PRO/Tool Kit Installation Guide and Release Notes

Order No. AA-X911D-TH

June 1987

This document describes how to install the PRO/Tool Kit. It also provides release note information specific to this version of the PRO/Tool Kit.

REQUIRED SOFTWARE: PRO/Tool Kit V3.2

OPERATING SYSTEM: P/OS V3.2

DIGITAL EQUIPMENT CORPORATION
Maynard, Massachusetts 01754-2571

First Printing, December 1983
Revised April 1984
Revised June 1987

The information in this document is subject to change without notice and should not be construed as a commitment by Digital Equipment Corporation. Digital Equipment Corporation assumes no responsibility for any errors that may appear in this document.

The software described in this document is furnished under a license and may only be used or copied in accordance with the terms of such license.

No responsibility is assumed for the use or reliability of software on equipment that is not supplied by DIGITAL or its affiliated companies.

The specifications and drawings, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

Copyright © 1983, 1984, 1987 by Digital Equipment Corporation
All Rights Reserved

The following are trademarks of Digital Equipment Corporation:

CTI BUS	MASSBUS	Rainbow
DEC	PDP	RSTS
DECmate	P/OS	RSX
DECsystem-10	PRO/BASIC	RT
DECSYSTEM-20	PRO/Communications	Tool Kit
DECUS	Professional	UNIBUS
DECwriter	PRO/FMS	VAX
DIBOL	PRO/RMS	VMS
digital	PROSE	VT
	PROSE PLUS	Work Processor

CONTENTS

PREFACE vi

CHAPTER 1 **NEW AND CHANGED FEATURES**

CHAPTER 2 **REQUIREMENTS AND INSTALLATION**

2.1 REQUIREMENTS 2-1
2.2 INSTALLING PRO/TOOL KIT V3.2 2-2
2.2.1 Installing PRO/Tool Kit After the DCL Application 2-2
2.2.2 Copying PRO/Tool Kit and DCL Applications 2-2
2.2.3 Installing On-Line DCL HELP and MCR HELP (System Manager) 2-2
2.2.4 Installing only On-Line DCL HELP (System Manager) 2-3
2.2.5 Installing only On-Line MCR HELP (System Manager) 2-3
2.3 RUNNING THE PRO/TOOL KIT 2-4
2.4 REMOVING/DELETING THE PRO/TOOL KIT 2-4
2.4.1 Installing Application on Menu (Any User) 2-4
2.4.2 Installing PRO/DECnet Tool Kit and DCL Extensions 2-5
2.4.3 Installing Synergy Tool Kit 2-5

CHAPTER 3 **COMPATIBILITY WITH PREVIOUS VERSIONS**

3.1 RUNNING EXISTING APPLICATIONS ON P/OS V3.2 . 3-1
3.2 WRITING BACKWARD-COMPATIBLE APPLICATIONS . . 3-3
3.2.1 Using Installation File Extensions 3-3
3.2.2 Using Commands and Qualifiers in Installation Command Files 3-4
3.2.3 Using the SYSDISK: Logical Device Name . . 3-4
3.2.4 Using the LB000: Logical Device Name . . 3-4
3.2.5 Translating References to APPL$DIR . . . 3-4

CHAPTER 4 **RELEASE NOTES**

4.1 RETRIEVING THE ON-LINE RELEASE NOTES 4-1
4.2 CHANGED DOCUMENTATION 4-1
4.3 CORRECTIONS TO TOOL KIT DOCUMENTATION . . . 4-2
4.3.1 FMS-11/RSX Software Manual 4-2
4.3.2 IAS/RSX-11 ODT Reference Manual Supplement 4-2
4.3.3 PRO/Tool Kit Command Language and Utilities Manual 4-3

4.3.4 RSX-11M/M-PLUS and Micro/RSX Task Builder Manual 4-3
4.4 HARDCOPY RELEASE NOTES 4-4
4.4.1 The Indirect Processor 4-4
4.4.2 Locating "Lost" Files 4-4
4.4.3 ReGIS to Gidis Converter 4-5
4.4.4 PRO/Tool Kit DCL Command SET TERMINAL . . 4-5
4.4.5 PRO/Tool Kit DCL Restrictions 4-5
4.4.5.1 Core Graphics Library 4-5
4.5 GRAPHIC FONTS AND THE VDM INTERPRETER . . . 4-6
4.6 DCL PROBLEMS AND RESTRICTIONS 4-6
4.6.1 SET PROTECTION Command 4-6
4.6.2 Misleading DCL Error Message 4-6
4.7 PASRES PROBLEM 4-7
4.7.1 Installation Files with No INSTALL Lines . 4-7
4.8 APPLICATION DISKETTE BUILDER 4-8
4.9 MULTIPLE TERMINAL CONFIGURATION APPLICATION 4-9
4.10 PRO/TOOL KIT ON MULTIPLE TERMINALS 4-10
4.10.1 Editing the Application Installation File 4-11
4.10.2 Editing the Startup Command File 4-11
4.11 SINGLE APPLICATION SYSTEM 4-11
4.11.1 Single Application System Components . . . 4-12
4.11.1.1 Required Components 4-12
4.11.1.2 Optional Components 4-13
4.11.2 Script File Commands 4-14
4.11.2.1 INSTALL 4-14
4.11.2.2 LOAD 4-14
4.11.2.3 MOUNT 4-15
4.11.2.4 UNLOAD 4-15
4.11.2.5 ASSIGN 4-15
ASSIGN HELP 4-15
ASSIGN LOGICAL 4-15
ASSIGN MENU 4-16
ASSIGN MESSAGE 4-16
4.11.2.6 RUN 4-16
4.11.2.7 Comments 4-16
4.11.3 Building a Single Application System (SAS) Diskette 4-16
4.11.4 Guidelines for Building Single Application Systems 4-17
4.11.4.1 All Applications 4-17
4.11.4.2 Multiple Diskette Applications 4-17
4.11.4.3 Memory Usage and Checkpoint File 4-18
4.11.5 Sample Application Script File 4-18
4.12 AIS-PL/I V3.0 4-19

CHAPTER 5 **TOOL KIT LANGUAGES--INSTALLATION AND DOCUMENTATION CORRECTIONS**

5.1 INSTALLING PRO/TOOL KIT LANGUAGES ON P/OS V3.2 5-1
5.2 PRO/TOOL KIT FORTRAN-77 V5.0 5-2
5.2.1 PRO/Tool Kit F-77 Installation Command File 5-3
5.2.2 Corrections to Documentation 5-4
5.3 PRO/TOOL KIT FORTRAN-77 DEBUG V1.0 5-4
5.3.1 Modifying the DEBUG Installation Command File 5-4
5.3.2 Modifying the DEBUG IVP Command File . . . 5-6
5.3.3 Corrections to Documentation 5-8
5.4 PRO/TOOL KIT PASCAL V1.2 5-8
5.4.1 PRO/Tool Kit Pascal V1.2 Installation Command File 5-9
5.4.2 Corrections to Documentation 5-10
5.5 PRO/TOOLKIT BASIC-PLUS-2 V2.2 5-10
5.5.1 Modifying the Installation Command File . 5-11
5.5.2 Modifying the Startup Command File (BP2STR.CMD) 5-21
5.5.3 Documentation Corrections 5-22

TABLES

3-1 Device Names on P/OS V3.0 and Later 3-2
4-1 Manuals Changed for PRO/Tool Kit Version 3.2 4-1

PREFACE

Manual Objectives

This document describes how to install PRO/Tool Kit V3.0 and V3.2 on a Professional running P/OS V3.2. Also, the document discusses compatibility between this release and previous releases. Finally, it contains release notes and the name of the on-line release notes file.

Intended Audience

This manual is intended for users of the PRO/Tool Kit V3.2 or system managers who are installing PRO/Tool Kit V3.2 or PRO/Tool Kit V3.0 on a P/OS V3.2 system.

Structure of This Document

This manual contains the following chapters:

- **Chapter 1** summarizes new and changed features for Version 3.2.
- **Chapter 2** describes hardware and software requirements for this release of the PRO/Tool Kit, and then explains how to install the PRO/Tool Kit.
- **Chapter 3** describes compatibility between this release and previous releases of P/OS.
- **Chapter 4** contains release notes, provides the name of the on-line release notes file, and lists corrections to Tool Kit documentation.
- **Chapter 5** contains information on installing Tool Kit languages on Version 3.2.

Associated Documents

In addition to this guide, the documents you should refer to initially are:

- The *Hard Disk System User's Guide* describes how to install applications, such as the PRO/Tool Kit. The manual also contains general instructions for using the Professional.

- The *PRO/Tool Kit Command Language and Utilities Manual* provides information on the PRO/Tool Kit commands.

For instructions on the installation of any Tool Kit language, refer to your language-specific documentation.

CHAPTER 1

NEW AND CHANGED FEATURES

This chapter describes the new and changed features for Version 3.2. Features are grouped by the manual that describes them.

Tool Kit Command Language and Utilities Manual

- **Flying Installs**

  A flying install is the process by which DCL installs, runs, and then removes a task or utility that is needed to process a command, if the task is not currently installed in the System Task Directory (STD).

- **New Commands**

  - The ANALYZE/MEDIA command allows you to identify the number of bad blocks on a disk.

  - The BROADCAST and REPLY commands allow you to send messages to users on one or more workstations connected to your system or to a Professional that is connected to your local network.

  - The SET FILE command allows you to establish certain file characteristics. You can change the end-of-file marker, direct a directory entry to point to a file in another directory, or truncate a file.

  - The SET PROMPT command allows you to set the prompt that DCL displays on your terminal.

  - The SHOW USERS/NODE command displays information about users on your local node.

- **New Qualifiers**

  - The /PROTECTION qualifier to the CREATE/DIRECTORY command allows you to specify a protection code for the directory file when it is created.

  - The /TERMINAL qualifier to the CONTINUE, START, START/UNBLOCK, or STOP/BLOCK command directs the command to operate on a terminal other than the terminal from which the command was issued.

- **The Catchall Facility**

  The Catchall Facility is a DCL feature that allows you to customize DCL command processing by defining a logical name and equating it to one or more values. With this feature, you can set up DCL to interpret MCR commands, install, run, and remove a task, run a user-written task, or run the system-supplied sample catchall task, TDX.TSK. TDX.TSK and its source file, TDX.MAC, are supplied on the DCLHLP2 diskette.

- **Default Editor Specification**

  You can change the default editor that DCL invokes by defining the logical name DCL$EDITOR and equating it to the value EDT, PROSE, SLP, or the name of an installed editor task.

- **Disabling the DCL EXIT Command**

  You can selectively disable the EXIT command on one or more terminals in a multi-user system.

Tool Kit Reference Manual

The Application Diskette Builder (ADB) application has been enhanced to allow you to build an application diskette for P/OS Version 3.0 or later.

PRO/GIDIS Manual

- PRO/GIDIS has added support for the LA75 dot matrix and LN03+ laser printers.

PRO/Document VDM Manual

- PRO/Document VDM has added support for the LA75 dot matrix and LN03+ laser printers.

P/OS System Reference Manual

- The Host synch and Pass through terminal driver characteristics are supported. The IO.BRK terminal driver I/O function code is also supported.

CHAPTER 2

REQUIREMENTS AND INSTALLATION

PRO/Tool Kit V3.2 is a shared application. This section describes how the Server manager for a Server system, or a stand-alone system manager can copy the PRO/Tool Kit into the system Public Library, and how users can install the PRO/Tool Kit onto their individual menus.

2.1 REQUIREMENTS

The PRO/Tool Kit requires the following hardware:

- Professional 350 or Professional 380
- Hard disk: RD51 (10 Mb), RD31 (20 Mb), RD32 (40Mb), RD52 (33Mb), and RD53 (66 Mb)
- 512 Kb memory

In addition, your Professional must be running P/OS V3.2.

You must have the following free space on your hard disk:

- 3500 blocks for the PRO/Tool Kit
- 630 blocks for DCL On-Line HELP
- 560 blocks for MCR and PRO/Tool Kit On-Line HELP
- 75 blocks for Fast Install
- 120 blocks for ADB

2.2 INSTALLING PRO/TOOL KIT V3.2

To install PRO/Tool Kit V3.2, insert the diskettes labeled PROTK1 and PROTK2 in the diskette drives in any order. Then follow the instructions in the *Hard Disk System User's Guide* for copying an entire application into the Public Library.

2.2.1 Installing PRO/Tool Kit After the DCL Application

If you have installed the DCL application from the P/OS V3.2 kit and want to install the PRO/Tool Kit, follow these steps:

1. If you are using a Server, make sure that no one is logged on.

2. Delete all DCL system components from the Public Library.

3. Copy PRO/Tool Kit to the Public Library. (Refer to the *Hard Disk System User's Guide* for instructions.)

2.2.2 Copying PRO/Tool Kit and DCL Applications

If you plan to copy the PRO/Tool Kit and the DCL application from the P/OS V3.2 kit to the Public Library, follow these steps:

1. Copy the PRO/Tool Kit to the Public Library.

2. Copy the application-specific components of the P/OS V3.2 DCL application to the Public Library.

   The PRO/Tool Kit contains all the files that the P/OS V3.2 DCL application uses. Therefore, when you copy P/OS V3.2 DCL, approximately eleven blocks of unique DCL files are copied to the disk. Thus, you save disk space by copying the PRO/Tool Kit first.

3. Install the DCL application on the desired menu.

2.2.3 Installing On-Line DCL HELP and MCR HELP (System Manager)

The system manager can optionally install DCL/MCR On-Line HELP by following these steps:

1. Install the PRO/Tool Kit onto a menu in the system manager account. The *Hard Disk System User's Guide* explains how to install an application on a menu.

2. Run the PRO/Tool Kit from the menu on which it is installed. Section 2.3 describes how to run the PRO/Tool Kit.

3. Insert the diskettes labeled DCLHLP and DCLHLP2 in the drives in any order. These diskettes are included in the P/OS V3.2 kit.

4. Type **@DCLHLP:[INSTALL]INSTALL**

5. When installation is complete, a success message is displayed. Remove the diskettes and store them in a safe place.

2.2.4 Installing only On-Line DCL HELP (System Manager)

The system manager can optionally install only DCL On-Line HELP by following these steps:

1. Install the PRO/Tool Kit onto a menu in the system manager account. The *Hard Disk System User's Guide* explains how to install an application on a menu.

2. Run the PRO/Tool Kit from the menu on which it is installed. Section 2.3 describes how to run the PRO/Tool Kit.

3. Insert the diskette labeled DCLHLP in any drive. This diskette is included in the P/OS V3.2 kit.

4. Type **@DCLHLP:[INSTALL]DCLHLPINS**

5. When installation is complete, a success message is displayed. Remove the diskettes and store them in a safe place.

2.2.5 Installing only On-Line MCR HELP (System Manager)

The system manager can optionally install only MCR On-Line HELP by following these steps:

1. Install the PRO/Tool Kit onto a menu in the system manager account. The *Hard Disk System User's Guide* explains how to install an application on a menu.

2. Run the PRO/Tool Kit from the menu on which it is installed. Section 2.3 describes how to run the PRO/Tool Kit.

3. Insert the diskettes labeled DCLHLP and DCLHLP2 in the drives in any order. These diskettes are included in the P/OS V3.2 kit.

4. Type **@DCLHLP:[INSTALL]MCRHLPINS**

5. When installation is complete, a success message is displayed. Remove the diskettes and store them in a safe place.

2.3 RUNNING THE PRO/TOOL KIT

To run the PRO/Tool Kit, choose it from the menu on which it was installed. When the DCL prompt ($) appears, you are at DCL command level; the PRO/Tool Kit is installed and ready to run. Refer to the *PRO/Tool Kit Command Language and Utilities Manual.*

2.4 REMOVING/DELETING THE PRO/TOOL KIT

You can remove the PRO/Tool Kit from an individual account. If it is removed from all accounts, the system manager can delete it from the Public Library.

In either case, the system removes only files listed in the application installation (.INB) file. Files not listed in FILE commands in the .INB file are not removed. These include:

- Language files, if you have installed any languages.
- HELP files, if you have installed any on-line HELP in LB:[1,2].HLP.

Delete these files individually to reclaim disk space.

2.4.1 Installing Application on Menu (Any User)

Any user can install the PRO/Tool Kit, ADB, or Fast Install on a

menu once it has been copied to a Public Library by the system manager. To install an application on a menu in your account, refer to the *Hard Disk System User's Guide.*

2.4.2 Installing PRO/DECnet Tool Kit and DCL Extensions

Refer to the *PRO/DECnet Installation Guide* for information about installing the PRO/DECnet Tool Kit and DCL extensions.

2.4.3 Installing Synergy Tool Kit

The Synergy Tool Kit allows you to write applications that use the Synergy Window Manager. It is located on two diskettes, marked SYNTK1 and SYNTK2. The *Synergy Programmer's Manual* provides details on writing the applications.

To install the Synergy Tool Kit, you need the PRO/Tool Kit and at least one of the following products installed:

- Synergy V2.0
- PRO/Communications V3.0
- PROSE PLUS V2.0

These products contain the Synergy Window Manager, which is required by the Synergy Tool Kit. The PRO/Tool Kit does not contain the Synergy Window Manager.

The installation procedure follows:

1. Install the Synergy Window Manager, which comes with Synergy V2.0, PROSE PLUS V2.0, or PRO/Communications V3.0. Follow the installation instructions for the Window Manager supplied with any of those products.

2. Insert diskette SYNTK1 and install the following applications: (You can copy Baton Twirler to the Public Library or install it from diskette. You must install Vue and White from diskette.)

   - Baton Twirler
   - Vue

- White

3. Copy the Synergy Tool Kit development libraries and tasks to your system disk by inserting floppy labeled SYNTK2 into a diskette drive, running the PRO/Tool Kit, and issuing the following DCL command:

   @SYNTK2:[INSTALL]INSTALL.CMD

Check that the installation procedure was successful by making sure that the Synergy Window Manager is installed on your PRO.

You should also have the following files on your hard disk:

```
LB:[1,5]WINLIB.OLB
LB:[ZZPRODCL]FCT.TSK
[ZZSYNTK]INSAPP.TSK
[ZZSYNTK]REMEXE.TSK
[ZZSYNTK]SYNREVERS.CMD
[ZZSYNTK]SYNNORMAL.CMD
```

The following files remain on diskette SYNTK1:

```
[BATON]BATON.CMD
[BATON]BATON.PAS
[BATON]BATON.ODl
[BATON]BATONFRMS.SFF
[BATON]BUILD.CMD
[BATON]GIDIS.PAS
[BATON]GIDISOPS.PAS
[BATON]SYNERGY.PAS
[BATON]AFRMID.PAS
[BATON]GETAKEY.MAC
[BATON]KBSERV.MAC
[BATON]READMESG.MAC
```

One file remains on SYNTK2:

```
[ZZSYNTK]FCT.EXE
```

CHAPTER 3

COMPATIBILITY WITH PREVIOUS VERSIONS

3.1 RUNNING EXISTING APPLICATIONS ON P/OS V3.2

Most applications written to run on pre-V3.0 versions of P/OS will run on a P/OS V3.0 or later system. Some applications, however, do not run as expected. Answering the following questions should assist you in diagnosing some of these difficulties:

- **Are device references correct?**

  A logical device name on pre-V3.0 P/OS may not refer to the same physical device on P/OS V3.0 or later. For example, in pre-V3.0 P/OS, the logical device names SYSDISK: and LB000: referred to the same physical device. In P/OS V3.0 or later, LB000: refers to the system library (boot) device, which is never a concealed device. SYSDISK:, however, always refer to a concealed device.

  Table 3-1 describes the system logical device names supplied with V3.0 or later of P/OS. You can either change incorrect references to logical device names in your source code or write a new installation command file, using the .INB extension. Supply both an .INS and .INB file; the .INB file is used only on P/OS V3.0 systems. In the .INB file, you can copy files to all devices to which you refer in your code. See the *Tool Kit Reference Manual* for details on .INB files.

Table 3-1: Device Names on P/OS V3.0 and Later

Logical Name	Equivalence Name	Comments
BIGDISK:	__DW001:	Refers to the user's current default device. An application should never change the equivalence value of SY000: without the user's consent.
BIGVOLUME:	__DW001:	Refers to the user's current default device. An application should never change the equivalence value of SY000: without the user's consent.
DW001:	BIGVOLUME	Refers to the user's current default device. An application should never change the equivalence value of SY000: without the user's consent.
LB000:	(Varies)	Refers to the device from which your system is booted. LB000: is also the system library device, containing all system files. Examples of system files include system-supplied shared resident libraries, assembler and task builder system input libraries (SYSLIB.OLB, RXSMAC.SML), and system task images. Use the logical name SYSDISK: to refer to an application- or user-specific component of an application, such as a file in the [ZZAPnnnnn] directory.
LDW001:	(Varies)	Refers to the user's current default device. An application should never change the equivalence value of SY000: without the user's consent.
SY000:	(Varies)	Refers to the user's current default device. An application should never change the equivalence value of SY000: without the user's consent.
SYSDISK:	__DW001	Refers to the user's home device, where user-specific application components are stored.

Logical Name	Equivalence Name	Comments
USERDISK:	SYSDISK:	Refers to the user's current default device. An application should never change the equivalence value of SY000: without the user's consent.

- **Is file or directory protection appropriate?**

P/OS versions before V3.0 were single-user systems in which any user could access the entire disk. P/OS V3.0 or later, however, supports a multi-user environment, including full file protection based on log-in validation. Consequently, file and directory protection values have become much more significant.

Your application might cause privilege violations during installation or execution. Investigate any file protection changes you have made to application files; you might have given a file inappropriate protection values for the access required. To change the protection of a file, use the DCL command SET PROTECTION or the POSSUM routine PROATR.

3.2 WRITING BACKWARD-COMPATIBLE APPLICATIONS

Here are some guidelines for writing an application that runs on previous P/OS versions as well as on P/OS V3.2.

3.2.1 Using Installation File Extensions

Use .INS as the extension for your installation command file name.

However, if your application needs some of the features of P/OS V3.0 or later, while still being able to run on previous versions of P/OS, you can create both an .INS and .INB file.

Examples of P/OS V3.0 features that .INB files allow you to use are the Public Library and sharing application components among users and among applications.

3.2.2 Using Commands and Qualifiers in Installation Command Files

The following commands and qualifiers are valid only in .INB files; you must not specify them in an .INS file:

- ASSIGN MESSAGE
- /USR, /NTW, and /CLS qualifiers on the EXECUTE command
- /USER, /NETWORK, and /CLUSTER qualifiers on any file specification
- /TASK=name on the INSTALL command

3.2.3 Using the SYSDISK: Logical Device Name

The user-specific area is a device name that refers to a location where files unique to a user are stored. The application-specific area is a device name that refers to a location where files unique to your application are stored.

Use the system logical device name SYSDISK: to refer to either area for applications that run on all systems. On previous versions of P/OS, SYSDISK: referred to the hard disk.

3.2.4 Using the LB000: Logical Device Name

The system logical device name LB000: refers to an area where files provided and used by the system are stored. For example, the directory [ZZFONT] is located on LB000:.

Use LB000: to refer only to system files. You must not use LB000: to refer to user-specific files. Application-specific files cannot be located on LB000: for applications that must be compatible with earlier versions of P/OS (unless such files reside in [ZZSYS]).

3.2.5 Translating References to APPL$DIR

P/OS V3.0 or later allows you to specify several logical names that end in a colon, eliminating the need to translate the logical before passing it to Record Management Services (RMS). However, previous versions of P/OS require you to translate a

logical name, such as APPL$DIR, before passing it to RMS. Consequently, to maintain backward compatibility, you must translate the P/OS V2.0-compatible logical names before passing them to RMS.

CHAPTER 4

RELEASE NOTES

This chapter describes how to retrieve the on-line release notes and provides hardcopy release note information.

4.1 RETRIEVING THE ON-LINE RELEASE NOTES

A file containing on-line release notes for Version 3.2 PRO/Tool Kit is copied to your system when you install the PRO/Tool Kit. This file, LB:[1,2]TOOLKIT32.DOC, may contain additional last-minute information. Check the contents of this file before using PRO/Tool Kit.

4.2 CHANGED DOCUMENTATION

The following PRO/Tool Kit manuals have been updated or revised for Version 3.2:

Table 4-1: Manuals Changed for PRO/Tool Kit Version 3.2

Manual	Status
PRO/GIDIS Manual	Revised
PRO/Document VDM Manual	Revised
Tool Kit Reference Manual	Updated
P/OS System Reference Manual	Updated

Manual	Status
Guide to Writing a P/OS I/O Device Driver and Advanced Programmer's Notes	Updated
Positional Device Interface Programmer's Manual	Revised
PRO/Tool Kit Installation Guide and Release Notes	Revised
PRO/Tool Kit Command Language and Utilities Manual	Revised
PRO/FMS-11 Document Supplement	Updated
FMS-11/RSX Release Notes	Revised
FMS-11/RSX Software Reference Manual	Revised
IAS/RSX-11 System Library Routines Reference Manual	Revised
Telephone Management System (TMS) Programmer's Manual	Revised

4.3 CORRECTIONS TO TOOL KIT DOCUMENTATION

The following sections correct errors in Tool Kit documents.

4.3.1 FMS-11/RSX Software Manual

The FCHIMP call is not supported by the PRO/FMS and HOST/FMS Form Drivers.

4.3.2 IAS/RSX-11 ODT Reference Manual Supplement

Use the following instructions to redirect ODT output in place of the method described in Section 5.0 of the *IAS/RSX-11 ODT Reference Manual Supplement*.

To redirect ODT output to another terminal configured in the system, define a user level logical named CL000: and equate it to

the terminal to which you want the output to be redirected. You must do this before executing the task built with ODT. For example, issuing the following DCL command will redirect ODT output to the printer port.

```
$ DEFINE CL000: TT002:/USER
```

4.3.3 PRO/Tool Kit Command Language and Utilities Manual

Note the following corrections:

- The /CROSSREFERENCE qualifier to the DIBOL command is not accepted by PRO/Tool Kit DCL. Its use will result in the error message "Illegal or contradictory qualifier."

  The /SHOW qualifier does not accept any arguments. If any arguments are specified, an error message is displayed.

- The LINK command allows the /FAST_MAP qualifier to be specified either as an argument to the /CODE: qualifier or as an output file qualifier. Use FAST_MAP only as an argument to the /CODE: qualifier to ensure that command files will operate properly on an RSX-11M/PLUS system.

- The SHOW USERS command shows all users on all systems connected to a server. The only supported command format is SHOW USERS/NODE, which shows users on a local node only. If you are logged into a server system, you can use the Cluster Status Display Utility to show all workstations and workstation users who are logged on to your server. The Cluster Status Display Utility is described in the *P/OS Server User's Guide*.

4.3.4 RSX-11M/M-PLUS and Micro/RSX Task Builder Manual

The *RSX-11M/M-PLUS and Micro/RSX Task Builder Manual* omits description of the /FM switch (TKB format) or the /FAST_MAP qualifier for the LINK command (DCL format).

See the description of the LINK command in the *PRO/Tool Kit Command Language and Utilities Manual* for details.

4.4 HARDCOPY RELEASE NOTES

4.4.1 The Indirect Processor

The Indirect Processor directive, .ENABLE DELETE, is not supported on the Professional. To delete a command file after running it, include the /DELETE qualifier in the command to run the file. For example,

```
$ @CLEAN.CMD/DELETE
```

When you run an indirect command file, the Indirect Command Processor first looks for the file in the current default directory. It then looks for the file on LB:[1,2]. If the command file is not stored in either directory, you must run it by using the complete file specification. If you store indirect command files in LB:[1,2], you can run them from any directory.

4.4.2 Locating "Lost" Files

A privileged user can use the VERIFY command procedure to search a volume for "lost" files. Lost files are files that are not in any directory and cannot be referenced by file name. A list of the files is produced, and will be placed into the "lost file directory" [1,3] on the associated volume and directory, if that directory exists. You must create the directory [1,3].

To invoke the VERIFY command procedure type:

```
@VERIFY
```

If your system includes multiple volumes, you can search a particular volume for lost files by including the device name in the verify command line.

To invoke the VERIFY procedure to find lost files on a volume other than DW002: type:

```
$ @VERIFY DDnnn:
```

where DDnnn: is the device name of the volume that you want to scan for lost files.

Nonprivileged users should not invoke the VERIFY command procedure, as privilege violations will prevent any lost files from being placed into the lost file directory.

4.4.3 ReGIS to Gidis Converter

The ReGIS to Gidis converter (RTOG.TSK) is not installed on your system when the PRO/Tool Kit is installed. To install it, enter the PRO/Tool Kit on a stand-alone or Server system from a system manager's or privileged account. Insert the floppy labeled PROGRAPH3V32 from the P/OS V3.2 distribution kit into one of the drives. Then type the following commands:

```
$ COPY PROGRAPH3V32:[RTOG]RTOG.TSK LB000:[ZZPRODCL]*.*
$ SET PROTECTION:(SY:RWD,OW:RWED,GR:R,WO:R) -
$- LB000:[ZZPRODCL]:RTOG.TSK
```

The ReGIS to Gidis converter is now installed on your system and available to all users of the PRO/Tool Kit.

4.4.4 PRO/Tool Kit DCL Command SET TERMINAL

Although the SET TERMINAL/TYPEAHEAD:n command is not supported on P/OS, it is provided for compatibility with RSX-11M/M+ systems. When you execute SET TERMINAL/TYPEAHEAD:n on P/OS, the buffer remains fixed at 36 (decimal) bytes, but the command causes no error condition.

4.4.5 PRO/Tool Kit DCL Restrictions

The following DCL commands do not accept a logical name in a format other than ddnnn: for a device name:

SET DEVICE
SHOW DEVICE
SHOW TERMINAL

4.4.5.1 Core Graphics Library -

The Core Graphics Library (CGL) limits coordinate values to 50 times the width of the defined window's width or height. If coordinate data in your program exceeds this value, a floating point overflow occurs. CGL does not report the problem, and your program aborts.

There are two ways to handle this problem:

- Condition the data before passing it to CGL, to ensure that the data does not exceed the maximum.

- Use the exception-handling capability of your language to handle the floating point overflow.

The second approach is recommended. CGL does not declare exception routines itself in order to avoid conflict with exception routines established by the application.

4.5 GRAPHIC FONTS AND THE VDM INTERPRETER

The diskettes labeled PROGRAPH2V32 and PROGRAPH3V32 contain additional GIDIS fonts and a ReGIS-to-GIDIS conversion application. If you are using the VDM interpreter (described in the *PRO/Document VDM Manual*), you should copy these fonts to the Public Library on the Server or on a stand-alone system. Copy *only* the system wide components. After you copy the fonts, they do not appear in the list of library applications, but are available to GIDIS.

4.6 DCL PROBLEMS AND RESTRICTIONS

4.6.1 SET PROTECTION Command

If multiple files are specified in a SET PROTECTION command, only the protection on the first file in the list is modified.

4.6.2 Misleading DCL Error Message

The error message "INSTALL -- Cannot install a common built with EXTSK task builder option" sometimes appears when you are using the INSTALL command. The message can have the following meanings:

- An attempt was made to install a common that was task built using the EXTSK task builder option. P/OS does not allow a common built with the EXTSK option to be installed in the system.

- The task image specified was not a task image file or the task image was not contiguous.

4.7 PASRES PROBLEM

If a task built with Pascal V1.2 is run on a P/OS V1.7 or later system, the task fails. The workaround is as follows:

1. Create a file called PASFIX.CMD containing the following lines:

```
;
; PASFIX.CMD
;
; This PAB command file removes some global symbols from
; PASRES.STB which can cause programs built with
; PRO/Pascal V1.2 to execute incorrectly on P/OS V1.7 and
; P/OS V3.0.  Particularly, the symbols $DDIV and $DMUL
; in PASRES will override those in SYSLIB, preventing the
; extraction of those symbols from SYSLIB.
;
;
,/-SP,LB:[1,5]PASRES=LB:[1,5]PASRES.STB
/
GBLXCL  = $DDIV
GBLXCL  = $DMUL
GBLXCL  = $DLN
GBLXCL  = $PXII
GBLXCL  = $PXRI
GBLXCL  = $PXRR
GBLXCL  = $PXDI
GBLXCL  = $PXDD
//
```

2. Type:

```
$ RUN $PAB
PAB>@PASFIX
```

   This replaces your PASRES.STB file with a new file which does not contain the offending symbol definitions.

3. Taskbuild the program again.

4.7.1 Installation Files with No INSTALL Lines

If an application installation file (.INS or .INB) contains a RUN line, but does not contain an INSTALL line, the application activator reports an error. To solve this problem, INSTALL the

task that you want to run. Use the /NOREMOVE qualifier if the task is already installed.

4.8 APPLICATION DISKETTE BUILDER

P/OS Version 3.0 allows an application's components to be shared by all users and/or workstations. Application Diskette Builder (ADB) automatically creates a master copy of an application diskette that can be reproduced for distribution. The *Tool Kit Reference Manual* explains how to use this feature. If you want to build an application diskette manually, follow these steps:

- Initialize the application diskette(s).
- Create an application directory on the application diskette.
- Copy the installation command file (.INB file) to the application diskette. The installation command file name must match the application directory name on the diskette.
- Copy the application components to the diskette(s) into those directories described as follows:

  /USER components

  If no directory is included in the FILE line for the component, place the component in the application directory on the application diskette(s). If a directory is included in the FILE line, place the component in the specified directory on the application diskette(s).

  /NETWORK components

  Place the components that include the /NETWORK qualifier in the application directory on the application diskette(s).

  /CLUSTER components

  If no directory is included in the FILE line for the component, place the component in the application directory on the application diskette(s). If a directory is included in the FILE line, place the component in the specified directory on the application diskette(s).

- Application Components File protection suggestions:

  When an application component file is copied from the diskette to a hard disk, the file protection is modified to ensure that SYSTEM and GROUP accessors have read and delete privileges. No other file protection characteristics are modified, but the owner UIC is set to correspond to that of the installer.

  DIGITAL recommends that the following file protection be applied to all read-only files on an application diskette:

  ```
  (SYSTEM:R,OWNER:R,GROUP:R,WORLD:R)
  ```

  Files that are designed to allow read and write access should have a minimum of SYSTEM:R and OWNER:RWE access rights.

4.9 MULTIPLE TERMINAL CONFIGURATION APPLICATION

The Multiple Terminal Configuration application provides the system manager with a mechanism to inform P/OS that additional terminals exist that require menu services. A maximum of three additional terminals can be added. They can be connected to the printer port or a QUAD SLU line. The terminal's communication baud rate can also be specified. The terminal must be VT200 series compatible and should be set to "VT200 mode, 8-bit controls." This application is located on the TOOLKIT diskette.

Several restrictions apply when a multi-terminal environment is active on P/OS V3.0 systems.

- Additional memory may be required for adequate performance, depending on the applications executed.

- Additional memory may need to be allocated to the system's secondary pool. (See the Version 3.2 Hard Disk System Release Notes.)

- Not all applications will function correctly in a multi-terminal environment. Those that function correctly will minimally require modifications to their installation command files. (For more general application restrictions, press HELP after entering the multi-terminal configuration application. For specific details concerning how to modify the PRO/Tool Kit application, see the next section.

4.10 PRO/TOOL KIT ON MULTIPLE TERMINALS

The PRO/Tool Kit application can be modified so that it is possible to execute the application simultaneously on multiple terminals. This is done by modifying the application installation file. As the PRO/Tool Kit is a public application, there is a template installation command file (.INB) in the library. You can modify this template .INB file in the library or modify the per-user copy of the .INB file that was copied during the "Install from library" process. If the .INB file in the library is modified, then all users who install the PRO/Tool Kit from the library can run the application concurrently on more than one terminal.

To modify the PRO/Tool Kit's installation command file in the library, do the following:

1. Enter the PRO/Tool Kit application.

2. Using your favorite editor, edit the application installation file APPL$NETWORK:ZZPUBAP.INB as explained in the section Editing the Application Installation File.

3. Edit the file startup command file APPL$NETWORK:START.CMD as explained in the section Editing the Startup Command File.

To modify the PRO/Tool Kit's application installation command file on a per-account basis, do the following:

1. Log in to the account for which you want to modify the PRO/Tool Kit.

2. Enter the PRO/Tool Kit application.

3. Using your favorite editor, edit the file DCLAPPL$DIR:ZZAPnnnnn.INB as explained in the section Editing the Application Installation File.

4. Edit the file DCLAPPL$DIR:START.CMD as explained in the section Editing the Startup Command File.

4.10.1 Editing the Application Installation File

Change all INSTALL lines to include the /NOREMOVE switch. For example, change the line that reads:

```
INSTALL [ZZPRODCL]PRODCL.TSK/TASK/CLUSTER
```

to read:

```
INSTALL [ZZPRODCL]PRODCL.TSK/TASK/NOREMOVE/CLUSTER
```

Note that you do not have to put the /NOREMOVE switch on lines that have the /LIBRARY qualifier instead of the /TASK switch.

If you are modifying a per-user installation command file, you can save system resources by commenting out unused or seldom used utilities. DCL will install, run, and remove a task that is not installed if it is needed by a DCL command.

4.10.2 Editing the Startup Command File

Change all INSTALL commands to include the /NOREMOVE qualifier. For example, change the line that reads:

```
INSTALL LB:[ZZDECNET]NFT/TASK=...NFT
```

to read:

```
INSTALL LB:[ZZDECNET]NFT/TASK=...NFT/NOREMOVE
```

Add the /NOREMOVE qualifier to each line that includes a DCL INSTALL command.

4.11 SINGLE APPLICATION SYSTEM

The Single Application System (SAS) provides a base for applications that must run without a hard disk subsystem. In general, these are applications that do not need the full P/OS Hard Disk System functionality, but do need device and/or executive support of P/OS V3.0.

The major component of a SAS is a bootable diskette containing the operating system components and an application script. This diskette can also contain the application, which may span multiple diskettes.

4.11.1 Single Application System Components

A single application system consists of one or more diskettes which contain the operating system, a script processor, the application script, and the application. Certain components are required, others are optional, depending on application use.

4.11.1.1 Required Components -

The following components *must* reside on the bootable diskette in directory [ZZSYS].

1. **[ZZSYS]POS.SYS** is the P/OS system image. It can be found on the PRONVR diskette. This system image contains no support for DECnet.

2. **[ZZSYS]SASCOM.TSK** is the message file for the script processor. It can be found on the PRONVR diskette. The source for this file is SASCOM.MAC, and can be found on the Application Diskette Builder diskette, in directory TOOLKIT:[SAS]. Instructions for building SASCOM.TSK are contained in the source.

3. **[ZZSYS]STARTUP.TSK** is the script processor. It can be found on the PRONVR diskette.

4. **[ZZSYS]SAS.COM** is the application-specific script file.

4.11.1.2 Optional Components -

1. **PROLOD.TSK** is the server task used for LOAD and UNLOAD commands. It can be found in LB:[ZZSYS].

2. **Device drivers** for DECTouch, the Communications port, and TMS can be found in LB:[ZZSYS] or on the PRODRIVERS diskette.

3. **YQAUTO.TSK** is the task that configures additional terminal driver Quad SLU units into the system. This will be done if YQAUTO.TSK is on the boot diskette in directory [ZZSYS].

4. **Language OTSs and message files** are needed if the application is written in a high-level language. They can be found in LB:[ZZSYS] and LB:[1,2].

5. **POSRES.TSK** is needed if the application uses help, menu, or message services. It can be found in LB:[ZZSYS].

6. **SUMFBI.TSK** is the server for initializing diskettes or hard disks. It can be found in LB:[ZZSYS].

7. **CREDEL.TSK** is the server for creating or deleting directories. It can be found in LB:[ZZSYS].

8. **SUMPBB.TSK** is the server for PROVOL calls. It can be found in LB:[ZZSYS].

9. **ALPH00.TSK** is the font common for GIDIS. It must be installed before GDSCOM.TSK. It can be found in LB:[ZZSYS].

10. **GDSCOM.TSK** is the graphics portion of the terminal subsystem. It must be installed if any graphics are to be used. When this common (or any common named $GIDIS) is installed, the script processor enables the graphics subsystem. GDSCOM.TSK can be found in LB:[ZZSYS].

11. **CGLFPU.TSK** is the CORE Graphics Library. It can be found in LB:[ZZSYS].

4.11.2 Script File Commands

All script file commands must be uppercase.

The following sections, which describe the application script commands, use these conventions:

Convention	Meaning
file_specification	A fully qualified file name (device, directory, and file name)
dd:	A device name
ddn:	A device name and unit number
logical_name	A logical name that is to be used by the application
equivalence_string	The string to be assigned to a logical name

4.11.2.1 INSTALL - The INSTALL command is used to install a task or common. The /FIXED qualifier specifies that the task or common is to be fixed in memory. The /READ_ONLY qualifier specifies that the common be installed for read-only access.

Format:

```
INSTALL file_specification[/FIXED][/READ_ONLY]
```

4.11.2.2 LOAD - The LOAD command loads a device driver into memory. PROLOD.TSK must be installed from diskette before using the LOAD command. Both the driver's .TSK and .STB files must be in directory [ZZSYS] on the diskette in drive 1 when the LOAD command is issued.

Format:

```
LOAD dd:
```

The device drivers can be found in LB:[ZZSYS] or PRODRIVERS:[ZZSYS].

DTDRV.*	DECTouch driver
XKDRV.*	Communications Port driver
XTDRV.*	TMS driver

4.11.2.3 MOUNT - The MOUNT command requests the user to place a particular diskette in a specified drive.

Format:

```
MOUNT ddn:volume_label
```

4.11.2.4 UNLOAD - The UNLOAD command removes a previously loaded device driver from memory. PROLOD.TSK must be installed from diskette before using the UNLOAD command. Both the driver's .TSK and .STB files must be in directory [ZZSYS] on the diskette in drive 1 when the UNLOAD command is issued.

Format:

```
UNLOAD dd:
```

4.11.2.5 ASSIGN - There are four forms of the ASSIGN command. They are mainly used if your application uses POSRES.

ASSIGN HELP - This command creates the logical APPL$HLP. This logical is used by the POSRES help routines.

Format:

```
ASSIGN HELP file_specification
```

ASSIGN LOGICAL - This command assigns an equivalence string to a logical name.

Format:

```
ASSIGN LOGICAL logical_name "equivalence_string"
```

ASSIGN MENU - This command creates the logical APPL$MENU. This logical is used by the POSRES menu routines.

Format:

ASSIGN MENU file_specification

ASSIGN MESSAGE - This command creates the logical APPL$MSG. This logical is used by the POSRES RDMSG routine.

Format:

ASSIGN MESSAGE file_specification

4.11.2.6 RUN - The RUN command starts the application. The script processor will not process any commands after the RUN line is encountered.

Format:

RUN task_name

4.11.2.7 Comments - Comment lines begin with either a "!" or ";" character as the first nonblank character on the line. Comments are not allowed on command lines.

4.11.3 Building a Single Application System (SAS) Diskette

This section describes the steps needed to build a SAS diskette.

1. Enter the Command Language or PRO/Toolkit application.
2. Initialize the diskette.
3. Copy the required components to [ZZSYS].
4. Issue the command:

   RUN $LCT/COMMAND="MMV PBB DZn:[ZZSYS]POS.SYS

   This makes the diskette bootable.

5. Copy any optional components to the diskette.

6. Copy the application components to the diskette.

4.11.4 Guidelines for Building Single Application Systems

4.11.4.1 All Applications - The following guidelines apply to all applications:

1. For compatibility, all device unit numbers, *except* in the MOUNT command, should be justified to three digits. For example, use

   INSTALL DZ001:[ZZSYS]PROLOD.TSK

   rather than

   INSTALL DZ1:[ZZSYS]PROLOD.TSK

   The MOUNT command is incompatible with standard P/OS device name usage.

2. The logicals APPL$DIR and SY000:, and the default directory context are not set up by the application script processor. If the application requires these logicals, it should create them with the ASSIGN LOGICAL command. If the application requires a default directory context, it should set the default.

4.11.4.2 Multiple Diskette Applications - The following guidelines apply to multiple diskette applications.

1. It is the application script processor's responsibility to ensure that diskettes are not removed from the drives (unless requested by a MOUNT command) until the RUN command is encountered. If the application requires that the diskettes remain in place, it should open a file on each diskette.

2. When a diskette is removed, all tasks and commons installed from that diskette are removed, unless they were installed with the /FIXED qualifier. If a task with disk-resident overlays was installed from the diskette with the /FIXED qualifier, overlay loads will fail.

3. All device driver .TSK and .STB files must be on DZ1: when the LOAD or UNLOAD command is issued.

4.11.4.3 Memory Usage and Checkpoint File - An application developer must determine whether an application requires a checkpoint file and must allocate the file appropriately.

4.11.5 Sample Application Script File

The following script file shows an application that uses POSRES, graphics, and the Communications Port driver.

```
! Install Graphics Components
!
INSTALL DZ001:[ZZSYS]ALPH00.TSK/FIXED
INSTALL DZ001:[ZZSYS]GDSCOM.TSK/FIXED
INSTALL DZ001:[ZZSYS]CGLFPU.TSK/READ/FIXED
!
! Load Communications Port Driver
!
INSTALL DZ001:[ZZSYS]PROLOD.TSK
LOAD XK:
!
! This application uses POSRES.
!
INSTALL DZ001:[ZZSYS]POSRES.TSK/FIXED
!
! The application itself resides on a second diskette with the
! volume label "SASAPPL".  Since all components from the bootable
! diskette are now either fixed in memory or no longer needed,
! the next diskette will replace the bootable diskette in drive 1.
!
MOUNT DZ1:SASAPPL
!
! Install the application task
!
INSTALL DZ001:[APPLDIR]MYAPPL.TSK
!
! Assign the help, menu, and message logicals.
!
ASSIGN HELP DZ001:[APPLDIR]MYAPPL.HLP
ASSIGN MENU DZ001:[APPLDIR]MYAPPL.MNU
ASSIGN MESSAGE DZ001:[APPLDIR]MYAPPL.MSG
!
! Set up an application directory logical.
!
```

```
ASSIGN LOGICAL APPL$DIR "DZ001:[APPLDIR]"
!
! Set up an application specific logical.
!
ASSIGN LOGICAL USER$DIRECTORY "DZ001:[USERDIR]"
!
! Now run it.
!
RUN MYAPPL
```

4.12 AIS-PL/I V3.0

This non-DIGITAL application requires the PRO/Tool Kit. You must modify the application before you can install and use it on P/OS V3.0 or later. Do the following:

1. Replace the PLISTART.CMD file supplied with the kit with the following:

```
INS APPL$DIR:PLI
INS LB:[1,5]PLIRES
```

2. The system manager must copy the following files using PRO/Tool Kit:

```
COPY AISPLI:[AISPLI]*.OLB,PLIRES.* LB:[1,5]
COPY AISPLI:[AISPLI]*.MSG LB:[1,2]
COPY AISPLI:[AISPLI]PLI.TSK APPL$DIR:
COPY AISPLI:[AISPLI]PLI.CMD LB:[1,5]
```

3. The user must copy the following files using PRO/Tool Kit:

```
COPY AISPLI:[AISPLI]TRYOUT.* DW1:[USERFILES]
APPEND AISPLI:[AISPLI]PLISTART.CMD APPL$USER:START.CMD
APPEND AISPLI:[AISPLI]PLIEXIT.CMD APPL$USER:EXIT.CMD
```

CHAPTER 5

TOOL KIT LANGUAGES--INSTALLATION AND DOCUMENTATION CORRECTIONS

5.1 INSTALLING PRO/TOOL KIT LANGUAGES ON P/OS V3.2

Because of changes and enhancements to P/OS V3.0 to provide P/OS Server functionality and support for multiple hard disks, some PRO/Tool Kit languages released prior to P/OS V3.0 require modification to their installation and startup procedures. In most cases, these modifications are made to correct references to the device DW001:.

The following PRO/Tool Kit languages install correctly on P/OS V3.0 or later and are not described here:

- PRO/Tool Kit DIBOL V1.7
- PRO/Tool Kit COBOL-81 V2.3
- PRO/Tool Kit PASCAL V1.3

The following PRO/Tool Kit languages need modifications to installation procedures to install correctly on P/OS V3.0 or later:

- PRO/Tool Kit FORTRAN-77 V5.0
- PRO/Tool Kit FORTRAN-77 DEBUG V1.0
- PRO/Tool Kit Pascal V1.2
- PRO/Tool Kit BASIC-PLUS-2 V2.2

Remaining sections in this chapter describe the following for each language requiring modification:

- Installation instructions
- Modifications to installation and/or startup command files
- Corrections to language documentation.

NOTE: Before modifying the distribution diskettes, you should copy the diskettes that need modification. Perform the modifications on the copied diskette, so that a backup diskette is available if you encounter an error.

5.2 PRO/TOOL KIT FORTRAN-77 V5.0

To install the PRO/Tool Kit FORTRAN-77 V5.0 language on a P/OS V3.0 or later system, perform the following:

1. Choose the PRO/Tool Kit from the menu on which it was installed.
2. Modify the file [INSTALL]INSTALL.CMD as shown in the next section. The file is on the diskette labeled BL-Y472A-BH PRO/Tool Kit F-77 V5.0.
3. While logged in to the system manager's or a privileged account, follow the instructions in Chapter 2 in the *PRO/Tool Kit FORTRAN-77 Installation Guide and Documentation Supplement* to install FORTRAN-77.

5.2.1 PRO/Tool Kit F-77 Installation Command File

Modified lines start with an asterisk (*). The modified INSTALL.CMD is shown below:

```
  .;    INSTALL.CMD:    - PRO/Tool Kit FORTRAN-77
  .;    COPYRIGHT (C) - 1986 DIGITAL EQUIPMENT CORP.
  .;                    MAYNARD, MA. 01754
  .;
  .ENABLE SUBSTITUTION
  .ENABLE GLOBAL
  .TRANSLATE APPL$DIR
  SET DEF '<EXSTRI>'
  .TESTFILE     PF7.TSK
  .IF   <FILERR> = 1    .GOTO UPDATE
  .;
  .; Initial installation
  .;
  .TESTFILE     START.CMD
  .IF   <FILERR> <> 1   .GOTO COP
  .;
  .; If START.CMD already exists, append to it
  APPEND DZ1:[INSTALL]START.CMD START.CMD
  .TRANSLATE APPL$DIR
  APPEND DZ1:[INSTALL]EXIT.CMD EXIT.CMD
  .GOTO CON
  .COP:
  .;
  .; Else copy START.CMD to be START.CMD
  COPY DZ1:[INSTALL]START.CMD START.CMD
  COPY DZ1:[INSTALL]EXIT.CMD EXIT.CMD
  .CON:
  .UPDATE:
* .TESTFILE DW1:[0,0]PROF77IVP.DIR
  .IF   <FILERR> <> 1   CREATE/DIR DW1:[PROF77IVP]
  .TRANSLATE APPL$DIR
  SET DEF '<EXSTRI>'
  COPY DZ1:[PROF77]*.* *.*
  PURGE PF7.TSK
  SET DEF [001005]
  COPY DZ1:*.* *.*
  PURGE PROF77.*
* SET DEF DW1:[PROF77IVP]
  COPY DZ1:*.* *.*
  PURGE *.*
```

5.2.2 Corrections to Documentation

There are no changes to the documentation.

5.3 PRO/TOOL KIT FORTRAN-77 DEBUG V1.0

To install PRO/Tool Kit FORTRAN-77 DEBUG V1.0 on a P/OS V3.0 or later system perform the following.

1. Choose the PRO/Tool Kit from the menu on which it was installed.

2. Modify the file [INSTALL]INSTALL.CMD (found on the diskette labeled BL-Z254A-BH PRO/Tool Kit F77/DEBUG V1 RX50) with the modifications listed in section Modifying the DEBUG Installation Command File.

3. Modify the file [INSTALL]DBGVER.CMD (found on the diskette labeled BL-Z254A-BH PRO/Tool Kit F77/DEBUG V1 RX50) with the modifications listed in the section Modifying the DEBUG IVP Command File.

4. While logged in to the system manager's or a privileged account, follow the instructions listed in Chapter 1 of the *Professional Tool Kit FORTRAN-77 DEBUG Installation Guide and Documentation Supplement* to install FORTRAN-77 DEBUG V1.0.

5.3.1 Modifying the DEBUG Installation Command File

Modified lines start with an asterisk (*). The modified INSTALL.CMD is shown below:

```
;
;      F77 DEBUG / PROFESSIONAL INSTALLATION PROCEDURE
;
.;     INSTALL.CMD:  - PRO/Tool Kit FORTRAN-77 DEBUG
.;     COPYRIGHT (C) - 1983 DIGITAL EQUIPMENT CORP.
.;     MAYNARD, MA. 01754
.;
.ENABLE SUBSTITUTION
.ENABLE GLOBAL
.SETS SAVDIR <DIRECT>
.TESTFILE LB:[0,0]F77DBG.DIR
.IF <FILERR> <> 1   CREATE/DIR LB:[F77DBG]
.TESTFILE LB:[0,0]001002.DIR
```

```
* .IF <FILERR> <> 1   CREATE/DIR LB000:[001002]
  .TESTFILE LB:[0,0]001005.DIR
* .IF <FILERR> <> 1   CREATE/DIR LB000:[001005]
  .TRANSLATE APPL$DIR
  SET DEF '<EXSTRI>'
  .;
  .; Initial installation
  .;
  .TESTFILE   START.CMD
  .IF <FILERR> <> 1   .GOTO COP
  .;
  .; If START.CMD already exists, append to it
  ;
  APPEND DZ1:[INSTALL]START.CMD START.CMD
  APPEND DZ1:[INSTALL]EXIT.CMD EXIT.CMD
  .GOTO CON
  .COP:
  .;
  .; Else copy START.CMD to START.CMD
  ;
  COPY DZ1:[INSTALL]START.CMD START.CMD
  COPY DZ1:[INSTALL]EXIT.CMD EXIT.CMD
  .CON:
  ;
  ;   Create directory for IVP files and copy them
  ;
  SET DEF [F77DBG]
* COPY DZ1:*.* LB000:*.*
* PURGE LB000:MACTST.MAC,MACTST.CMD,MACTST.MST,DBGMAC.CMD
  ;
  ;   Copy debugger task
  ;
  .TRANSLATE APPL$DIR
  SET DEF '<EXSTRI>'
  COPY DZ1:[001005]F77DBG.TSK *.*
  PURGE F77DBG.TSK
  ;
  ;   Copy debugger kernel
  ;
  SET DEF [001005]
* COPY DZ1:F77DBG.OBJ LB000:*.*
* PURGE LB000:F77DBG.OBJ
```

```
  ;
  ;   Copy debugger help file
  ;
  SET DEF [001002]
  COPY DZ1:[001005]F77DBG.HLP LB000:*.*
  PURGE LB000:F77DBG.HLP
  ;
  ;   Run F77 DEBUG installation verification procedure
  ;
  @DZ1:[INSTALL]DBGVER
  ;
  ;   Delete installation verification files
  ;
* DEL LB000:[F77DBG]MACTST.*;*,DBGMAC.CMD;*
  ;
  SET DEF 'SAVDIR'
```

5.3.2 Modifying the DEBUG IVP Command File

Modified lines start with an asterisk (*). The modified DBGVER.CMD file is shown below:

```
  .;
  .;  Compile and link the DBGMAC program
  .;
* SET DEF LB000:[F77DBG]
  MAC MACTST/ENA:DEBUG
  LINK  @DBGMAC
  .IFINS MACTST  REM MACTST
  INS MACTST/TASK=MACTST
  .;
  .;  Install the appropriate debugger
  .;
  .IFINS F77DBG  REM F77DBG
  INS APPL$DIR:F77DBG/TASK=F77DBG
  ;
  ;       Starting execution of Installation Verification program...
  ;
  ;  When the DBG> prompt appears, type: @MACTST
  ;  When the DBG> prompt appears again, type: CTRL/Z
  ;
  RUN MACTST
  ;       Installation Verification program has been run...
  ;       Comparing output...
  .SETF SUCC
  .OPENR #0 MACTST.LOG
  .IF <FILERR> NE 1 .GOTO ERROR0
  .OPENR #1 MACTST.MST
  .IF <FILERR> NE 1 .GOTO ERROR1
  .;
```

```
.COMPAR:
.READ #0 LOGREC
.IFT <EOF> .GOTO LAST
.IF <FILERR> NE 1 .GOTO ERROR0
.;
.READ #1 MSTREC
.IFT <EOF> .GOTO NOTEQL
.IF <FILERR> NE 1 .GOTO ERROR1
.;
.IF LOGREC EQ MSTREC .GOTO COMPAR
.GOTO NOTEQL
.;
.LAST:
.READ/END=EQUAL #1 MSTREC
.IFT <EOF> .GOTO EQUAL
.IF <FILERR> NE 1 .GOTO ERROR1
.;
.NOTEQL:
.;
.;  The installation verification failed
.;
;   F77 DEBUG Installation Verification Failed
.GOTO DONE
.;
.EQUAL:
.;
;   The installation verification was successful
;
;   F77 DEBUG Installation Verification Complete
.SETT SUCC
.GOTO DONE
.;
.ERROR0:
;   Error occurred opening file MACTST.LOG
.GOTO DONE
.;
.ERROR1:
;   Error occurred opening file MACTST.MST
.;
.DONE:
.CLOSE #0
.CLOSE #1
.;
.IFT SUCC .GOTO EXIT
```

```
;   ***** F77 DEBUG Installation aborted *****
;
.EXIT:
;
.;  End of F77 DEBUG installation verification
```

5.3.3 Corrections to Documentation

The following corrections apply to the *Professional Tool Kit FORTRAN-77 DEBUG Installation Guide and Documentation Supplement* in order to use FORTRAN-77 DEBUG V1.0 in a P/OS V3.0 or later system.

On page 1-3 change the line that reads

```
INSTALL [ZZSYS]F77DBG.TSK/TASK
```

to one of the following:

If you are using an .INS application installation file, change the line to

```
INSTALL [ZZPROCDCL]F77DBG.TSK/TASK
```

If you are using an .INB application installation file, change the line to

```
INSTALL [ZZPROCDCL]F77DBG.TSK/CLUSTER
```

5.4 PRO/TOOL KIT PASCAL V1.2

To install the PRO/Tool Kit Pascal V1.2 on a P/OS V3.0 or later system, perform the following:

1. Choose the PRO/Tool Kit from the menu on which it was installed.

2. Modify the file [INSTALL]INSTALL.CMD (on the diskette labeled BL-X907B-BH PRO/Tool Kit Pascal V1.2 1/2) with the modifications listed in section Modifying the Installation Command File.

3. Modify the file [ELEMENTED]ELEMENTED.CMD (on the diskette labeled BL-X908B-BH PRO/Tool Kit Pascal V1.2 2/2) by deleting the line that reads:

   ```
   ASG     = LB:34:35:37
   ```

4. While logged in to the system manager's or a privileged account, install PRO/Tool Kit Pascal V1.2 according to the instructions in Chapter 3 of the *Professional Developer's Tool Kit Pascal Installation and Release Notes* .

5. After the installation completes, please refer to Chapter 8 in that manual re-linking the Pascal symbol file to remove references to $MUL and $DIV.

5.4.1 PRO/Tool Kit Pascal V1.2 Installation Command File

Modified lines start with an asterisk (*). The modified INSTALL.CMD file is shown below:

```
;
; Pascal Language Installation Procedure
;
.ENABLE QUIET
.; This command procedure should always reside in
.; DZ1:[INSTALL]INSTALL.CMD
.;
.; Determine if this is an installation or an update
.ENABLE SUBSTITUTION
.TRANSLATE APPL$DIR
.TESTFILE '<EXSTRI>'PASSTART.CMD
.IF <FILERR> <> 1 APPEND DZ1:[INSTALL]ST.CMD APPL$DIR:START.CMD
.TESTFILE '<EXSTRI>'PASSTART.CMD
.IF <FILERR> <> 1 APPEND DZ1:[INSTALL]EX.CMD APPL$DIR:EXIT.CMD
COPY DZ1:[INSTALL]PASSTART.CMD APPL$DIR/REPLACE
.;
.; Copy the Pascal compiler
COPY DZ1:[PROTKP]*.* APPL$DIR/REPLACE
.;
.; Look for the second disk
.REPT:
.TESTFILE DZ2:[0,0]PROTKP2.DIR
.IF <FILERR> = 1 .GOTO GOTIT
.ASKS Q Please Mount "PROPascal2" IN DISKETTE2
.GOTO REPT
.GOTIT:
.;
.; Copy the library files
COPY DZ2:[1,5]*.* LB:[1,5]/REPLACE
COPY DZ2:[1,2]*.* LB:[1,2]/REPLACE
.;
.; Try the IVP
.TRANSLATE APPL$DIR
```

```
  @'<EXSTRI>'PASSTART REM
  @'<EXSTRI>'PASSTART INS
  .TESTFILE DW1:[0,0]ELEMENTED.DIR
  .IF <FILERR> <> 1 CREATE/DIR DW1:[ELEMENTED]
* COPY DZ2:[ELEMENTED]*.* DW1:[ELEMENTED]/REPLACE
  SET DEF DW1:[ELEMENTED]
  .DISABLE QUIET
  ; Compiling the Installation Verification Program
  ;   This will take about 10 minutes
  PAS ELEMENTED
  ; Building the Installation Verification Program
  LINK @ELEMENTED
  .TESTPARTITION CGLFPU
  .SETS RESULT "'<EXSTRI>'"
  .PARSE RESULT ",,,," FIRST SECOND THIRD FOURTH FIFTH
* .IF SECOND = "" INSTALL LB:[ZZSYS]CGLFPU
  ; Executing the Installation Verification Program
  RUN ELEMENTED
  .IF SECOND = "" REMOVE/REGION CGLFPU
  ; Installation complete
```

5.4.2 Corrections to Documentation

There are no changes to the documentation.

5.5 PRO/TOOLKIT BASIC-PLUS-2 V2.2

To install PRO/Tool Kit BASIC-PLUS-2 V2.2 on P/OS V3.0 or later, perform the following:

1. Choose the PRO/Tool Kit from the menu on which it was installed.

2. Modify the installation command file [INSTALL]INSTALL.CMD (found on the diskette labeled BL-A136A-BH PRO/TK BP2 V2.2, volume label PROBP2) as described in section Modifying the Installation Command File.

3. Modify the startup command file [INSTALL]BP2STR.CMD (found on the diskette labeled BL-A136A-BH PRO/TK BP2 V2.2, volume label PROBP2) as described in section Modifying the Startup Command File.

4. While logged in to the system manager's or a privileged account, follow the instructions in Chapter 2 of the *PRO/Tool Kit Basic-Plus-2 Installation Guide and Supplement*

to install BASIC-PLUS-2.

5.5.1 Modifying the Installation Command File

Modified lines start with an asterisk (*). The modified INSTALL.CMD file is shown below:

```
    .ENABLE QUIET
    .ENABLE SUBSTITUTION
    CLEAR
    .DISABLE QUIET
;   ****************************************************
;   *                                                  *
;   *     INSTALLATION FOR PRO/Tool Kit BASIC-PLUS-2   *
;   *                  VERSION 2.2                     *
;   *                                                  *
;   ****************************************************
;
; Please verify that:
;        1) the diskette labeled PROBP21 is in drive 1.
;        2) the diskette labeled PROBP22 is in drive 2.
;
; NOTE:
;        This procedure will delete all of the files in the
;        [PROBP2] directory on BIGVOLUME:.
;
;        This procedure will also purge [001002]BP2*.HLP,
;        [001002]BP2ERR.ERR, [001005]BP2*.*, and
;        [001005]PBFSML.* on BIGVOLUME.
;
;        Before continuing this installation, please move to
;        another directory any files you wish to save.
;
;
    .ASK QUEST Are you ready to continue with the installation

    .ENABLE QUIET
;
; Quit sending everything to the screen
;
;
; If not ready to continue -- then EXIT
;
    .IFF QUEST .EXIT
;
;
;
```

```
      CLEAR
      .DISABLE QUIET
;
;  ****************************************************
;  *                                                  *
;  * INSTALLATION FOR PRO/Tool Kit BASIC-PLUS-2       *
;  *                 VERSION 2.2                      *
;  *                                                  *
;  ****************************************************
;
;
;         INSTALLATION IN PROGRESS .....
      .ENABLE QUIET
;
; Assume that this is the first installation and try to create
; the PROBP2 directory.
;
      .TESTFILE LB:[0,0]PROBP2.DIR
      .IF <FILERR> EQ 1 .GOTO NOCRE
*     CREATE/DIR LB:[PROBP2]
      .GOTO SAVDIR
;
; Delete old versions before we install new ones
;
.NOCRE:
*     DELETE LB:[PROBP2]*.*;*
.SAVDIR:
;
; Save name of old directory
;
      .SETS OLDDIR <DIRECT>
;
; Set default to the new directory
;
*     SET DEFAULT LB:[PROBP2]
;
.V2:
;
; Verify that the user has placed PROBP22 into DRIVE 2
;
      .TESTFILE DZ2:[PROBP2]ELEMENTED.B2S
      .IF <FILERR> EQ 1 .GOTO GOOD
      CLEAR
      .DISABLE QUIET
;
; ATTENTION:
;   Please place the diskette labeled PROBP22 into DRIVE 2.
;
;   (If you have already placed the PROBP22 diskette in DRIVE 2,
;   it may be that you inserted it upside down. Place the
;   PROBP22 diskette correctly in drive 2.)
```

```
;
   .ENABLE QUIET
   .ASKS DUMMY *           Press <RETURN> to continue
   .GOTO V2
.GOOD:
   CLEAR
   .DISABLE QUIET
;  Now copying files from diskette PROBP22
   .ENABLE QUIET
;
; Copy the first part of the compiler task and the rest of
; the IVP files from DZ2:[PROBP2]
;
   COPY DZ2:[PROBP2]*.* *.*
;
.V3:
;
; Verify that the user has placed PROBP23 into DRIVE 2
;
   .TESTFILE DZ2:[PROBP2]BP2IC2.TSB
   .IF <FILERR> EQ 1 .GOTO GOOD3
   CLEAR
   .DISABLE QUIET
;
; ATTENTION:
;   Please place the diskette labeled PROBP23 into DRIVE 2.
;
;   (If you have already placed the PROBP23 diskette in DRIVE 2,
;    it may be that you inserted it upside down. Place the
;    PROBP23 diskette correctly in drive 2.)
;
   .ENABLE QUIET
   .ASKS DUMMY *           Press <RETURN> to continue
   .GOTO V3
.GOOD3:
   CLEAR
   .DISABLE QUIET
;  Now copying files from diskette PROBP23
   .ENABLE QUIET
;
; Copy the rest of the compiler task file from DZ2:[PROBP2]
;
   APPEND DZ2:[PROBP2]BP2IC2.TSB BP2IC2.TSA
   COPY/CONTIG BP2IC2.TSA BP2IC2.TSK
   DELETE BP2IC2.TSA;0
;
;  COPY COMPILER RESIDENT LIBRARIES
;
   COPY DZ2:[PROBP2]*.TSK *.*
;
; Verify that the compiler is not installed in the active
```

```
;  task list. If not then :
;     1) append the installation data behind START.CMD
;     2) append the removal data behind END.CMD
;
    .IFINS ...BP2 .GOTO REMO
;
    ;
    APPEND DZ1:[INSTALL]BP2STR.CMD APPL$DIR:START.CMD
    APPEND DZ1:[INSTALL]BP2END.CMD APPL$DIR:EXIT.CMD
    .GOTO SKIP
;
;
.REMO:
;
;   Remove the PROBP2 compiler
;
    REMOVE ...BP2
    REMOVE B22SH1/REG
    REMOVE B22SHR/REG
;
.SKIP:
    CLEAR
    .DISABLE QUIET
;   Now copying files from diskette PROBP21
    .ENABLE QUIET
;
;  Copy the resequencer and IVP files from DZ1:[PROBP2]
;
    COPY DZ1:[PROBP2]*.* *.*
;
;  Set the default directory to P/OS system directory [001002]
;
*   SET DEFAULT LB:[001002]
;
;  Copy the help and error files from DZ1:[001002]
;
    COPY DZ1:[001002]BP2.HLP *.*
    COPY DZ1:[001002]BP2RFA.HLP *.*
    COPY DZ1:[001002]BP2ERR.ERR *.*
;
;  Purge the directory to get rid of old copies
;
    PURGE BP2.HLP
    PURGE BP2RFA.HLP
    PURGE BP2ERR.ERR
;
;  Set the default directory to P/OS system directory [001005]
;
*   SET DEFAULT LB:[001005]
;
;  Copy the odl and reslib files from DZ1:[001005]
```

```
;
   COPY DZ1:[001005]BP2*.* *.*
   COPY DZ1:[001005]PBFSML.* *.*
;
; Purge the directory to get rid of old copies
;
   PURGE BP2*.*
   PURGE PBFSML.*
   CLEAR
   .DISABLE QUIET

;  ************************************************
;  *                                              *
;  *    INSTALLATION FOR PRO/Tool Kit BASIC-PLUS-2    *
;  *                  VERSION 2.2                 *
;  *                                              *
;  *               >>>> COMPLETED <<<<            *
;  *                                              *
;  ************************************************
;
;
;  All files have been copied from the kit media to the
;  Winchester drive on your PROFESSIONAL 350. The next
;  portion of the installation is verification of file
;  placement on BIGVOLUME:. Please note that this
;  verification is optional.
;
;
   .ENABLE QUIET
   .ASK QUEST Verify file placement

   .IFF QUEST .GOTO QUIT

;
; Open a file to store results
;
   .OPEN DW1:[USERFILES]RESULT.DAT
;
; Initialize the error counter to 0
;
   .SETN ERRNO 0

; Verify the compiler
   .ENABLE SUBSTITUTION
*  .SETS DEST "LB:[PROBP2]BP2IC2.TSK"
   .SETS SRC  "DZ2:[PROBP2]BP2IC2.TSA DZ3:[PROBP2]BP2IC2.TSB"
*  .TESTFILE   LB:[PROBP2]BP2IC2.TSK
   .IF <FILERR> NE 1 .GOSUB ERROUT


; Verify the compiler library B22SHR.TSK
```

```
      .ENABLE SUBSTITUTION
*     .SETS DEST "LB:[PROBP2]B22SHR.TSK"
      .SETS SRC  "DZ3:[PROBP2]B22SHR.TSK"
*     .TESTFILE   LB:[PROBP2]B22SHR.TSK
      .IF <FILERR> NE 1 .GOSUB ERROUT

   ; Verify the compiler library B22SH1.TSK
      .ENABLE SUBSTITUTION
*     .SETS DEST "LB:[PROBP2]B22SH1.TSK"
      .SETS SRC  "DZ3:[PROBP2]BP22SH1.TSK"
*     .TESTFILE   LB:[PROBP2]B22SH1.TSK
      .IF <FILERR> NE 1 .GOSUB ERROUT

   ; Verify the resequencer utility
*     .SETS DEST "LB:[PROBP2]PROB2RESQ.TSK"
      .SETS SRC  "DZ1:[PROBP2]PROB2RESQ.TSK"
*     .TESTFILE   LB:[PROBP2]PROB2RESQ.TSK
      .IF <FILERR> NE 1 .GOSUB ERROUT
```

```
   ; Verify the IVP
*     .SETS DEST "LB:[PROBP2]ELEMENTED.B2S"
      .SETS SRC  "DZ2:[PROBP2]ELEMENTED.B2S"
*     .TESTFILE   LB:[PROBP2]ELEMENTED.B2S
      .IF <FILERR> NE 1 .GOSUB ERROUT

   ; Verify the IVP
*     .SETS DEST "LB:[PROBP2]GEO.B2S"
      .SETS SRC  "DZ2:[PROBP2]GEO.B2S"
*     .TESTFILE   LB:[PROBP2]GEO.B2S
      .IF <FILERR> NE 1 .GOSUB ERROUT

   ; Verify the IVP
*     .SETS DEST "LB:[PROBP2]MAP.B2S"
      .SETS SRC  "DZ2:[PROBP2]MAP.B2S"
*     .TESTFILE   LB:[PROBP2]MAP.B2S
      .IF <FILERR> NE 1 .GOSUB ERROUT

   ; Verify the IVP
*     .SETS DEST "LB:[PROBP2]GEO.OBJ"
      .SETS SRC  "DZ2:[PROBP2]GEO.OBJ"
*     .TESTFILE   LB:[PROBP2]GEO.OBJ
      .IF <FILERR> NE 1 .GOSUB ERROUT

   ; Verify the IVP
*     .SETS DEST "LB:[PROBP2]MAP.OBJ"
      .SETS SRC  "DZ2:[PROBP2]MAP.OBJ"
*     .TESTFILE   LB:[PROBP2]MAP.OBJ
      .IF <FILERR> NE 1 .GOSUB ERROUT

   ; Verify the IVP
*     .SETS DEST "LB:[PROBP2]ELEMENTED.INS"
      .SETS SRC "DZ1:[PROBP2]ELEMENTED.INS"
*     .TESTFILE   LB:[PROBP2]ELEMENTED.INS
      .IF <FILERR> NE 1 .GOSUB ERROUT

   ; Verify the IVP
*     .SETS DEST "LB:[PROBP2]EDFPU.CMD"
      .SETS SRC  "DZ1:[PROBP2]EDFPU.CMD"
*     .TESTFILE   LB:[PROBP2]EDFPU.CMD
      .IF <FILERR> NE 1 .GOSUB ERROUT

   ; Verify the IVP
*     .SETS DEST "LB:[PROBP2]EDFPU.ODL"
      .SETS SRC  "DZ1:[PROBP2]EDFPU.ODL"
*     .TESTFILE   LB:[PROBP2]EDFPU.ODL
      .IF <FILERR> NE 1 .GOSUB ERROUT

   ; Verify the IVP
*     .SETS DEST "LB:[PROBP2]MAPFPU.CMD"
      .SETS SRC  "DZ1:[PROBP2]MAPFPU.CMD"
```

```
*       .TESTFILE   LB:[PROBP2]MAPFPU.CMD
        .IF <FILERR> NE 1 .GOSUB ERROUT

    ; Verify the IVP
*       .SETS DEST "LB:[PROBP2]MAPFPU.ODL"
        .SETS SRC  "DZ1:[PROBP2]MAPFPU.ODL"
*       .TESTFILE   LB:[PROBP2]MAPFPU.ODL
        .IF <FILERR> NE 1 .GOSUB ERROUT

    ; Verify the help file
*       .SETS DEST "LB:[001002]BP2.HLP"
        .SETS SRC  "DZ1:[001002]BP2.HLP"
*       .TESTFILE   LB:[001002]BP2.HLP
        .IF <FILERR> NE 1 .GOSUB ERROUT

    ; Verify the help RFA file
*       .SETS DEST "LB:[001002]BP2RFA.HLP"
        .SETS SRC  "DZ1:[001002]BP2RFA.HLP"
*       .TESTFILE   LB:[001002]BP2RFA.HLP
        .IF <FILERR> NE 1 .GOSUB ERROUT

    ; Verify the error file
*       .SETS DEST "LB:[001002]BP2ERR.ERR"
        .SETS SRC  "DZ1:[001002]BP2ERR.ERR"
*       .TESTFILE   LB:[001002]BP2ERR.ERR
        .IF <FILERR> NE 1 .GOSUB ERROUT

    ; Verify the OTS library
*       .SETS DEST "LB:[001005]BP2OTS.OLB"
        .SETS SRC  "DZ1:[001005]BP2OTS.OLB"
*       .TESTFILE   LB:[001005]BP2OTS.OLB
        .IF <FILERR> NE 1 .GOSUB ERROUT

    ; Verify PBFSML.TSK
*       .SETS DEST "LB:[001005]PBFSML.TSK"
        .SETS SRC  "DZ1:[001005]PBFSML.TSK"
*       .TESTFILE   LB:[001005]PBFSML.TSK
        .IF <FILERR> NE 1 .GOSUB ERROUT

    ; Verify PBFSML.STB
*       .SETS DEST "LB:[001005]PBFSML.STB"
        .SETS SRC  "DZ1:[001005]PBFSML.STB"
*       .TESTFILE   LB:[001005]PBFSML.STB
        .IF <FILERR> NE 1 .GOSUB ERROUT

    ; Verify BP2IC0.ODL
*       .SETS DEST "LB:[001005]BP2IC0.ODL"
        .SETS SRC  "DZ1:[001005]BP2IC0.ODL"
*       .TESTFILE   LB:[001005]BP2IC0.ODL
        .IF <FILERR> NE 1 .GOSUB ERROUT
```

```
   ; Verify BP2IC1.ODL
*     .SETS DEST "LB:[001005]BP2IC1.ODL"
      .SETS SRC  "DZ1:[001005]BP2IC1.ODL"
*     .TESTFILE   LB:[001005]BP2IC1.ODL
      .IF <FILERR> NE 1 .GOSUB ERROUT

   ; Verify BP2IC2.ODL
*     .SETS DEST "LB:[001005]BP2IC2.ODL"
      .SETS SRC  "DZ1:[001005]BP2IC2.ODL"
*     .TESTFILE   LB:[001005]BP2IC2.ODL
      .IF <FILERR> NE 1 .GOSUB ERROUT

   ; Verify BP2IC3.ODL
*     .SETS DEST "LB:[001005]BP2IC3.ODL"
      .SETS SRC  "DZ1:[001005]BP2IC3.ODL"
*     .TESTFILE   LB:[001005]BP2IC3.ODL
      .IF <FILERR> NE 1 .GOSUB ERROUT

   ; Verify BP2IC4.ODL
*     .SETS DEST "LB:[001005]BP2IC4.ODL"
      .SETS SRC  "DZ1:[001005]BP2IC4.ODL"
*     .TESTFILE   LB:[001005]BP2IC4.ODL
      .IF <FILERR> NE 1 .GOSUB ERROUT

   ; Verify BP2IC5.ODL
*     .SETS DEST "LB:[001005]BP2IC5.ODL"
      .SETS SRC  "DZ1:[001005]BP2IC5.ODL"
*     .TESTFILE   LB:[001005]BP2IC5.ODL
      .IF <FILERR> NE 1 .GOSUB ERROUT

   ; Verify BP2IC6.ODL
*     .SETS DEST "LB:[001005]BP2IC6.ODL"
      .SETS SRC  "DZ1:[001005]BP2IC6.ODL"
*     .TESTFILE   LB:[001005]BP2IC6.ODL
      .IF <FILERR> NE 1 .GOSUB ERROUT

   ; Verify BP2IC7.ODL
*     .SETS DEST "LB:[001005]BP2IC7.ODL"
      .SETS SRC  "DZ1:[001005]BP2IC7.ODL"
*     .TESTFILE   LB:[001005]BP2IC7.ODL
      .IF <FILERR> NE 1 .GOSUB ERROUT

      .CLOSE
      .IF ERRNO EQ 0 .GOTO SUCCES
      CLEAR
      .DISABLE QUIET
   ;
   ;  >>>>> ERROR <<<<<
   ;
   ;  The verification procedure detected errors during the
   ;  verification process. The file containing a list of
```

```
;  the errors is in DW1:[USERFILES]RESULT.DAT.
;
   .ENABLE QUIET
   .ASK QUEST Display the error file on the terminal
   .IFF QUEST .GOTO QUIT
   CLEAR
   TYPE DW1:[USERFILES]RESULT.DAT
   .ASKS DUMMY *           Press <RETURN> to continue
   .GOTO QUIT
.SUCCES:
   CLEAR
   .DISABLE QUIET
;
;  >>>>> SUCCESS <<<<<
;
;  No errors were detected by the verification procedure
;
   .ENABLE QUIET
   DELETE DW1:[USERFILES]RESULT.DAT
.QUIT:
;
; Clear the screen and display the completion message
;
   .ENABLE DISPLAY
   .IFNINS ...BP2 .GOTO DOINS
;
;  Remove old version
;
   REMOVE B22SHR/REG
   REMOVE B22SH1/REG
   REMOVE ...BP2
.DOINS:
;
```

```
   ; Install the tasks for the first time
   ;
*     INSTALL LB:[PROBP2]B22SHR.TSK
*     INSTALL LB:[PROBP2]B22SH1.TSK
*     INSTALL LB:[PROBP2]BP2IC2.TSK/TASK=...BP2
*     INSTALL LB:[ZZSYS]PBFSML
      CLEAR
      .DISABLE QUIET
   ;  ******************************************************
   ;  *                                                    *
   ;  *    PRO/Tool Kit  BASIC-PLUS-2 VERSION 2.2          *
   ;  *                                                    *
   ;  *    has been installed on your Professional.        *
   ;  *                                                    *
   ;  *    Please follow the instructions in the           *
   ;  *                                                    *
   ;  *    accompanying documentation to complete the      *
   ;  *                                                    *
   ;  *    verification process using the sample           *
   ;  *                                                    *
   ;  *    PRO/Tool Kit BASIC-PLUS-2 application.          *
   ;  *                                                    *
   ;  ******************************************************

      .ENABLE QUIET
      SET DEF 'OLDDIR'
      .EXIT
   ;
   ; Subroutine used to verify location of files on target media
   ;
   .ERROUT:
      .INC ERRNO
      .DATA FILE : 'DEST' NOT FOUND ON BIGVOLUME:
      .DATA KIT LOCATION : 'SRC'
      .RETURN
```

5.5.2 Modifying the Startup Command File (BP2STR.CMD)

Modified lines start with an asterisk (*). The modified BP2STR.CMD file is shown below:

```
  ;
```

```
  ;    Install resident libraries for PROBP2 compiler
  ;
       .DISABLE QUIET
*      INSTALL LB:[PROBP2]B22SHR
*      INSTALL LB:[PROBP2]B22SH1
       .ENABLE QUIET
  ;
  ;    Install the PROBP2 compiler - BP2 command
  ;
       .DISABLE QUIET
*      .IFNINS ...BP2 INSTALL LB:[PROBP2]BP2IC2.TSK/TASK=...BP2
       .ENABLE QUIET
  ;
  ;    Install the PROBP2 RESIDENT LIBRARY
  ;
       .DISABLE QUIET
*      .TESTPARTITION PBFSML
*      .SETS RESULT "'<EXSTRI>'"
*      .PARSE RESULT ",,,," FIRST SECOND THIRD FOURTH FIFTH
*      .IF SECOND = "" INSTALL LB:[ZZSYS]PBFSML
       .ENABLE QUIET
```

5.5.3 Documentation Corrections

The following are changes to the *PRO/Tool Kit Basic-Plus-2 Installation Guide and Supplement* in order to use PRO/Tool Kit BASIC-PLUS-2 V2.2 on P/OS V3.0 or later.

On page 3-2 change the line that reads:

```
$ SET DEFAULT [PROBP2]
```

to read:

```
$ SET DEFAULT LB000:[PROBP2]
```

and the line that reads:

```
$ RUN [PROBP2]BP2IC2
```

to:

```
$ RUN LB000:[PROBP2]BP2IC2
```

On page 3-4 change the lines:

```
$ COPY DW1:[PROBP2]ELEMENTED.INS *.*
$ COPY DW1:[PROBP2]ELEMENTED.TSK *.*
$ COPY DW1:[PROBP2]MAP.TSK *.*
```

to read:

```
$ COPY LB000:[PROBP2]ELEMENTED.INS *.*
$ COPY LB000:[PROBP2]ELEMENTED.TSK *.*
$ COPY LB000:[PROBP2]MAP.TSK *.*
```

PRO/Tool Kit Installation Guide and Release Notes
AA-X911D-TH

READER'S COMMENTS

Note: This form is for document comments only. DIGITAL will use comments submitted on this form at the company's discretion. If you require a written reply and are eligible to receive one under Software Performance Report (SPR) service, submit your comments on an SPR form.

Did you find this manual understandable, usable, and well organized? Please make suggestions for improvement.

_____

_____

_____

_____

_____

_____

_____

_____

_____

Did you find errors in this manual? If so, specify the error and the page number.

_____

_____

_____

_____

_____

_____

_____

_____

_____

Please indicate the type of user/reader that you most nearly represent:

- ☐ Assembly language programmer
- ☐ Higher-level language programmer
- ☐ Occasional programmer (experienced)
- ☐ User with little programming experience
- ☐ Student programmer
- ☐ Other (please specify) _____

Name _____ Date _____

Organization _____

Street _____

City _____ State _____ Zip Code or Country _____

— — Do Not Tear — Fold Here and Tape —

digital

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO.33 MAYNARD MASS.

POSTAGE WILL BE PAID BY ADDRESSEE

DIGITAL EQUIPMENT CORPORATION
CORPORATE USER PUBLICATIONS
MLO5–5/E45
146 MAIN STREET
MAYNARD, MA 01754–2571

— — Do Not Tear — Fold Here —