

**NOS 2.8.4 LEVEL 847
SOFTWARE
RELEASE BULLETIN**

SMD134774

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Chapter 1 - SRB Introduction

This document is the NOS 2.8.4 L847 Software Release Bulletin (SRB). It is to be used in conjunction with the NOS Installation Handbook (IHB) for installing NOS and its products. Control Data Systems, Inc. recommends that the SRB be read in its entirety prior to software installation. You should also verify that all of your hardware is at the FCA levels indicated in the Configuration Management section of the Software Availability Bulletin (SAB).

The NOS 2.8.4 L847 system described in this document is being released at the following levels:

Operating System	Level 847
Network Host Products	Level 847
Common Product Set	Level 847
CDCNET	Level 847

Audience

The SRB is written primarily for the site analyst. It contains notes and cautions about installation and usage of NOS 2.8.4 L847.

Central Software Support Hotline

Central Software Support (CSS) maintains a hotline to assist you in the use of our products. If you need help not provided by the documentation or find that a product does not perform as described, phone one of the following numbers. A support analyst will work with you.

From the USA and Canada:	(800) 345-6628
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From other countries:	(612) 482-3434
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SOLVER Access Phone Numbers

The following phone numbers are used to access SOLVER:

1200/2400 baud V.22:	612-482-6000
9600 baud V.32 :	612-482-4000

Chapter 2 - Installation

This chapter emphasizes changes in the operating system and its products which may be of particular interest to the person performing the system installation.

Notes and Cautions

This section highlights changes which should be kept in mind when installing NOS 2.8.4 L847.

All Local PP Programs Must Be Reassembled

Changes to PP common decks and NOSTEXT at NOS 2.8.4 L847 require that all sites reassemble any local PP programs.

CIP L847 Required for All CYBER 180-Class Mainframes

All CYBER 180-class mainframes require CIP L847 to deadstart NOS 2.8.4 L847. For further information regarding CIP, refer to the CIP L847 SRB.

Changes to Operating System Decks

There are no resequenced, new, or deleted decks at NOS 2.8.4 L847.

DAS Level 16 Controlware Required for 47444 3.5" Disks

DAS level 16 controlware (MH427-D16) is required if 47444 3.5" disk are to be used. While this controlware is included as part of CIP L847, the Customer Engineer must perform an off-line procedure to install it.

SRB is Now on Tailored Release Tapes

The tape copy of the SRB is no longer carried on its own separate tape. It is now included as a file on your tailored release tapes. It is loaded to the installation user name during the SYSGEN procedure call SYSGEN(SOURCE) and has a permanent file name of SRB1.

To access this copy prior to or instead of executing the SYSGEN(SOURCE) command, enter the following command AFTER updating your RECLAIM database for the NOS 2.8.4 L847 release:

RECLAIM(SRB1)

This command will load the file SRB1 to your installation user name.

PSR Summary Report

A summary report of all the NOS PSR modsets in NOS 2.8.4 L847 is available on the permanent file tapes. It is loaded to the installation user name during the SYSGEN procedure call SYSGEN(SOURCE) and has a permanent file name of PSRRPT.

Dual State Support

NOS 2.8.4 L847 includes support of the Dual State product. A build procedure in DECKOPL, a source library, and permanent files are released with this product. Dual state binaries for NOS/VE 1.8.2 L847 are contained on the NOS deadstart tape for dual state customers. The permanent file tapes contain binaries for NOS/VE 1.8.2 L847 compiled to run on NOS 2.8.1 L803, NOS 2.8.2 L826, and NOS 2.8.3 L840.

For more information concerning dual state and its build procedure, consult the NOS Version 2 Installation handbook (60459320).

Chapter 3 - Analysis

This chapter emphasizes changes in the operating system which may be of particular interest to the site analyst.

Enhancements

This section highlights new capabilities in NOS 2.8.4 L847.

New 47444 3.5" DAS Devices

NOS 2.8.4 L847 adds support for 47444 3.5" disks under the 5830 Disk Array Subsystem (DAS). The following 47444 device types are supported:

EO	One 47444 3.5" drive run in serial mode.
EP	Two 47444 3.5" drives: one for data and one for parity.
ES	Two 47444 3.5" drives run in parallel mode.
EU	Three 47444 3.5" drives: two for data and one for parity.
EV	Four 47444 3.5" drives: three for data and one for parity.
EW	Four 47444 3.5" drives run in parallel mode.

The device types ES, EU, EV and EW are supported as partitioned devices. Refer to the article on Disk Partitioning for more information on partitioned devices.

New 5833 Sabre and 5838 Elite DAS Devices

NOS 2.8.4 L847 adds support for several new 5833 (Sabre) and 5838 (Elite) device types under the 5830 Disk Array Subsystem (DAS). The following new device types are supported:

EI	Two 5838 Elite drives run in parallel mode.
EJ	Three 5838 Elite drives: two for data and one for parity.
EK	Four 5838 Elite drives: three for data and one for parity.
EL	Four 5838 Elite drives run in parallel mode.
EM	Four 5833 Sabre drives: three for data and one for parity.
EN	Four 5833 Sabre drives run in parallel mode.

These new device types are supported as partitioned devices. Refer to the article on Disk Partitioning for more information on partitioned devices.

Disk Partitioning

On some large disk devices, it is not possible for NOS to access the entire physical device as a single logical device. This is the result of the way NOS allocates space on mass storage devices; due to the size of the fields in the various system tables, it is not possible to support a logical device larger than 2 GB (2 Gigabytes).

In order to support physical devices larger than this limit, NOS uses a partitioning scheme. Each physical device that is larger than 2 GB is partitioned into two or more logical devices. Each of these logical devices is configured with its own EQPDECK entry, has its own EST entry, and is treated by all system commands and displays as if it were an independent device.

The number of partitions used for a physical device is fixed for each device type, and has been chosen as the smallest number of partitions that will keep the size of each logical device within the 2 GB limit.

The following device types are supported as partitioned devices:

<u>Type</u>	<u>Description</u>	<u>Size</u>	<u>Partitions</u>
EM	DAS - 5833 SABRE 3XP	3.1 GB	2
EN	DAS - 5833 SABRE 4X	4.0 GB	2
EI	DAS - 5838 ELITE 2X	3.3 GB	2
EJ	DAS - 5838 ELITE 2XP	3.3 GB	2
EK	DAS - 5838 ELITE 3XP	5.2 GB	3
EL	DAS - 5838 ELITE 4X	6.7 GB	4
ES	DAS - 47444 3.5" 2X	3.5 GB	2
EU	DAS - 47444 3.5" 2XP	3.5 GB	2
EV	DAS - 47444 3.5" 3XP	5.2 GB	3
EW	DAS - 47444 3.5" 4X	6.9 GB	4

Note that although these physical devices are larger than 2 GB, the logical devices in each case are 2 GB or smaller.

The logical devices that make up a partitioned device may be used for independent purposes. They may be in separate families, and may be initialized at different times. However, if the physical device is reformatted (by specifying the INITIALIZE,FP entry for any of the EST entries that refer to the physical device), then all of the partitions will be reformatted and initialized.

A partitioned device can be configured in the EQPDECK in either of two ways: with individual EQPDECK entries for each partition, or with a single EQPDECK entry that defines all of the partitions at once. In both cases, an EST entry is reserved for each partition.

Example 1: Define a 5838 ELITE 3XP device with three EQPDECK entries. The PN parameter is used to specify the partition number.

EQ10=EK,ST=ON,CH=3A/11B,EQ=1,UN=0,PN=0.

EQ11=EK,ST=ON,CH=3A/11B,EQ=1,UN=0,PN=1.

EQ12=EK,ST=ON,CH=3A/11B,EQ=1,UN=0,PN=2.

NOTE

Although this example shows the three logical devices in sequential EST entries, this is not required. These three devices could just as easily be defined as EST entries 10, 20 and 30, with definitions for other devices intervening between the EQPDECK entries for these three devices.

Example 2: Define a 5838 ELITE 3XP device with one EQPDECK entry. The "-3" syntax is used to indicate that three devices are being defined.

EQ10=EK-3,ST=ON,CH=3A/11B,EQ=1,UN=0.

NOTE

This EQPDECK entry defines three EST entries: 10, 11 and 12. When creating an EQPDECK with this syntax, care must be taken to avoid reusing EST entries 11 and 12 for other devices.

The partition numbers that are used for each device in this example are the same as those specified explicitly in example 1.

New N=* Parameter for MST

A new parameter, N=*, has been added to the Mass Storage Test tool, MST. When N=* is specified, MST will test the entire disk. This is useful when checking for errors on a new or newly repaired disk or HDA.

Chapter 4 - Operations

This chapter emphasizes changes in the operating system which may be of particular interest to the administrator responsible for performing user validations and accounting activities, and/or the person responsible for operational activities.

Enhancements

This section highlights new capabilities in NOS 2.8.4 L847.

Changes to DSD Displays

The format of the E,C and E,F displays under DSD have been changed to include the partition numbers for multi-partition devices.

Chapter 5 - Configuration Management

Notes and Cautions

This section highlights changes in configuration management for NOS 2.8.4 L847.

Certified Components and Levels

The following components are certified at the indicated levels:

Hardware Component	Release Level	CIP Level
Model 810 Microcode	M14AA16	L847
Model 815 Microcode	M11AA16	L847
Model 825 Microcode	M12AA16	L847
Model 830 Microcode	M13AA16	L847
Model 835 Microcode	M20AA17	L847
Model 847 Microcode	M340x09	L847
Model 845 Microcode	M310x11	L847
Model 850 Microcode	M330x12	L847
Model 855 Microcode	M300x10	L847
Model 990 Microcode	M40Ax22	L847
Model 990 Microcode	M41Ax22	L847
Model 994 Microcode	M44Ax22	L847
800 Series Environment Interface (EI)	Level 28	L847
DFT	V10	L847
SCI	V09	L847

Microcode for model 870 is the same as that for the 860 and microcode for model 995 is the same as that for the 990.

The NOS 2.8.4 L847 system is supported in environments containing the following peripheral components:

Hardware Component	Release Level
7054/844(BCS-Half Track)	MA710-D13
7021/66X (FIRM66X)	MB434-D14*
7155/885/844-4X (FMD-HT/FT)	MA721-D12*
7154/855 (BCF-Full Track)	MA401-D08*
7155-401/885-42/885-1X/844-4X (PHD-HT/FT)	MA722-D03*
7221/639 (CW63X)	MB465-D04*
7255-01/834/835 (ISD I/II)	MA462-D06*
7165/895 (MA464)	MA464-D10*
5870 (CCC5870)	MA466-D03*
7990 (CCC7990)	MB466-D03*
380-170 (NAD)	MG401-06
CM1 Controlware (CMD)	MH422-D07*
CM2 Controlware (CM2)	MH424-D03*
9853 (XMD) Controlware	MH426-D9C*
5830 (DAS) Controlware	MH427-D16*
FSC Tape	MB401-D04*
FSC Disk Firmware (ADP)	MA454-D04*
698-XX CMTS	MB467-D02*
Cartridge Tape PMC	MB468-D04*
CYBER Initialization Package (CIP)	CIP L847

*Contained on CIP 847

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