress of the installation by entering the Show Background Status (SBS) or Wait (WAIT) command.

4. When the execution has completed, you receive the following message:

# n ERRORS INSTALLING TIFORM

If the error count is not zero, the listing file indicates the cause of the error. If the installation is error—free, the listing file contains a disk map of the .S\$TIFORM directory showing the files installed. The installation process also installs the following tasks on the program file .S\$TIFORM.S\$PROG: EXECT911, FDLC, ISGE, FDLBUILD, and EXECT820. ITIFORM also assigns the global logical name S\$TIFORM to the directory .S\$TIFORM.

Now proceed to Section 4 for instructions for patching the installed object.

# Patching the Object

# 4. 1 INTRODUCTION

Before you can use TIFORM, you must apply patches to the object. To apply the patches, follow the instructions in this section.

# 4.2 PATCHING AFTER INSTALLATION

When you install TIFORM from disk, tape, or add-on, your patches are included with the TIFORM object. When you install from diskettes, you must perform these steps to unload the object diskette and load the diskette that contains the patches.

 Enter the following command to release the TIFORM installation command library:

. USE

Enter the following command to unload the object diskette:

UV VOLUME=TIFRMNF1

3. Unload TIFRMNF1 and load TIFRMNF2. Then, enter the following command to install TIFRMNF2:

IV UNIT=DSxx, VOLUME=TIFRMNF2

where:

DSxx is the drive where TIFRMNF2 is loaded.

4. Enter the following command to assign the synonym TIFRMINS to TIFRMNF2:

AS SYNONYM=TIFRMINS, VALUE=TIFRMNF2

5. Enter the following command to access the TIFORM installation command library on TIFRMNF2:

. USE TIFRMINS, . S\$CMDS

To apply the TIFORM patches, enter the Patch TIFORM (PTIFORM) command from the TIFORM installation menu. Respond to the prompts as described.

# [ ]PTIFORM

PATCH TIFORM

TARGET SYSTEM VOLUME NAME: <volume>
TIFORM PATCH FILE PATHNAME: <patchfile>
HISTORY COMMAND DIRECTORY: <history>
TIFORM COMMAND DIRECTORY: <commands>
LISTING ACCESS NAME: <listfile>

#### where:

- <volume> is the volume name of the disk where TIFORM is installed.
- <patchfile> is TIFRMINS.PT.MTASK, the pathname of the
   TIFORM patchfile located on the object
   installation disk. If you receive a patch
   update and copy the patch file to a new
   location, use the pathname of the new copy.
- <history> is the pathname of the history command directory, usually .S\$SYSTEM.S\$\$CMDS.
- the pathname of a file to receive listings
  from the patch process.
- If PTIFORM detects no errors, the following message appears:

TIFORM PATCHING IN PROGRESS

After the patch procedure has completed, you receive the following message:

n ERRORS ON TIFORM MULTI-TASK PATCH STREAM

If patch error count is not zero, examine the listing file to find and correct the error. If the completion message reports no errors, then the patches have been applied successfully and you can proceed to Section 5 to verify the installation.

# 4.3 APPLYING PATCHES AT A LATER DATE

In addition to any patches you receive with the TIFORM object, you can also use the PTIFORM command to apply any TIFORM patches you receive at a later date. To do so, you need access to the PTIFORM command, which is currently in TIFRMINS. PTIFORM. Paragraph 5.5 provides instructions for copying PTIFORM and other components of TIFORM included with the object.

## Verifying the Installation

# 5. 1 INTRODUCTION

Before you begin using TIFORM, you must run three tests to verify the success of a TIFORM installation. If you have just completed the object installation, enter the following command to return to your usual SCI main menu:

.USE <libraries>

where:

The object media contains everything you need to run the tests. When you install TIFORM from disk, tape, or add-on, your test materials are included with the TIFORM object. When you install from diskettes, you must perform these steps to unload the patch diskette and load the diskette that contains the test materials.

 Enter the following command to unload the object diskette:

UV VOLUME=TIFRMNF2

Unload TIFRMNF2 and load TIFRMNF3. Then, enter the following command to install TIFRMNF3:

IV UNIT=DSxx, VOLUME=TIFRMNF3

where:

DSxx is the drive where TIFRMNF3 is loaded.

3. Enter the following command to assign the synonym TIFRMINS to TIFRMNF3:

AS SYNONYM=TIFRMINS, VALUE=TIFRMNF3

# 5.2 TEST 1: FDL COMPILER VERIFICATION

Enter the following command to compile the test program and test the FDL compiler:

XFDLC SOURCE=TIFRMINS. TESTFORM. TEST2, OBJECT=S\$TIFORM. PROG, LIST=. LISTING

This command executes for approximately one minute on a quiet system. Enter the Wait (WAIT) command to wait for completion.

At the end of a successful compilation, you receive the following message:

FDL ERROR COUNTS: 000 000 000 000/000 000 000 000 :

If this message does not appear, or any of the error counts is nonzero, refer to Appendix C of the <u>TIFORM Reference Manual</u> for an explanation and corrective action.

# 5.3 TEST 2: FORM EXECUTOR VERIFICATION

Enter the following command to execute the test program and test the Form Executor:

# [ ] FORMTSTR

When the Form Tester menu appears, perform the following tests:

- Enter O1 and press the Return key to open a form. Specify a program file of S\$TIFORM. PROG, a form name of FLABO1, and a terminal of ME. Press the Return key in response to the SURE? prompt. When the cursor reappears, press the Return key again.
- Enter 20 and press Return to display the status of the Form Tester session. The FORM STATUS field and the OS STATUS field should be OO. Press the Return key to respond.
- 3. Enter O2 and press Return to prepare a segment. Specify a segment name of SLABO1 and a group name of SLABO1. Press the Return key in response to the SURE? prompt. The following image appears on the screen.

# USED BODY PARTS

DATI SOLD TO		/	INVOICE # TERMS:			
PART #	YT <i>Q</i> #######		DESCRIPTION	####	*	ICE
#	#	#			#	#
#	#	#			#	#
#	#	#			#	#
#	#	#			#	#
#	#	#		****	#	#
########	#######	######	*****	####	######	#####
			SUBTO	TAL	#	#
					#####	#####
				TAX	#	#
					#####	#####
			TOTAL	AMT	#	#
					#####	#####

The box is displayed in graphic characters and the cursor is positioned in the INVOICE # field.

- 4. Press the Print key. A printout of the figure above is printed on the device assigned to TIFORM and a confirmation message appears at the bottom of the screen. Press the Return key to acknowledge the message and return the cursor to the INVOICE # field.
- Press the Previous Field key. Then, press the Return key to return to the Form Tester main menu.
- 6. Enter 20 and press the Return key to display the new status of the Form Tester session. The FORM STATUS field is 01, the TEXT LENGTH is 200, and the GROUP LENGTH is 408. All other fields have a value of 0. Press Return to go back to the Form Tester main menu.
- Enter 22 and press Return. Respond Y to the SURE? prompt to exit the FORMTSTR.

This completes the verification of the Form Executor using the Form Tester. If any of the STATUS fields contain values other than those specified in the preceding, refer to Appendix C of the TIFORM Reference Manual for an explanation of the error.

## 5. 4 TEST 3: ISGE VERIFICATION

To verify the installation of TIFORM's Interactive Screen Generator/Editor, you need to initialize a new segment and create the FDL from that segment. Refer to the ISGE tutorial in Section 4 of the <u>TIFORM Reference Manual</u>.

# 5.5 CONCLUDING THE INSTALLATION PROCESS

Once you have verified that the installed TIFORM performs correctly, you are ready to conclude the installation process. Before you unload the object media or delete the installation directory, you might wish to copy certain components of TIFORM that are included with the object media. If you decide not to save them, you can still access them later after preparing the object media for installation as described in Section 2. To conclude the installation process, perform the following steps:

 Enter the appropriate commands from the following list to save the TIFORM components you wish to keep for later use:

For removing TIFORM from the system:

CC I=TIFRMINS.REMOVE, O=<pathname>.REMOVE

For patching TIFORM at a later date:

CC I=TIFRMINS.PTIFORM, O=<pathname>.PTIFORM

For creating a linkable version of TIFORM:

CD I=TIFRMINS.LINKD, O=<pathname>.LINKD

where:

<pathname> is a directory to hold the TIFORM
 parts.

If you have installed from tape, enter the following command to delete the scratch directory:

DD PATHNAME=TIFRMINS, ARE YOU SURE?=YES

Otherwise, enter the following command to unload the installation disk:

UV VOLUME=TIFRMINS

Remove the installation disk, diskette, or tape from its drive. 4. Enter the following commands to delete the remaining synonyms used in the installation process:

AS SYNONYM=TIFRMINS, VALUE=""
AS SYNONYM=DSC, VALUE=""

This completes the installation of TIFORM.

# Removing TIFORM

If you wish to delete the installed TIFORM from your system, use the following procedure:

 Assign the synonym DSC to the disk where TIFORM is installed using the following command:

AS SYNONYM=DSC, VALUE=<volume>

where:

<volume> is the disk where TIFORM is installed.

Execute the batch stream named REMOVE, which is supplied on the installation media, by executing the following command:

XB INPUT=<directory>.REMOVE, LISTING=<pathname>

where:

<directory> is the directory that contains the
 REMOVE batch stream.

for the operation.