

DX10 COBOL ***Object Installation***

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|
| READ THIS DOCUMENT BEFORE ATTEMPTING TO USE THIS OBJECT KIT.
| THE DOCUMENT DESCRIBES THE DX10 COBOL OBJECT INSTALLATION
| MEDIA, VERSION 3.5.0, PART NUMBER 0939431-9701.
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Section 1

Introduction

1.1 GENERAL INFORMATION

Be sure to copy this master. For copy procedures, refer to the DX10 Operations Guide, TI part number 946250-9702.

Many of the system command interpreter (SCI) commands in this document are given in abbreviated form. These can be executed by entering the command exactly as it is shown. Alternatively, you can issue the commands without parameters and respond to the SCI prompts for any required parameter values. For more discussion of the two command forms, refer to the DX10 Operations Guide, TI part number 946250-9702.

1.2 MEDIA DEFINITION

Product shipments are made in three formats:

- * Disk -- The object is shipped on a CD1400, DS80, or DS300 disk pack, or on a double-sided, double-density (DSDD) diskette.
- * Magnetic Tape -- The object is shipped on a 1600 bit-per-inch magnetic tape reel or magnetic tape cartridge.
- * Add-On -- The object and one or more additional products are shipped on a CD1400, DS80, or DS300 disk pack.

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

1.3 THE INSTALLATION PROCEDURE

The object medium contains the files and batch streams to perform the following:

- * Install the object files
- * Verify the installation

1.4 SYSTEM REQUIREMENTS

To perform this installation procedure successfully you must have a DX10 system, Version 3.4 or later.

Section 2

Preparing for Installation

2.1 INTRODUCTION

Before executing the installation instructions, you must prepare the object files so that the batch stream can access them. The following paragraphs describe, for each of the available storage media, how to prepare the files.

2.2 DISK FORMAT

If you received the object on a disk, prepare it for installation by performing the following steps:

1. Put the installation disk in an available disk drive on a functioning DX10 system (Version 3.4 or later) and load it.
2. Install the disk by issuing the following command:

```
[ ] IV U=DSxx, V=CBLINS10
```

where:

DSxx is the disk drive on which you have loaded the disk.

Proceed to Section 3 for instructions on installing the object.

2.3 MAGNETIC TAPE FORMAT

If you received the object on magnetic tape, you must move the files to a disk before beginning the installation process, as explained in the following steps:

1. Create a directory on a disk by issuing the following command:

```
[ ] CFDIR P=<volume name>.CBLINS10, M=25
```

where:

<volume name> is the name of the disk on which you wish to create the directory.

2. Load the magnetic tape reel or cartridge.
3. Move the contents of the magnetic tape to the directory you created by issuing the following command:

```
[ ] RD S=MTxx, D=<volume name>.CBLINS10, L=.LISTING
```

where:

MTxx is the tape drive from which the object is to be copied.

<volume name> is the name of the disk volume to which the object is to be copied.

A listing of the directory restored from the magnetic tape will be written to the file .LISTING. You can examine this file by executing a Show File (SF) or a Print File (PF) command.

4. Unload the magnetic tape reel or cartridge.

Proceed to Section 3 for instructions on installing the object.

2.4 ADD-ON FORMAT

If you received the object as an add-on package, prepare it for installation by performing the following steps:

1. Put the disk containing the add-on package in an available disk drive on a functioning DX10 system (Version 3.4 or later) and load it.
2. Install the disk by issuing the following command:

```
[ ] IV U=DSxx, V=<volume name>
```

where:

DSxx is the disk drive on which you have loaded the volume.

<volume name> is the volume name of the add-on disk. The volume name is marked on the disk.

You can also execute a Show Volume Status (SVS) command to obtain the volume name.

Section 3

Installing the Object

3.1 INTRODUCTION

This section describes the procedure for installing the COBOL compiler and run-time support package on your DX10 system. The installation process accomplishes the following:

1. Deletes any previously installed version of DX10 COBOL
2. Installs the DX10 COBOL run-time routines and compiler

3.2 INSTALLATION PROCEDURES

To install the COBOL compiler and run-time support package, perform the following steps:

1. Designate the installation disk as an alternate procedure library with the following command:

```
[ ] .USE <volume name>, .S$PROC
```

where:

<volume name> is either the name of the installation disk or the name of the disk file to which the object was copied.

2. Execute the SCI command INSTALL. The following prompts will appear:

```
[ ] INSTALL
```

```
NAME of Installation Disk: CBLINS10
INSTALL on System Disk: YES
TARGET Volume name/Device: DS01
LIBRARY Volume name/Device: DS01
SYSTEM Program File Name: .S$PROGA
BATCH EXECUTION Listing File:
```

The TARGET Volume name/Device prompt identifies the installation destination for the compiler and the run-time support package. This will normally be on the standard system disk DSO1, which is the default value.

The LIBRARY Volume name/Device prompt is for the location of the .S\$SYSLIB files. These are the piece parts used when linking a run-time procedure with a program. The default for this prompt is the standard system disk DSO1.

The SYSTEM Program File Name prompt is for the name of the system program file on the target disk. If this name is not the default value ".S\$PROGA," the correct name must be entered.

You can find this name by issuing the Modify Volume Information (MVI) command as follows:

```
[ ] MVI
```

```
MODIFY VOLUME INFORMATION
CONTROL ACCESS NAME: ME
DISK?: <volume number>
COMMAND(L, C, S, G)?: L
```

The following prompts should appear:

| | PRIMARY | SECONDARY | SELECT |
|----------------------------|---------|-----------|--------|
| SYSTEM IMAGE: | | | P |
| PROGRAM FILE: <.S\$PROGB> | | | P |
| OVERLAY FILE: | | | |
| LOADER FILE: | | | |
| WCS FILE: | | | |
| DIAGNOSTIC: | | | |
| VOLUME NAME: <volume name> | | | |
| COMMAND?: | | | |

where:

<volume name> is the number of the drive on which your disk is installed

<.S\$PROGB> is the name of the system program file.

Note the program file name, enter Q for the command prompt, and press RETURN.

The installation process takes approximately twenty minutes to execute for a disk or one-half hour for a diskette.

During this time, you can check the status of the batch stream for completion and proper execution by issuing the SCI command Show Background Status (SBS) or Wait (WAIT). When the execution has completed, the following message appears:

```
COBOL INSTALLATION COMPLETE:  ERRORS = nn
```

If nn is not equal to zero, examine the batch listing to determine the error. The following error codes are normal and should be ignored.

- * 0001 -- Error in a Release LUND (RL) command
- * 0026 -- Error in a Create File Directory (CFDIR) command
- * 0027 -- Error in a Delete File (DF) command
- * 285F -- Error in a Delete Task (DT) command
- * 295F -- Error in a Delete Procedure (DP) command
- * 3158 -- Error in a Delete Task (DT) command

3.3 COBOL Components

During installation of COBOL, the components of the compiler and run-time support package, shown in Table 3-1, are installed on the target disk. The target disk should be the DX10 system disk.

DSC is a synonym set by the installation proc to the target disk name given by you.

Table 3-1 Compiler and Run-Time Support Package Files

| <u>Directory</u> | <u>Description</u> |
|------------------|--|
| DSC. S\$PROC | |
| XCP | SCI procedure -- Execute COBOL Program |
| XCPF | SCI procedure -- Execute COBOL Program in Foreground |
| XCT | SCI procedure -- Execute COBOL Task |
| XCTF | SCI procedure -- Execute COBOL Task in Foreground |
| XCTD | SCI procedure -- Execute COBOL Task |
| XCC | SCI procedure -- Execute COBOL Compiler |
| XCCF | SCI procedure -- Execute COBOL Compiler in Foreground |
| | |
| <u>Directory</u> | <u>Description</u> |
| DSC. S\$MSGX | |
| COBOL | Run-time message file |
| COBOLCMP | Compiler message file |
| M\$41 | Alias of COBOL |
| DSC. S\$SYSLIB | |
| RCBPRC | Linkable run-time reentrant procedure module |
| RCBNOIO | Linkable run-time reentrant procedure module without I/O capabilities |
| RCBTSK | Linkable run-time task segment without debugger |
| RCBTSKD | Linkable run-time task segment with debugger |
| RCBMPD | Linkable run-time main program designator |
| | |
| <u>Tasks</u> | <u>Description</u> |
| Program file | |
| DSC. S\$SDS\$ | |
| COBOL | Compiler task with overlays CO1, CO2, CO3, and CO4 |
| XCP | Run-time task without debugger |
| XCPD | Run-time task with debugger |

Table 3-1 Compiler and Run-Time Support Package Files (Continued)

| <u>Procedures</u> | <u>Description</u> |
|------------------------------|--|
| Program file DSC.S\$SDS\$ | |
| RLOADER | Task loader |
| Program file DSC.S\$PROGA | |
| RCOBOL | Shared reentrant run-time procedure |
| <u>Directory</u> | <u>Description</u> |
| DSC.S\$SYSLIB.C\$SUBS | Run-time subroutine library |

If you wish to delete the installed run-time package and compiler from your system, use the Delete File (DF), Delete Directory (DD), Delete Task (DT), or Delete Procedure (DP) commands, as appropriate, to remove the components listed in the preceding examples.

Instructions for the verification of a successful installation are in Section 4. Instructions for building a COBOL execution diskette are outlined in Section 5.

Section 4

Verifying the Installation

A test program is provided on the DX10 COBOL disk to determine if the package is installed properly. Perform the following steps to verify the installation:

1. Boot your system from the new system disk on which COBOL has been installed.
2. Install the DX10 COBOL disk.
3. Compile the test program by issuing the following command:

```
[ ] XCCF S=CBLINS10.TESTCASE,  
      O=<volume name>.TESTOBJ, L=ME
```

where:

<volume name> is the name of the disk on which the compiled object is to be placed.

4. Execute the test program by issuing the following command:

```
[ ] XCPF O=<volume name>.TESTOBJ
```

where:

<volume name> is the name of the disk where the compiled object resides.

If the test program completes satisfactorily, the following will be displayed on the video display terminal:

```
THIS TEST PROGRAM RUNS ON A TI990 MINICOMPUTER  
IT IS WRITTEN IN TI COBOL  
HIT RETURN TO COMPLETE TEST
```

Press the RETURN key to complete the test.

5. Once the program has executed satisfactorily, delete the test program by issuing the following command:

```
[ ] DF P=<volume name>.TESTOBJ
```

where:

<volume name> is the name of the disk where the compiled object resides.