INSTALLATION GUIDE

PLATO LESSON DELIVERY AND AUTHORING 1

RELEASE 34.2 - NOS 2.3 LEVEL 617
RELEASE 34.2 - NOS 2.4.1 LEVEL 630
Table of Contents

1 Preface
1.1 Introduction 1
1.2 Operating System Compatibility 2
1.2.1 Operating system changes 3
1.3 Organization 3
1.4 Installation Materials 5
1.5 Where to Start 7

2 New System Installation Procedures
2.1 Introduction 9
2.2 Determine disk system configuration 12
2.3 Create PLATO system user name(s) 13
2.4 Obtain files from installation tape 15
2.5 Modify the ASCII network 17
2.5.1 Modify network configuration file 17
2.5.2 Sample NDL file 17
2.6 Reinstall NAM and CCP 18
2.7 Modify deadstart file text records 21
2.8 Modify release procedure files 23
2.8.1 PLATO configuration file 24
2.8.2 Submit file PLATO 25
2.8.3 Procedure MFX 25
2.8.4 Procedure MFS 27
2.9 Build new deadstart file 28
2.10 Initialize ESM 30
2.11 Deadstart on new deadstart file 31
2.12 Load PLATO master files 32
2.13 Create binary master file 34
2.14 Load PLATO via PLAINS 35
2.15 Initialize system files 37
2.15.1 Installation parameters 37
2.15.2 Set logical site assignments 39
2.15.3 Allocate extended memory 41
2.15.4 System groups 41
2.15.5 Notes files 42
2.15.6 Bulletin board 45
2.15.7 Central print options 46
2.15.8 AIDS package 47
2.15.9 AUTHORS package 48
2.15.10 OPJDS package 48
2.16 Install optional features 50
2.17 Install add-on products 51
2.18 Execute post-installation cleanups 52
2.18.1 Delete "install" of group "pm" 53
2.18.2 Run account cleanup programs 54
2.18.3 Purge disk files 55
2.19 Install published courseware 55
2.19.1 Courseware installation - details 57
2.19.2 Courseware installation - details 57
2.19.3 Courseware installation - details 57
2.20 Reload PLATO via PLATU 64
3. Optional Installation Procedures
3.1 Archiving
3.2 Backups
3.3 Central Micro PLATO executor
3.4 Network database
3.5 Computer Interface Unit network
3.6 TRANSMIT Utility
3.7 PLATO Inter-System Link
3.7.1 Determine accounting method
3.7.2 Create NOS user names
3.7.3 Modify network configuration file
3.7.4 Modify PLATO network system table
3.7.5 Create system-specific files
3.7.6 Install runner programs

4. Add-on Products
4.1 PC02
4.1.1 PC02 Installation Procedures
4.1.2 PC02 Update Installation
4.1.3 PC02 Bill of Materials

5. Update Installation Procedures
5.1 PLATO Operations Changes
5.2 Update Installation procedures
5.2.1 Execute pre-installation cleanups.
5.2.2 Obtain files from installation tape.
5.2.3 Load release master files.
5.2.4 Reinstall NAM and CCP.
5.2.5 Reinstall selected NOS programs.
5.2.6 Change NOS validation files.
5.2.7 Change deadstart file text records.
5.2.8 Change PLATO configuration file.
5.2.9 Build new deadstart file.
5.2.10 Clear operator action queues.
5.2.11 Complete file dumps.
5.2.12 Deadstart on new deadstart file.
5.2.13 Change MFNX procedure.
5.2.14 Load PLATO via PLAINS.
5.2.15 Change existing access lists.
5.2.16 Change existing PLATO files.
5.2.17 Destroy obsolete files.
5.2.18 Install new system lessons.
5.2.19 Initialize binary master file(s).
5.2.20 Reload PLATO.
5.2.21 Run required conversion programs.
5.2.22 Run file installation check.
5.2.23 Change network system table.
5.2.24 Reinstall AUTHORS database.
5.2.25 Change local AIDs files.
5.2.26 Install new optional features.
5.2.27 Reinstall Add-on Products
5.2.28 Post-installation cleanups.
5.2.29 Dump all master files.

6. Mini-Release Installation Procedures
6.1 Obtain files from installation tape.
6.2 Perform special instructions.
6.3 Build new deadstart file.
6.4 Load mini-release master files.
6.5 Deadstart on new deadstart file.
6.6 Load PLATO via PLAINS.
6.7 Change existing PLATO files.
6.8 Initialize binary master file(s).
6.9 Reinstall Add-on Products
6.10 Post-installation cleanups.
6.11 Reload PLATO.

7 Reinstallation Procedures
7.1 Obtain files from installation tape.
7.2 Reinstall 4AM and CCP.
7.3 Reinstall selected NOS programs.
7.4 Change NOS validation files.
7.5 Build new deadstart file.
7.6 Deadstart on new deadstart file.
7.7 Load PLATO via PLAINS.
7.8 Initialize binary master file(s).
7.9 Reinstall Add-on Products
7.10 Post-installation cleanups.
7.11 Reload PLATO.

8 Bill of Materials
8.1 Central System
8.1.1 Records: A - L
8.1.2 Records: M - R
8.1.3 Records: S - Numeric
8.2 NOS Permanent Files
8.2.1 NOS Permanent Files (continued)
8.3 PLATO Utility Files
8.3.1 File: m - az
8.3.2 File: a
8.3.3 File: c
8.3.4 File: d
8.3.5 File: e
8.3.6 File: f
8.3.7 File: g
8.3.8 File: l
8.3.9 File: j
8.3.10 File: i
8.3.11 File: i
8.3.12 File: m
8.3.13 File: n
8.3.14 File: o
8.3.15 File: p
8.3.16 File: q
8.3.17 File: r
8.3.18 File: s
8.3.19 File: t
8.3.20 File: u
8.3.21 File: v
8.3.22 File: w
8.3.23 File: w
<table>
<thead>
<tr>
<th>Section</th>
<th>Files</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.3.24</td>
<td>Files: x</td>
<td>181</td>
</tr>
<tr>
<td>8.3.26</td>
<td>Files: z</td>
<td>131</td>
</tr>
<tr>
<td>8.3.27</td>
<td>Files: 0 - 9</td>
<td>141</td>
</tr>
<tr>
<td>8.4</td>
<td>System-Specific Files/Subfiles</td>
<td>182</td>
</tr>
<tr>
<td>8.4.1</td>
<td>Files: a</td>
<td>182</td>
</tr>
<tr>
<td>8.4.2</td>
<td>Files: b</td>
<td>183</td>
</tr>
<tr>
<td>8.4.3</td>
<td>Files: c</td>
<td>183</td>
</tr>
<tr>
<td>8.4.4</td>
<td>Files: d</td>
<td>184</td>
</tr>
<tr>
<td>8.4.5</td>
<td>Files: e</td>
<td>184</td>
</tr>
<tr>
<td>8.4.12</td>
<td>Files: l</td>
<td>184</td>
</tr>
<tr>
<td>8.4.13</td>
<td>Files: m</td>
<td>185</td>
</tr>
<tr>
<td>8.4.14</td>
<td>Files: n</td>
<td>185</td>
</tr>
<tr>
<td>8.4.15</td>
<td>Files: o</td>
<td>185</td>
</tr>
<tr>
<td>8.4.16</td>
<td>Files: p</td>
<td>185</td>
</tr>
<tr>
<td>8.4.18</td>
<td>Files: r</td>
<td>187</td>
</tr>
<tr>
<td>8.4.19</td>
<td>Files: s - sx</td>
<td>187</td>
</tr>
<tr>
<td>8.4.19.1</td>
<td>sys - sz</td>
<td>187</td>
</tr>
<tr>
<td>8.4.19.2</td>
<td>sCa - sG1</td>
<td>189</td>
</tr>
<tr>
<td>8.4.19.3</td>
<td>sfn - sGz</td>
<td>190</td>
</tr>
<tr>
<td>8.4.26</td>
<td>Files: z</td>
<td>192</td>
</tr>
<tr>
<td>8.4.27</td>
<td>Files: 0 - 9</td>
<td>192</td>
</tr>
</tbody>
</table>
1.1 Introduction

This manual describes how to install the "PLATO Lesson Delivery and Authoring System" application on your operating system.

If the PLATO application media you ordered requires an upgrade of your operating system, we assume that that upgrade has already been installed. This guide will only discuss the PLATO application installation.

This manual has been written for system analysts and Engineering Services personnel who have a working knowledge of the hardware and software involved, including information in the operating system reference manual, the operating system operator's guide and the operating system analysis handbook.

The Operations Guide for the PLATO application contains operations information. The installing analyst should read the "PLATO Overview" section of the Operations Guide before starting the installation.

The Configuration Handbook for the PLATO application contains information on setting up the configuration parameters which are referenced in this manual.

The PLATO Software Release Bulletin for a particular release contains last-minute information about installations. That document should be read before beginning the installation. Any conflicts between information contained in the SRB and the Installation Guide should be resolved in favor of the SRB.
1.2 Operating System Compatibility

Since the PLATO application is delivered as binaries which have been assembled for a specific level of the operating system, you must make sure that the PLATO Release you are installing is compatible with your operating system.

Release 3.3 of the PLATO application software was released only under NOS 2.3 level 617.

Release 34.1 of the PLATO application software was released only under NOS 2.4.1 level 630.

Release 34.2 of the PLATO application software was released under both NOS 2.3 level 617 and NOS 2.4.1 level 630. This required that there be two different versions of the PLATO Release 34.2 materials. These two different versions are assembled for a specific NOS level and are not interchangeable. That is, the PLATO Release 34.2 for NOS 2.3 level 617 will not run on NOS 2.4.1 level 630 and vice versa. If you are running PLATO Release 34.2 under NOS 2.3 level 617 and wish to upgrade your operating system, but continue to use the same PLATO Release, you must reorder the installation materials and reinstall the PLATO application.

Beginning with PLATO Release 35, each new PLATO Release will run under the most current level and the two most recent past levels of the operating system.
1.2.1 Operating System Changes

The following section describes changes in the past several NOS releases which have required changes to the operation or installation of the PLATO application. This is included to inform analysts performing an upgrade installation or reinstallation of the PLATO application of important changes in operational procedures.

The following information highlights those NOS changes which may have the greatest impact on the PLATO application. Rather than duplicate other documentation on NOS, it describes areas of significance and cites references for further information.

The most informative documents addressing NOS changes are the following:

- NOS Software Release Bulletin (SRB)
- NOS Feature Notes
- NOS V2 Installation Handbook (IHJ)
- NOS V2 Operations Handbook (OHJ)
- NOS V2 Analysis Handbook (AHJ)

Changes for NOS 2.3 Level 617

* Service Class Validation for System Origin Jobs

The service class validation is now checked for jobs routed from system origin jobs. Due to the restrictions that are now properly enforced, jobs which used to run may now abort with "INCORRECT SERVICE CLASS". The effect of this change on the PLATO application is seen as a "Submitx error" when attempting to submit system origin jobs from PLATJ lessons. To fix this problem, the VM parameter in the user's NOS user name must be updated to allow submitting jobs with system service class. This change must also be made to the user names specified by the "subun" and "prtun" PLATO configuration file entries before attempting to bring up the PLATO application.

Changes for NOS 2.4.1 Level 630

There were no operating system changes which required changes in the operation of the PLATJ application for this level.
1.3 Organization

This Installation Guide is organized as follows:

1. Introduction

2. New system installation procedures.
   Procedures to be used when initially installing
   the PLATO Lesson Delivery and Authoring System.

3. Optional installation procedures.
   Procedures to be used to install optional features
   of the PLATO application.

4. Add-on Product installation procedures.
   Procedures to be used to install or upgrade optional,
   separately-ordered PLATO products.

5. Update installation procedures.
   Procedures to be used to upgrade the PLATO Lesson
   Delivery and Authoring System from one full release
   to another (e.g., from Release 33 to Release 34).

   Procedures to be used to upgrade the PLATO Lesson
   Delivery and Authoring System to correct critical
   problems (e.g., from Release 34.1 to Release 34.2).

7. Reinstallation procedures.
   Procedures to be used to reinstall the same PLATO
   Release on a new operating system level.

8. PLATO Bill of Materials.
   A description of the components of the PLATO Lesson
   Delivery and Authoring System.

The following convention is used in describing computer
console commands:

- upper-case letters indicate terms to be entered
  exactly as given

- lower case letters indicate terms which vary from
  system to system, and which should be replaced with
  values applicable to your system.
1.4 Installation Materials

As part of your installation package, you will receive two copies of the Operations Guide and the Configuration Handbook. You will also receive the following:

<table>
<thead>
<tr>
<th>TAPE</th>
<th>FILE</th>
<th>VSN</th>
<th>No.</th>
<th>CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLAT1A</td>
<td></td>
<td>1</td>
<td></td>
<td>Installation procedures</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>Release binaries for the PLATO application</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>Release submit file (PLATOD)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td>Release configuration files</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5</td>
<td>Release procedure MFNX</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td>Release procedure MFDX</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td>Modifications to NOS to support the PLATO application</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8</td>
<td>Modifications to NAM to support the PLATO application</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9</td>
<td>Modifications to CCP to support the PLATO application</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td>LIBDECK entries for PLATO application</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11</td>
<td>Terminal resident load files</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12</td>
<td>PLATO load procedures</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>13</td>
<td>Empty file</td>
</tr>
<tr>
<td>PLAT2A</td>
<td></td>
<td>1</td>
<td></td>
<td>System lesson master file (part 1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>Empty file</td>
</tr>
<tr>
<td>PLAT2B</td>
<td></td>
<td>1</td>
<td></td>
<td>System lesson master file (part 2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>Empty file</td>
</tr>
<tr>
<td>PLAT2C</td>
<td></td>
<td>1</td>
<td></td>
<td>New installation master file <em>newins</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>Empty file</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(Sent to new installations only, not to sites updating existing software)</td>
</tr>
</tbody>
</table>
1.5 Where to Start

Check to make sure that you have all the materials you will need for the installation. Read the PLAT3 Software Release Bulletin. Then:

a) If you are performing a new system installation, begin with the "New System Installation Procedures" section.

b) If you are performing an upgrade installation from one PLAT3 Release to another (for example, from R33 to R34), begin with the "Upgrade Installation Procedures" section.

c) If you are performing a "mini-release" installation (for example, from R34.1 to R34.2), begin with the "Mini-Release Installation Procedures" section.

d) If you are reinstalling the same PLAT3 Release on a new operating system level, begin with the "Reinstallation Procedures" section.
SECTION 2 - NEW SYSTEM INSTALLATION PROCEDURES
2.1 Introduction

This section describes how to install the PLATO application for the first time.

The following information will be asked of you during the installation procedures:

- Your system routing identifier (RID).

  This is a unique identifier which has been assigned to your system by Control Data Software Manufacturing and Distribution. You will find your RID on the CDC tape label affixed to each of your tapes. The RID will be the last three characters of the "Customer Name" section of the tape. For example:

  CUSTOMER NAME    CFN NUMBER
  SMITH COMPANY    9315-06042222

  In this example, the system RID is "MNA".

- Your computer hardware configuration.

  This information will be used to determine installation procedures.

For future reference, keep this information with your PLATO Operations guide. It will also be required should you have to call or write for help with the PLATO application and when you order updates for the PLATO application or add-on products.
The following is a list of the steps to be taken to install the PLATO application. Each of these steps is discussed in detail in the following sections.

1. Determine disk system configuration.
2. Create PLATO system user name(s).
3. Obtain files from installation tape.
4. Modify the ASCII network.
   a. Modify network configuration file.
   b. Reinstall HAM and CCP.
5. Reinstall selected NGS programs.
6. Modify system deadstart file text records.
7. Modify release procedure files.
   a. PLATU configuration file
   b. Submit file PLATDD
   c. MFNX
   d. MFDS
9. Initialize ESM.
11. Load PLATO master files.
13. Load PLATO via PLAINS OSEQ-command.
    a. Installation parameters
    b. Set logical site assignments
    c. Allocate extended memory
    d. System groups
    e. Notes files
    f. Bulletin boards
    g. Central print options
    h. AIDS package
    i. AUTHORS package
    j. OSEQ package
15. Install optional features.
16. Install add-on products.
17. Execute post-installation cleanups.
    a. Delete "install" from group "p".
    b. Run account cleanup programs.
    c. Purge installation-only files.
    d. Convert master files.
18. Install published courseware.

2.2 Determine disk system configuration.

Before beginning the installation of the PLATO Lesson Authoring and Delivery application, you must decide how the disk packs to be used for the PLATO application will be defined.

The NOS V2 Installation Handbook, the NOS V2 Reference Manual Volume 3 and the NOS V2 Analysis Handbook have information on how the disk system can be configured.

The default disk system configuration uses the default family devices. All release procedures are already configured for this disk system configuration.

If you wish to use an alternate family for all PLATO files, you will have to modify the release procedures. Each affected section will describe the changes which need to be made if you are using an alternate family for all PLATO files.

You may also use either the default family or an alternate family for the PLATO application, but place the PLATO master files on auxiliary devices. Each affected section will describe the changes which need to be made if you are using auxiliary devices for the PLATO master files.
2.3 Create PLATO system user name(s).

Before you can create the PLATO system user name(s), the NOS validation files must be created.

If you are using the default family for PLATO files, these validation files were created during the installation of the operating system.

If you are using an alternate family for PLATO files, the NOS validation files for the family must be created. This may be done by entering the following commands on the computer console:

```
*DIS.
FAMILY(family name)
GENVAL.
DROP.
```

To add required user names when using the default family, enter the following command on the computer console.

```
*X.MOCVAL.
```

Or, if you are using an alternate family device for PLATO files, enter the following command on the computer console.

```
*X.MOCVAL(FM=fname,D=0)
```

The MOCVAL job will then request the K-display. You must assign this display to the job by the following procedure.

1. Find the job which is requesting the K-display on the console B-display.
2. Note the job sequence number (JSN) of the job. This is a four character identifier for the job.
3. Enter the following command on the computer console.

```
K,JSN.
```

Using the MOCVAL options documented in the NOS Administration Handbook, create the following user names. Suggested names are given, but any legal NOS user name may be used.

1. A user name for PLATO system tasks (usually "sys").
2. A user name for PLATO print jobs (usually "prints").

Give both user names all possible privileges (AW=ALL) and maximum resource limits (XL=ALL). The validation mask parameter for these user names must be set to allow them to submit system service class jobs (VM=ALL).
The PLATJ application also requires the user names PLATJMF and SYSTEMA. These user names were automatically created when the operating system was installed.

The passwords for user names PLATJMF and SYSTEMA are needed later in this procedure. They were set to "platomf" and "systema", respectively, when the user names were created.

User name PLATJMF is used when loading the PLATO master files. You must set the mass storage pru limit for this user name to "unlimited".

Once these steps have been completed, you will next obtain the PLATO application files from the installation tape.
2.4 Obtain files from installation tape.

This step will load the files which make up the PLATO application from the first installation tape.

Mount the first installation tape (the one labeled PLATIA) on an available tape drive. Make sure the tape drive is available by checking the console E1-display.

Enter the following commands on the computer console:

```
X,DIS,
FAMILY(family name) if using alternate family
USER(sys,password) sys is the system user name
created in the previous step
LABEL(TAPE,VSN-PLATIA)
GET(TAPE,INSTALL)PROC/INSTALL
BEGIN(INSTALL,INSTALL,PP#ps1,SP#ps2)
```

where ps1 = password for user name PLATO\(MF\)
(default = "platom\(f\)"
ps2 = password for user name SYSTEM\(X\)
(default = "system\(x\)"

This procedure creates the following files.

User sys PLAIN\(S\) PLATO release binaries
PLATJO PLATO submit file
CONF\(IG\) PLATO configuration file
MF\(NX\) procedure to attach master files
MF\(DX\) procedure to dump master files
PLAN\(JS\) modifications to N\(OS\)
PLAN\(AM\) modifications to N\(AM\)
PLAC\(CP\) modifications to C\(P\)
L\(DE\)D\(EK\) LIB\(DE\)CK entries for PLATO programs
LOADMF procedure to load installation
master files
BKS\(PR\)U program used to load installation
master files

User PLATO\(MF\):
ISTLFC0 terminal resident load file
ISTLFC1 terminal resident load file
ISTLFC3 terminal resident load file
ISTLFC3 terminal resident load file

User SYSTEM\(X\):
PLATJO PLATO load procedure
PLAIN\(S\) PLATO load procedure
PLAU\(D\) PLATO load procedure

The following empty files are also created.

User PLATO\(MF\):
AUJIT
AUJITX
BACKD\(IR\)
COMB\(UF\)
DUMP\(DI\)P
JOBACKC

User SYSTEM X: RAFJMN

See the PLATO Bill of Materials section for more information about these files.

You will next modify the ASCII network to support the PLATO application.
2.5 Modify the ASCII network.

It is assumed that NAM and CCP have already been installed on any system which will be using the PLATO ASCII network. It is also assumed that the NAM configuration files (Network Definition Language (NDL) files) have been initialized so that terminals may be logged into NAM.

This section describes changes which may be needed to the NAM configuration to allow the use of the PLATO application.

2.5.1 Modify network configuration file.

Make changes to the NAM network definition configuration file as described below:

IST terminals are defined as type TTY (tc=33).

COC-211 (Viking) terminals are defined as type 721 (tc=721).

Micro-computers used as PLATO terminals are defined as type TTY (tc=33).

In order to allow IST and Viking terminals to automatically load their resident, "pappl" must be set to "plato" ("pappl=plato"). Refer to the sample NDL file below for an example.

ENSURE that the NOS user numbers, specified for the *user* and *duser* parameters in the NDL source file, are validated for the "plato" application via NJOVAL.

2.5.1.1 Sample NDL file.

For more information on the NDL and NDL Processor, refer to the NAM Network Definition Language Reference Manual.

A sample program using NDL is shown below. In this example, it is assumed that a NOS user number of "namnet" exists and is validated for access only to application "plato".

In order for automatic loading of the terminal resident to occur, that line must have "pappl" set to "plato".

Only the Viking Terminal is supported at 9600 baud.

```
mffile: nfile,

comment plato network definition,

comment these defines describe the various ways to define a port and terminal to the plato/nam interface.
```
plat12: define tiptype=async, lspeed=1200.
plat124: define tiptype=async, lspeed=2400.
plat148: define tiptype=async, lspeed=4800.
plat190: define tiptype=async, lspeed=9600.
plitty: define tc=43, pri.

comment. beginning of first npu0...npu9...

npu0: new node=5, variant=npl, dap=yes.
suplink llnum=llinku.
cplrc coupler node=2, name=nost1.
link loglink name=npu0.

c1a1: group port=01, ltype=a2, plat12, n1=1.
pn10a1: termdev plitty, autolog=yes.
c1a3: group port=02, ltype=a2, plat148, n1=1.
pn10a3: termdev plitty, autolog=yes.
c1a5: group port=03, ltype=a2, plat12, n1=9.
pn10a5: termdev plitty, autolog=yes.
c1a1: group port=0c, ltype=a2, plat190, n1=1.
pn10a1: termdev plitty, autolog=yes.
c1a2: group port=0d, ltype=a2, plat12, n1=2.
pn10a2: termdev plitty, autolog=yes.

lcf file: lfile.

plouser: define sfile=0, user=namnet, pappl=platu.
plato: appl.

comment. user defined for npu0.
pn10a0: user plouser.
pn10a2: user plouser.
pn10a3: user plouser.
pn10a4: user plouser.
pn10a5: user plouser.
pn10a6: user plouser.
pn10a7: user plouser.
pn10a8: user plouser.

comment etc.

2.5.2 Reinstall NAM and CCP.

Inspect the contents of files PLANAM and PLACCUP under the PLATO system user name. If either of these files contains modules, it will be necessary to reinstall NAM and CCP with these modules. Refer to the 405 Installation Handbook for instructions.

The PLATO application requires only the standard asynchronous TIP in the CCP build procedure.
Save any zodsets in PLANAM and PLACCOP so they may be used again if 4AM and CCP must be reinstalled in the future.

You will next reinstall selected NOS programs.
2.6 Reinstall selected NOS programs.

Inspect the contents of file PLANOS under the PLATO system user name. If this file contains modssets, it will be necessary to reinstall the affected programs with these modssets. Refer to the NOS Installation Handbook for more information.

By looking at the contents of this file, determine what NOS programs will need to be reassembled. Only the programs which have modifications will need to be reassembled.

Be sure that, any time in the future, when these programs are reassembled, that these modifications are included.

Save the binaries produced for replacement on your deadstart file after all the PLATO materials are ready to be installed.

Save any modssets in PLANOS so they may be used again if the affected NOS programs must be reinstalled in the future.

You will next modify the system deadstart file text records.
2.7 Modify deadstart file text records.

The system deadstart file text records are used to define the configuration of your computer and its equipment and the operating system.

You must make changes to the following deadstart text records to allow the PLATO application to function correctly.

CMRDECK
EQPDECK
LIBDECK
IPRDECK

This can be done using Q26 or some other text editor available on your system. Instructions for using Q26 may be found in the NJS V2 System Programmer's Instant Manual.

Save the modified text records for replacement on your deadstart file after all the PLATO materials are ready to be installed.

Refer to the section titled "Deadstart File" in the PLATO Configuration Handbook for descriptions of the specific changes which must be made.

The following examples assume you are using Q26 as the text editor and that you are using the first (C) copies of the text records (CMRDECK, EQPDECK, LIBDECK, IPRDECK).

Example: Modifying a text record.

X*DIS.
FAMILY(family name) if using alternate family
USER(sys, password)
COMMD4 (SYSTEM)
GTK(SYSTEM, EQPDECK) TEXT/EQPDECK
Q26.
READ(EQPDECK).
* make required changes.
DIS.
SAVE(EQPDECK)

Example: Inserting PLATO entries into LIBDECK.

X*DIS.
FAMILY(family name) if using alternate family
USER(sys, password)
GET(LIBDECK)
COMMD4 (SYSTEM)
GTK(SYSTEM, LIBDECK) TEXT/LIBDECK
REWIND(*)
SKPIEL(LIBDECK)
COPYBAR(LIBDIR, LIBDECK)
PAGK(LIBDECK)
SAVE(LIBDECK)
You will next modify the release procedure files.
2.8 Modify release procedure files.

The following files have been created under the PLATO system user name:

CONFIG
PLATOD
MFNX
MFOX

These files may require changes depending on the configuration of your system. You may use D26 or any other text editor available on your system to make these changes.

The following procedure may be used to modify these files:

X.DIS.
FAMILY(family name) if using alternate family
USER(sys, password)
GET(file name)
D26.
READ.file name.
* make required changes.
DIS.
REPLACE(file name)

The following sections describe the changes which may be required for each of these files.
2.8.1 PLATO configuration file

The following changes to your PLATO configuration file are required. Refer to the PLATO Configuration Handbook for more information on the configuration file entries.

1. Change the "sdid" entry to the routing identifier assigned to your system by Control Data. See the section titled "Required Information" for instructions on how to determine your routing identifier.

2. You should change the "slid" entry to a name you wish your system to be known by. This name may be a string of any alphanumeric characters of up to seven characters.

3. If you did not use "sys" as the PLATO system user name, you must change the "sysun" entry to the user name actually used.

4. If you did not use "prints" as the PLATO print job user name, you must change the "prun" entry to the user name actually used.

5. If you are using an alternate family for PLATO files, you must change the "family" entry to the family name used.

The following changes to your PLATO configuration file are recommended, but are not critical to the installation procedure. These changes may be made now or at a later time.

1. If your mainframe is not a CYBER 180-81C, you should change the "cspaces" entry to the recommended value for your mainframe.
2.9.2 Submit file PLATDD

This file contains calls to the CCL procedures on the system deadstart file which initiate the PLATJ application jobs. The release file contains the following:

NOREKUN.
PLATX(CP=1+1$) PLATD
FRAXX(CP=1+2$) FORMATTER
PNIX(CP=1+3$) PNI
CONDX(CP=1+4$) CONDENSOR
EXIT.

The "CP" argument of each procedure call indicates which control point is occupied by that PLATJ job relative to the control point specified on the ENABLE,PLA entry you have added to the IPRECK.

The release submit file assumes that you have used a low-numbered control point for the ENABLE,PLA IPRECK entry. If you wish to use a high-numbered control point, you should modify the submit file to read as follows:

NOREKUN.
PLATX(CP=1-1$) PLATD
FRAXX(CP=1-2$) FORMATTER
PNIX(CP=1-3$) PNI
CONDX(CP=1-4$) CONDENSOR
EXIT.

Since the field length of the condensor is dynamic, it is best to keep it as the last control point to prevent storage moves for the other control points.

The release submit file assumes there are four contiguous control points available following the control point specified by the ENABLE,PLA IPRECK entry. If this is not the case, you should modify the PLATJ submit file to skip control points which are occupied by subsystems or change the control point assignments of other subsystems so there are four contiguous control points available.
2.8.3 Procedure MFX

This procedure file is called by the MASTOR job to attach all required PLATO master files.

Initially, this file is set up to attach master files SYS11, NEWINS, and BINARY. These files will be loaded from the installation tapes or created in later steps of this installation procedure.

This file initially contains the following:

*PRJC,MFX,M=R*
* *
SUI(377773b)
* *
ATTACH(BINARY)
ATTACH(SYS11)
ATTACH(NEWINS)
* *
REVERT*

If you are using an alternate family for PLATO master files, you must add a FAMILY command to this procedure.

If you are using auxiliary devices for PLATO files, you must add the appropriate RESJURC and PACKNAM commands to this procedure. Be sure to add the PACKNAM commands following the SUI command since SUI clears any PACKNAM previously entered.
2.8.4 Procedure MFDX

This procedure is used by the "backups" file dump procedure to copy master files to tape or disk. See the PLATO Operations Guide for more information on this procedure.

Initially, this procedure is set up to dump master files SYS11 and NEWINS.

This file initially contains the following:

```
*PROC,MFDX,VSN=*
**
IFE(SVSN .EQ. $3, DUMP3)
**
COPYMF(NA,V,MF=SYS11)
COPYMF(NA,V,MF=NEWINS)
**
ELSE(DUMP3)
**
COPYMF(NA,V=SVSN,MF=SYS11)
COPYMF(NA,V=SVSN,MF=NEWINS)
**
ENDIF(DUMP3)
**
REVERT, MFDX COMPLETE
**
SKIP(NEXT1)
EXIT.
** ERRORS IN MFDX
WAIT, MFDX ABORTED
REVERT,ABORT, MFDX ABORTED
ENDIF(NEXT1)
```

The release procedure uses the system default tape density. If you wish to use a different density for master file dumps, you must add the "D" parameter to each of the COPYMF commands. Refer to the PLATO Operations Guide for information on using this parameter.

You will next build a new deadstart file.
2.9 Build new deadstart file.

Build a new deadstart file which includes the following:

1. The NAM which was reinstalled with the modsets in file PLANAM, if any were present.

2. The NOS programs which were reinstalled with the modsets in file PLANOS, if any were present.

3. The CMRDECK, EQPDECK, LIBDECK and IPRDECK which were modified earlier in this procedure.

4. The PLATO procedure files CONFIG, MFNX and MFNX which were loaded from the installation tape and modified earlier in this procedure.

5. The PLATO release binaries which were loaded from the installation tape earlier in this procedure.

The following is a sample procedure which could be used to build the deadstart file.

```plaintext
X-DIS
FAMILY(family name) if using alternate family
USER(sys, password)
COMMON(SYSTEM)
ATTACH(nam binary file)
ATTACH(nos binary file)
GET(CMRDECK)
GET(EQPDECK)
GET(LIBDECK)
GET(IPRDECK)
GET(CONFIG)
GET(MFNX)
GET(MFDX)
ATTACH(PLABINS)
UNLOAD(DIR)
NOTE(DIRnX)*FILE nam binary file
NOTE(DIRnX)*FILE nos binary file
NOTE(DIRnxX)*FILE CMRDECK
NOTE(DIRnxX)*FILE EQPDECK
NOTE(DIRnxX)*FILE LIBDECK
NOTE(DIRnxX)*FILE IPRDECK
NOTE(DIRnxX)*FILE CONFIG
NOTE(DIRnxX)*FILE MFNX
NOTE(DIRnxX)*FILE MFDX
NOTE(DIRnxX)*FILE PLABINS
PACK(DIR)
REWIND(*)
LIBEDIT(P=SYSTEM,I=DIR)
REWIND(*)
* tape or disk
ASSIGN,xx,T=F=I, or INSTALL(NED=EJXX)
COPY(NEX,T,V)
You will next initialize Extended Semiconductor Memory, if your system is using it.
2.10 Initialize ESM.

The PLATO application on 17x or 17C-760 series mainframes uses either Extended Core Storage (ECS) or Extended Semiconductor Memory (ESM) to store lesson material. The 803 series mainframes use Unified Extended Memory (UEM). This section is only applicable to systems which use ESM. Users of other types of memory should go on to the next step.

ESM may be run in either ECS mode or ESM mode. You should skip this section if you are using your ESM in ECS mode.

Sites which will be using ESM should read the section titled "ESM Management" in the PLATO Configuration Handbook before proceeding with the installation of the PLATO application.

ESM must be properly initialized using the following procedure before the PLATO application can be run.

1. Deadstart the system WITHOUT an ESM equipment (OE or DP) entry in the EQPDECK.
2. Create an indirect access file named ESARM under NJS user name SYSTEMX. This file is used to hold the relocation memory map.
3. Enter "K.ESM." at the computer console.
4. Assign the K-display to the job.
5. Enter "K.CONFIG." at the console. This will initialize the relocation memory to your current ESM configuration.
6. Enter "K.GO." at the console.
7. Res-deadstart the system WITH the ESM equipment in the EQPDECK.

You will next deadstart with the new deadstart file created earlier in this procedure.
2.11 Deadstart on new deadstart file.

You should now deadstart your system on the newly-created deadstart file.

You will next load the release PLATO master files.
2.12 Load PLATO master files.

Use the PLATJ procedure LOADMF to copy the PLATO master files from the installation tapes to disk.

The formats of this procedure call are:

\[ \text{LOADMF(MF=\text{mf})} \quad \text{default family} \]
\[ \text{LOADMF(MF=\text{mf},FAMILY=\text{fn})} \quad \text{alternate family} \]
\[ \text{LOADMF(MF=\text{mf},\text{PN}=\text{pn},R=\text{dt})} \quad \text{auxiliary device} \]

where:

\[ \text{mf} = \text{master file name} \]
\[ \text{fn} = \text{family name} \]
\[ \text{pn} = \text{auxiliary pack name} \]
\[ \text{dt} = \text{device type if PN argument is used} \]

Mount each installation tape as it is requested via the Eolithic P-display.

Example: Default family.

If you are using the default family device for PLATJ master files, enter the following on the computer console.

\[ \text{X:*DIS.} \]
\[ \text{USER(sys,password)} \]
\[ \text{GET(LOADMF)} \]
\[ \text{LOADMF(MF=SYS11)} \]
\[ \text{LOADMF(MF=NEWINS)} \]

Example: Alternate family.

If you are using an alternate family device for PLATJ master files, enter the following on the computer console.

\[ \text{X:*DIS.} \]
\[ \text{USER(sys,password)} \]
\[ \text{FAMILY(family name)} \]
\[ \text{GET(LOADMF)} \]
\[ \text{LOADMF(MF=SYS11,FAMILY=family name)} \]
\[ \text{LOADMF(MF=NEWINS,FAMILY=family name)} \]

Example: Auxiliary devices.

To load the PLATO master files onto an auxiliary device named "PLATJA" of type "UL", enter the following on the computer console.

\[ \text{X:*DIS.} \]
\[ \text{USER(sys,password)} \]
FAMILY(family name) if using alternate family
GET(LJADMF)
LOADMF(MF=SYS11,PN=PLATDA,R=DL)
LOADMF(MF=NEWINS,PN=PLATDA,R=DL)

You will next create the binary master file.
2.13 Create binary master file.

Use the PLATO utility MFCREAT to create a binary master file. See the PLATO Operations Guide for more information about the MFCREAT utility.

The customary name for this master file is BINARY. If you wish to use a different name, you must change the name of the binary master file attached in procedure MFNX.

You should use the default size for this file for the device type on which it is being created.

Example: Default family.

X.DIS.
USER(PLATOMF=password)
PURGE(BINARY/NA)
MFCREAT(MF=BINARY,PT=BINARY)
DROP.

Example: Alternate family.

X.DIS.
USER(PLATOMF=password)
FAMILY(family name)
PURGE(BINARY/NA)
MFCREAT(MF=BINARY,PT=BINARY)
DROP.

Example: Auxiliary device.

X.DIS.
USER(PLATOMF=password)
PACKNAME(pack name)
PJRGE(BINARY/NA, Kr=device type)
MFCREAT(MF=BINARY, PT=BINARY, DT=device type)
DROP.

You will next load the PLATO application.
2.14 Load PLATO via PLAINS.

You will now load the PLATO application via the PLAINS DSG-command.

1. If your system is to use the PLATO ASCII network, NAM must be brought up at this point.

2. Load the PLATO application by entering the following on the computer console:

   PLAINS.

   When PLATO (job "PLAl") first comes up, the following system diagnostic message will be seen:

   ERROR - SYSTEM ID ME, ROUTING ID
   SYSTEM ID =
   ROUTING ID =

   This message appears because the system routing identifier has not yet been set. This will be done as the first step of the system file initialization.

   Following this message, another error message will be seen:

   (SGINIT) ERROR IN COURSEWARE ACCESS COMMON

   This message indicates that there is no published courseware on the system. The file containing the courseware access limit common will be delivered with the first published courseware shipment. If no published courseware is to be available on a system, this message will be seen every time the application is brought up. This message should be ignored.

3. Using a PLATO terminal, sign into the PLATO application with the following sign-on information:

   name: "install"
   group: "p"
   password: "install"

   You will next initialize PLATO system files.
2.15 Initialize system files.

During the following system file initialization, you will be working with lessons and files which have been designed to prompt you through their use. This prompting is accomplished through the use of arrows where input is requested as well as prompts (key words or function keys such as BACK, NEXT, LOAD) and explanations.
2.15.1 Installation parameters

Set system installation parameters.

1. Set the system identifier as follows:
   a. Enter the lesson name "ipedit" on the AUTHOR MODE display as shown in Figure 1a. Press DATA after the name to begin execution of the lesson. This procedure will be referred to as "executing lesson "ipedit"" later in this document.
   b. From the first display of options (shown in Figure 1b), choose the "Network Management" option.
   c. On the next display (shown in Figure 1c), choose the "System Identifier" option.
   d. Take note of the WARNING (as shown in Figure 1d) that you are given regarding the assignment of the system identifier. After reading the warning, press NEXT.
   e. Set the System Identifier (RID discussed earlier). It must match the "rid" PLATO configuration file entry and must NEVER be changed after it has been entered for the first time.
   f. Once you have set the system identifier, press BACK once to return to the "Network Management" display (Figure 1c).

2. Add your system to the network system table.
   a. Choose the "System Table" option. This takes you to the "Network System Table Management" display (Figure 1f).
   b. Choose the "Add a new system to the table" option.
   c. On the next display, enter your system name. This must match the "sid" PLATO configuration file entry.
   d. On the next display, choose the "Directly connected by PCH" option. This is done so the AUTHOR'S database may be used on your system.
   e. On the next display (Figure 1e), press "1" and enter your system routing identifier. This must match the "rld" configuration file entry and the system identifier entered in step 1 of this section.
   f. Also on this display, press "j" to set the "Authors database available" flag to "yes".

3. Return to the "Network System Table Management" index (Figure 1f) and choose the "Update the EN copy of the
system table" option. Press SHIFT-HELP when instructed to do so.

4. Now press BACK to return to the main index of "Installation Parameters" ("ipedit") shown in Figure 1b and set the remaining desired values. Most, if not all, of the parameters should be adequate for the time being.

5. After setting all desired installation parameters, press SHIFT-STOP to return to the Author Mode display.

You are now ready to set the logical site assignments for the "runner" stations.
2.15.2 Set logical site assignments

A number of programs run at the highest physical site number defined on your system. These programs perform functions which must be performed periodically such as maintaining space on the binary master files, checkpointing student records and student data files to disk, checking for messages to be sent to users, etc. These so-called "runner" programs should be assigned to the highest numbered logical site for memory allocation purposes. Use the following procedure to assign all stations on the highest numbered physical site to your system to the highest numbered logical site.

1. Execute lesson "allocate".

2. Choose the "Inspect / Change Station Assignment(s)" option.

3. Enter the highest physical site number for your system. This would be the value of the "nsite" configuration file keyword minus one. The value to be entered is also shown on this display as the maximum allowable entry.

4. The next display is a list of all site and station numbers for the selected physical site. Press "c" to change the logical site assignment for a station.

5. The characters ">>>" appear in the upper right corner of the display.

6. Enter the desired logical site number. For the runner programs, this would be logical site number 03.

7. Continue to press "c" and enter the logical site number until the last station has been assigned.

8. Press BACK twice to return to the main index display.

You are now ready to allocate extended memory to the logical sites on your system.
2.15.3  Allocate extended memory

When your system is first brought up, two logical sites, named "network" and "system", have already been created with a minimum amount of extended memory allocated to them to allow you to sign on and initialize the system files. In this step, you will allocate additional extended memory to logical site "network" for use by other users.

1. Execute lesson "allocate".

2. Choose the "Inspect / Change EM Allotment(s)" option.

3. The next display lists the first few logical sites. The zero (0) entry should be logical site "network". At the arrow at the bottom of the display, enter the logical site number for logical site "network" and press DATA to change its EM allotment.

4. At the top of the next display is a section similar to the following:

   Enter New EM Allotment For Site 0  (network)

   Currently Allotted = 4500CC of 35000CC

   31000CC remaining

   Currently Allotted To Site 0 = 20000

5. At the arrow, enter 80% of the number listed as "remaining" in the top section of the display as shown above and press NEXT.

6. Press BACK twice to return to the main index display.

7. Choose the "Special Functions" option.

8. Choose the "Update System Copy Of Allocation Table" option.


10. Press SHIFT-STOP to leave lesson "allocate".

You are now ready to initialize the system groups.
2.15.4 System groups

The following functional groups are to be considered for the following steps.

\[ \begin{align*}
  p & = \text{Controllers} \\
  o & = \text{Operations} \\
  pso & = \text{Consultants} \\
  m & = \text{Communications}
\end{align*} \]

Add sign-ons as needed to these groups using this procedure:

1. Enter the name of the group you wish to edit on the Author Mode display and press NEXT.

2. On the first display you see (Figure 2a), select the "Roster operations" option by pressing NEXT.

3. On the Roster Options display (Figure 2b), choose the "Add someone to the roster" option.

4. You will be asked to choose the type of record you wish to create (Figure 2c). Choose to create an "author" sign-on.

5. On the next display (Figure 2d), you will be asked to type the name of the new author. If you have already added all the sign-ons you wish, press SHIFT-STOP on this display to return to the Author Mode display.

6. You will then be prompted for a password (twice, to make sure you have entered it correctly), and an expiration date.

7. Press DATA to edit this user's sign-on. You should see a display resembling Figure 2e.

8. Choose the "choose allowable author OPTIONS" option. You will be shown a display which will allow you to press DATA to give the person all the options you have (Figure 2f). Press DATA.

9. If you are editing group "o" or "p", press NEXT to return to editing the sign-on. Otherwise, press BACK to add another sign-on (step 5).

10. Choose the "special options" from Figure 2e. You will see a display similar to the one in Figure 2g.

11. Press the letter to "change batch jobs allowed flag" to permit this user to submit batch jobs.

12. Next, press the letter to "change NOS user number/family".

13. At the first arrow enter the NOS user name to be associated with this user's sign-on. Customarily, it is set to be the same as the "subun" PLATO configuration.
file entry.

15. At the second arrow, either press NEXT or LAB to use the family under which PLATO will normally submit jobs (as specified by the "family" configuration file entry), or enter some other valid NOS family name.

16. Press BACK to return to Figure 2e.

17. If you are not editing group "p", press BACK to add another new sign-on (step 5).

18. Choose the "Choose allowable author OPTIONS" option again.

19. Select the "General Record Editing Options" option on the next display (Figure 2f).

20. Turn the "set NOS user number" option ON if it is not already ON by choosing the latter next to that option. (See Figure 2n).

21. Press BACK to return to Figure 2e, then BACK again to add another sign-on (step 5).

NOTE

Be sure to add yourself to group "p".

You are now ready to initialize system notes files.
2.15.5 Notes files

User access to any of the following notes files may now be changed if you do not wish to use the default access. These notes files are discussed in the PLATO Bill of Materials section of this document.

"announce"
"lessnotes"
"opnotes"
"ponotes"
"pnotes"
"sysin"
"sysmsg"

To change the access for a notes file, do the following:

1. Enter the name of the notes file you wish on the Author Mode display and press NEXT.

2. From the main display of the notes file, press SHIFT-JATA for director options.

3. If someone has used the director options before you, you will see a display giving the information about who has used an option. Press NEXT to go to the Director Options display.

4. Press NEXT to inspect or change the access list.

5. You will now see a display titled "Notes Access Options" (Figure 3a). Press NEXT to see or edit access for people on the same system as the notes file.

6. On the "Local" system display (Figure 3b), enter the group, accounts, or name/group you wish to inspect or change, and press NEXT.

7. You will now have several options to grant privileges to users of the notes file (Figure 3c). You may select uppercase (SHIFTed) letters to set the associated flags, or you may press individual lower case letters as they correspond to the privileges you wish to grant.

8. When you are done changing the access list, press BACK until you are at the main notes index. Then, press SHIFT-STOP to return to the Author Mode display.

Follow this procedure for all of the notes files mentioned above.

The option "to see all listed sign-ons" from the notes access options index (Figure 3a) will allow you to see all the sign-ons that you have added to the access list.

Once you have completed this procedure for each file, you
will be ready to initialize the "Bulletin Board".
2.15.6 Bulletin board

Customize the PLATO Bulletin Board for your system.

1. Edit file "bullfile". If someone has edited this file before you, you will see a display giving information about who was the last editor of the file. Press NEXT to begin editing the file.

2. Edit block "bull" by pressing the letter associated with it.

3. Customize the Bulletin Board to suit your system. It is not necessary to add any code to this file. Simply add the text as you wish it to be displayed.

4. Return to the Author Mode display by pressing BACK.

You are now ready to initialize the central print options.
2.15.7 Central print options

This section describes how to customize the jobs submitted through the central system print request lesson, "Prints". The jobs submitted by lesson "prints" are initially set to use an upper case only print train.

1. Edit file "prtsub".

2. Customize the procedures in the following blocks only if you wish to do something special with prints. Otherwise, you may continue with step "3".
   - "upper/lower" = upper/lower case prints
   - "upper case" = upper case only prints

3. Press BACK until you have returned to the Author Mode display.

4. Execute lesson "prints".

5. On the next display, you may see a message which says "There are no prints to do". If this is the case, press NEXT to go to the "Print Requests" options (Figure 4a). Otherwise, you will see a page which shows options to press SHIFT-DATA and SHIFT-LAB (Figure 4b). These options are used when you are actually going to request a print, and wish to use a different format from the default format. On this display, press SHIFT-BACK for the "Print Requests" options, as shown in Figure 4a.

6. If you wish to change the print train, choose the "Print Log MAINTENANCE" option.

7. On this display (Figure 4c), choose "Setup Print Types".

8. On this display (Figure 4d), choose the print type that you want. Press BACK when done.

9. Now return to the Log Maintenance index (Figure 4c) and customize all other parameters on the index.

You are now ready to customize the AIDS package.
2.15.d AIX5 package

You should edit the contents of the blocks in the following "aids" files to contain specific information about your system:

\texttt{mpsoless}
\texttt{acssl}

You are now ready to customize the AUTHORS package.
2.15.9 **AUTHORS package**

Create an "authors" database for the name system as follows:

1. Execute lesson "authors". You will first see a display similar to Figure 5a. Press NEXT.

2. Press SHIFT-NEXT to initialize the authors database for your system.

3. When asked about expected values (Figure 5b), your answers are not critical at this time. They may be changed later.

4. After the database creation is complete, press SHIFT-STOP to return to the Author Mode display.

Activate all other systems for which databases exist as follows:

1. Execute lesson "authors" again.

2. Press SHIFT-DATA for director options.

3. You will note the message at the top of the display (as shown in Figure 5c), which instructs you to press DATA to turn on "authors". Do so at this time.

4. On the display shown in Figure 5d, select option "$a$" to turn "authors" ON.

5. In addition, on the same display, make sure your sign-on is shown as the person responsible for this system's database. If it is not, select option "$a$" to change it and enter your sign-on name and group as prompted.

6. Now return to the Director Options Index (Figure 5c) and select the "Database Management Options".

7. Choose the "active systems" option on the next display (Figure 5e).

8. Press SHIFT-NEXT to install all system databases. This option turns the AUTHORS package off again.

9. When asked for a file prefix (as in Figure 5f), press NEXT for "none". Processing will begin automatically. Disregard messages that might be displayed.

10. After processing is complete, you will be asked if you would like to turn "authors" back on. Press NEXT to do so, then press SHIFT-STOP to exit "authors".

You are now ready to customize the UDJOBS package.
2.15.10 OPJOBS package

Refer to the "Usage Tracking" section of the PLATO Operations Guide for information about the use of "opjobs" to track PLATO usage before initializing this feature.

1. Execute lesson "opjobs".

2. Press LAW "to see/edit operating parameters."

3. Set the operating parameters to suit your system.

4. Edit file "prtsub".

5. Customize the procedures in the following blocks, if you wish to do something special with the routing of prints.

   - "opjobs1" = disposes of output after processing account files via "opjobs"
   - "opjobs2" = disposes of output after generating an accounting summary report

You are now ready to initialize any optional features your PLATO application might have.
2.15 Install optional features.

There are several optional features which may or may not be initialized depending on the resources available and the desire for the feature. Some of these features are not available on all systems.

These optional features may be installed during the initial system installation or at any time afterward.

See the "Optional Installation Procedures" section for more information and procedures to initialize these optional features.

If you do not wish to install any of these optional features at this time, or, after completing the installation of desired optional features, you should continue with the installation of add-on products as described in the following section.
2.17 Install add-on products.

At this time, any optional "add-on" PLATJ products, such as the PCU2 On-Line Authoring Module, which have been purchased may be installed. Refer to the "Add-on Products" section of this document for installation instructions.

After completing the installation of Add-On Products, you should continue with the Post-Installation Cleanup, as described in the following section.
2.19 Execute post-installation cleanups.

The following cleanup procedures should now be executed:

- remove the installation signon record
- make sure all files are in the proper PLATO account
- purge installation-only disk files
- convert release PLATO master files
2.18.1 Delete "Install" of group "p".

You should now delete sign-on "Install" of group "p". Follow these steps:

1. Sign off the system and sign back on with your own sign-on in group "p".

2. Edit group "p".

3. Select "Roster Options".

4. Select the option to delete a sign-on.

5. Enter the name "Install" when asked what name to delete.

6. Press SHIFT-HELP.

7. Press BACK until you have returned to the Author Mode display.
2.18.2 Run account cleanup program.

Run an account cleanup on all accounts on the system. This procedure involves the following:

1. Execute lesson "accounts".

2. Choose the option "update an account file name table".

3. Choose "b" for more processing time.

4. Press NEXT to build a new list of files.

5. After the list of files has been sorted, you will be prompted for an account name. Press SHIFT-NEXT to process all accounts.

6. Press SHIFT-HELP to start the process.

NOTE

The process can be very lengthy depending on how many master files are on your system.

7. When the word "DONE" appears, press SHIFT-STOP to return to the Author Mode display.
2.18.3 Purge disk files.

The following NUS permanent files may be purged to save space since they are needed only during the installation process.

<table>
<thead>
<tr>
<th>File</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLABINS</td>
<td>PLATO release binaries</td>
</tr>
<tr>
<td>CONFIG</td>
<td>PLATO configuration file</td>
</tr>
<tr>
<td>MFNX</td>
<td>procedure to attach master files</td>
</tr>
<tr>
<td>MFDO</td>
<td>procedure to dump master files</td>
</tr>
<tr>
<td>LIBDIR</td>
<td>LIBDECK entries for PLATO programs</td>
</tr>
<tr>
<td>LDAOMF</td>
<td>procedure to load installation master files</td>
</tr>
<tr>
<td>3KSPRU</td>
<td>program used to load installation master files</td>
</tr>
</tbody>
</table>

Enter the following commands on the computer console:

```
X.DIS,
FAMILY(family name) if using alternate family
USER(sys, password)
PURGE(PLABINS)
```
2.18.4 Convert master files.

These procedures are not critical. The PLATO application will work correctly if these procedures are not done until some time in the future.

You may want to rename your master files to use a naming convention which is popular at other sites.

To rename master files SYSII and NEWINS to SYSTEM and ANAST, do the following:

1. Take the PLATO application down.
2. Execute the following job at the computer console.

   X•DIS.
   FAMILY(family name) if using alternate family
   USER(PLATO#password)
   PACKNAME(pack name) if using auxiliary devices
   CHANGE(SYSTEM=SYSII)
   CHANGE(ANAST=NEWINS)
   ATTACH(SYSTEM,ANAST/N=*
   MFALTER(MF=SYSTEM,N=SYSTEM)
   MFALTER(MF=ANAST,N=ANAST)
   DROP.

4. Change procedure MFNX on the current deadstart file to change the master file names.

5. Change procedure MFDX on the current deadstart file to change the master file names.

6. Make a new deadstart file with the changed MFNX and MFDX procedures and reload the system with it.

7. Bring up the PLATO application.

8. Rename the master files in the required master files table in lesson "Ipedit".

9. Use program BACKM30 to rename the master files in the list of master files to be dumped.

If you wish to expand the disk space available for user files on your system, you may do one of the following:

- Add another required master file to your system. Refer to the "Adding/Changing a Required Master File" section of the PLATO Configuration Handbook for information on how to do this.

- Use procedure MFPACK to increase the size of the existing type general master file. This would permit you to take better advantage of the capacity of the master file
directories. In order to do this, you may have to add another disk pack to your system.

The following example assumes you have renamed master file NEINS to AMAST. The SP parameter given in the example is the maximum size for a master file on an 824 (DD) device. If your master file is on a different device type, use the maximum for that device given in the section describing the MFREAT command in the PLATO Operations Guide.

1. Take the PLATO application down.

2. Increase the size of the master file by executing one of the following jobs at the computer console.

   Default family or alternate family:

   \[ \text{X\_DIS.} \]
   \[ \text{FAMILY(family name) if using alternate family} \]
   \[ \text{USER(PLATOMF, password)} \]
   \[ \text{MFPACK(MF=AMAST, N=AMAST, PT=GENERAL, SP=3680)} \]
   \[ \text{DROP.} \]

   Auxiliary devices:

   \[ \text{X\_DIS.} \]
   \[ \text{USER(PLATOMF, password)} \]
   \[ \text{MFPACK(AF=AMAST, N=AMAST, PN=pack name, R=device type, NPN=new pack name, NR=new device type, PT=GENERAL, SP=3680)} \]
   \[ \text{DROP.} \]

You will next install published courseware.
2.13 Install published courseware.

The initial shipment of new courseware to your site will be composed of any or all of the following courseware categories:

- Category I — Academic (Libraries A/B)
- Category II — Authors Library
- Category III — Educational (Libraries C/E/G/H/I and LDEC)
- Category IV — Training (Libraries J/F/I/J/K/L)

The tapes containing the courseware will be labeled as follows:

- Category I — cat1a / cat1b / cat1c / ...
- Category II — cat2a / ...
- Category III — cat3a / ...
- Category IV — cat4a / ...

In addition, the initial shipment will include a site-specific tape, whose label will correspond to the site name. It contains the published courseware catalog (accessed by pressing shifted "F" from the Author Mode display) and the file that holds the courseware access limit for your site. This limit is the maximum number of users who may simultaneously be accessing published courseware. This tape also contains other courseware management work files.

NOTE: The courseware access limit will not take effect until (1) the site-specific tape has been installed, and (2) the PLATO application has been taken down and brought back up, since the limit is read in and set only at that time. Until then, nobody will be able to access any of the courseware.

If your site has ordered courseware by title, rather than by entire categories, the initial shipment tapes will be labeled like the site-specific tape: “site1”, “site2”, etc.

For every tape received, there will be an accompanying MFPLINI, listing all the files within that master file tape.

Regardless of the tape labels and the contents, each tape contains a single, 2000-part master file. The method for installing the courseware involves adding each master file as a required master file and performing account cleanup procedures.

The following steps should be followed for all tapes EXCEPT the site-specific tape, which should be installed as described in the “Courseware Installation” section of the PLATO Operations Guide after all other tapes have been installed. These steps are described in more detail in the following sections.

1. Ensure sufficient disk space under VDIS.
d. Copy all tapes to disk via NETLOAD.

e. Use the procedure described in the "Changing a Required Master File" section of the PLATO Configuration Handbook to change the master file name and the master file type for all the newly-copied courseware master files.

f. Execute the "Search for duplicate files" option of lesson "Installu".

g. Execute the "Update account file name table" option of lesson "accountu".

h. Execute the "Account directory and file checks" option of lesson "accountu".

i. Install the site-specific tape as described in the "Courseware Installation" section of the PLATO Operations Guide.

2.19.1 Courseware Installation - details

The following is a detailed explanation of each of the steps described above:

e. "Ensure sufficient disk space under MDS."

A single disk part is 35 sectors, so each 2000-part master file will occupy 70,000 sectors. The number of free tracks required for each master file on each supported device type is shown below.

<table>
<thead>
<tr>
<th>Device</th>
<th>Tracks</th>
</tr>
</thead>
<tbody>
<tr>
<td>DD</td>
<td>6570</td>
</tr>
<tr>
<td>DG</td>
<td>1751</td>
</tr>
<tr>
<td>DI</td>
<td>1217</td>
</tr>
<tr>
<td>DJ</td>
<td>4654</td>
</tr>
<tr>
<td>DK</td>
<td>11016</td>
</tr>
<tr>
<td>DL</td>
<td>4654</td>
</tr>
<tr>
<td>DM</td>
<td>1560</td>
</tr>
<tr>
<td>DJ</td>
<td>1560</td>
</tr>
</tbody>
</table>

If you receive more courseware than there is room for on your system, please contact your sales representative. Your representative should then, in turn, call PLATO Courseware Delivery to discuss the resolution of this problem.

d. "Copy all tapes to disk via NETLOAD."

Refer to the PLATO Operations Guide for details on how to use NETLOAD to copy master file tape to disk.
c. "Use the procedure described in the "Changing a Required Master File" section of the PLATO Configuration Handbook to change the master file name and the master file type for all the newly-copied courseware master files."

Using MFALTER (refer to the PLATO Operations Guide for details), change the master file names from names like "catla", etc., to a name similar to others in use on your system. Traditionally, the names "main", "base", etc., have been used. In addition, to ensure the proper operation of your system, the first four (4) letters of all master file names must be unique.

At the same time as each master file name is being changed, its type should be changed to "general".

d. "Execute the "Search for duplicate files" option of lesson "installu"."

The way the various Categories are built is such that each of them is self-sufficient, as opposed to requiring that a different Category also be installed. For this reason, it is necessary to delete any duplicate files that may exist on your system. The steps to follow are:

1. Execute lesson "installu".
2. Select the "Search for duplicate files" option.
3. At the arrow, just press SHIFT-NEXT, to indicate that all master files are to be searched.

You will then see each master file name displayed, and every 64th file shown. Should a duplicate be encountered, you will be shown the information for each file (account, last edit info, master file, length, etc.). Based on that information, with primary consideration of the last edit date/time and the master file of residence (the copy of the file on the earlier-numbered master file will be the copy accessed by users), press either SHIFT-HELP or SHIFT-DATA to delete one file or the other.

Follow this procedure until all duplicate files have been deleted, before proceeding to the next step.

2.9.2 Courseware Installation - details

e. "Execute the "Update account file name table" option of lesson "accountu"."

This step is performed to update the directories of all accounts on the system so that they accurately represent the file and space count for the files in each account.
The procedure to be performed is as follows:

1. Reload the PLATO application using the PLAINS command or turn off file management options through lesson "accountu".

2. Execute lesson "accountu".

3. Choose the "Update an account file name table" option.

4. Press "b" to indicate that processing is to be done in "background" mode (gives more processing time).

5. Press NEXT to "Build a new list of files".

6. After the list is built and sorted, you will be given the option to press SHIFT-NEXT to process all accounts. Do so.

7. Press SHIFT-HELP to start the process. When completed, the screen will erase and the message "DONE" will appear.

f. "Execute the "Account directory and file checks" option of lesson "accountu""

This option checks each file on the system, and sets the published flag, if the account is published, and resets the account ordinal in the file directory. Before actually performing the steps, it might be of use to press HELP from within this option to see the list of features, followed by a list of the possible errors and what to do in case of each.

The steps to be followed are:

1. From the index of "accountu", choose the "Account directory and file checks" option.

2. Press "b" to indicate that processing is to be done in "background" mode (gives more processing time).

3. In the following display, choose the options as follows:

   File space computation? y
   DL space computation? n
   Directory pointer check? y
   Log errors in datfile? y (see below)
   Display errors on screen? n (see below)

NOTE: Since this process will take a long time, it is assumed that you will not want to stand by and wait for an error to be encountered, but
rather than you will examine the error log (file "accerrlog") after processing, to see if any errors were encountered.

4. When prompted for an account name, press NEXT with no input, to indicate that all accounts are to be processed.

5. You will then be given the choice of pressing NEXT to begin processing or SHIFT-HELP to clear the datafile. Press SHIFT-HELP.

when all accounts have been processed, the message "COMPLETED" will be displayed. At that point, check the log ("accerrlog") to see what kinds of problems may have come up. To find out how to correct them, refer back to the HELP sequence. If there were no errors, looking at "accerrlog" will show that 0 blocks are in use; otherwise, you will be given the option to look through the file contents.

2.19.3 Courseware Installation — details

g. "Execute the "Search for files not in an account" option of lesson "accounts"."

This option involves going through each master file on the system and logging every file that does not appear in the "list of files" prepared earlier. Seeing as the existing files/accounts are all in accordance with each other, the only files that show up in this search will be those which indicate they are in non-existent accounts. The steps to follow are:

1. Choose the "Search for files not in any account" option from the main index of "accounts".
   (From this point, you may wish to press HELP to get a more detailed explanation of what this option does.)

2. Press "n" to indicate that processing is to be done in "background" mode (gives more processing time).

3. If you feel certain of the integrity of the earlier-built list of files, press SHIFT-NEXT to proceed; otherwise, press NEXT to build and sort a new list.

4. Assuming that all problems previously logged in "accerrlog" have been resolved, press SHIFT-HELP when prompted to initialize the datafile.

You will then see a display where each master file name will be plotted, and then every "offending" file name
shown, along with the alleged account name. Since the displayed entries are being logged, there is no need to watch/record the file names as they appear.

When processing is complete, the message "DONE" will be displayed at the bottom of the display.

As indicated in the HELP sequence, program files should be moved into legitimate accounts via "account1".

h. "Install the site-specific tape as described in the "Courseware Installation" section of the PLATO Operations Guide."

This concludes the initial installation of courseware on your system.
2.20  

Reload PLATO via PLATO.

Take down the PLATO application as described in the Operations section of the PLATO Operations Guide.

Bring the PLATO application back up by entering "PLATO." at the computer console. This is the normal entry to bring up the PLATO application when not doing a system installation or upgrade. This will allow any users to sign in.

The installation of the PLATO Lesson Authoring and Delivery 1 application is now complete.
3 Optional Installation Procedures

SECTION 3 - OPTIONAL INSTALLATION PROCEDURES
There are several optional features of the PLAT® Lesson Delivery and Authoring System which may be initialized depending on the resources available and the desire for the feature. Some of these features are NOT available on all systems.

These optional features may be initialized during the initial system installation or at any time afterward.

See the following sections for more information and procedures to initialize these optional features.
3.1 Archiving

Please read the section in the PLATJ Operations Guide which describes the Archiving Utility and its operation.

The archiving utilities are included in the software sent to every system. To use this feature on your system, install as follows:

1. Set the warning and deletion cycles for archive files as follows:
   a. Execute lesson "ipedit".
   b. Choose option "archive recycle period".
   c. Enter settings as desired.
   d. Press SHIFT-STOP to exit "ipedit".

2. Create file "s0arcnds" according to the specifications given in the PLATJ Bill of Materials section of this document.

3. Execute lesson "archiver". It will prompt for initialization when executed the first time. Press SHIFT-NEXT to initialize.

4. Enable the archive feature as follows:
   a. Execute lesson "account1".
   b. Choose "file backup and archive options".
   c. If archiving is currently disallowed, choose the option to "allow archiving".

Before an account can use the archiving utility, it must be assigned "archive rights". See the PLATJ Operations Guide for instructions on how to do this.
3.2 **Backups**

Please read the section in the PLATO Operations Guide which describes the Backups Utility and its operation.

The backup procedure BACKOMP requires that either SORTMRG4 or S0X15 be available on the system.

The procedure to initialize the backups utility for use is described below.


2. Create file "s0back" according to the specifications given in the PLATO Bill of Materials section of this document.

3. Create file "s0backc" according to the specifications given in the PLATO Bill of Materials section of this document.

4. Run the following job at the console:

   ```
   X.BACKMJJ
   K.350
   X.INITIALIZE
   K.WR
   K.END
   X.BACKCPY
   ```

5. Use the procedure "Initializing the Slot Table" in the PLATO Operations Guide to set up the desired dump cycle.

6. Use the "Changing the Master Files to be Dumped" procedure in the PLATO Operations Guide to initialize the list of master files you wish to dump. You should add master files SYSLI and NEWINS to this list.
3.3 Central Micro PLATO executor

The Central Micro PLATO Executor (CMP) allows lessons written in the Micro PLATO Language to be executed on the central system. It aids in development of lessons written in the Micro PLATO Language, but also increases the amount of EH used as overhead by the PLATO system, reducing the amount of EH available for user lessons.

To install the Micro PLATO Executor:

1. Add the following to the PLATJ configuration file:
   
   ```
   cp=on.
   ```

2. Create file "s0cmp0" according to the specifications given in the PLATJ Bill of Materials section of this document.

3. Edit file "s0cmp0".

4. Press DATA to exit the file information.

5. Choose the "associated files" option.

6. Set the -use- file to "s0cmpuse".

7. Press BACK to return to the file information index.

8. Choose the "Micro PLATO level" option.

9. Set the Micro PLATO level to "3" and the execution mode to "Central System execution".

10. If you are using more than one condensor, repeat this procedure for files "s0cmp1" and "s0cmp2".
3.4 Network database

A network database describing all aspects of your communications network may be built using lesson "pnet". This database may be quickly scanned to aid in the isolation of network problems.

A HELP-section in lesson "pnet" provides additional information.

The network database is built via options in "pnet" as follows:

1. Enter all locations in the location table.
2. Enter all equipment types in the equipment table.
3. Enter all terminal types in the terminal type table.
4. Define any desired utility fields.
5. Add all circuits and keep your network as each entry is made, and add all known information to the corresponding information fields.
3.5 Computer Interface Unit network

The CIU (Central Interface Unit) and SIU (Site Interface Unit) are unique to the PLATO application. This network is not available on CYBER 170-300 series machines.

1. Add the C1 and D2 EQDECK entries. See the PLATO Configuration Handbook for more information.

2. Add / Change the following entries in the PLATO configuration file.

```
coslt
clslt
ncosl
ncisl
```

Lesson "cludius" is the CIU diagnostics utility. If you wish to use this optional feature, do the following:

1. Create file "scluins" according to the specifications given in the PLATO Bill of Materials section of this document.

2. Execute lesson "scluins" and execute all initialization options.

3. Add the following to the runner list according to the specifications given in the PLATO Configuration Handbook.

```
scluru
```
3.6 TRANSMIT Utility

The TRANSMIT Utility allows users to transfer data from PLATO files into NCS files for batch jobs to process.

To install TRANSMIT, the following steps should be followed:

1. One or more datasets must be created for use in transferring data. These files should be created in account "s0files", and have the following characteristics:

   record size: 64 words
   length: minimum of 10 parts, Performance improves as the length approaches 63 parts. (The length determines how many separate batch jobs must be submitted to transfer the files to NCS files.)

   The number of datasets created determines how many users can use TRANSMIT simultaneously. Any number from one to 50 is acceptable, assuming sufficient system resources are available.

2. Enter the names of all datasets created in leslist "$0xslt" in file "$CCommon".

3. Enable the use of TRANSMIT on the system:
   a. Execute lesson "ipedit".
   b. Choose the "batch submission control" option.
   c. Edit the appropriate mainframe entries to enable both the "User jobs" and "Transmit" features on the desired mainframe(s).

Accounts must be allowed to use this utility. See the "TRANSMIT" section in the PLATO Operations Guide for more information on how to do this.
3.7 PLATO Inter-System Link

Before beginning the installation of the PLATO Inter-System Link optional products, please read the overview given in the PLATO Operations Guide.

Before you install the PLATO Inter-System Link, you must first install the PLATO application (level 34.2 or higher) and the RHP application materials. Also, be sure to check the SOLVER data base for any corrective modssets for the RHP application. In particular, for NOS 2.4.1 level 630, you must incorporate PSR INSA095 and PSK RHFB173 modssets.

The following is a list of the steps to be taken to install the PLATO Inter-system Link. Each of these steps is discussed in detail in the following sections.

1. Determine accounting method to be used.
2. Create NOS user names.
3. Modify the network configuration file.
4. Modify the PLATO network system table.
5. Create required system-specific files.
6. Install the required runner programs.

3.7.1 Determine accounting method

Read the "Link accounting" section of the PLATO Configuration Handbook and decide which method of accounting for link traffic you wish to use for your system. This will affect the information you must enter into the PLATO network system table for each linked system.

3.7.2 Create NOS user names

You need to set up two NOS user names that are used to transfer data between systems. Follow these steps:

1. You have the option of placing your link data files on an alternate family device.

   If you wish to use an alternate family, the NOS validation files for the family must be created if they do not already exist. This may be done by entering the following commands on the computer console:

   ```
   X'DIS
   FAMILY(family name)
   GENVAL
   DROP
   ```
2. If you are using the default family, enter the following command:

\texttt{X.MJOVAL}

Or, if you are using an alternate family device for the link files, enter the following command:

\texttt{X.MJOVAL(FM=fnam,CP=K)}

3. The MJOVAL job will then request the K-display. Assign this display to the job by the following procedure:

a. Find the job which is requesting the K-display on the console B-display.

b. Note the job sequence number (JSN) of the job. This is a four character identifier for the job.

c. Enter the following command on the computer console:

\texttt{K,JSN}

4. Using the MJOVAL options documented in the NJS Version 2 Administration Handbook, create the following user names:

a. User name "PLASEND". This name stores data that is sent to other systems.

b. User name "PLARECV". This name stores data that is received from other systems.

5. The user names must have certain validations for security reasons. Unless otherwise noted, validations not mentioned are assumed to be site-specific.

a. You must set the following validations:

\quad \texttt{- M = CLPF, CCNR, CSRPR, CSAP, CPLK, CUST, CSAF, CCSR,}

\quad \texttt{- CC = 773}

\quad \texttt{- CP = 0}

\quad \texttt{- CS = 0}

\quad \texttt{- DB = 773}

\quad \texttt{- DF = 773}

\quad \texttt{- DS = 773}

\quad \texttt{- DT = 0}

\quad \texttt{- EC = 0}

\quad \texttt{- FC = 7}

\quad \texttt{- FS = 0}

\quad \texttt{- LP = 0}

\quad \texttt{- MS = 773}

\quad \texttt{- MT = 0}

\quad \texttt{- PT = 0}

\quad \texttt{- RP = 7}

\quad \texttt{- SL = 773}

\quad \texttt{- TL = 773}
- UC = BCCT, R3CT, IACT.
- VM = ALL.

b. Choose a password, and set both user names to use this password. The user names MUST have identical passwords. This password is the key to controlling access from other systems. You must exchange passwords with the administrators of the remote site when you wish to permit inter-system data transfers.

c. If you wish to set a default charge number for accounting purposes, you should do so at this time as described in the PLATO Configuration Handbook.

3.7.3 Modify network configuration file

Now you need to set up your NOS communication network. To establish a connection to another system, you need to define a path through NAM's network configuration file and NAM's logical identifier (LID) table. This procedure and other details about the installation and operation of these applications can be found in the following references:

NOS Version 2 Feature Notes
NOS Version 2 Installation Handbook (60459320)
NOS Version 2 Analysis Handbook (60429300)
Network Definition Language Reference Manual (60480000)

Follow these steps:

1. Update your NOS level communication network.

   a. Update the LID configuration file. Refer to the the NOS Version 2 Analysis Handbook for examples. You need to specify a LID for your system -- we suggest you use your routing identifier as specified by the "RID" PLATO configuration file keyword. You will also need to add PID's and LID's for all the other systems in your network. You will need to share this information with the administrators of other sites.

   b. Update your NDL file with changes necessary to run the NAM applications. Here are some examples of NDL entries you will need to make:

* LINE definitions

```plaintext
LINE:  LINE,PORT=port,LTYPE=ltype,TIPTYPE=tiptype,
PSN=psn,NSVC=svrcr,DFL=dlf,FRAME=frame,
RTIME=timer,RCOUNT=count,DCE=yn2.
device:  TERKREW,STIP=tтипетyps,NUMCIR=ncir,REN=enclr,
         DT=dtypetyp.
```

* APPL statements
PTF: APPL,PRU,NETXFR,MCSCPYS=4.
PTFS: APPL,PRU,RSU,NETXFR,MCSCPYS=4.

* INCALL and OUTCALL statements for X.25

INCALL
A NAME=ptfs,FAM=filename,USERNAME=usernam,
SNODE=srcnode,PORT=portnum,DNODE=dstnode,
DSF=dsfsize,UBZ=upbsize,DPLS=dplsz

OUTCALL
NAME=ptfs,PL=plname,SNODE=srcnode,
DNODE=dstnode,PORT=portnum,UBZ=dsfsize,
UBZ=upbsize,DPLS=dplsz,SHOST=srchost,
DHOST=dsthost,DTEA=dtea

* INCALL and OUTCALL statements for shared 2550

INCALL
A NAME=ptfs,FAM=filename,USERNAME=usernam,
D8L=dnolll,A8L=abl.

OUTCALL
NAME=ptfs,PL=plname,SNODE=srcnode,
DNODE=dstnode,D8L=dnolll,A8L=abl.

* INCALL and OUTCALL statements for direct line
* or TRUNK

INCALL
A NAME=ptfs,FAM=filename,USERNAME=usernam,
SNODE=srcnode,PORT=portnum,DNODE=dstnode,
D8L=dnolll,A8L=abl.

OUTCALL
NAME=ptfs,PL=plname,SNODE=srcnode,
DNODE=dstnode,PORT=portnum,D8L=dnolll,A8L=abl,
UBZ=upbsize,DPLS=dplsz,SHOST=srchost,
DHOST=dsthost.

Refer to the NIS Version 2 Feature Notes for more examples.

c. Build your new network configuration file and corresponding local configuration file using the
   NDLP system command. Refer to the Network
   Definition Language Reference Manual for examples.

a. Update your current NAH start-up file with the new
   NAH start-up file that was created with the RHP
   build process. Also, please make sure that the
   following NOS files are moved to the same user
   index as the NAH start-up file:
   ZZPTFS
   ZZQTFS

e. Bring down NAH, then relaod NAH using the new
   configuration files.

2. Your NOS communication network is now updated. Be sure
   to test your network.

3.7.4 Modify PLAT0 network system table

You now need to update the PLAT0 network system table,
which includes descriptions of the links between your system and other systems, and the options available to each link.

First, you must modify the network system table entry for your own system as follows:

a. Sign on to PLATO with your "p" signon.

b. Execute lesson "lpemitt".

c. Choose the "Network Management" option.

d. Choose the "System Table" option. This takes you to the "Network System Table Management" display.

e. Choose the "Inspect or change a table entry" option.

f. On the next display, enter your system name and press NEXT. This name is the same as that specified by the "slid" PLATO configuration file keyword.

g. Choose the "Network Type" option.

h. Choose the "Directly connected by 2550" option. The display will replot and show a number of additional options.

i. Choose the "NAM mainframe number" option. Enter the number of the mainframe that executes the NAM application. On most systems this will be the default value of 0.

j. Choose the "Family name" option. Enter the NDS family name that you set up to send and receive data. If you wish to use the default family, simply press NEXT.

k. Choose the "User name password" option. Enter the password that you assigned to the user names PLASEND and PLARECV. The password entered MUST be the one entered for both user names earlier in the installation process. There is no default.

l. Choose the "Charge number" option. If you will not be using NDS charge numbers, or, if you plan to use the default charge number you specified for the PLARECV/PLASEND user names, press NEXT. If you want to account for each system's usage, enter a charge number here. Refer to the "Link Accounting" section of this document for details.

m. You may wish to store the sending and receiving data files on an auxiliary pack because of space constraints on your "system" pack. If so, choose the "Pack name" option and enter the desired NDS pack name. If you are using the default pack,
press NEXT.

n. If you chose to store your files on an auxiliary pack, choose the "Pack device type" option and enter the device type of the pack you entered. The default is 'dl'.

o. Turn on the appropriate data transfer options. For instance, if you want to be able to send and receive photos, turn both these options on.

p. Press BACK to return to the "Network System Table Management" index.

You should now use the procedure described in the "Adding a system" section of the PLATO Configuration Guide to add new systems or use the same procedure, selecting the "Inspect or change a table entry" option in place of the "Add a new system to the table" option on the "Network System Table Management" index, to modify existing systems to establish a link.

3.7.5 Create system-specific files

If the following required system-specific files do not exist on your system, you should now create them in account "s0files" according to the specifications given in the PLATO Bill of Materials section.

   s0rpmds
   s0rpmlog
   s0rnpnps
   3neting
   3natoutq

3.7.6 Install runner programs

Now you need to set up a runner which will execute the PLATO lesson which looks for link traffic. Follow these steps:

   a. Sign on to the system with your group "p" signon.
   b. Execute lesson "runnersys".
   c. Choose the option to "Add lesson to list".
   d. On the next display, enter the lesson name "s0rpm".
   e. On the next display, choose the "cycle" option and enter a cycle time of 5 minutes.
   f. No other options need be set, unless you have some specific site requirements.
   g. On the same display, press SHIFT-LAB to make the runner active.
h. Use the same procedure to add lessons "pnotes" and "snotrun" to the runner list. These lessons will distribute personal notes and group notes received from remote systems to the appropriate files. Use the attributes listed in the "Runner Lesson Management" section of the PLATO Operations Guide when adding these lessons.

I. Press SHIFT-STOP to return to the Author Mode page.

The installation of the PLATO Inter-system Link optional feature is now complete.
Add-on Products

SECTION 4 - ADD-ON PRODUCTS INSTALLATION PROCEDURES
INTRODUCTION

This section describes the initial and update installation procedures for the separately ordered add-on PLATO products. These products include:

a. PLAT3 Courseware Development and Delivery (PC02)
4.1 PCD2

Before beginning the installation of the PCD2 add-on product, please read the overview given in the "Add-on Products" section of the PLATO Operations Guide.

4.1.1 PCD2 Installation Procedures

The installation of the PCD2 product requires that you have already installed the PLATO application and that the PLATO and PCD2 release level are the same.

The first part of installing PCD2 involves modifying the currently running PLATO binary. Perform the following steps.

1. Mount the tape labelled PLAT3D on an available tape drive.
2. Enter the following at the computer console.

```plaintext
X8DIS
LABEL(TAPE,D=PE,F=I,VSN=PLAT3D)
CJPYBF(TAPE,PSMDE)
BEGIN(PSMDE)
```

Do NOT enter "DROP." when this process is complete.

3. The resulting file, LGO, is a modified version of the currently running PLATO binary which will allow use of the PCD2 on-line authoring system. It should be used as the binary input to LIBEDIT to build a new deaddstart file.

4. Re-deaddstart your system with the new deaddstart file and bring up PLATO in the standard manner.

The second part of the installation process is the optional step of customizing the PCD2 access list.

By default, all users have access to PCD2 when it is first installed. If you wish to limit access to specific users, refer to the "PCD2 Operation" section of the PLATO Operations Guide.

If you do not wish to limit access to PCD2 at this time, the installation of the PCD2 product is now complete.
4.1.2 PCD2 Update Installation

MAJOR RELEASE UPDATES

Because PCD2 is an add-on application to be used with PLATO Lesson Authoring and Delivery Application 1, you must update PCD2 each time you update your PLATO software.

Updates (releases) are generally announced with a document called the "Order Information Package" (OIP) which briefly describes the major features of a new release. This document comes from Control Data Software Manufacturing and Distribution (SDM) and is used to pre-order the planned update. This pre-ordering ensures that you will receive the new software as soon as it is available through SDM.

It is important to keep in mind that the release level of PCD2 that you order must agree with the release level of your PLATO application, or the level you are ordering.

You should use the "PCD2 Installation Procedures" to update the PCD2 product with each major release.

CORRECTIVE CJOE/MINI-RELEASES

If you should receive corrective code/or mini-releases which include program A35/PLATO, this should be installed first, and then PCD2 will have to be reinstalled following the "PCD2 Installation Procedures" in this document.
4.1.3 PCD2 BILL of Materials

PCD2 BILL OF MATERIALS

The PCD2 product has 3 aspects: central system components, global PLATO files, and system-specific files and subfiles.

CENTRAL SYSTEM:

The following is a list of the records which reside on the PCD2 installation tape (VSN = PLAT3D).

PSMDX (PRG) procedure which calls program PSMD from the PLAT3D tape. This record is in the first logical file on the installation tape.

PSMD (ABS) edits the PLATD binary to make PCD2 available. This record is contained in the second logical file on the tape.

GLOBAL PLATO FILES IN ACCOUNT "system":

The following PLATO files make up the global aspect of PCD2. All of these files should exist on all systems, although they will be inoperative on systems which have not installed PCD2. These files are global, in that their content is the same on all systems. These global files are included in each release of the PLATO Application.

<table>
<thead>
<tr>
<th>FILE NAME</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>pcd2</td>
<td>PCD2 processor (main entry) lesson.</td>
</tr>
<tr>
<td>pcd2a1ds</td>
<td>PCD2 &quot;Aids&quot; driver lesson.</td>
</tr>
<tr>
<td>sCpcd2</td>
<td>PCD2 user's source file - use - lesson.</td>
</tr>
<tr>
<td>sCpcd2e</td>
<td>PCD2 main editor control lesson.</td>
</tr>
<tr>
<td>sCpcd2g</td>
<td>PCD2 graphics frame editor.</td>
</tr>
<tr>
<td>sCpcd2n</td>
<td>PCD2 &quot;Aids&quot; information.</td>
</tr>
<tr>
<td>sCpcd2x</td>
<td>PCD2 color table data.</td>
</tr>
<tr>
<td>sCpcd2l</td>
<td>PCD2 line frames (Normal, Program, Reply, Test, Cartoon, Animation) editor.</td>
</tr>
<tr>
<td>sCpcd2p</td>
<td>PCD2 print / copy lesson.</td>
</tr>
<tr>
<td>sCpcd2u</td>
<td>PCD2 system - use - lesson.</td>
</tr>
<tr>
<td>sCpcd2x</td>
<td>PCD2 to PLATO Author Language / Micro PLATO translator (Part 1).</td>
</tr>
</tbody>
</table>
sCpc32y     PC02 to PLATO Author Language / Micro
            PLATO translator (part 2).
source      PC02 nameset to lesson code transfer.

SYSTEM-SPECIFIC FILES / SUBFILES:

The following files and subfiles are unique to each system. They
contain system-specific information, and are thus not shipped with
each release. These files are delivered only with the initial release
of the PLATO application. These files should be kept in account "scfiles".

<table>
<thead>
<tr>
<th>FILE/SUBFILE NAME</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>sCsysfile/pc02</td>
<td>System-specific PC02 access list.Edited through lesson &quot;scalutil1&quot;.</td>
</tr>
</tbody>
</table>
SECTION 5 - UPDATE INSTALLATION PROCEDURES
INTRODUCTION

The following sections describe the procedure to be followed to update your PLATO system from one major release to another (for example, from PLATO Release 33 to PLATO Release 34). If you are only upgrading your operating system and wish to reinstall the same PLATO Release level on it, you should use the "Reinstallation Procedures" section instead of this one.

If the PLATO Release you are updating to requires a different level of the operating system, it is assumed that it has already been installed.

When updating to a new level of the operating system, the following PLATO-related items must be carried over from the old operating system deadstart file to the new one.

1. Changes to deadstart file text records (CMRDECKS, EMRDECKS, LIBDECKS, PRDECKS) as described in the "Deadstart File" section of the PLATO Configuration Handbook.

2. Procedure MFNX.

3. Procedure MFJX.

4. The PLATO configuration file.

If there are changes required to the above for the new PLATO release, they will be described in the "Change deadstart file text records" section of the following procedure. Do not carry over any PLATO binaries or procedures other than the ones listed above from one operating system to another.

This update installation procedure is designed to allow analysts to upgrade their system from any PLATO release more recent than Release 31 to the current release.

Each section which is dependent on the PLATO Release which is currently running has a separate list of changes required for each release. To use these update installation procedures, you must start with the list describing the changes for the PLATO release immediately following the release level currently running on your system and proceed through all lists of changes up to and including the release level being installed.

For example, if you are currently running release level 33 and you wish to upgrade to level 34, you should use only the list of changes for PLATO R34 in each section. If your system is currently running at release level 32 and you wish to upgrade to release level 34, you must use the list of changes for PLATO R33 and PLATO R34 in all sections.
5.1 PLATO Operations Changes

The following describes major changes to the operation or installation of the PLATO application. This is included to inform analysts performing the upgrade installation of the PLATO application of important changes in operational procedures.

**Changes for PLATO R33**

PLATO is now defined to be a NOS subsystem. The various DSD commands to load PLATO have changed since parameters cannot be specified on DSD commands. These commands are shown below.

<table>
<thead>
<tr>
<th>Old DSD command</th>
<th>New DSD command</th>
</tr>
</thead>
<tbody>
<tr>
<td>x.manage</td>
<td>plato</td>
</tr>
<tr>
<td>x.manage(install=update)</td>
<td>plaupgrade</td>
</tr>
<tr>
<td>x.manage(install)</td>
<td>plains</td>
</tr>
</tbody>
</table>

The control point at which MASTJR is to be loaded is specified via the ENABLE IPREDCK entry or SUBSYSST command, i.e., ENABLE.PLAT.1.

In order to process the new DSD commands, procedure files exist under user index 377777 on the system pack with the same name as the DSD commands. Local copies of these procedures may be made and modified under different names and DSD will automatically process the proper procedure when that name is entered to load PLATO. The only requirement for the names is that they begin with the letters "pla" and are legal NOS file names.

The procedure "spjx" was used on previous levels to maintain compatibility between NJS 2.1 and NOS 2.2. This procedure has now been replaced by the *prote* control statement in all PLATO procedures. If local procedures use *spjx*, they must be changed.

Procedures "mastx", "manage", "joga" and "spjx" are no longer used and may be deleted from deadstart tapes and LIBRECKS.

To reduce the dependence of the PLATO system on the operating system levels, the `~display` option for the right screen when using `~console` has been removed.

The PLATO terminal simulator for the system console has been changed to squeeze the entire left-screen display into the upper three-fifths of the screen. This has been done as part of the support for the CDC 721 console on the B1C/B1C mainframes.

**Changes for PLATO R34**

All documentation for the PLATO application has been completely
rewritten for this release. Major changes were:

- The Installation Guide was reorganized to make the initial installation and update installation process simpler.

- Changes were made to the Installation Guide to allow for running a given release on more than one level of the operating system.

- The PLATJ Bill of Materials section of the Operations Guide was moved to the Installation Guide.

- All installation-related information was moved from the Operations Guide to the Installation Guide.

- The information on system deadlock files was moved from the Operations Guide to a new Configuration Handbook.

- The PLATJ configuration file section of the Operations Guide was moved to the Configuration Handbook.

- The Operations Guide was reorganized and a new index was written to make it easier to find a particular operational procedure.

- All configuration-related information in the Operations Guide was moved to the new Configuration Handbook.
5.2 Update installation procedures

The following is a list of the steps to be taken to upgrade the PLATO application software. Each of these steps is discussed in detail in the following sections.

1. Execute pre-installation cleanups.
2. Obtain files from installation tape.
3. Load release master files.
4. Reinstall NHM and CCP.
5. Reinstall selected NOS programs.
6. Change NOS validation files.
7. Change deadstart file text records.
11. Complete file dumps.
13. Change MFNX procedure.
14. Load PLATO via PLAINS OS0-command.
15. Change existing access lists.
16. Change existing PLATO files.
17. Destroy obsolete files.
18. Install new system lessons.
19. Initialize binary master file(s).
20. Reload PLATO.
21. Run required conversion programs.
22. Run file installation check.
23. Change network system tables.
25. Change local AIDS files.
25. Install new optional features.
27. Reinstall Add-on Products.
29. Dumper all master files.
5.2.1 Execute pre-installation cleanups.

There are several checkouts and cleanups that should be done as part of normal operations. The procedures in the following sections should be done before the installation to resolve possible existing problems and to minimize the cleanups necessary after installation.

1. Execute the following cleanup programs in lesson "accountu" for all accounts. Errors are logged in "accterrlog".
   a. "Account directory and file checks"
   b. "Search for files not in any account"

2. Execute the "Search for duplicate files" option in lesson "installu" for all active master files.

3. Execute the "File Directory Verification Check" option in lesson "utility". If the "utility" runner is turned on, it should not be necessary to run this manually.

4. If any errors are found as a result of these checks, they will be logged. Print the corresponding log file and correct any errors before proceeding.

5. A new software release will usually require more disk space. The amount required may vary from a few parts to over a hundred. Make sure there is adequate space on your required master file to handle the new software. This may involve adding another master file to your system if you are currently at or close to the limit of available space.

6. During the installation process, a temporary master file must be loaded onto your disk packs. You must make sure there is enough disk space available on your disk packs to create one 3334-part master file. The number of free tracks required for this master file is shown below for each supported device type. In addition, there must also be half as many tracks of temporary file space available.

<table>
<thead>
<tr>
<th>Device</th>
<th>Tracks</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>14400</td>
</tr>
<tr>
<td>03</td>
<td>3440</td>
</tr>
<tr>
<td>04</td>
<td>22640</td>
</tr>
<tr>
<td>01</td>
<td>19670</td>
</tr>
<tr>
<td>08</td>
<td>21750</td>
</tr>
<tr>
<td>0L</td>
<td>10670</td>
</tr>
<tr>
<td>09</td>
<td>3110</td>
</tr>
<tr>
<td>04</td>
<td>3110</td>
</tr>
</tbody>
</table>

7. When installing PLANET Release 34 or above, you may need to lengthen common "link" in file "sysfile"
Before beginning the installation, use the following procedure to determine if you will need to lengthen this common.

a. Edit file "sysfile".

b. Press "+" until you find the block named "link".

c. Press the letter which appears next to block "link" to edit it.

d. Near the top of the next display, you will see the current length of the common displayed.

e. If this length is greater than \((1 + 10 * \text{the value of the "netas" configuration file entry})\), you will not need to lengthen this common.

If the current length of the common is too short, you should use the following procedure to lengthen it.

a. At a convenient time, back out all users. This is necessary to prevent a user from writing a common into file "sysfile" while the file is reorganized.

b. Edit file "sysfile".

c. Press "+" until you find the block named "link".

d. Press the letter which appears next to block "link" to edit it.

e. Press SHIFT-<LAB for "other options".

f. Choose the "change length of common" option.

g. Choose a new length which is the lowest multiple of 32 greater than \((1 + 10 * \text{the value of the "netas" configuration file entry})\).
5.2.2  Obtain files from installation tape.

This step will load the files which make up the PLATO application from the first installation tape.

Mount the first installation tape (the one labeled PLAT1A) on an available tape drive. Make sure the tape drive is available by checking the console CRT-display.

Enter the following commands on the computer console:

```
X,DIS
FAMILY(family name) if using alternate family
USER(sys,password) sys is the PLATO system user name (usually SYS)
LABEL(TAPE,VSN=PLAT1A)
GET(TAPE,UPGRADE)PROC/UPGRADE
BEGIN(UPGRADE,UPGRADE,PPW=ps1,SPW=ps2)
```

where  
ps1 = password for user name PLATJMF
ps2 = password for user name SYSTEMX

This procedure creates or replaces the following files.

**User sys:**

- PLABINS  PLATO release binaries
- PLANJS  modifications to NOS
- PLANAM  modifications to HAM
- PLACC  modifications to CCP
- LIBDIR  LIBDECK entries for PLATO programs
- LJADMF  procedure to load installation master file
- BKSPPU  program used to load installation master file

**User PLATJMF:**

- ISTLF0  terminal resident load file
- ISTLFU0  terminal resident load file
- ISTLF03  terminal resident load file
- ISTLF06  terminal resident load file

**User SYSTEMX:**

- PLAT3  PLATO load procedure
- PLAINS  PLATO load procedure
- PLAUPO  PLATO load procedure
5.2.3 Load release master files.

Use the PLATO procedure LOADMF to copy the PLATO master files from the installation tapes to disk.

The formats of this procedure call are:

- LOADMF(MF=mf) default family
- LOADMF(MF=mf,FAMILY=fn) alternate family
- LOADMF(MF=mf,PN=pn,RT=dt) auxiliary device

where:

mf = master file name
fn = family name
pn = auxiliary pack name
dt = device type if PN argument is used

Mount each installation tape as it is requested via the E,P-display.

Examples: Default family.

If you are using the default family device for PLATO master files, enter the following on the computer console.

X*DIS.
USER(sys,password)
GET(LOADMF)
LOADMF(MF=SYS1)

Examples: Alternate family.

If you are using an alternate family device for PLATO master files, enter the following on the computer console.

X*DIS.
USER(sys,password)
FAMILY(family name)
GET(LOADMF)
LOADMF(MF=SYS1,FAMILY=family name)

Examples: Auxiliary devices.

To load the PLATO master files onto an auxiliary device named "PLATOA" of type "OL", enter the following on the computer console.

X*DIS.
USER(sys,password)
FAMILY(family name) if using alternate family
GET(LOADMF)
LOADMF (MF=SYS1, PN=PLATOAR, R=DL)
5.2.4 **Reinstall NAM and CCP.**

Inspect the contents of files PLANAM and PLACCP under the PLATO system user name. If either of these files contains modsets, it will be necessary to reinstall NAM and CCP with these modsets. Refer to the NOS Installation Handbook for instructions.

The PLATO application requires only the standard asynchronous TIP in the CCP build procedure.

Save any modsets in PLANAM and PLACCP so they may be used again if NAM and CCP must be reinstalled in the future.
5.2.5 Reinstall selected NJS programs.

Inspect the contents of file PLANJS under the PLATO system user name. If this file contains modsets, it will be necessary to reinstall the affected programs with these modsets. Refer to the NJS Installation Handbook for more information.

By looking at the contents of this file, determine what NJS programs will need to be reassembled. Only the programs which have modifications will need to be reassembled.

Be sure that, any time in the future, when these programs are reassembled, that these modifications are included.

Save the binaries produced for replacement on your deadstart file after all the PLATO materials are ready to be installed.

Save any modsets in PLANJS so they may be used again if the affected NJS programs must be reinstalled in the future.
5.2.6 Change NJS validation files.

Changes to the format or content of the NJS validation files may affect the user names used by the PLAT0 application or by users of the PLAT0 application.

You should make all changes listed for all NOS levels beginning with the one following the level you are updating from through the NOS level you are updating to.

CHANGES FOR NOS 2.3 LEVEL 617

The user names specified by the "subun" and "prtun" PLAT0 configuration file entries and all user names which are permitted to submit system origin jobs through PLAT0 must be changed to allow them to submit system service class jobs. Use the following procedure to make this change:

K actionable=*
  * assign the k-display to the job.
K sys=
K display=ALL
K END
K=END

CHANGES FOR NOS 2.4.1 LEVEL 63C

There are no NOS validation file changes necessary for this NOS level.
5.2.7 Change deadstart file text records.

Changes in the format or content of the NOS deadstart file text records (CMRDECKS, EQPDECKS, LIBDECKS, IPRDECKS) may be required because of changes in NOS or in the PLATO application software.

This can be done using J26 or some other text editor available on your system. Instructions for using J26 may be found in the NOS V2 System Programmer's Instant manual.

Save the modified text records for replacement on your deadstart file after all the PLATO materials are ready to be installed.

The following example assumes you are using J26 as the text editor and that you are using the first (U) copies of the text records (CMRDC0, EQPDUC, LID00C, IPRDC0).

Example: Modifying a text record.

```
X.DIS.
FAMILY(family name) if using alternate family
USER(sys, password)
CMDN(System)
GTR(System,CMRDECK) TEXT/CMRDC0
J26.
READ.CMRDECK
* make required changes.
DIS.
PURGE(CMRDECK/NA)
SAVE(CMRDECK)
```
CHANGES TO CMRDECKS

The following change should be made to all CMRDECKS on the deadstart file. If there are on-line copies of these decks, be sure to change them as well. See the "Deadstart File" section in the PLATO Configuration Handbook for a list of all PLATO-related CMRDECK entries.

Change the version line if the release level of the PLATO software is referenced. Also, change the NUS version line, if updating the operating system.

CHANGES TO EQPDECKS

There are no required EQPDECK changes.

CHANGES TO L1DDECKS

The following changes should be made to all L1DDECKS on the deadstart file. If there are on-line copies of these decks, be sure to change them as well. See the "Deadstart File" section in the PLATO Configuration Handbook for a list of all PLATO-related L1DDECK entries.

CHANGES FOR PLATO R33

Add entry:

`*CM PP/4PA,4PD`

Delete entries:

`*PROJ SPJX`
`*PROJ MANAGE`
`*PROJ MASTX`

CHANGES FOR PLATO R34

Delete entry:

`*CM PP/42V`

CHANGES TO IPRODECKS

The following changes should be made to all IPRODECKS on the deadstart file. If there are on-line copies of these decks, be sure to change them as well. See the "Deadstart File" section in the PLATO Configuration Handbook for a list of all PLATO-related IPRODECK entries.

CHANGES FOR PLATO R33

Add entry:
ENABLE,PLA,cp.

where cp = the control point where the MASTER job is to be run.

CHANGES FOR PLATJ R34

There are no required IPRDECK changes for this release.
5.2.8 Change PLATO configuration file.

The following changes should be made to the PLATO configuration file on the deadstart file. If there are on-line copies of this file, be sure to change them as well. Refer to the PLATO Configuration Handbook for a complete list of all PLATO configuration file entries.

You may use O26 or any other text editor available on your system to make these changes.

Save the modified configuration file for replacement on your deadstart file after all the PLATO materials are ready to be installed.

The following procedure may be used to modify the PLATO configuration file:

```
X,DIS,
FAMILY(family name) if using alternate family
USER(sys,pw)
COMMON(SYS)
GET(SYS,CONFIG,TEXT,CONFIG
O26,
READ,CONFIG,
* make required changes,
DIS,
PURGE(CONFIG/NA)
SAVE(CONFIG)
```

CHANGES FOR PLATO R33

Delete the following entries, if present.

```
1st2x
plo
```

Systems using 232-series mainframes must set the "ncmb" parameter to zero. Systems using 730-series mainframes should not change this parameter.

CHANGES FOR PLATO R34

Delete the following entries, if present.

```
antsz
binds
bolat
click
comsr
defos
fowl
l1jtem
adln
```
The interpretation of the "jobks" entry has changed with this release. This now specifies the total number of judge buffers in the system instead of the number of judge buffers for each executor in a multi-executor configuration. All systems running more than one executor will need to increase the value of the "jobks" entry. This can be done by multiplying the number of judge buffers formerly used by the number of executors used, keeping in mind the limit on the maximum number of judge buffers allowed and the recommended value, as documented in the PLATO Configuration Handbook.

The "cbuf" keyword must be changed to "cb1th". The interpretation of the value of this keyword has also changed so that it must be specified in units of the TUTOR block length instead of an absolute length. The new value should be set to the old value divided by 320.

The "nterà" keyword must be changed to "users". The interpretation of this keyword has not changed.

The "syslx" keyword must be changed to "sysac". The interpretation of this keyword has not changed.

The default values of the following keywords have been changed. They are now dependent on the amount of memory available. See the PLATO Configuration Handbook for more information.

```
cb1th  emgr3  emgr4  fast1  foral
lesns  nparc
```

The default values of the following keywords have been changed to 0. When the value of these keywords is set to zero, the system will automatically set the value based on the number of users defined by the "users" keyword. See the PLATO Configuration Handbook for more information.

```
niob  quesz
```
5.2.9 Build new deadstart file.

Build a new deadstart file which includes the following:

1. The NAM which was reinstalled with the modssets in file PLANAM, if any were present.

2. The NOS programs which were reinstalled with the modssets in file PLANJS, if any were present.

3. The CMRDECK, EQPDECK, LIBDECK and IPRDECK which were modified earlier in this procedure.

4. The PLATU configuration file which was modified earlier in this procedure.

5. The PLATO release binaries which were loaded from the installation tape earlier in this procedure.

The following is a sample procedure which could be used to build the deadstart file.

```
X*DIS
FAMILY(family name) if using alternate family
USER(sys*password)
CJOB=ORC(SYSTEM)
ATTACH(nam binary file)
ATTACH(nos binary file)
GET(CMRDECK)
GET(EQPDECK)
GET(LIBDECK)
GET(IPRDECK)
GET(CONFIG)
ATTACH(*PLATINS)
UNLOAD(JIR)
NOTE(DIR=NAM)*FILE nam binary file
NOTE(DIR=NAM)*FILE nos binary file
NOTE(DIR=CMR)*FILE CMRDECK
NOTE(DIR=CMR)*FILE EQPDECK
NOTE(DIR=CMR)*FILE LIBDECK
NOTE(DIR=CMR)*FILE IPRDECK
NOTE(DIR=CMR)*FILE CONFIG
NOTE(DIR=CMR)*FILE PLATINS
PACK(JIR)
REWD(*)
LIBEDIT(F=SYSTEM,I=JIR)
REWD(*)
ASSIGN,J=CMR,T=F=I., or INSTGRID(NEW=LJXX)
COPY(NEW,J=CMR,T=I.)
```
5.2.1C  Clear operator action queues.

The format of various operator action queues may change with a new release. Therefore, all requested actions should be performed just prior to the installation, thus clearing the queues.

1. Print all requests in the print request queue.
2. Perform any file backup requests.
3. Complete any archive/retrieval requests.
5.2.11 Complete file dumps.

Before you begin the installation, do a complete dump of all disk packs. If something goes wrong, good backups must be available to allow retreating to the previous release, if necessary.
5.2.12 Deadstart on new deadstart file.

Deadstart using the new deadstart file for this release. DO NOT try to bring up PL/SQL yet; some changes must be made first.
5.2.13 Change MFNX procedure.

Procedure MFNX must be changed to attach the new system lesson master file, SYS1. This master file must be the first master file attached so that files on this master file which duplicate ones already on the system are used when the PLATO application is loaded. You may also need to change or add a RESOURSE command if the new master file will be on an auxiliary pack other than those already used by required master files.

In addition, check to be sure that the number of required master files PLUS the one installation master file does not exceed the value of the "ndsus" PLATO configuration file entry. If necessary, obtain a copy of your configuration file from the deadstart file, edit it to increase "ndsus" as needed.

Use SYSEdit to make these changes to MFNX and the PLATO configuration file part of the running system.

You may use a procedure similar to the following to make these changes to MFNX and your PLATO configuration file.

```
EXEC
COMMD("SYSTEM")
GRTR("SYSTEM",MFNX)PRJC/MFNX
* * At this point, procedure MFNX is in MFN
* * local file MFNX. Use J26 to edit file MFNX
* * to attach new master files.
*
GRTR("SYSTEM",CONFIG)TEXT/CONFIG
* * Use J26 to change the value of the "ndsus"
* * entry in local file CONFIG, if necessary.
* 
NOTE(DIR,IR)FILE MFNX
NOTE(DIR,IR)FILE CONFIG
PACK(DIR)
SYSEdit(I=DIR,n=0)
```
5.2.14 Load PLATO via PLAINS.

You will now load the PLATO application via the PLAINS DSD-command.

1. If your system is to use the PLATO ASCII network, MUX must be brought up at this point.

2. Load the PLATO application by typing the following at the computer console:

   PLAINS.

This console command is used only during PLATO application installations. It performs the following functions:

a. Alters the "cspmd" configuration entry so that the PLATO application will allow more foreground processing time for running installation programs.

b. Prevents groups other than "s", "p" and "convert" from signing onto the system.

When updating from PLATO release 34.1 or earlier, you may see the daytime message "network table obsolete". This message may be ignored during installation since the problem being reported will be corrected by a conversion to the network system table later in this process.

3. Now, sign on to the PLATO application with a PLATO terminal, using your "p" sign-on.
5.2.15  Change existing access lists.

The PLATO application uses several access lists to control user access to privileged system lessons and options. These access lists are maintained by the local system. Sometimes changes must be made to these access lists at the time of the installation of a new PLATO release.

The following general procedure can be used to update these access lists.

1. Edit file "s0sysfile".

2. Press "*" until the name of the access list to be updated is seen on the block display of the editor.

3. Edit the access list which must be updated by pressing the letter which appears next to the name of the access list on the block display.

4. Select the "edit user option descriptions" option.

5. Now, select the "copy descriptions from another access list" option.

6. Enter "s0subfil" as the name of the file from which to copy.

7. Enter the name of the block to be updated as the block from which to copy.

8. Press "y" to adjust authorizations. (If this is not done, all entries in the access list will be of type "special", instead of "director" or "operator", etc.).

9. Press SHIFT-HELP to copy the descriptions.

10. Any sign-on listed in the access list which was previously of type "special" still retains that classification. You may want to check the individual options assigned to that sign-on, and possibly change some of them.

CHANGES FOR PLATO R33

There are no changes needed for this PLATO release.

CHANGES FOR PLATO R34

There are no changes needed for this PLATO release.
5.2.16 Change existing PLATO files.

For each new PLATO release, there may be changes needed for existing system database files.

CHANGES FOR PLATO R33

Two new access lists must be added to the system database file "s0sysfile". One access list is only used if the PCD2 on-line authoring product is installed, but all systems must make this change. The other is used by the Calendar utility, a new feature with Release 33.

Use the following procedure to install these access lists.

1. Edit file "s0sysfile".

2. Choose to add a new block to this file by pressing the SHIFTed letter of the block you want the new block to follow. You may have to lengthen "s0sysfile" through accounts options if there is not enough room to add new blocks.

3. Choose the option to copy blocks from another file.

4. Enter "s0subfil" as the file to copy from.

5. Choose block "pcd2" as the block to copy. You may get a message at this point which indicates there is not enough space in the file to copy all of the blocks. If this happens, lengthen the file through account options and start this procedure over at step 1.

6. After the blocks are copied, press BACK until you are out of the file.

7. Repeat this procedure, but use the name "s0scheosys" as the name of the blocks to be copied.

CHANGES FOR PLATO R34

One new access list must be added to the system database file "s0sysfile". This access list is used to control the options of lessons "ipedit", "s1netsys" and "s0calutil".

Use the following procedure to install this access list.

1. Edit file "s0sysfile".

2. Choose to add a new block to this file by pressing the SHIFTed letter of the block you want the new block to follow. You may have to lengthen "s0sysfile" through accounts options if there is not enough room...
to add new blocks.

3. Choose the option to copy blocks from another file.

4. Enter "s@sysfile" as the file to copy from.

5. Choose block "ipedit" as the block to copy. You may get a message at this point which indicates there is not enough space in the file to copy all of the blocks. If this happens, lengthen the file through account options and start this procedure over at step 1.

6. After the blocks are copied, press BACK until you are out of the file.

If access list "s@calutil" exists in file "s@sysfile", it may be deleted as it is no longer used.

Use the following procedure to delete this access list:

1. Edit file "s@symsfile".

2. Press "*" until a block named "s@calutil" appears on the block directory display.

3. Press the latter which appear next to the first of these blocks.

4. Press SHIFT-HELP to delete the access list.
5.2.17 Destroy obsolete files.

With each release, there are certain files which become obsolete and are no longer needed. These files should be destroyed to save space. This is done through lesson "transfer" as follows:

1. Execute lesson "transfer".
2. Choose the "Destroy Obsolete System Courseware" option.
3. Choose "obsolete system files".
4. Press SHIFT-HELP to begin the operation.
5. Enter the name of a student datafile to use as an error log or press NEXT to use the default log file when requested.

5. If a particular file did not exist on the system, it will be automatically skipped and entered into the error log along with any other error that may have occurred. If log entries were made, the log should be scanned to see if anything unusual happened.
5.2.18 Install new system lessons.

Install new versions of system lessons as follows:

1. Execute lesson "transfer".
2. Choose the "Install new courseware" option.
3. Enter "sysl" and press NEXT.
4. You will be asked for the name of the first file to process. Press NEXT to begin with the first file on the master file.
5. Press "n" to specify that customer files are NOT to be replaced.
6. Press "n" to specify that errors are NOT to be automatically skipped.
7. Old system files will be automatically destroyed if they are to be replaced. If a new file duplicates a file found in a non-system account, "transfer" will stop. The file in the non-system account must be renamed.
8. If an error occurs, a message will be displayed. Correct the problem reported and continue. There should be no errors if the account cleanup programs were run prior to the installation.
9. It may be necessary to increase the number of disk parts allocated to account "system" during this installation. If so, set the parts allocated to unlimited.
5.2.19 Initialize binary master file(s).

All binary master files should be reinitialized. While the system will still function properly without doing this, the "utility" runner program will generate errors for any old binary file it finds.

1. Execute lesson "ldr".
2. Choose the "Master File Initializations" option.
3. Enter the binary master file name.
4. Press NEXT to leave the master file name the same.
5. Press NEXT to leave the master file type the same.
6. Press "y" to initialize all files on the master file.
7. Press SHIFT-HELP to initialize the master file.
8. Repeat this procedure for all binary master files.
5.2.20  Reload PLATJ.

All new system files have now been transferred to the required master files. Therefore, master file SYS1 is no longer needed. Reload without it as follows:

1. Take the PLATJ application down.

2. Enter the following at the computer console to restore procedure FMx and the PLATJ configuration file to their original state.

   X.SYSEDIT(R)

3. Reload the PLATJ application again using the PLAIN5 DSO command.
5.2.21 Run required conversion programs.

For some releases, conversion programs must be run to update user files so that they will work on the new release of the application. The conversions which must be run for this release are described below. Unless told otherwise below, run the conversions according to the procedures described in the "File Conversions" section of the PLATO Operations Guide.

If there are no conversion programs to be run or after all conversion programs are run, you must make sure that the update levels of new files are being set correctly. This is done as follows:

1. Execute lesson "ipedit".

2. Press NEXT on the first display for other options.

3. Select the "Update levels for new files" option.

4. Check the list of file types and update levels with the list below. The update levels of file types not listed below should be zero.

<table>
<thead>
<tr>
<th>File type</th>
<th>Update level</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>5</td>
</tr>
<tr>
<td>f</td>
<td>6</td>
</tr>
<tr>
<td>g</td>
<td>1</td>
</tr>
<tr>
<td>h</td>
<td>2</td>
</tr>
<tr>
<td>i</td>
<td>2</td>
</tr>
<tr>
<td>k</td>
<td>1</td>
</tr>
<tr>
<td>l</td>
<td>2</td>
</tr>
<tr>
<td>o</td>
<td>2</td>
</tr>
<tr>
<td>q</td>
<td>1</td>
</tr>
</tbody>
</table>

4. If there are any differences, enter the file type and the new update level. Update levels will always increase, do not change an update level to a lower value.

CONVERSIONS FOR PLATO R33

There are no required conversion programs for this release.

CONVERSIONS FOR PLATO R34

There are no required conversion programs for this release.
Run file installation check.

All system lessons have now been replaced with the new versions for this release. Test for proper installation as follows:

1. Execute lesson "Installu".
2. Choose "Special lesson list check" option.
3. Press NEXT to scan all active master files.
4. If any file is reported as missing, report it via PSR. See the "Problem Reporting" section of the PLATO Operations Guide for information on how to do this.
5.2.23 Change network system table.

For each PLATO release, there may be required changes to the network system table to add or delete systems for which an AUTHORS database was or is to be installed.

Use the following general procedure to update the network system table:

1. Execute lesson "ipedit".
2. Choose the "Network management" option.
3. On the following display, choose the "System table" option.
4. Choose the "Add a new system" or "Delete a system" option as instructed.
5. When adding a new system, you must enter the following:
   a. the name of the new system
   b. the routing identifier (RID) of the new system
   c. the link type for the new system (generally, this will be "not linked")
   d. the "AUTHORS database available" flag

CHANGES FOR PLATO R33

There are no changes necessary for this release.

CHANGES FOR PLATO R34

The network system table common in file "s0sysfile" must be converted when installing this release. Use the following procedure to convert this common:

a. Execute lesson "s0netsys".

b. Press SHIFT-HELP when requested. When the conversion is complete, you will be sent to the main index.

c. Choose the "Update the En copy of the system table" option and press SHIFT-HELP when requested.
5.2.24 Reinstall AUTHORS database.

Activate the new AUTHORS database files as follows:

1. Execute lesson "authors".

2. Press LAB for director options.

3. Choose the "Database management options".

4. Choose the "active systems" option.

5. Press SHIFT-NEXT to install all systems' databases.

6. When asked for a file prefix, just press NEXT.

7. At the end of the installation, the option to turn AUTHORS back on will be given. Press NEXT to do so.
5.2.25  Change local AID$ files.

Each PLAT$ release may require changes to the two AID$ files which are maintained by each system, "ajssl" and "ajpsolless".

CHANGES FOR PLATO R33

There are no changes necessary for this release.

CHANGES FOR PLATO R34

There are no changes necessary for this release.
5.2.26  Install new optional features.

Each PLATO release may introduce new optional features for which further installation procedures are needed. See the "Optional Installation Procedures" section for more information and installation procedures for the features listed below.

These new optional features may be installed at this time or at any future time. If you do not wish to install any of these features at this time, or, when you have completed installing them, you should continue with the next section.

CHANGES FOR PLATO R33

There are no new optional features for this release.

CHANGES FOR PLATO R34

The PLATO Inter-system Link was added at this release.
5.2.27 Reinstall Add-on Products

At this time, any optional "add-on" PLATO products, such as the PC02 On-Line Authoring Module, which have been purchased must be reinstalled.

Add-on products which are to be installed must match the PLATO level you are updating to.

See the "Add-on Products" section of this document for update installation instructions.

When you have completed installing all add-on products, you should continue with the next section.
Post-Installation Cleanups.

The items listed below are things which must be done following a new PLATO release update, but are not critical. They may be done as part of the actual installation or during the following week. If you do not wish to do these cleanups now, continue on to the next section.

PURGE RELEASE MASTER FILES

The release master file, SYS1, should be purged to recover the disk space it occupies.

PURGE INSTALLATION-ONLY DISK FILES

The following hfs permanent files may be purged to save space since they are needed only during the installation process.

- PLABINS PLATO release binaries
- CONFIG PLATO configuration file
- MPNX procedure to attach master files
- MFDX procedure to dump master files
- LIDDIR LIDJOCK entries for PLATO programs
- L3AGMF procedure to load installation master files
- B3SPRU program used to load installation master files

CHANGE ON-LINE CONFIGURATION FILE / PROCEDURES

If on-line copies of the PLATO configuration file, deadstart file text records or PLATO procedures MPNX and MFDX are used, make the same changes to these copies that were made when the new deadstart file was built, if this has not already been done.

REASSEMBLE PROGRAMS IF THERE HAS BEEN A NJS CHANGE

If the operating system has changed with this release, be sure to reassemble any private programs in use on the system.
5.2.29 Dump all master files.

The installation is now complete.

All master files should be dumped for protection against disk problems happening before the next regularly scheduled dump.

Once the dumps are complete, open the system to users by taking the PLATO application down and reloading it via the PLATO USDA command.
SECTION 6 - MINI-RELEASE INSTALLATION PROCEDURES
INTRODUCTION

The following sections describe the procedure to be followed to update your PLATO system when you receive a "mini-release" shipment. Mini-release shipments are used to distribute fixes for critical problems which cannot wait until the next major release.

This procedure may be used to update from any mini-release version of the PLATO system to any other (for example, from PLATO Release 34.1 to PLATO Release 34.2).

The following is a list of the steps to be taken to install a mini-release of the PLATO application software. Each of these steps is discussed in detail in the following sections.

1. Obtain files from mini-release binaries tape.
2. Perform special instructions.
5. Deadstart on new deadstart file.
7. Change existing PLATO files.
8. Initialize binary master file(s).
9. Reinstall Add-on Products.
11. Reload PLATO.
6.1 Obtain files from installation tape.

This step will load the files which make up the PLATO application from the mini-release binaries tape.

Mount the first installation tape (the one labeled PLAT1A) on an available tape drive. Make sure the tape drive is available by checking the console E,T-display.

Enter the following commands on the computer console:

```plaintext
X.DIS.
FAMILY(family-name)  (if using alternate family)
USER(sys,password)  sys is the PLATO system
                        user name (usually SYS)
LABEL(TAPE,vsn=PLAT1A)
STR(TAPE,UPGRADE)PRJC/UPGRADE
BEGIN(UPGRADE,UPGRADE,PPW=ps1,SPW=ps2)
```

where ps1 = password for user name PLATOMF

ps2 = password for user name SYSTEMX

This procedure creates or replaces the following files.

**User sys:**

<table>
<thead>
<tr>
<th>File</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLABINS</td>
<td>PLATO release binaries</td>
</tr>
<tr>
<td>PLANJS</td>
<td>modifications to NOS</td>
</tr>
<tr>
<td>PLANAM</td>
<td>modifications to NAM</td>
</tr>
<tr>
<td>PLACCP</td>
<td>modifications to CCP</td>
</tr>
<tr>
<td>LI3DIR</td>
<td>L3DECK entries for PLATO programs</td>
</tr>
<tr>
<td>LOAD1F</td>
<td>procedure to load installation master file</td>
</tr>
<tr>
<td>BKSPRU</td>
<td>program used to load installation master file</td>
</tr>
</tbody>
</table>

**User PLATOMF:**

<table>
<thead>
<tr>
<th>File</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$TLFCD</td>
<td>terminal resident load file</td>
</tr>
<tr>
<td>$TLFC1</td>
<td>terminal resident load file</td>
</tr>
<tr>
<td>$TLFC3</td>
<td>terminal resident load file</td>
</tr>
<tr>
<td>$TLFC8</td>
<td>terminal resident load file</td>
</tr>
</tbody>
</table>

**User SYSTEMX:**

<table>
<thead>
<tr>
<th>File</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLATO</td>
<td>PLATO load procedure</td>
</tr>
<tr>
<td>PLAINS</td>
<td>PLATO load procedure</td>
</tr>
<tr>
<td>PLAUPU</td>
<td>PLATO load procedure</td>
</tr>
</tbody>
</table>
6.2 Perform special instructions.

The following may be changed by a specific mini-release, but are not generally needed for all mini-releases. Make these changes only if told to do so in the mini-release memo included with the mini-release tapes or in the PLATO Software Release Bulletin.

a. Reinstall NAM and CCP.

b. Reinstall selected NOS programs.

c. Change PLATO configuration file.
6.3 Build new deadstart file.

Build a new deadstart file which includes the PLATO binaries which were loaded from the installation tape earlier in this procedure and any items changed under the section on special instructions.

The following is a sample procedure which could be used to build the deadstart file.

X.DIS,
FAMILY(family name) If using alternate family
USER(sys, password)
CJMKJN(SYSTEM)
ATTACH(PLABINS)
UNLOAD(DIR)
NOTE(DIR#NR)##FILE PLABINS
PACK(DIR)
REWIND(*)
LIBEDIT(P=SYSTEM,F=DIR)
REWIND(*)
ASSIGN,50,T,F=I. or INSTALL(NEW=EQxx)
COPY(NEW,T,V)
6.4 Load mini-release master files.

Load the mini-release master file tapes as described in the "Courseware Installation" section of the PLATO Operations Guide.

You must be sure that no users are signed in while this installation is being done. Since system files are being replaced, users may begin using the new files before the installation is complete and results are unpredictable.

When the installation is complete, take the PLATO system down.
6.5 Deadstart on new deadstart file.

Deadstart using the new deadstart file.
6.6 Load PLATÜ via PLAINS

You will now load the PLATÜ application via the PLAINS DSO-command.

1. If your system is to use the PLATÜ ASCII network, NAM must be brought up at this point.

2. Load the PLATÜ application by typing the following at the computer console:

   PLAINS.

This console command is only during PLATÜ application installations. It performs the following functions:

a. Alters the "csped" configuration entry so that the PLATÜ application will allow more foreground processing time for running installation programs.

b. Prevents groups other than "s", "p" and "convert" from signing onto the system.

When updating from PLATÜ release 34.1 or earlier, you may see the dayfile message "network table obsolete". This message may be ignored during installation since the problem being reported will be corrected by a conversion to the network system table later in this process.

3. Now, sign on to the PLATÜ application with a PLATÜ terminal, using your "p" sign-on.
6.7 Change existing PLATO files.

The following may be changed by a specific mini-release, but are not generally needed for all mini-releases. Make these changes only if told to do so in the mini-release memo included with the mini-release tapes or in the PLATO Software Release bulletin.

a. Change existing access lists.

b. Change existing PLATO database files.
6.8 Initialize binary master file(s).

All binary master files should be reinitialized. While the system will still function properly without doing this, the "utility" runner program will generate errors for any old binary file it finds.

1. Execute lesson "lor".
2. Choose the "Master File Initialization" option.
3. Enter the binary master file name.
4. Press NEXT to leave the master file name the same.
5. Press NEXT to leave the master file type the same.
6. Press "y" to initialize all files on the master file.
7. Press SHIFT-HELP to initialize the master file.
8. Repeat this procedure for all binary master files.
6.9 Reinstall Add-on Products

At this time, any optional "add-on" PLATO products, such as the PCC2 On-Line Authoring Module, which have been purchased must be reinstalled.

Add-on products which are to be installed must match the MAJOR release level of the PLATO system being run.

See the "Add-on Products" section of the PLATO Installation Guide for update installation instructions.
6.10 Post-installation cleanups.

The items listed below are things which may be done following a PLATO reinstallation, but are not critical. If you do not wish to do these cleanups now, continue on to the next section.

PURGE INSTALLATION--ONLY DISK FILES

The following NOS permanent files may be purged to save space since they are needed only during the installation process.

- PLABINS: PLATO release binaries
- CONFIG: PLATO configuration file
- MFNX: procedure to attach master files
- MFDX: procedure to dump master files
- LIBDIR: LIBDECK entries for PLATO programs
- LOADMF: procedure to load installation master files
- 9KSPRU: program used to load installation master files
6.11  **Reload PLATO.**

The mini-release installation is now complete.

Open the system to users by taking the PLATO application down and reloading it via the PLATO DSU command.
7 Reinstallation Procedures

SECTION 7 - REINSTALLATION PROCEDURES
INTRODUCTION

The following sections describe the procedure to be followed to reinstall your PLATO system on a new level of the operating system. If you are also upgrading your PLATO system to a new release level as well as upgrading your operating system, you should use the "Upgrade Installation Procedures" section instead of this one.

When updating to a new level of the operating system, the following PLATO-related items must be carried over from the old operating system deadstart file to the new one.

1. Changes to deadstart file text record (.CHRDECKS, EDODECKS, LISSHDECKS, IPRADECKS) as described in the "Deadstart File" section of the PLATYP Configuration Handbook.

2. Procedure MFX.

3. Procedure MFX.

4. The PLATO configuration file.

Do not carry over any PLATO binaries or procedures other than the ones listed above from one operating system to another.

The following is a list of the steps to be taken to reinstall the PLATO application software. Each of these steps is discussed in detail in the following sections.

1. Obtain files from installation tape.

2. Reinstall NAM and CCP.

3. Reinstall selected NCS programs.

4. Change NCS validation files.


7. Load PLATYP via PLAINS.

8. Initialize binary master file(s).

9. Reinstall Add-on Products.


11. Reload PLATYP.
7.1 Obtain files from installation tape.

This step will load the files which make up the PLATO application from the first installation tape.

Mount the first installation tape (the one labeled PLAT1A) on an available tape drive. Make sure the tape drive is available by checking the console i,T-display.

Enter the following commands on the computer console:

X.DIS
FAMILY(family name) if using alternate family
USER(sys, password) sys is the PLAIU system
user name (usually SYS)
LABEL(TAPE, VSN=PLAT1A)
GET(TAPE, UPGRADE) PLUCC/UPGRADE
BEGIN(UPGRADE, UPGRADE, PPD=ps1, SPD=ps2)

where ps1 = password for user name PLATOMF
ps2 = password for user name SYSTEMX

This procedure creates or replaces the following files.

**User sys:**
- PLABINS PLATO release binaries
- PLAINS modifications to NDS
- PLANAM modifications to NAM
- PLACCP modifications to CCP
- L33DIR LISTDECK entries for PLATO programs
- LOADMF procedure to load installation master file
- dKSPRU program used to load installation master file

**User PLATOMF:**
- ISTRFO terminal resident load file
- ISTRFO1 terminal resident load file
- ISTRFC3 terminal resident load file
- ISTRFO8 terminal resident load file

**User SYSTEMX:**
- PLATJ PLATO load procedure
- PLAINS PLATO load procedure
- PLAUPD PLATO load procedure
7.2 Reinstall NAM and CCP.

Inspect the contents of files PLANAM and PLACCP under the PLATO system user name. If either of these files contains modsets, it will be necessary to reinstall NAM and CCP with these modsets. Refer to the NOS Installation Handbook for instructions.

The PLATO application requires only the standard asynchronous TIP in the CCP build procedure.

Save any modsets in PLANAM and PLACCP so they may be used again if NAM and CCP must be reinstalled in the future.
7.3 Reinstall selected NJS programs.

Inspect the contents of file PLANJS under the PLATU system user name. If this file contains modsets, it will be necessary to reinstall the affected programs with these modsets. Refer to the NJS Installation Handbook for more information.

By looking at the contents of this file, determine what NJS programs will need to be reassembled. Only the programs which have modifications will need to be reassembled.

Be sure that, any time in the future, when these programs are reassembled, that these modifications are included.

Save the binaries produced for replacement on your quadstart file after all the PLATJ materials are ready to be installed.

Save any modsets in PLANJS so they may be used again if the affected NJS programs must be reinstalled in the future.
7.4 Change NOS validation files.

Changes to the format or content of the NOS validation files may affect the user names used by the PLATJ application or by users of the PLATJ application.

You should make all changes listed for all NOS levels beginning with the one following the level you are updating from through the NOS level you are updating to.

CHANGES FOR NOS 2.3 LEVEL 617

The user names specified by the "subun" and "prtun" PLATJ configuration file entries and all user names which are permitted to submit system origin jobs through PLATJ must be changed to allow them to submit system service class jobs. Use the following procedure to make this change.

*XMODVAL*
* assign the 1D-display to the job.*
*K.OSYS*
*K.VM*ALL*
*K.END*
*K.END*

CHANGES FOR NOS 2.4.1 LEVEL 630

There are no NOS validation file changes necessary for this NOS level.
7.5 **Build new deadstart file.**

**Build a new deadstart file which includes the following:**

1. The **NAM** which was reinstalled with the modsets in file **PLANAM**, if any were present.

2. The **NOS** programs which were reinstalled with the modsets in file **PLANOS**, if any were present.

3. The **PLATO** release binaries which were loaded from the installation tape earlier in this procedure.

**The following is a sample procedure which could be used to build the deadstart file:**

```
X*DIS*
FAMILY(family name) if using alternate family
USER(sys, password)
COMMON(SYSTEM)
ATTACH(nam binary file)
ATTACH(nos binary file)
ATTACH(PLABINS)
UNLOAD(DIR)
NOTE(DIR, NR) *FILE nam binary file
NOTE(DIR, NR) *FILE nos binary file
NOTE(DIR, NR) *FILE PLABINS
PACK(DIR)
REWIND(*)
LIBEDIT(P=SYSTEM, I=DIR)
REWIND(*)
ASSIGN:50,T,F=I. or INSTALL(NEX=EQxx)
CJFY(NEX,T,V)
```
7.6 Deadstart on new deadstart file.
Deadstart using the new deadstart file for this release.
7.7 Load PLATO via PLAINS.

You will now load the PLATO application via the PLAINS DSD-command.

1. If your system is to use the PLATO ASCII network, MAX must be brought up at this point.

2. Load the PLATO application by typing the following at the computer console:

   PLAINS

   This console command is used only during PLATO application installations. It performs the following functions:

   a. Alters the "opsrd" configuration entry so that the PLATO application will allow more foreground processing time for running installation programs.

   b. Prevents groups other than "s", "p" and "converte" from signing onto the system.

3. Now, sign on to the PLATO application with a PLATO terminal, using your "p" sign-on.
7.8 Initialize binary master file(s).

All binary master files should be reinitialized. While the system will still function properly without doing this, the "utility" runner program will generate errors for any old binary file it finds.

1. Execute lesson "Idr".

2. Choose the "Master File Initializations" option.

3. Enter the binary master file name.

4. Press NEXT to leave the master file name the same.

5. Press NEXT to leave the master file type the same.

6. Press "y" to initialize all files on the master file.

7. Press SHIFT-HELP to initialize the master file.

8. Repeat this procedure for all binary master files.
7.9 Reinstall Add-on Products

At this time, any optional "add-on" PLATJ products, such as the PCD2 On-Line Authoring Module, which have been purchased must be reinstalled.

Add-on products which are to be installed must match the PLATJ level you are installing. All add-on products must be reinstalled when a new PLATJ system is installed.

See the "Add-on Products" section of this document for update installation instructions.

When you have completed installing all add-on products, you should continue with the next section.
7.10 Post-installation cleanups.

The items listed below are things which may be done following a PLATO reinstallation, but are not critical. If you do not wish to do these cleanups now, continue on to the next section.

**PURGE INSTALLATION-ONLY DISK FILES**

The following MJS permanent files may be purged to save space since they are needed only during the installation process.

<table>
<thead>
<tr>
<th>File</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLABINS</td>
<td>PLATO release binaries</td>
</tr>
<tr>
<td>CONFIG</td>
<td>PLATO configuration file</td>
</tr>
<tr>
<td>MNFX</td>
<td>procedure to attach master files</td>
</tr>
<tr>
<td>MFDX</td>
<td>procedure to dump master files</td>
</tr>
<tr>
<td>LIBDIR</td>
<td>LIBBEDK entries for PLATO programs</td>
</tr>
<tr>
<td>LOADMF</td>
<td>procedure to load installation master files</td>
</tr>
<tr>
<td>3KSRAU</td>
<td>program used to load installation master files</td>
</tr>
</tbody>
</table>
7.11 Reload PLATO.

The reinstallation is now complete.

Open the system to users by taking the PLATO application down and reloading it via the PLATO SSO command.
Bill of Materials

SECTION 6 - PLATO BILL OF MATERIALS
The PLATJ "Bill of Materials" is a list of all central system programs and files and all PLATJ files which make up the PLATJ Authoring and Delivery Application 1 product. These are the items which each site receives with their initial release materials.
8.1 Central System

Below is an alphabetical list of the records which are to be placed on the deadstart file. The usage of programs listed here is documented in the PLATO Operations Guide or the PLATO Configuration Handbook.

8.1.1 Records: A - L

ACCPRT (ABS) print file management logs.
ASM1 (AdS) generate sorted billing cycle file.
BACKCPY (ABS) copy "backups" information to PLATU files.
BACKDMP (PROC) dump PLATO master files.
BACKLIB (ABS) list "backups" audit trail.
BACKLST (ABS) list data from "backups" dump directory.
BACKMOD (ABS) modify "backups" parameters.
BACKONE (ABS) execute "backups" database merge, phase one.
BACKTWO (ABS) execute "backups" database merge, phase two.
BKSTART (PROC) reinitialize "backups" communications buffer.
CIPHER (ABS) encryption program for the PLATO intersystem link.
CIRCUIT (VOL) overlay of ABS/NETPRT.
CMDMP (ABS) dump central memory to a local file.
CONDEN (ABS) CONDENSOR main overlay.
CONDEN (ULIB) CONDENSOR overlays.
CONDMAP (TEXT) CONDENSOR load map.
CONDX (OCD) load CONDENSOR.
CONFIGX (PROC) obtain PLATO configuration file.
CONSOLE (ABS) PLATO terminal simulator for computer console.
COPYMF (ABS) dump master files to tape or disk.
COPYPD (PROC) copy PLATO dump files to tape.
COPYPF (ABS) recover individual PLATO file or entire master file from tape or disk.
DATESCNY (ABS) scan billing cycle file and generate list
of dates on the file.

DDP (PP) called by DVL/DDPT.
DDPT (DVL) on-line diagnostic for DVP/low-speed port.
DCCPRT (ABS) print documentor files.
DPRINT (ABS) print student data files.
DSNCARD (DVL) overlay of ABS/NECPRT.
DUMPPRT (PROC) print PLATO dump tape or file.
ECSTST (DVL) test extended memory.
EFRDUMP (ABS) dump extended flag registers.
EMPRT (PROC) print EM dump from PLATO dump tape or file.
EMDMP (DVL) dump extended memory to a local file.
EMDTAPE (PROC) dump extended memory and submit tape copy job.
EPE (PP) process extended memory parity errors.
ESM (ABS) load ESM relocation memory or monitor and log ESM parity errors.
ESM (PP) called by ABS/ESM.
EXEC (PROC) load additional PLATO executor.
FORMCMD (PROC) format PLATO dump files.
FRAMAT (ABS) FRAMAT/FORMAT main overlay.
FRAMAT (JLI3) FRAMAT/FORMAT overlays.
FRAMAP (TEXT) FRAMAT/FORMAT load map.
FRAMX (PROC) load FRAMAT/FORMAT.
LUR3C (ABS) generate lesson usage report.

8.1.2 Records: K - R

MAS (PP) called by background batch jobs to request action from MASTJR.
MASJDB (ABS) translate control card for jobs submitted by MASTJR.
MASTJR (ABS) MASTJR main overlay.
MASTR (JLI3) MASTJR overlays.
MASTORN (ABS)  MASTORN overlays.
MASTORN (ULIB) MASTORN overlays.
MEMPRN (ABS)  print central and extended memory from PLATO dump tapes or files.
MFUX (PROC)  dump master files.
MFNX (PROC)  attach required master files to MASTORN.
MFPACK (PROC) change master file name, type and/or length.
MFTCOPY (PROC) copy master files from disk to tape.
MFTLOAD (PROC) copy master files from tape to disk.
MFU (PP) called by ABS/MFUTIL.
MFUTIL (ABS) create and maintain master files.
MJDPRNT (ABS) print PLATO Learning Management (PLM) modules.
MRQ (PP) called by ABS/MASTORN and ABS/MASTORN.
MXX (PP) called by ABS/MASTORN.
NETPRNT (ABS) print the "pnet" network database.
NPRINT (ABS) print group and student notes files.
PCODE (ABS) set file access password for future file accesses via PF command.
PCCAT (PROC) catalog contents of a PLATO dump tape.
POJ (PP) called by ABS/CONSOLE.
POPR (ABS) print master file directories.
PFL (ADS) transfer files between PLATO and batch jobs.
PID (PP) called by ABS/PLATO.
PLATMAF (TEXT) PLATO load map.
PLATO (ABS) PLATO executor main overlay.
PLATJO (ULIB) PLATO executor overlays.
PLATX (PROC) load PLATO executor.
PLMPPRNT (ABS) print PLATO Learning Management (PLM) curriculum files.
PMS (PP) called by ADS/MASTORN.
PNA (PP) called by ABS/PNI.

PNI (ABS) PLATO / NAM Interface program.

PNICARD (JVL) overlay of ABS/NETPRT.

PNIMAP (TEXT) PNI load map.

PNIX (PROC) load PNI.

PORTS (JVL) overlay of ABS/NETPRT.

PORTX (ABS) generate port (station) usage report.

PPACK (ABS) set master file for future file accesses via PF command.

PPRINT (ABS) convert PLATO print files to ASCII.

PROUTE (ABS) schedule PLATO job at a control point.

RAFPBC (ABS) compact and partially reduce raw account file.

RAFPDD (ABS) generate PLATO availability report.

RECOVAL (PROC) recover all master files on a specific pack or all master files on the entire system.

RECOVMF (PROC) recover a single master file.

REQPACK (ABS) pause until a desired NOS pack is mounted and available.

ROTARY (JVL) overlay of ABS/NETPRT.

8.1.3 Records: S - Numeric

SPF (PP) called by ABS/REQPACK.

SORTCC (JVL) overlay of ABS/NETPRT.

STATS (JVL) overlay of ABS/NETPRT.

SUBMITM (JVL) submit a file for NOS execution.

TFOFM (ABS) format NOS output to be written to a PLATO file with PF command.

TPRINT (ABS) print TUTOR lessons, datasets and namsets.

UVRBC (ABS) generate user usage report.

VERSA (PROC) obtains appropriate software version.

WAIT (ABS) wait for specified time or operator action.
| QM | (PP) | overlay of PP/PMQ. |
| QN | (PP) | overlay of PP/PMQ. |
| QO | (PP) | overlay of PP/PMQ. |
| QP | (PP) | overlay of PP/PMQ. |
| QR | (PP) | overlay of PP/PMQ. |
| QS | (PP) | overlay of PP/PMQ. |
| QT | (PP) | overlay of PP/PMQ. |
| QU | (PP) | overlay of PP/PMQ. |
8.2 NQS Permanent Files

The following is a list of all NQS permanent files required to run the PLATO Authoring and Delivery Application 1. The PLATO system user name is that defined by the "supern" PLATO configuration file (usually called "sys"). The user names PLATOMF and SYSTEMX are created when the operating system is installed.

(IA) Indicates a direct access file.
(IA) Indicates an indirect access file.

FILES UNDER THE PLATO SYSTEM USER NAME

CONFIG (IA) Release configuration file - used only during installation.

LIBDIR (IA) LibDECK entries for PLATO programs - used only during installation.

MFDX (IA) Release procedure to dump master files - used only during installation.

MFNX (IA) Release procedure to attach master files - used only during installation.

PLA3INS (IA) Release PLATO binaries - used only during installation.

PLACCP (IA) Modifications to CCP - used only during installation.

PLANAM (IA) Modifications to NAM - used only during installation.

PLANOS (IA) Modifications to NQS - used only during installation.

PLATDD (IA) This file is submitted by MASTER to load the other PLATO control points. It must contain calls to procedures to load the required jobs. This is a system-unique file delivered only with the initial release.

8.2.1 NQS Permanent Files (continued)

FILES UNDER THE "PLATOMF" USER NAME

AUDIT (IA) This file contains the audit trail used by the file swap/backups procedures and programs.

AUDITX (IA) This file is an alternate copy of the contents of file AUDIT.
BACKDIR (DA)  This file is an alternate copy of the contents of file DUMPDIR.

COND2CM (DA)  This is a temporary file used to hold the CONDENSOR dump file until it is copied to a tape (also COND1CM and COND2CM).

COM3BUF (DA)  This file contains the communication buffer used by the file dump/backups procedure.

CONFIGX (IA)  This file contains temporary configuration file settings when the PLAINS or PLAUPD command is used to load PLATO.

DUMPDIR (DA)  This file contains the dumped file directory used in the file dump/backups procedure.

DUMPLOCK (DA)  This file is used to prevent more than one job from copying PLATO dumps to tape.

ENDUMP (DA)  This is a temporary file used to hold the extended memory dump file while it is being copied to a tape.

EXGCM (DA)  This is a temporary file used to hold the PLATO dump file until it is copied to a tape.

FRAMCM (DA)  This is a temporary file used to hold the FRAMAT dump file until it is copied to a tape.

ISTLMxx (DA)  These are files which contain the terminal residents loaded by PMI. The "xx" in the file name is the load file number in hexadecimal (02, 01, 03, 08).

MASTCM (DA)  This is a temporary file used to hold the MASTOR dump file until it is copied to a tape.

PLATEM (DA)  This is a temporary file used to hold the extended memory dump file until it is copied to a tape.

PNICM (DA)  This is a temporary file used to hold the PMI dump file until it is copied to a tape.

PNIlOCK (DA)  This is a temporary file used to indicate that PMI is active. It will exist and be attached in write mode when PMI is running to prevent another copy from being loaded.

SMPACKC (DA)  This file contains parameters and tables used by the file dump/backups procedures.

FILES UNDER THE "SYSTEMX" USER NAME
ESHMR

(IA) This file is used by program ESM to save a copy of the ESM relocation table.

OAFMON

(DA) This file is the previous contents of file RAFMON.

PLAINS

(IA) This file holds the PLATO load procedure executed when the PLAINS DSD-command is entered.

PLATO

(IA) This file holds the PLATO load procedure executed when the PLATO DSD-command is entered.

PLAUPD

(IA) This file holds the PLATO load procedure executed when the PLAUPD DSD-command is entered.

RAFMON

(DA) This file is used to save the account file for the current billing cycle.
8.3 PLATO System Files

The following sections list the PLATO files supplied as part of the PLATO system. All of these files will exist on all systems, although some of them may be inapplicable on some systems if the corresponding product is not available. These files are global files, meaning that their content is exactly the same on all systems. Such global files are included in all system releases.

8.3.1 Files: a - az

ACCOUNTC part of the user PLATO file management program.
ACCOUNTP formats information about an account into a dataset so it may be printed.
ACCOUNTS main lesson for editing PLATO accounts.
ACCOUNTU system maintenance utility for PLATO accounts.
ACCOUNT2 system controller options for PLATO accounts.
ACCOUNT1 user PLATO file management functions.
ACCOUNT2A user PLATO file management functions.
ACCOUNT3 user file archiving options.
AIDS main AIDS package control lesson.
AIDSASET dataset used by AIDS package.
AINFO system options for AIDS package.
ALARM allows users to set alarm messages to be sent to them at a specified time.
ALLOCATE assign stations and allocate EM to logical sites.
ARCHIVER system controller file archiving options.
ASK allows users to see and respond to Term-ask requests.
AUTHORS main lesson for AUTHORS package.
AUTHORSYS system controller options for AUTHORS package.

8.3.1.1 Files: a-

All files beginning with the characters "a:" are part of the AIDS package. All these files are listed below.

A: ACCESS
6.3.2 Files: b
BACKUPS driver for file backups package.
BIN displays tutor binaries.
BINARY binary master file cleanup.

6.3.3 Files: c
C main consult management lesson.
CATAIDS help program for the CATALOGS package.
CATALOGS retrieves and displays catalog information.
CATDOC documentation of CATALOGS package.
CATTEXT text editor for CATALOGS package.
CATUSE defines and common routines for CATALOGS package.
CAT1 system and director options for CATALOGS package.
CAT2 editor for CATALOGS package.
CERRORDSET dataset which holds the detailed condense error messages.
CHARSET character set editor.
CHARSETS charset library for AIDS package.
CHECKPT check points common, data files, student records, and master file directories to disk; checks for disk and extended memory errors.
CIUDIAG main index and runner control options for the CIU diagnostics utility.
CONDERR condense error display driver.
CONSULE utility to display AIDS system displays on a PLATO terminal.
CONSTATS displays consult call statistics.
CONSULT reserved file name.
CONSYS consult system options.

CONTINUE reserves file name.

CONVERTxx PLATO file conversion program ("xx" is the number of the conversion). Refer to the "File Conversions" section of the PLATO Operations Guide for more information.

CONVERT26
CONVERT33
CONVERT42
CONVERT47
CONVERT43
CONVERT49
CONVERT51
CONVERT54
CONVERT57
CONVERT59
CONVERT60
CONVEKT01
CONVEKT03
CONVEKT04
CONVEKT05
CONVEKT06

CURRICULUM curriculum documentation for the AIDS packages.

8.3.4 Files: d

DATA displays student data collected by Instructional lessons.

DIAG diagnostics for IST and Magnavox terminals.

DIAGUSE use file for lesson "diag".

DIAG2 communications diagnostics; terminal errors, monitor/master, echo timing.

DINTRO "documentor" users guide.

DOCUMENTOR main document editor.

8.3.5 Files: e

EDIT Author Mode displays.

EDITDEFINE defines used by TUTOR editor lessons.

EDITDES dataset/nameset/common editor.

EDITHELP help displays for TUTOR editor.

EDITMICRO microtable and leslist editor.

EDIT1 continuation of TUTOR editor.
EDIT2
continuation of TUTJR editor.
ENFORCER
prevents use of specified lessons by users at a logical site.
EXECERR
execution error display driver.
EXERRORSET
dataset which holds short execution error messages.

8.3.6 Files: f

FILELIST
build and manipulate lists of files.
FILESNAP
utility for users to scan files to see if they meet publishing standards and to search files for references to other files.

FLOPPY
8 inch flexible disk utility. Allows users to prepare and edit flexible disks for use with the Micro PLATO system. Includes options to create lessons, datasets and character sets on flexible disks, to destroy, rename, copy and update flexible disk files and to make copies of flexible disks.

FLOPPYPC
5,25 flexible disk utility. Allows users to prepare and edit flexible disks for use with the Micro PLATO system. Includes options to create lessons, datasets and character sets on flexible disks, to destroy, rename, copy and update flexible disk files and to make copies of flexible disks.

8.3.7 Files: g

GUIDE
main editor lesson for "guide". All displays are created, deleted and edited via this lesson.

GUIDE AID5
"guide" users guide.

GJIDER
general purpose display driver for "guide".

8.3.9 Files: i

IMODE
default router for instructor sign-ons.

INDEXAID5
help program for published lesson catalog.

INSTALLY
system/courseware installation utilities.

INSTRUCTOR
instructor options documentation for AIDS package.

IPEEDIT
installation parameters editor.

8.3.10 Files: j
JJBSTAT lesson used to submit/monitor batch jobs.

8.3.12 Files: 1

LDR options to load, unload, inspect, and initialize master files.

LIBRARY library of coding techniques and routines for AIDS package.

LINESET linest editor.

LINESETS lineset library for AIDS package.

8.3.13 Files: m

MAINTCX procedures called by "s0maintx".

MAINTX contains day files from jobs submitted by "s0maintx".

MEM memory inspect options.

MICROS microtable library for AIDS package.

MLIBRARY library of Micro-PLATO coding techniques and routines for the AIDS package.

MODIFY disk edit/inspect utilities.

MPROUTER Micro-PLATO router/utility lesson.

MPXLATOR Micro-PLATO translator utility.

MREDIT group curriculum options.

MREDIT1 continuation of curriculum editor.

MREDIT2 continuation of curriculum editor.

MRJTER default student router.

MSYSUSE defines and routines used by "mredit".

MTUTORX Micro PLATO interpreter binary files. The correspondence between these files and the terminal type is as follows:

<table>
<thead>
<tr>
<th>File Name</th>
<th>Version</th>
<th>Terminal</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTUTOR1</td>
<td>1</td>
<td>1ST-II</td>
<td>4</td>
</tr>
<tr>
<td>MTUTOR2</td>
<td>2</td>
<td>ASCII</td>
<td>4</td>
</tr>
<tr>
<td>MTUTOR3</td>
<td>3</td>
<td>unused</td>
<td></td>
</tr>
<tr>
<td>MTUTOR4</td>
<td>4</td>
<td>unused</td>
<td></td>
</tr>
<tr>
<td>MTUTOR5</td>
<td>5</td>
<td>unused</td>
<td></td>
</tr>
<tr>
<td>MTUTOR6</td>
<td>6</td>
<td>unused</td>
<td></td>
</tr>
</tbody>
</table>
8.3.14 Files: n

NETMGN monitors all sites on the CIU and checks for problems in the network.

NOSAIDS NOS/PLATO interface program documentation for AIDS package.

NOTES Main general notes control lesson.

NOTESEDIT text editor used by "notes", "pnotes", the "catalog" text editor, the condense and execution message editors, and user programs.

NOTESYS system controller options for "notes".

8.3.15 Files: o

OPSCALLS reserved file name.

OPERATOR system account/file options.

OPJOBNS nameset used by "opjobs".

OPJOBS submits jobs used in the collection of nos account files used for billing.

8.3.16 Files: p

PACEDIT print access control editor.

PBM list of files which make up the PLATO Bill of Materials used in preparing new installation and update releases.

PDD PLATO Courseware Development and Delivery (PCD2).

PCD2AIDS PCD2 users guide.

PICTURES charset picture library for AIDS package.

PICTURE32 charset picture library for AIDS package.

PLATO initial sign-on sequence displays.

PLFIXES MODIFY directives for the current release program library used to fix problems in the
PLATO software defines and routines for user lessons.

PLMAIDS driver for PLMAIDS package. Other files in this package are:

PLMAACCT
PLMAACS
PLMAFEAT
PLMAGPCTL
PLMAGRADE
PLMAINFD
PLMAINST
PLMAIUOP
PLMAMAIN
PLMAMODJP
PLMA NAMES
PLMAPHILD
PLMAPLMJC
PLMAUS
PLMASTR
PLMASTRJC
PLMASTU
PLMASTUVW
PLMA TECH
PLMATUTJR
PLMAVMS
PLMA210

PLACURR PLM curriculum/course editor.
PLCURRK1 continuation of "placurr".
PLCURRK2 continuation of "placurr".
PLCURRK3 continuation of "placurr".
PLCURRK4 continuation of "placurr".
PLMDEFINES use file for PLM package.
PLMEDIT Inspect/change student records options
PLMLIBRARY lists of PLM curriculum and modules
PLMREADIT PLM learning resource editor.
PLMMOD PLM module editor.
PLMMOD1 continuation of "plmmod".
PLMMOD2 continuation of "plmmod".
PLMSS messages used by PLM curriculum editor.
PLMOBJ student objective mastery status.
PLM3LT  PLM off-line testing.
PLM4QUEST  PLM question editor.
PLM4QUEST1  continuation of "plmquest".
PLM4RECORDS  PLM gradebook and summary statistics.
PLM4RECS  student record initialization.
PLM4RETURN  student return from CAI tests.
PLM4ROUTER  PLM student router.
PLM4RX  PLM prescription generator.
PLM4SCHED  PLM scheduling and group controls.
PLM4SCHED1  continuation of "plmsched".
PLM4STAT  PLM gradebook summary statistics collection.
PLM4SUM  PLM gradebook group summary displays.
PLM4TEST  PLM test driver.
PLM4TQA  PLM test question item analysis.
PLM4USERS  displays PLM statistical information.
PLM4UTILITY  utilities for PLM authors.
PLM4VERIFY  PLM module verification.
PNET  network configuration database editor.
PNETDOC  documentation for "netex".
PNOTES  main personal notes control lesson.
PNOTESYS  personal notes system options.
PRINT  used to print lessons, datasets, namesets, documentor files and screen copies using an online printer.
PRINTS  used to request/submit print jobs.
8.3.17  Files: 9
Q  reserved file name.
QREF  "quick references alias" driver.
8.3.18  Files: 1
RECORDS main group editor; includes roster management, editing of individual records, and options to set the router's data file, etc.

RECORDS1 continuation of group editor.

RECPRTN formats information about groups and student records into a dataset for printing.

RESUME reserved file name.

RETURN reserved file name.

RSTARTL reserved file name.

RUNNER router for runner programs.

RUNNERPSYS system options used to control runner programs.

RUNNEREXEC runner executive; manages runner programs and gathers statistics.

8.3.19 Files: sa - sz

S group used by PLATU Support Personnel.

SEARCH allows searching entire lesson for a string.

SERV1 continuation of TUTOR editor - 10/60 options.

SERV2 continuation of 10/60 options.

SIGNON terminal auto-signon editor.

SITE logical site directory options.

STATS displays statistics gathered by "stats1".

STATS1 collects peak terminal usage statistics and PLATO uptime statistics.

STIM start/stop stimulator programs.

SYSAIDS system documentation driver.

SYSCDS used to display the security log ("loglo").

SYSMICRO contains microtables used by system lessons.

SYSTR monitors system stability.

SYSTRTSTRT dataset used by "sysstr" for disk tests.

SYSJPTS system operations options (packout, send messages, reload condensor, etc).

SYSTEM1 statistics displays.
Files: sco - sdc

SOACCESS contains system access lists delivered with each release. Subfiles in this file are:

CATACCESS access list used to control access to system options in "catalog".
S$CALUTIL common used by "s$calutil".
S$MAINT access list used to control access to "s$maintx".

SOACCOUNTS use file / documentation for "accounts".

SOACEDIT access list editor.

SOACEDN help displays for access list editor.

SOACEDO continuation of "s$acedit".

SOASCERS description of the PLATO interface to ASCII terminals.

SOASC2 IST-3 ASCII resident for Micro PLATO Level 2.

SOAUTHORSC dataset which contains subject areas in which lessons have been written.

SOBACKU "backups" system options.

SOCALUTIL main driver lesson for inspecting/editing the custom access lists to control access to system lessons.

S$CDOH utility used primarily by Control Data Courseware Services to manage the distribution of published courseware.

S$CD02 continuation of "s$cd01".

S$CD03 continuation of "s$cd01".

S$CD04 continuation of "s$cd01".

S$CDRIVER use file for conversion programs.

S$CCECM common which holds short condense error messages.

S$CFGNS nameset used by "s$confign".

S$CIUDA data display options for "ciuday".

S$CIUER dataset with error messages for "ciuday".

S$CIUHD history and report generation options for
"cludiaq".

SOClUHE dataset with HELP displays for "cludiaq".

SOClUIN Installation options for "cludiaq".

SOClULC log index and options for "cludiaq".

SOClULL log entry display and related options for "cludiaq".

SOClUMU network monitor options for "cludiaq".

SOClURP main report generation lesson for "cludiaq".

SOClURU runner lesson for "cludiaq".

SOClURL runner lesson for "cludiaq" (continued).

SOClUSA dataset containing diagnostics information used by "cludiaq".

SOClUSU summary report option for "cludiaq".

SOClUSUS use file for "cludiaq" and related lessons.

SOCCMPUSE use file for system-unique files "s0capD", "s00mpl", etc.

SOCONFER main Teleconferencing lesson.

SOCONFIG EM configurator used to see the effect of changing configuration file parameters.

SOCOPY TUTOR editor copy-a-block options.

SOCPSPD used to determine proper setting of "cpspd" configuration file entry.

SOCPUSTAT gathers/displays stats about CPU usage while executing or condensing and about lesson usage.

63.19.2 Files: sud - $01

SOCCEDU use file for "documentor".

SOCCFM continuation of "documentor".

SOCCVERE Micro PLATC level 2 disk verification routines.

SOCHGJD key echo tracker lesson.

SOEDIT main TUTOR source editor.

SOEXNSET nameset which holds detailed execution error messages.
SOFINFO continuation of TUTOR editor.
SOGEDIT graphics/display editor used with "guide".
SOGHELP help lesson for "sogedit".
SOGJIDENS nameset used with "guide aids".
SOFLJOB help lesson for "floppy".
SOINIT initializes system databases at load time.
SOISTAC3 short ASCII resident for IST2 and IST3.
SOISTB2 resident for level 2 IST-II.
SOISTC4 ASCII resident for IST1.
SOIST3A IST2 ASCII resident used when loading the ASCII resident while on the CIU.
SOIST300 resident for multi-function IST3.
SCLANG system vocabs blocks. Lists words which are not permitted as misspellings of each other.
SULDH3 Micro PLATO, Level 3, help lesson.
SULDH4 Micro PLATO, Level 4, help lesson.
SULDH5 Micro PLATO, Level 5, help lesson.
SULDI3 Micro PLATO, Level 3, diskette initialization.
SULDI4 Micro PLATO, Level 4, diskette initialization.
SULDI5 Micro PLATO, Level 5, diskette initialization.
SULIB library of routines available to system lessons.
SULINESET continuation of lineset editor.
SULLOAD help lesson for "suload".
SULOAD2 Micro PLATO, Level 2, disk loading utility.
SULOAD3 Micro PLATO, Level 3, diskette management.
SULOAD4 Micro PLATO, Level 4, diskette management.
SULOAD5 Micro PLATO, Level 5, diskette management.

File: sm - sio

SMMAINT used by group "s" to generate new PLATO binaries from source.
SOMENU used by "sChIndex" for PLATP HomeLink.
SOMPDEF54 use file for level 4 Micro PLM on the CDC 160, and PPS.
SOMPLIB3 Micro PLATU, Level 3, unit library.
SOMPLIB4 Micro PLATU, Level 4, unit library.
SOMPR02 "mprouter", Level 2, German version.
SOMPR03 "mprouter", Level 3, German version.
SOMPR04 "mprouter", Level 4, German version.
SOMPRE2 "mprouter", Level 2, English version.
SOMPRE3 "mprouter", Level 3, English version.
SOMPRE4 "mprouter", Level 4, English version.
SOMPRF2 "mprouter", Level 2, French version.
SOMPRF3 "mprouter", Level 3, French version.
SOMPRF4 "mprouter", Level 4, French version.
SOMPRS2 "mprouter", Level 2, Spanish version.
SOMPRS3 "mprouter", Level 3, Spanish version.
SOMPRS4 "mprouter", Level 4, Spanish version.
SOMPRUSE2 use file for "mprouter", Level 2.
SOMPRUSE3 use file for "mprouter", Level 3.
SOMPRUSE4 use file for "mprouter", Level 4.
SOMPR2 "mprouter" author options, Level 2.
SOMPR3 "mprouter" author options, Level 3.
SOMPR4 "mprouter" author options, Level 4.
SCHEDIT general notes text editor.
SONETPAT network database print program.
SONETSYS network system table editor.
SONETUSE use file for "prat", "superat" and "nclamon".
SCHINDEX "notes" index editor.
SONOTES system Terms: ask, comment, note.
SONOJRUN  inter-system notes distribution runner.
SOPORIENT system TERMS J, Japanese, oriental and code
for the "load" command.

8.3.19.4  Files: scp - sdpn
SOPACTER  ASCII user stimulator.
SOPCD2  use file for PCD2 users' source files.
SOPCD2E  PCD2 main editor control lesson.
SOPCD2G  PCD2 graphics frame editor.
SOPCD2H  PCD2 documentation.
SOPCD2K  PCD2 color table data.
SOPCD2L  PCD2 line frames editor.
SOPCD2P  PCD2 print/copy lesson.
SOPCD2U  PCD2 package use file.
SOPCD2X  PCD2 - PLATO Author Language/Micro PLATO translator(1).
SOPCD2Y  PCD2 - PLATO Author Language/Micro PLATO translator(2).
SOPCD3  reserved file name.
SOPCLD4  PC Micro PLATO disk utility, Level 4 V2.2.
SOPCOM  database of information defining attributes
of supported terminal types.
SOPDCE2  off-line dataset editor.
SOPFE  router lesson for the PLATO Menu.
SOPFEH  help lesson for the PLATO Menu.
SOPHELP  help lesson for "print".
SOPINDEX  PLATO SCRIBE system controller options.
SOPLIB  auxiliary file for on-line print lessons.
SOPLIST  people list editor for Teleconferencing and
the PLATU Calendar utility.
SOPMULL  PLM 12C conversion program.
SOPMATTR  monitor mode options for PLM off-line testing.
SOPMOBJ  Data speed 4C version of "plmodj".
SOPLMPR PLM print Instructions.
SOPLMRG Dataspeed 40 version of "plmrecords".
SOPLMRET Dataspeed 40 version of "plmreturn".
SOPLMROUTE Dataspeed 40 version of "plmroute".
SOPLMX Dataspeed 40 version of "plmx".
SOPLMTEST Dataspeed 40 version of "plmtest".
SOPLMUSE use file for PLM.
SOPLMUTIL PLM utility lesson.
SOPLM1 reserved file name.
SOPLM2 reserved file name.
SOPLMNX PLATOSCRIBE Plus system controller options.
SOPLUS PLATOSCRIBE Plus router.
SOPLUSH PLATOSCRIBE Plus router HELP lesson.
SOPLNET continuation of "pnet".
SOPLNETX4 allows automatic repetition of network messages.
SOPLNLF used to convert terminal resident binaries to a form acceptable to NM and stores them in a NOS permanent file.
SOPLPS auxiliary file for on-line print lessons.
SOPLPSF Filest: supo - suz
SOPLPT library of programmable terminal routines.
SOPLREG GDIDE driver connection for Teleconferencing.
SOPLREMLP detailed help displays for Teleconferencing.
SOPLPRESEN presentation driver for Teleconferencing.
SOPLPRIN prints TUTOR files and datasets when using a Magnavox terminal.
SOPLPRINTD on-line print program for notes files and PLM modules.
SOPLPRINTU use file for on-line print lessons.
SOPLRECUSE use file for "records".
SOPLRP 2550-based Inter-system link driver.
SORoster editor for PLATOSCRIBE and PLATOSCRIBE PLUS groups.

SOROUTE used by "SOnetprt" to route output to printer.

SOSCRED PLATO Calendar utility.

SOSCREDH help lesson for "SOnsched".

SOSCREDHV GUIDE driver for "SOnschedh".

SOSCREDSYS database clean-up routines for "SOnschau".

SOSCRIBE PLATOSCRIBE router.

SOSCRIBEH PLATOSCRIBE help lesson.

SOSHOWC allows users with a "Taiwan REXX box" to plot Chinese characters from a Micro PLATO lesson.

SOSOURCE used to transfer PCD2 source code from namesets into PLATO files.

SCSPELLE TERM-spell database.

SOSTEP system TERMS: step, spell.

SOSTIMxx files used by stimulator program (1 ≤ xx ≤ 10).

SOSUBFIL used to deliver subfiles (commons, leslists, etc.) to remote systems for addition to "sysfile" or "SCsysfile".

SOSYS.COM contains subfiles which are delivered with every release, as opposed to those which are site-specific. Subfiles in this file are:

TTPARAM table of data used by the -snow- command.

SOTALK system TERMS: talk, confer, busy, reject, consult, operator.

SOTERM5 system TERMS: calc, grid, cursor, local, time, namesets, and the excess processing Warning.

SOUFLP use file for "floppy".

SOUFLD3 use file for "sou3", "sou4a3", and "sounit3".

SOUFLD4 use file for "sou14", "souload4", and "sounit4".

SOUFLD5 use file for "sou15", "souload5", and "sounit5".

SOUNIT2 Micro PLATO, level 2, unit editing.
SOUNIT3  Micro PLATO, Level 3, unit editing.
SOUNIT4  Micro PLATO, Level 4, unit editing.
SOUNIT5  Micro PLATO, Level 5, unit editing.
SOUSERDS  help displays for "user".
SOY721CC  terminal resident for CDC 721 (Viking) terminal.
SOXGDX  command list for "xplator".
SOXEST  used to estimate the work involved to translate a file via "xplator".
SOXLATE  PLATO Author Language to Micro PLATO translator.
SOXMIT  TRANSMIT feature.
8.3.20  Files: t
TRANSFER  used to install system software and courseware.
TRANSMIT  TRANSMIT documentation.
8.3.21  Files: u
U  general utility routines.
USER  shows list of users currently signed on and allows changing personal information and flags.
UTILITY  general debugging tools.
8.3.22  Files: v
VOCABEDIT  vocabulary block editor.
8.3.24  Files: x
X  reserved file name.
8.3.26  Files: z
ZWMMH  reserved file name.
ZSYSUSE  use file for "mmult1".
ZTREPORT  used to convert accounting data stored in file "ztmct" and store it in "ztdata".
8.3.27  Files: 0 - 9
C  reserved file name.
6.4 System-Specific Files/Subfiles

The following files and subfiles are unique to each system. They contain system-specific information and are thus not delivered with each release. Normally, these files are kept in account "$HOME" if they exist at all. Some files are optional depending on whether the corresponding feature is available at the site.

6.4.1 Files:

- **ACCERRLOG** used by "account".
  - type: student datafile
  - size: 4 parts

- **ACCCFILE** used by "account".
  - type: dataset
  - size: 8 parts

- **ACCLLOG** file management log.
  - type: student datafile
  - size: 16 parts

- **ACCLLOG1** file management log.
  - type: student datafile
  - size: 16 parts

- **ACCLLOG2** file management log.
  - type: student datafile
  - size: 16 parts

- **ACCLLOG3** file management log.
  - type: student datafile
  - size: 16 parts

- **ACCOUNTCD** accounts database. Subfiles in this file are:
  - ACCOUNTCD1 8750 word common

- **ANNOUNCE** general notes file used by PLATO system personnel for special announcements.
  - Initial access:
    - p director
    - others read only

- **AJT-HPL** account used by Courseware Services.

- **ADDSCLESS** useful files / lessons available to users.
miscellaneous system-specific displays.

8.4.2 Fileset b

BULLFILE contains system bulletin board display.

B0Rld The "authors" package uses a set of files for each system for which an index exists. There is one file named "b0(routing ld)" and one or more files named "b0(routing ld)(letter)". These namesets are automatically created when the "authors" package is initialized on a new system and new ones may be created through the "authors" director options. For example, assume you are on system "abc" and that you also have "authors" data for the "ain" and "bra" systems. You would have the following files:

m. b0abc b0aabc b0babc b0cabc  
   o. b0ain b0aian b0aind b0ainb  
   c. b0bra b0braid b0braa b0braa  

The actual number of files depends on the number of authors on each system.

8.4.3 Fileset c

CATDS used to hold user routing information for re-entry to the published lesson catalog from a lesson which was entered from the catalog.

type - nameset
records - 65
record size - 64 words
names - same as the number of records
name size - 30 characters

CESAVEDSET used to hold user's condensed error information when going to AIOS for a command description so it may be restored on return to the condensed error display.

type - dataset
size - 3 parts
record size - 160 words

CONDATA contains consult statistics.

type - dataset
size - 18 parts
record size - 64 words

CONVERTC group used for running file conversions.

CONVERTLL used by conversion programs. Subfiles in this file are
LIST 240C lesson leslist

CONVERTLOG used by conversion programs.
  type - student datafile
  size - 12 parts

COSERV group used for published courseware management.

COSERVF account used by Courseware Services.

8.4.4 Files: d

DUx used for on-line copy of backups dump directory
("x" is a letter). The number of files needed
depends on the number of files on the system.

  type - dataset
  size - 32 parts
  record size - 5120 words

8.4.5 Files: e

EXSAVENSET holds execution error information when user
  jumps to AIDS to get more information about a
  command so it may be restored when returning.

  type - nameset
  records - 69
  record size - 320 words
  names - same as number of records
  name size - 15 characters

8.4.12 Files: 1

LESSNOTES general notes file used by PLATO system personnel
  to report problems in published courseware. This
  file is attached to almost all published course-
  ware; TERM comments done in published lessons will
  automatically go here.

  Initial access:
  coserv director
  p read/write
  pso director
  s read/write
  others write only

LOGLOG log of system maintenance activities which may
  involve minor security breaches such as inspecting
  a user file for which the system's person does
  not have normal access.

  type - student datafile
  size - 18 parts
8.4.13 Files: M

M group used by communications and hardware maintenance personnel.

8.4.14 Files: N

NARFILE account signon restrictions database.

type - dataset
records - 32 * number of physical sites
record size - 64 words

NS04DATA new version of "notes" index display. This file is edited by "s0nindex" and must be copied into "s0ndata" to be made active.

8.4.15 Files: O

O group used by PLATJ/NOS operators.

OPSNOTES general notes file used by users to communicate with system controllers and operators.

Initial access:

p director
0 read/write
others write only

OS0NDATA old version of "notes" index display. This file can be used to hold the last version of the "notes" index display when "ns0ndata" is copied into "s0ndata".

8.4.16 Files: P

P group used by system controllers.

PACCNS used by "pacedit" for account print request access control.

type - nameset
records - same as maximum number of accounts
record size - 64 words
names - same as number of records
name size - 10 characters

P3NOTES general notes file used as a public forum for topics of general interest to users.

Initial access:

p director
others read/write

PLMCOM PLM package subfiles. Subfiles in this file are:
PLMCM1

PLM package subfiles. Subfiles in this file are:

BACKOUT 320 word common user backouts
PLMUSER5 64 word common statistics

PLMHSIT

statistics for PLM package.

type - dataset
size - 1 part
record size - 64 words

PRINTLOG

used by "prints" to store print requests.
type - dataset
size - 7 parts
record size - 320 words

PRTSUB

contains NIS CCL procedures for submitting print requests. Subfiles in this file are:

DPJOBS1 source block dispose output for "opjobs"
DPJOBS2 source block dispose output for "opjobs"

PS

account used by the local services organization.

Initial access:
    p director
    other none

PSO

group used by PLATO consultants.

PSDNOTES

general notes file used for communication between users and PLATO consultants.

Initial access:
    p director
    psd director
    others write only

PUBLISC

account which contains published courseware.

Initial access:
    caserv director
    other none

PUBLISE

account which contains published courseware.

Initial access:
    caserv director
PUBLISF

account which contains published courseware.

Initial access:
coserv         director
other          none

PUBLISG

account which contains published courseware.

Initial access:
coserv         director
other          none

PUBLISI

account which contains published courseware.

Initial access:
coserv         director
other          none

8.4.19

Files:

RJNC

group used to monitor runner programs.

8.4.19

Files: s - sx

SINSPECT

group used by PLATO support personnel.

SITES

station location list.

SPECPL

account for special release courseware. These files are for special demonstrations.

Initial access:
coserv         director
other          none

SSECURITY

security database for "site".

type - dataset
size - 10 parts
record size - 320 words

6.4.14.2

sys - sz

SYS

group used to monitor "statsi" runner.

SYSENSET

contains debugging information for execution errors in sysex lessons.

type - nameset
records - 20
record size - 320 words
names - half the number of records
name size - 10 characters
### SYSFILE

**System lesson subfiles.** Subfiles in this file are:

<table>
<thead>
<tr>
<th>Subfile</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALARMX</td>
<td>1280 word common</td>
<td>alarm</td>
</tr>
<tr>
<td>ARCHIVE</td>
<td>320 word common</td>
<td>archiver</td>
</tr>
<tr>
<td>AUTHORS</td>
<td>1920 word common</td>
<td>author</td>
</tr>
<tr>
<td>ASK</td>
<td>320 word common</td>
<td>TERM-ask</td>
</tr>
<tr>
<td>BINARY</td>
<td>320 word common</td>
<td>binary</td>
</tr>
<tr>
<td>CLUSCOM</td>
<td>320 word common</td>
<td>c</td>
</tr>
<tr>
<td>CONDND</td>
<td>source block</td>
<td>sysopts</td>
</tr>
<tr>
<td>CONSTATS</td>
<td>640 word common</td>
<td>constats</td>
</tr>
<tr>
<td>CONSULT</td>
<td>320 word common</td>
<td>m</td>
</tr>
<tr>
<td>ECSALLDT</td>
<td>2560 word common</td>
<td>EM allocation table</td>
</tr>
<tr>
<td>ENFORCER</td>
<td>1500 word common</td>
<td>enforcer</td>
</tr>
<tr>
<td>EXEC</td>
<td>source block</td>
<td>sysopts</td>
</tr>
<tr>
<td>FLOPPY</td>
<td>320 word common</td>
<td>floppy</td>
</tr>
<tr>
<td>FRAMDR</td>
<td>source block</td>
<td>sysopts</td>
</tr>
<tr>
<td>IPARAMS</td>
<td>320 word common</td>
<td>td</td>
</tr>
<tr>
<td>KICOMOG</td>
<td>2240 word common</td>
<td>netmon</td>
</tr>
<tr>
<td>LESSONS</td>
<td>960 word common</td>
<td>reserved lesson list</td>
</tr>
<tr>
<td>LINK</td>
<td>320 word common</td>
<td>network system</td>
</tr>
<tr>
<td>LSLITCM</td>
<td>320 word common</td>
<td>logical site</td>
</tr>
<tr>
<td>NETMON</td>
<td>320 word common</td>
<td>netmon</td>
</tr>
<tr>
<td>NOTESCLEAN</td>
<td>160 lesson list</td>
<td>notes file</td>
</tr>
<tr>
<td>NOTESTAT</td>
<td>320 word common</td>
<td>notes</td>
</tr>
<tr>
<td>OPERATOR</td>
<td>320 word common</td>
<td>TERM-operator</td>
</tr>
<tr>
<td>OPGJOBS</td>
<td>320 word common</td>
<td>ovpjops</td>
</tr>
<tr>
<td>PNET</td>
<td>1280 word common</td>
<td>pnet</td>
</tr>
<tr>
<td>PNETON</td>
<td>320 word common</td>
<td>pneton</td>
</tr>
<tr>
<td>PNJO</td>
<td>source block</td>
<td>sysopts</td>
</tr>
<tr>
<td>PNOTESCOM</td>
<td>320 word common</td>
<td>notes</td>
</tr>
<tr>
<td>PRINTS</td>
<td>960 word common</td>
<td>prints</td>
</tr>
<tr>
<td>RUNNERCOM</td>
<td>2340 word common</td>
<td>runner lesson list</td>
</tr>
<tr>
<td>SERVICE</td>
<td>640 word common</td>
<td>service</td>
</tr>
<tr>
<td>SIGNONCOM</td>
<td>4160 word common</td>
<td>signon</td>
</tr>
<tr>
<td>SITE</td>
<td>1600 word common</td>
<td>site</td>
</tr>
<tr>
<td>SIZECHARS</td>
<td>640 word common</td>
<td>sized write</td>
</tr>
<tr>
<td>SPELLCOM</td>
<td>640 word common</td>
<td>TERM-spell</td>
</tr>
<tr>
<td>STATSOM</td>
<td>960 word common</td>
<td>stats</td>
</tr>
<tr>
<td>ZLANG</td>
<td>320 word common</td>
<td>tem</td>
</tr>
</tbody>
</table>

**General notes:**
- File attached to almost all system lessons; TERM-comments done in system lessons will automatically go here.
- Initial access:
  - director: read/write
  - pso: read/write
  - others: write only
SYSTEM account file which contains all global system files.

Initial access:

- support people/s director
- Other/s inspector
- Other/system inspector
- Other/p inspector
- Other/Other lengthen/shorten

SYSTEST group used by stimulated terminals.

SYSWORK workspace for support requirements.

SYSWOKKI workspace for support requirements.

8.4.19.2 SQA - SUL

SOARCH account used as temporary residence for archived files awaiting off-line copy.

SOARCHDS archive retrieval requests.

type - dataset
size - 1 part
record size - 64 words

SOBACKA file dumps/backups audit trail.

type - dataset
size - 2 parts
record size - 300 words

SOBACKC file dump/backups parameters and tables.

type - dataset
size - 3 parts
record size - 320 words

SOBACKCOM "backups" subfiles. Subfiles in this file area:

REQUEST 96 word common requests
STATS 94 word common statistics

SOCLUNA "ciidias" database.

type - nameset
records - 622
record size - 64 words
names - 71
name size - 3 characters

SOCPX one file per CONDENSOR user when condensing central Micro PLAT lessons (x = 0,1,2).
SOCOMMON

system lesson subfiles. Subfiles in this file are:

CIUDIAG 640 word common "ciudiag"
PHETRUNCOM 320 word common "phet"
SOCPUPSTAT 300 word common "sopcupstat"
SCHETPRT 320 word common "schetprt"
SOXMIT 320 word common "soxmit"
SOXMIT 160 lesson loslist "soxmit"
UTILITY 320 word common "utility"

SOCPUDATA

used to store weekly CPU usage statistics.

SOFILE

system subfiles. Subfiles in this file are:

SYSID 320 word common routing ID

SOFILES

account for system-specific PLAT) files.

Initial access:
p director
other none

SCISTLF

used by "sopnilf".

SOLESLSST

system lesson subfiles. Subfiles in this file are:

SO SNAP 160 lesson loslist "so snap"

SOLDG

log file for "transfer".

SOLOG

used by "netmon" to log terminal I/O errors.

type - nameset
records - 405
record size - 320 words
names - 39
name size - 10 characters

SOLOG
SODATA  "notes" Index displays.
        type = nameset
        records = 2 * number of names
        record size = 128 words
        names = 5
        name size = 32 characters

SODNWK  port information for "pnet".
        type = nameset
        records = 18 * number of physical sites
        record size = 64 words
        names = number of physical sites
        name size = 16 characters

SODNWK1 configuration data for "pnet".
        type = nameset
        records = 682
        record size = 64 words
        names = 593
        name size = 20 characters

SODNTESET "notes" sequencer.
        type = nameset
        records = two per user
        record size = 64 words
        names = one per user
        name size = 12 characters

SOPLMCOM1 Dataspeed 40 version of "placom1".

SOPLFHIST Dataspeed 40 version of "planhist".

SORHPDS Inter-system Link to N35 Communication.
        type = dataset
        size = 1 part
        record size = 320 words

SORHPLLOG error and data transfer log for Inter-system Link.
        type = student data file
        size = 2 parts

SORHPNS Inter-system Link data queue.
        type = nameset
        records = 57
        record size = 128 words
        names = 5
        name size = 10 characters
SOSCRRUNS
runner statistics:

- type = nameset
- records = 256
- record size = 64 words
- names = 32
- name size = 16 characters

SOSCHEUDATA
PLATO Calendar Utility database. This file is created automatically.

SOSCRIBEU
access lists for PLATOSCRIBE and PLATOSCRIBE Plus routers.

SOSUP
account used by PLATO Support personnel.

Initial access: same as account "system".

SOSYSFILE
system lesson access lists.

SOSYSMSG
messages to the system controllers and operators.

SOULOG
"utility" runner log file.

- type = student datafile
- size = 4 parts

SOXFER
account used for inter-system link files.

Initial access: director

8.4.26 Files: 2

Z1ACNT
account summary data.

- type = dataset
- records = 1 + maximum number of accounts
- record size = 320 words

Z1DATA
account summary data reformatted by "z1report".

- type = dataset
- size = 3 parts
- record size = 320 words

8.4.27 Files: 6-9

GCACOM
courseware access limits table. This file is delivered with the first courseware release.

GQUESTIONS
general notes file used for communication between users and PLATO Courseware maintenance.

Initial access:
- courses: director
- other: read/write
3NETING  Inter-system Link data queue.

  type = nameset
  records = 100
  record size = 128 words
  names = 100
  name size = 10 characters

3NETOUT  Inter-system Link data queue.

  type = nameset
  records = 100
  record size = 128 words
  names = 100
  name size = 10 characters