# NOS V2.2 Level 602 OPERATING SYSTEM

# LEVEL 602/587

# SOFTWARE RELEASE BULLETIN

# LEVEL 602 ADDENDUM

Control Data Corporation recommends that the NOS V2.2 Software Release Bulletin as well as this addendum be read in its entirety prior to any software installation of this system.

SMD130613

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NOS Version 2.2 Level 602/587 Software Release Bulletin
January 9, 1984

## 1.0 INTRODUCTION

The Software Release Bulletin (SRB) is to be used in conjunction with the Installation Handbook (IHB) for installing Control Data Corporation systems. Control Data recommends that the SRB be read in its entirety prior to software installation. Any conflicts between the IHB and the SRB are to be resolved in favor of the SRB.

### 1.1 Scope

The SRB is the vehicle whereby any changes to the IHB, after it has gone to print, are documented. Although features are not fully documented in this SRB, major changes in the system are highlighted with emphasis placed on installation dependent and configuration management data.

### 1.2 Content

This document contains information necessary to build and install the NOS V2.2 level 602/587 system. The appendix section contains documentation on the new CYBER Initialization Process.

## 2.0 NOS V2.2 RELEASE DESCRIPTION

This section lists the new features and enhancements of the NOS V2.2 level 602/587 system.

### 2.1 Operating System Content

- Monitor Display Driver (MDD) and OS Support Mods
- DSDI mods to support HPA Analysis of EDD Hardware registers
- Subsystem Expansion Mods
- CYBERPLUS Phase I Operating System Support
- HSIO Function Timeout
- Standardization of RECLAIM Utility
- Full Screen Editor Enhancements
- Corrective Code

### 2.2 Common Products

None

### 2.3 Network Products

- Version levels updated to level 602
- Corrective Code

## 2.4 Controlware

The only new controlware added is the following:

- MA722-A02 HSIO

## 2.5 CYBER Initializatin Package (CIP) Level 1

- Repackaging of CTI, MSL, HIVS, EI and Microcode.

Beginning with the NOS V2.2 level 602/587 system, CIP is required for installing and running the NOS V2 system. CIP is not shipped with operating system software releases for CYBER 170-800 customers.

See Appendix A for additional information on CIP.

# 3.0 SYSTEM INSTALLATION NOTES

## 3.1 Unconfigured Deadstart Tape

The Unconfigured Deadstart Tape (UDST) contains sample CMRDECKs, EQPDECKs, LIBDECKs and IPRDECKs for CYBER 170 models 730, 760 and 825. These decks are provided as examples only.

## 3.2 Installation Tape

The format of the REL0 tape is described below:

| File | Record | Description | File Name* |
|---|---|---|---|
| 1 | 1 | Procedure TAPE which installs files from REL0. | |
| | 2 | REP binaries (Installation Summary Report) | REP |
| | 3-n | Installation Decks (MODIFY PL) | DECKOPL |
| 2 | 1 | UPDATE formatted program library for temporary corrective code. | CODEPL |
| 3 | 1 | UPDATE formatted program library containing compatibility mods. | MISCPL ** |
| 4 | 1-(n-1) | Relocatable binary modules for the user library used in building QU3. | DBUBIN |
| | n | Absolute binary of DFRCV. This binary is added to file PRODUCT by the QU3 build job. | |
| 5 | 1 | NOS COMPASS coding standards. | CODING |
| 6 | 1 | SYMPL coding standards. | SYMPCOD |
| 7 | 1 | Copy of the sequential file needed to create an online manual for NOS CONTEXT. | MANUAL |

* Permanent files are created from REL0 by procedure TAPE with the indicated file names. All files are direct access.

** MISCPL contains only NOS V1, NOS V2.0 and NOS V2.1 modsets for compatibility.

There is no corrective code on REL0 for this release for the Operating System or the Networks. Corrective code exists only for the product set.

## 3.3 Installation Procedures

The installation procedures documented in the NOS V2.2 SRB are still applicable unless noted herein. Consult the NOS V2.2 level 596 SRB when installing level 602. All operating system and Network Product release levels should be changed to level 602. The Product Set level remains at 587. Although the Product Set program libraries have not changed from NOS V2.2, Operating System text changes in level 602 may result in differences in the Product Set binaries.

### 3.3.1 Resequenced New Decks for NOS V2.2 Level 602

The following decks were added at NOS V2.2 level 602:

COMPTMA
COMPDLI
COMPIOU
RECLAIM

No existing decks were resequenced for this release. A new naming convention was used for the composite feature modset identifier. The identifier used was V22L602. It identifies the V2.2 release level and the 602 PSR Summary level.

## 4.0 OPERATION SYSTEM CHANGES

### 4.1 FSE Terminal Support

The NOS Full Screen Editor (FSE) will additionally support the Tektronix 4115, the Lear Siegler ADM3A and the Lear Siegler ADM5 terminals. Use the following SCREEN commands to get into screen mode:

SCREEN,T4115
SCREEN,ADM3A.
SCREEN,ADM5.

### 4.2 New TLX Functions

The following capabilities have been added as new TLX functions:

1. Typeahead input checking - a running program can check for the presence of typed ahead input stored for that user in IAF's FL.

2. Program initiated detach - a running program can detach itself from the user's terminal.

### 4.3 Subsystem Expansion

The limitation that only 12 subsystems (those with the highest subsystem ID-s) can be System Control Point (SCP) subsystems has been removed. Any subsystem can be an SCP subsystem. The format of Control Point Area word SSCW has changed to support this. A UCP will now be allowed to connect to no more than five system control points simultaneously.

As part of this change, a new method of defining subsystems in common deck COMSSSD is used. New macros define the subsystem ID and all attributes of a subsystem. All decks that require a table of subsystem-related information use this common deck to build it. Adding a new subsystem requires the appropriate definition in COMSSSD along with a few other changes which are listed in COMSSSD.

Also, all of the ENABLE/DISABLE status bits for subsystems have been moved from CMR word SSTL to new word SSSL. The bit corresponding to each subsystem is determined by the subsystem ID. The ENABLE, subsystem,cp. and DISABLE,subsystem,cp. operator commands have been moved to the SUBSYST L display utility. It is now necessary to enter the SUBSYST command to bring up the L display before entering these commands. The L display will show the current status of each subsystem.

### 4.4 Manuals

Manual changes will be included with this release as self-contained packets of change pages only. Complete manual updates will be made for NOS V2.3. The Security Administrators Handbook will not be included in this release.

## 5.0 FUTURES

Effective with the release of NOS 2.3, files in a user's catalog will no longer appear in an alternate user CATLIST of that catalog unless explicitly authorized on a file-by-file basis by the owning user.

A file's visibility in an alternate user CATLIST will be controlled by means of a new parameter, AC, recognized by the CHANGE, DEFINE, and SAVE permanent file operations.

If AC=Y is supplied as a parameter to one of these operations, the file(s) referenced will appear in an alternate user CATLIST for any user with permission to access the file(s).

If AC=N is supplied, or if no AC parameter is supplied for the DEFINE or SAVE, the file(s) will not appear in any alternate user CATLIST, regardless of whether the user has permission to access the file(s).

In situations where an unauthorized person has gained access to a system, or where files must be maintained as Semi-private or Public due to accessing requirements, this feature will help to prevent a user from "browsing" through users' catalogs to locate potentially interesting files.

## 6.0 CONFIGURATION MANAGEMENT

NOS V2.2 level 602/587 was tested in an environment containing the following controlware, microcode, environment interface, CML and HIVS/CTI software components:

| Hardware Component | Release Level | Part Number |
|---|---|---|
| 7054/844 (BCS-HALF TRACK) | MA710-A13 | (PN52706607) |
| 7021/67X (FIRM67X) | MB434-A14 | (PN52653361) |
| 7155/885/844-4X (FMD-HT/FT) | MA721-A00 | (PN53479843) |
| 7154/844 (BCF-FULL TRACK) | MA401-A07 | (PN22724600) |
| 7155-501/885-42/885-1X /844-4X (PHD-HT/FT) | MA722-A02 | (PN53479851) |
| 380-170 (NAD) | MG101-A05 | (PN53367354) |
| CYBER 18 Mode 4 emulator | MD426-A05 | (PN88952276) |
| CYBER INITIALIZATION PACKAGE | CIP001 | |
| Model 815 Microcode | M11AA09 | |
| Model 825 Microcode | M12AA09 | |
| Model 835 Microcode | M20AA12 | |
| Model 845 Microcode | M310C01 | |
| Model 855 Microcode | M300C01 | |
| 800 Series Environment Interface | level 9 | |
| HIVS | 156 | |
| MSL | 156 | |

The following components are certified at the indicated levels:

| Hardware Model | Hardware FCA Index | NOS Level | CML Level | CIP Level |
|---|---|---|---|---|
| CY170-815 | 3 | V2.2 L602 | 155 | 001 |
| CY170-825 | 4 | V2.2 L602 | 155 | 001 |
| CY170-835 | 5 | V2.2 L602 | 155 | 001 |
| CY170-845 | 1 | V2.2 L602 | 155 | 001 |
| CY170-855 | 5 | V2.2 L602 | 155 | 001 |
| CY170-865 | 1 | V2.2 L602 | 155 | 001 |
| CY170-875 | 1 | V2.2 L602 | 155 | 001 |

## 7.0 KNOWN PROBLEMS

Problems that could possibly affect the reliability or stability of the system are documented below by product area. This is not an all encompassing problem list but a list of those problems to be aware of at installation time. Several problems and solutions refer the reader to SOLVER. If your site does not have access to SOLVER, contact your local Professional Services office. It is not recommended that all this code be installed automatically but that it be chosen selectively after experiencing problem symptoms similar to those documented in these sections.

### Interactive CCL and non-721 Terminals

1. Entering a SCREEN command and then calling an interactive CCL procedure will cause CCL prompting to fail. For example, entering "Screen, 722." and then calling CCL will incorrectly put you in input mode instead of CCL dialogue mode. Entering a "(CNTL) T" and a "Line,722." will switch CCL back to line by line prompting.

   Install modset CCL0291 from SOLVER to correct the problem.

### NAM

1. NAM aborts shortly after an application has completed a NETON to the system when the system is relatively busy. The message NIP/SCP ERROR RC = 43B,JOBID=JSN is seen in the dayfile.

   Install modset NA5A480 from SOLVER to correct the problem.

2. An application is not allowed to NETON to the network if PRIV is specified in the LCF for that application even though it is a privileged program.

   Install modset NA5A407 from SOLVER to correct the problem.

### RECLAIM

1. Occasionally RECLAIM will incorrectly process an EOR when loading a file. This usually occurs on a multi-record file and misplaces the EOR.

   Code is available on SOLVER under PSR #NS2C609.

2. Under certain circumstances, RECLAIM aborts with the messages "ILLEGAL I/O REQUEST ON FILE SCR3" and "PP ABORT" when processing a dump directive with PF=* and a long list of files.

   Code is available on SOLVER under PSR #NS2C608.

## Monitor Display Driver

1. The default register display for CPU registers numbered beyond 80 does not display the MCEL, CCEL or PFS registers correctly. A "DR P" command will display incorrect values.

   To correct the problem display the registers individually with the following format: "DR P 81" will display the PFS1 register.

## APPENDIX A

### CYBER INITIALIZATION PACKAGE (CIP)

A new process has gone into effect regarding the use of the CTI, HIVS, EI and microcode components on CYBER 170-800 series machines. These components, referred to as the hardware/software interface modules, have been packaged together as the CYBER Initialization Package (CIP).

CDC introduces the CIP to simplify the installation of the hardware/software interface modules, and to unify the distribution of the hardware/software interface modules.

The objectives are accomplished by combining the modules into a single release package - CYBER Initialization Package (CIP) and enhancing the installation process to install automatically all of the CIP modules to disk upon selection of a single install option.

For CYBER 170-815, 825, 835, 845 and 855 mainframes, the CIP contains CTI, MSL, microcode, and EI. For CYBER 170-865 and 875 mainframes the CIP contains CTI and MSL. For CYBER 170-700, 170, 70 and 6000 mainframes the CIP contains CTI and HIVS.

Prior to the CIP, the hardware/software interface modules were released on several tapes in various combinations. Combining the modules into the CIP facilitates management of this part of the system and eliminates confusion resulting from the asynchronous releases of the modules. Control Data ensures that the modules on the CIP form a cohesive set.

Prior to the CIP, the installation process required three tapes, three deadstarts and 40 steps. The new installation process requires one deadstart, a single tape and three steps.

## Considerations for CYBER 170-800 Series Customers

The CIP was created to make it easier to deadstart CYBER 170-800 series mainframes. The benefits of the CIP and changes to the process affect CYBER 170-800 series customers more significantly than others. The following paragraphs explain how the new process affects all CYBER 170-800 series customers.

1. CIP Release and Distribution. The CIP is released when a change (either a new feature or a correction) is made to one of the CIP modules. A CIP release is planned to occur every six months. A critical problem which must be fixed between the planned releases will cause an additional CIP release.

   The CIP is released on magnetic tape and distributed to CYBER 170-800 series customers as a Field Change Order (FCO). As an FCO, the CIP is sent automatically. It is shipped to the same individual who receives hardware and microcode FCOs (in general, the site customer engineer (CE)). CIP is not shipped with operating system software releases for CYBER 170-800 customers.

2. Installation Options. Automatic installation of the CIP is achieved by selecting a single installation option. The CIP is installed so that it may co-exist with operating system information on the deadstart disk.

   Automatic installation can either be performed in update or initialize mode. Update mode installs the CIP to the deadstart disk and preserves operating system information on the disk. Initialize mode initializes the deadstart disk and installs the CIP, preserving no other information.

   The options to install the CIP modules individually are retained for emergency CIP repair.

3. Operator Changes. Changes have been made to some of the deadstart displays which will be apparent to the operators. The effect should be positive due to the simplified process and the usability features which have been added. In particular, the Help displays should enable a user to execute most of the deadstart utilities without consulting a manual.

4. Documentation. A CIP User's Guide accompanies the first CIP FCO. The User's Guide includes information about: Installation Process, Operating System Deadstart Process, Displays and Options, FCA Interpretation, Problem Reporting method, and Emergency CIP Repair process.

5. Tailored CIP. The CIP is tailored for each CYBER 170-800 series mainframe type, e.g., a CYBER 170-835 series CIP contains microcode and MSL unique to the CYBER 170-835.

   Each CYBER 170-800 series mainframe in a multi-mainframe complex will receive a CIP FCO. Two or more CYBER 170-800 series mainframes in a customer's complex can share a disk containing the CIP only if the mainframes are of the same type and FCO level. (The CYBER 170-865 and 875 mainframes are an exception to this guideline. The CIP is the same for these mainframes and, therefore, a CYBER 170-865 mainframe and a CYBER 170-875 mainframe can share a disk containing CIP.)

6. Single CTI copy. One of the objectives of the process change is to release only one copy of any of the modules. CTI is a part of the CIP tape. Therefore, operating system deadstart tapes received with a NOS or NOS/BE order for CYBER 170-800 series sites will no longer contain a copy of CTI. Operating system load using the tape deadstart file will be supported.

   Note: Customers may use a deadstart tape containing CTI as the operating system load file. However, the CTI on the deadstart tape cannot be used to initialize the mainframe; deadstart from the CTI on the operating system deadstart tape is not supported.

Considerations for CYBER 170-700, 170, 70 and 6000 customers. The effect of the new CIP process on CYBER 170-700, 170, 70 and 6000 mainframe customers is minimal.

The CIP tape replaces the HIVS tape. CIP content and function are the same as HIVS:

- Contains CTI and HIVS modules.
- Is distributed with an operating system order (not as an FCO).
- Provides hardware verification sequencer and deadstart utilities.
- If installed to disk, provides disk deadstart capability.

  Note: Disk residence of the CIP is not a requirement.

The difference between the CIP tape and HIVS tape is that the installation of the CIP tape will be easier and the deadstart displays more usable.

## APPENDIX B

PUBLICATIONS ADDENDUM

The following changes and additions to the NOS V2.2 level 602 IHB should be noted before attempting to install the system:

| Page | |
|---|---|
| 2-21 | The DECKOPL parameters IUN, IPW and IFAMILY are no longer used by the MOVEPF procedure. |
| 2-47 | The COMBINC procedure has been dropped from DECKOPL. |
| 2-63A | The insert implies that the file MANUALS must be moved to username LIBRARY when indeed it should be moved to username MANUALS. |
| 2-64 | The default values for UN1, PW1 and FAM1 are now null strings. |

INSTALLATION RESPONSE FORM

SOFTWARE RELEASE BULLETIN
NOS V2.2 LEVEL 602

NOS Field Support maintains a list of the sites using NOS. In order that we may represent the customer base more effectively, we ask that you fill out the form below and return it to NOS Field Support. Thank you.

---

SITE NAME AND CODE _____

SITE ADDRESS _____

_____

_____

_____

_____

CONTACT _____

DATE _____

This site has installed NOS V2.2 level 602/587 and is currently using it in a production environment.

Please return to:

NOS FIELD SUPPORT - ARH213
CONTROL DATA CORPORATION
4201 North Lexington Avenue
St. Paul, Minnesota 55112

NOS4372E