



**DX10 Online Diagnostics
and
System Log Analysis Task
Object Installation**

2.1.0

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READ FIRST

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READ THIS DOCUMENT BEFORE ATTEMPTING TO USE THIS OBJECT KIT.
IT DESCRIBES THE DX10 ONLINE DIAGNOSTICS AND SYSTEM LOG
ANALYSIS TASK OBJECT INSTALLATION MEDIA, PART NUMBER
2270692-1603. YOU SHOULD ALSO READ THE PRODUCT RELEASE
INFORMATION, PART NUMBER 2270694-9901, PRIOR TO INSTALLATION.

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MADE TO THIS OBJECT KIT.

Section 1

Introduction

1.1 GENERAL INFORMATION

This installation guide contains the procedures for installing the object modules of the DX10 Online Diagnostics and System Log Analysis Task. Your object modules arrive on one of the following media:

- * Disk
 - Double-sided, double-density (DSDD) diskette
 - DS10, DS25, DS31, DS50, DS80, DS200, DS300, or CD1400
 - Add-on package on a disk pack with the DX10 Release 3.5
- * Magnetic tape: 800 bits per inch (bpi), 1600 bpi, or cartridge tape

This installation guide gives step-by-step instructions for:

- * Installing from disk
- * Installing from magnetic tape
- * Verifying the installation
- * Executing Online Diagnostics from the object kit

The installation creates directories and files for both Online Diagnostics and for the System Log Analysis Task. Additional files will be established after the first execution of Online Diagnostics and the System Log Analyzer. All of the directories and files created by the installation and established after the first run are listed in Section 4 of this manual.

1.2 PREREQUISITES

The following conditions must be satisfied before you can install the DX10 Online Diagnostics and System Log Analysis Task object modules:

- * Release 3.5 of the DX10 operating system must have been properly installed and initialized.
- * You must have available, in good condition, a DX10 Online Diagnostics and System Log Analysis Task object kit.
- * Verify the volume name of the object kit. If your object kit is on a separate disk pack, the volume name should be on the disk. If you do not see the volume name, you can execute a Show Volume Status (SVS) command to obtain it. That is the name you use in your installation. The procedures in this manual use the volume name DXODOBJ. If your object kit is an add-on package on the system disk with the DX10 Release 3.5, DXODOBJ is a directory with the pathname volumename.DXODOBJ (where volumename is the name of the system disk).
- * You must decide whether you want to install the Online Diagnostics on the system disk or on a user disk. If the latter, you must have a disk available to use as the target disk. The System Log Analysis Task must be installed on the system disk.

Section 2

Installing from Disk

2.1 GENERAL INFORMATION

Use the procedures described in this section to install the object modules of the DX10 Online Diagnostics and System Log Analysis Task. The procedure involves the following main steps:

1. Preparing for the installation
2. Installing the object modules

You should install all System Log Analysis Task object modules on the system disk. You can install the Online Diagnostics modules on either a user disk or the system disk.

The installation instructions in this section describe the installation when the object kit is on a separate disk with volume name DXODOBJ. If the object kit is an add-on package on a disk pack with the operating system release, the volume name DXODOBJ becomes a directory name, volumename.DXODOBJ (where volumename is the name of the system disk). When the directory is on the system disk, you may omit volumename and use just .DXODOBJ as the directory name.

NOTE

If you are installing an object kit that is an add-on package on the disk pack with the operating system release, you must replace DXODOBJ with .DXODOBJ in the instructions in Section 2 of this installation guide.

2.2 PREPARING FOR THE INSTALLATION

Perform the following steps to prepare for the installation. If the object kit is an add-on package on the disk pack with the operating system release, omit steps 2 and 3.

1. Make sure that Release 3.5 of the DX10 operating system has been properly installed and initialized.
2. Mount the object kit disk in a disk drive and leave the write protection enabled.
3. Install the object kit disk volume with the Install Volume (IV) command, as follows:

```
[ ] IV
```

```
INSTALL VOLUME  
    UNIT NAME: objdrive  
    VOLUME NAME: DXODOBJ
```

where:

objdrive is the device name of the drive on which the object kit disk is mounted.

DXODOBJ is the volume name of the object kit disk.

2.3 INSTALLING THE OBJECT MODULES

Perform the following steps to install the object modules on a target disk. If you are installing them on the system disk, start with Step 3.

1. Mount a target disk on a drive and ready the drive. Do not write protect the disk.
2. Install the target disk with the IV command as follows:

```
[ ] IV
```

```
INSTALL VOLUME  
UNIT NAME: drivenm  
VOLUME NAME: targetdsk
```

where:

drivenm is the device name of the drive on which the target user disk is mounted.

targetdsk is the volume name of the user disk to receive the object modules.

3. Enter the following in response to the SCI prompt:

```
.USE DXODOBJ.ODS$PROC, .S$PROC
```

or, if the object kit is on the system disk:

```
.USE .DXODOBJ.ODS$PROC, .S$PROC
```


4. The following menu is displayed:

```

O N L I N E   D I A G N O S T I C S
      &
S Y S T E M   L O G   A N A L Y S I S

      O B J E C T

I N S T A L L A T I O N

      C O M M A N D S

```

YOU MAY NOW USE THE FOLLOWING COMMANDS TO INSTALL ONLINE DIAGNOSTICS AND/OR SYSTEM LOG ANALYSIS OBJECT:

```

ODDISO   - INSTALL ONLINE DIAGNOSTICS OBJECT SOFTWARE
SLAISO   - INSTALL SYSTEM LOG ANALYSIS OBJECT SOFTWARE
RTN      - RETURN TO USING .S$PROC SCI COMMANDS

```

5. The command ODDISO executes the installation batch stream for Online Diagnostics. (The name of this batch stream is DXODOBJ.S\$ODIAG.BATCH.INSTALL.) Enter the ODDISO command as follows:

[] ODDISO

```

INSTALL ONLINE DIAGNOSTICS OBJECT SOFTWARE
  ODD INSTALLATION DISK: DXODOBJ (object kit disk)
  ODD TARGET DIRECTORY: .S$ODIAG (target directory)
  ODD PROC TARGET DIRECTORY: .S$PROC (target PROC directory)
  INSTALLATION BATCH LIST: .ODDISO (batch output file)
                          LIST

```

- a. If your object kit is an add-on on the system disk, replace DXODOBJ with .DXODOBJ.
- b. If you are installing the modules on a target disk, insert the volume name in the responses to the prompts for the target directories. You may put the S\$ODIAG directory on the target disk and add the new commands to the .S\$PROC directory on the system disk if you want.
- c. Accept the default for the INSTALLATION BATCH LIST prompt. The batch output file is added to the system disk.

6. The next prompt will appear as follows:

```
INSTALL HELP FEATURE?: Y
```

- a. If you respond Y to the INSTALL HELP FEATURE? prompt, the help feature option is installed.
 - b. If you do not want to install the help feature in order to save disk space, enter N.
7. The next prompt appears, as follows:

INSTALL ALL DEVICE TASKS? Y

- a. If you enter Y in response to this prompt, tasks for all supported devices are selected.
- b. If you do not want to install all the tasks in order to save disk space, enter N and select specific device tasks as follows:

EXAMPLE:

SPECIFY DEVICE TASKS TO INSTALL

DISK: Y
LP2260: N
LP600: Y
LP810: Y
LP840: Y
MEMORY: Y
MT979: Y
ST820: N
ST911: Y
ST940: Y

- c. Enter Y for each device task you want to install.
- d. Enter N for each device task you want to exclude.
- e. Press the RETURN key to process your responses.

8. Enter the Wait for Online Diagnostics (W) command as follows:

```
[ ] W
```

Waiting for Online/SLA Installation Background Task to complete

When the ODDISO command is complete, the following message is displayed:

```
ODD INSTALLATION COMPLETE, ERROR COUNT=(nn)
```

where:

The error count, nn, should be zero.

9. To see that all required steps have been performed properly, inspect the batch list file .ODD\$ISO for errors. You can find explanations of the error codes in the DX10 Error Reporting and Recovery Manual (Volume VI). If necessary repeat steps 1 through 8. When the batch stream execution is error free, proceed to step 10.
10. The command SLAISO executes the installation batch stream for the System Log Analysis Task. (The name of this batch stream is DXODOBJ.S\$SLA.BATCH.INSTALL.) Enter the SLAISO command as follows:

```
[ ] SLAISO
```

```
INSTALL SYSTEM LOG ANALYSIS OBJECT SOFTWARE
  SLA INSTALLATION DISK: .DXODOBJ
    SYSTEM DISK VOLUME: (volume name of system disk)
  SLA PROC TARGET DIRECTORY: .S$PROC (target PROC directory)
    RECREATE .S$DML FILE: YES (purges .S$DML file)
  INSTALLATION BATCH LIST: .SLA$ISOLIST (batch output file)
```

- a. If your object kit is an add-on on the system disk, replace DXODOBJ with .DXODOBJ.
- b. Since you must install the SLA modules on the system disk, enter the volume name of your system disk for the SYSTEM DISK VOLUME prompt.
- c. Accept the defaults for the remaining prompts. The commands and the batch output file are also added to the system disk.

11. Enter the W command, as follows:

```
[ ] W
```

Waiting for Online/SLA Installation Background Task to complete

When the SLAISO command is complete, the following message is displayed:

```
SLA INSTALLATION COMPLETE, ERROR COUNT=(nn)
```

where:

The error count, nn, should be zero.

12. Inspect the batch list file .SLA\$ISO to see that all required steps have been performed properly. You can find explanations of the error codes in the DX10 Operating System Error Reporting and Recovery Manual (Volume VI). If necessary repeat steps 10 and 11.
13. When the error count is zero, the installation of the object modules is complete.
14. Return control to the system procedure library by entering the RETURN TO USING .S\$PROC SCI COMMANDS (RTN) command. If you want to use other procedure libraries, enter .USE and specify the library you want.

Section 3

Installing from Magnetic Tape

3.1 GENERAL INFORMATION

Object modules supplied on magnetic tape cannot be accessed directly from the tape. You must first restore them to a disk. You can restore the modules to a CD1400, DS10, DS25, DS31, DS50, DS200, or FD1000 disk. The procedure described in this section involves copying the DX10 Online Diagnostics and System Log Analysis Task object modules onto a user disk with the volume name DXODOBJ for use in the installation procedures described in paragraph 2.3.

3.2 PREPARING FOR THE INSTALLATION

Perform the following steps to prepare for the installation:

1. Make sure that a DX10 operating system has been properly installed and initialized.
2. Mount the object kit magnetic tape on the tape drive without a write ring. Ready the tape unit for operation.
3. Mount the user disk to receive the object kit on a disk drive and ready the drive.

4. Initialize the user disk with volume name DXODOBJ with the Initialize Disk Surface (IDS) commands, as follows:

```
[ ] IDS
```

```
INITIALIZE DISK SURFACE
```

```
                UNIT NAME:  drive name
INITIALIZE NEW VOLUME?:  YES
BAD TRACK ACCESS NAME:
LISTING ACCESS NAME:
```

5. Enter the drive name and accept the defaults for the other three prompts by pressing the RETURN key. The following display appears on the screen:

```
INITIALIZE NEW VOLUME
```

```
                VOLUME NAME:  DXODOBJ
NUMBER OF VCATALOG ENTRIES:  342
DEFAULT PHYSICAL RECORD SIZE: 864
HARDWARE INTERLEAVING FACTOR: 1
USED AS SYSTEM DISK?:  NO
LISTING ACCESS NAME:  (press RETURN)
```

6. Enter the volume name DXODOBJ, and NO for the USED AS SYSTEM DISK? prompt. Accept the defaults for the other prompts by pressing the RETURN key.

7. Enter the Restore Directory (RD) command to transfer the contents of the object kit tape to the volume DXODOBJ as follows:

```
[ ] RD
```

```
RESTORE DIRECTORY
```

```
SEQUENTIAL ACCESS NAME:  objdrive
DIRECTORY PATHNAME:  DXODOBJ
LISTING ACCESS NAME:  destnm
OPTIONS:  REP,ALIAS
```

where:

objdrive is the device name of the tape drive on which the object kit tape is mounted.

destnm is the pathname of a file or device to receive the listings from the RD command.

8. Verify the RD command by executing the Verify Backup (VB) command as follows:

```
[ ] VB
```

```
VERIFY BACKUP
  SEQUENTIAL ACCESS NAME: objdrive
  DIRECTORY PATHNAME: DXODOBJ
  LISTING ACCESS NAME: destnm
```

where:

objdrive is the device name of the tape drive on which the object kit tape is mounted.

destnm is the pathname of a file or device to receive the listings from the VB command.

The DX10 Online Diagnostics and System Log Analysis Task object modules are now restored to the user disk DXODOBJ. Follow the procedure in paragraph 2.3 to install the object modules.

Section 4

Verifying the Installation

4.1 GENERAL INFORMATION

To verify completion of and to gain familiarity with the new installation, perform the following steps:

1. See that the batch stream execution was error free. If not, refer to the appropriate batch listing output file entered in response to the INSTALLATION BATCH LIST prompt for the ODDISO or SLAISO commands.
2. When the Online Diagnostics installation completes, verify that an Online Diagnostics Driver (ODD) directory exists on the target disk with the default pathname, volumename.S\$ODIAG or just .S\$ODIAG if it is on the system disk. It will contain the following files:
 - a. Online Diagnostics equivalence file (default pathname volumename.S\$ODIAG.EQFILE)
 - b. Online Diagnostics message file (default pathname volumename.S\$ODIAG.MSG)
 - c. Online Diagnostics object command language interactive processing file (default pathname volumename.S\$ODIAG.OCLIP)
 - d. Online Diagnostics program file (default pathname volumename.S\$ODIAG.PI)
 - e. Online Diagnostics test batch file (default pathname volumename.S\$ODIAG.TBATCH). This file is an example of the creation and implementation of an Online Diagnostic batch stream.

NOTE

After the first execution of Online Diagnostics, the files with the following default pathnames should also exist.

- f. `Volumename.S$ODIAG.CMD`
 - g. `Volumename.S$ODIAG.ERRORS` (created with Show Diagnostic Files (SF) command verb using the ERRORS option)
 - h. `Volumename.S$ODIAG.HISTORY`
 - i. `Volumename.S$ODIAG.LDC` (created with the List Device Configuration (LDC) command verb)
3. Verify that the procedures XODD, ON, OFF, and DIAG have been added to the directory `.$$PROC` on the system disk or to the directory `volumename.$$PROC` if you put them on the target disk.
4. When the System Log Analysis Task installation completes, verify the existence of the following files:
- a. File `volumename.$$SLAMSG` on the system disk
 - b. Task `>5E` in the `volumename.$$PROGA` program file on the system disk (where the symbol `>` indicates a hexadecimal value)
 - c. The procedures XSLA and XSLAP in the directory `volumename.$$PROC` on the on the system disk
 - d. File `volumename.$$DML` on the system disk

NOTE

After the first execution of the System Log Analysis Task (either by XSLA or by automatic bid by the system), the file with the following pathname should also exist:

`Volumename.$$SLARPT` on the system disk

5. You can now delete files `.ODD$ISO` and `.SLA$ISO` from the system disk.

Section 5

Using the Object Kit Without Installing

If your object kit is on a disk (or has been restored to a disk from magnetic tape), you can execute an Online Diagnostics session directly from the modules in your object kit. However, you cannot execute the System Log Analysis Task until it has been installed by the procedures detailed in this guide.

The following conditions must be satisfied before you can operate Online Diagnostics from the object kit:

- * The DX10 operating system must have been properly installed and initialized.
- * A DX10 Online Diagnostics object kit on a disk (either the system disk or another volume) must be mounted on a disk drive and installed with the Install Volume (IV) command.
- * You must execute the .USE primitive to specify the procedure library(s) from which SCI and Online Diagnostics take command procedures and menus.

To execute the .USE primitive, enter the following information from the SCI prompt position:

```
.USE volumename.DXODOBJ, .S$PROC
```

where:

volume name is the name of the volume which contains the object modules.

When the object kit is on a volume named DXODOBJ enter the primitive as follows:

```
.USE DXODOBJ, .S$PROC
```

When the object kit is on the system disk, enter:

```
.USE .DXODOBJ, .S$PROC
```

When the DXODOBJ procs have been set up, you can execute a diagnostic session as described in the DX10 Online Diagnostics and System Log Analysis Task User's Guide.

When you have terminated your diagnostic session, return control to the system procedure library by issuing a .USE primitive without parameters. The .S\$PROC library is the default when .USE alone is entered.