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This manual describes how to set up, operate, and maintain the BASEWAY database. A description of the available utility programs is also provided.

BASEWAY

User's Manual and Utilities Guide

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PREFACE

1.0 Manual Objectives

The purpose of the manual is to describe how to set up, operate, and maintain the BASEWAY database. Various BASEWAY utility programs are also described.

2.0 Audience

This manual is for individuals involved in database administration or operations, or for programmers who need to understand database operations.

3.0 Prerequisites

The reader of this manual should be familiar with the VAX/VMS operating system and have some knowledge of a high-level programming language.

4.0 Structure of This Document

This manual is organized as follows:

Chapter 1: Provides an overview of the BASEWAY system.

Chapter 2: Gives instructions for system startup, shutdown, and recovery.

Chapter 3: Provides information on the use of BASEWAY screens.

Chapter 4: Explains the User Application menu.

Chapter 5: Explains the System Management menu which allows you to define the system configuration, the device network, and session defaults.

Chapter 6: Explains the System Status menu which contains various BASEWAY utility programs.

Preface

Chapter 7: Lists and describes BASEWAY system user messages.

5.0 Associated Documents

Further information on various topics covered in this manual may be found in the following manuals:

- o BASEWAY Installation Guide/Release Notes
(order number XX-12345-01).
- o PROGRAMMABLE DEVICE SUPPORT Installation Guide/Release Notes
(order number XX-12365-01)
- o SHOP FLOOR GATEWAY Installation Guide/Release Notes
(order number XX-12355-01)
- o BASEWAY System Programmer's Guide
(order number XX-12346-01).
- o PROGRAMMABLE DEVICE SUPPORT User's Manual and Utilities Guide
(order number XX-12367-01)
- o VAX DATATRIEVE User's Guide
(order number AA-K080A-TE)
- o ALL-IN-1 Office Menu User's Guide
(order number AA-N321A-TE).

CHAPTER 1

OVERVIEW OF BASEWAY

1.1 Overview

The BASEWAY system provides tools for the development and control of complex manufacturing applications where accurate and timely communication with shop floor devices is vital. These tools can reduce application development and maintenance time by replacing significant amounts of application control and programmable device-specific communications code.

The BASEWAY product works together with DIGITAL's SHOP FLOOR GATEWAY product. While BASEWAY provides application program communications and control functions, the SHOP FLOOR GATEWAY provides the actual communications interface to shop floor devices. A global database contains all programmable device definitions, and programs in each application can access a device simultaneously. The product can concurrently support up to four gateways.

A wide range of manufacturing applications can be developed and controlled with BASEWAY including inventory control, part tracking, and quality control.

Overview of BASEWAY

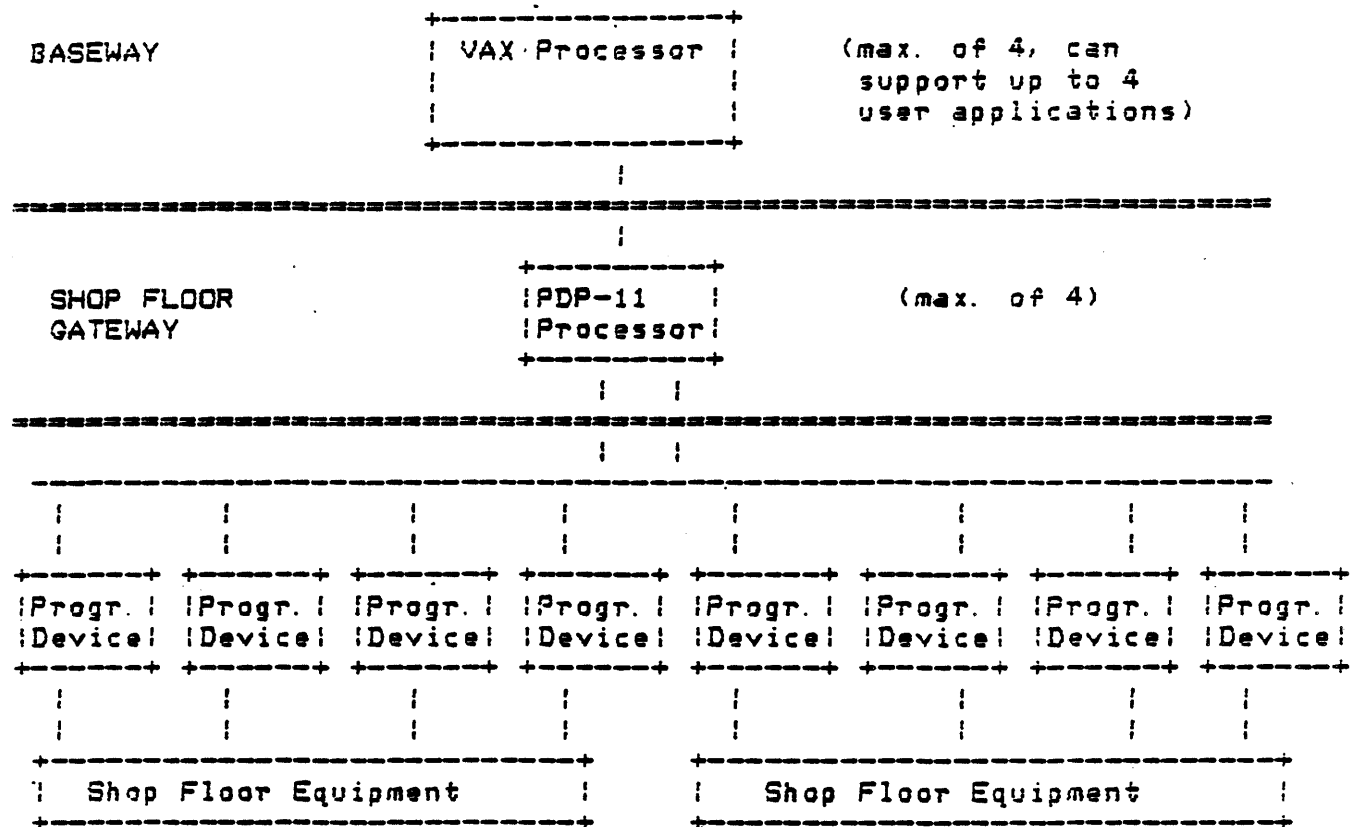


Figure 1. System Overview

CHAPTER 2

BASEWAY STARTUP, SHUTDOWN, AND RECOVERY

The BASEWAY's Application Control facility provides a controlled environment for application startup and shutdown. During application startup, a script file is executed. This file may create logical names and mailboxes, start application programs, or perform DCL commands. An application program may be monitored or unmonitored. If a monitored application program fails, the BASEWAY Application Control facility logs the event and begins an orderly shutdown of all other application processes.

2.1 Startup Procedures

2.1.1 Application

The purpose of the Application startup procedure is to start the application to which all polled data will be sent.

For each application on the system, there should be one manager account with sufficient authorization (SYSPRV and DETACH) to start up the BASEWAY system. After logging in to this account, the user proceeds as shown:

```
cr
Username: xxxxx cr
Password:      cr
.
.
$ @BSL$SYSTEM: APPxxxx
```

Starting BASEWAY System

%RUN-S-PROC-ID, identification of created process is 00301009

\$

See Chapter 3 of the BASEWAY Installation Guide/Release Notes for complete information.

2.1.1.1 Application Startup Verification -

If the system starts properly, several messages will be printed on the system console. For example:

```
%OPCOM, 02-JAN-1984 00:00:00.01, ...
BASEWAY Starting
```

When these messages have finished printing, you can further verify that proper system startup has occurred by entering the SHOW SYSTEM command:

\$ SHG SYSTEM

```
VAX/VMS V3.4  Processes on 2-JAN-1984 23:11:03.79  Uptime 7 08:54:54
Pid  Process Name      UIC  State Pri Dir.  I/O    CPU    Page flts Ph. M
00010000 NULL                000,000 COM   0           0 02:05:12.84    0    0
00010001 SWAPPER        000,000 HIB   16           0 00:07:20.09    0    0
008F0030 EVENT_LOG      243,002 LEF   4           7 00:00:00.27   64  100
00D20031 GATE_INIT      243,002 LEF   7          23 00:00:00.49   82  100
00B80032 DATA_PROC     243,002 LEF   4           3 00:00:00.24   55  100 S
01270034 NET_INTER      243,002 HIB  10           3 00:00:00.27   56  113 S
025F0038 EVENT_PROC     243,002 LEF   6           6 00:00:00.91   15  200
0003003C NETACP        001,004 HIB  10        3788 00:04:24.38 18078 116
```

If error messages are displayed, check Chapter 7 for an explanation and suggested method of recovery.

2.1.2 SHOP FLOOR GATEWAY

The purpose of the SHOP FLOOR GATEWAY startup procedure is to request initialization of the programmable device database which causes the SHOP FLOOR GATEWAY to be loaded with the desired system configuration.

The user may start the SHOP FLOOR GATEWAY (collector) system in one of two ways: (1) by using the boot switch on the PDP-11 processor or (2) by entering the DECnet TRIGGER function on the VAX.

2.1.2.1 Using the PDP-11 Processor Boot Switch -

To use the boot switch method, first locate the key on the front panel of the PDP-11 processor and make sure that it is set to the LOCAL position. Next, locate the rocker switch on the front panel. Push the rocker switch to the right (BOOT) and release it. Be sure to move the key back to the LOCAL DISABLED position.

2.1.2.2 Using the TRIGGER Function -

To use the TRIGGER function method, enter the following commands:

```
$ NCP
NCP> TRIGGER NODE GATE01
NCP> ^Z
```

2.1.2.3 Execution of Initialization Tasks -

The SHOP FLOOR GATEWAY initialization proceeds in several stages:

- o RSX-11S system image is downloaded by DECnet
- o initialization tasks on the gateway are run
- o polling database is downloaded

DECnet Downloading-- When the boot begins, DECnet responds to the gateway node's actions by downloading the specified system image. The NCP command may be used to display the characteristics of the node (see BASEWAY Installation Manual/Release Notes). The example console dialog shown on the following page illustrates the downloading of a gateway named GATE01, with a Node ID of 35, from an application named GEOVAX:

%OPCOM, 02-JAN-1984 15:30:53.64, message from user DECNET
DECnet event 5.1, remotely initiated state change
From node 33 (GEOVAX), 02-JAN-1984 15:30:53.58
Circuit DMC-0, Old state = Running, New state = Maintenance

%OPCOM, 02-JAN-1984 00:00:03.00, message from user DECNET
DECnet event 0.3, automatic line service
From node 33 (GEOVAX), 02-JAN-1984 15:30:57.27
Circuit DMC-0, Load, Requested, Node = 35 (GATE01)
File = SECDMC.SYS, Secondary loader

%OPCOM, 02-JAN-1984 15:31:09.62, message from user DECNET
DECnet event 0.3, automatic line service
From node 33 (GEOVAX), 02-JAN-1984 15:30:57.41
Circuit DMC-0, Load, Successful, Node = 35
File = SECDMC.SYS, Secondary loader (GATE01)

%OPCOM, 02-JAN-1984 15:31:17.89, message from user DECNET
DECnet event 0.3, automatic line service
From node 33 (GEOVAX), 02-JAN-1984 15:30:57.72
Circuit DMC-0, Load, Requested, Node = 35 (GATE01)
File = TERDMC.SYS, Tertiary loader

%OPCOM, 02-JAN-1984 15:31:26.09, message from user DECNET
DECnet event 0.3, automatic line service
From node 33 (GEOVAX), 02-JAN-1984 15:30:58.22
Circuit DMC-0, Load, Successful, Node = 35 (GATE01)
File = TERDMC.SYS, Tertiary loader

%OPCOM, 02-JAN-1984 15:31:34.32, message from user DECNET
DECnet event 0.3, automatic line service
From node 33 (GEOVAX), 02-JAN-1984 15:30:58.84
Circuit DMC-0, Load, Requested, Node = 35 (GATE01)
File = SFG\$SYSTEM:GATEWAY.SYS, Operating system

%OPCOM, 02-JAN-1984 15:31:42.92, message from user DECNET
DECnet event 0.3, automatic line service
From node 33 (GEOVAX), 02-JAN-1984 15:31:11.09
Circuit DMC-0, Load, Successful, Node = 35 (GATE01)
File = SFG\$SYSTEM:GATEWAY.SYS, Operating system

%OPCOM, 02-JAN-1984 15:31:51.52, message from user DECNET
DECnet event 5.0, locally initiated state change
From node 33 (GEOVAX), 02-JAN-1984 15:31:11.38
Circuit DMC-0, Old state = Maintenance, New state = Running

%OPCOM, 02-JAN-1984 15:31:59.08, message from user DECNET
DECnet event 4.10, circuit up
From node 33 (GEOVAX), 02-JAN-1984 15:31:21.45
Circuit DMC-0, Adjacent node = 35 (GATE01)

Execution of Initialization Tasks--Once the SFG has been loaded with its system image, several programs are run to initialize drivers, databases, etc.

Polling Database Downloading--Gateway initialization allows the running BASEWAY to establish contact with it. Several messages are printed on the console at this point. For example:

```
%OPCOM, 02-JAN-1984 15:12:19.92, message from user TEST APPLICATION
Lost communications with Device Set DEVICE SET 1
%OPCOM, 02-JAN-1984 15:12:24.04, message from user TEST APPLICATION
Lost communications with Gateway GATE01
%OPCOM, 02-JAN-1984 15:12:27.73, message from user TEST APPLICATION
Connected to Gateway GATE01
%OPCOM, 02-JAN-1984 15:12:36.93, message from user TEST APPLICATION
Connected to Device Set DEVICE SET 1
```

The last message indicates that the application has loaded the polling database into the SHOP FLOOR GATEWAY. Depending on the number of device addresses and programmable devices defined, and the current system load, this can take from several seconds to several minutes.

When the loading has been completed, a message is displayed on the gateway console indicating that polling is initialized.

2.2 Shutdown Procedures

The system will run independently until a process stops abnormally or until the system receives a MSG\$_SHUT interprocess message. To stop the current application, the user should RUN BSL\$SYSTEM:UTLAPPSTP from the system manager's account. This does not log the user off.

2.3 Restart/Recovery Procedures

2.3.1 Application

When the application comes up again, the gateway system will continue to process data; it is not necessary to reload the gateway.

WARNING: Data may have been lost during the period that the system was down. However, the gateway will start sending data as soon as the application is back online.

If any of the application or BASEWAY processes should abort or exit, the control process (EVENT_PROC) will shut down the rest of the application (in other words, all processes must be running).

2.3.2 SHOP FLOOR GATEWAY

If the SHOP FLOOR GATEWAY system goes down, it may also be rebooted without bringing down the application.

CHAPTER 3

UNDERSTANDING BASEWAY SCREENS

3.1 Introduction

BASEWAY screens utilize Digital's VAX Forms Management System (VAX FMS).

3.2 Screen Layout and Notation

To give you a better idea of the format of BASEWAY screens, Figure 2 shows a "generic" screen layout.

program library name	report name	time
program page		date
user input field > _____		display field : XXXXXXXXXXXXX
messages		

Figure 2. Example Form Layout

Understanding BASEWAY Screens

3.2.1 Input Fields

User input fields are preceded by the ">" character.

```
| Gateway Node Name>_____
```

3.2.2 Display Fields

Display-only fields are preceded by a ":" (colon) character. Information in display-only fields is put there by the program. For example,

```
| Device Name: _____
```

3.3 Keyboard and Key Usage

Characters may be entered in either upper- or lowercase; all characters that are required to be uppercase will be modified by the system.

3.4 Displaying the BASEWAY Menu

System managers should issue the following command to display the main menu for BASEWAY, the "System Overview" menu.

```
$ RUN BSL$SYSTEM:MENU
```

Other users will see this menu displayed immediately after login.

```

menu
page 1
9:00 AM
14-JUN-84

application name
APP User Application
SYS System Management
STS System Status
EXIT Leave BASEWAY System
BASEWAY Application Bus
System Overview

Type choice>
Then press RETURN

```

You may now enter the letters for the desired menu item. They are shown in uppercase letters on the far left side of the menu screen.

IMPORTANT: In this manual, the word "enter" means type the desired character(s) and then press the RETURN key.

Step-by-step instructions for using each of these items is given in Chapters 4, 5, and 6.

5 The EXIT Menu Item

To leave the BASEWAY system, enter the word, EXIT. You will be returned to the "\$" prompt.

NOTE: Within the BASEWAY system, letters denoting any valid menu item, including EXIT, may be entered at the Type Choice> prompt. It is not necessary to return to the menu the item is listed on.

3.6 Keypad Function Keys

3.6.1 Location of Keypad Function Keys and Associated Keyboard Keys

In the figure below, the characters enclosed in parentheses denote what is actually printed on the key.

Note: On keys showing two functions, the bottom (alternate) function is obtained by pressing the PF1 key first.

		activate alt. key function (PF1)	Help (PF2)	(PF3)	(PF4)
Prev. Field (BACK SPACE)		Update (7)	(8)	Print (9) PrintAll	(--)
Next Field (TAB)	Erase Char (DELETE)	Cancel (4)	Select (5)	Delete (6)	(.)
		Frstpag (1) Lastpag	Nextpag (2) Prevpag	(3)	(ENTER)
Erase Field (LINE FEED)		Exit Screen (0)		(.)	

Figure 3. Keypad and Associated Keys

3.6.2 Explanation of Keypad Function Keys

NOTE: For user terminals with keyboard overlays, "PF1" is equivalent to the GOLD key. The letters "KP" denote "Keypad" keys which are the rows of keys directly below the PF keys.

Generally, where you are instructed to press two keys, e.g., press PF1 + KP1 keys, you should press the first key and then press the second key. An exception to this is CTRL/R, which requires you to press the CTRL key and, holding it down, type "R".

Those function keys used frequently in the BASEWAY editors are summarized in the following section.

3.6.3 Commonly Used Keypad Function Keys

The following is a description of the more frequently used keypad keys as they apply to the BASEWAY editors. A complete list of keypad function keys is given in Section 3.6.0.1 below.

When you want to leave an editor, remember that you must press Keypad O.

Select - Keypad 5. Pressing this key when the cursor is positioned in a field which allows a list of the currently defined names to be displayed. Using the Select function minimizes the need for typing. May be VERY slow with many devices; intended as a help function.

```

Current Applications

1  FACTORY1
2  FACTORY2
3  FACTORY3

Selection > 0
--

```

At the prompt, you may enter the number of your selection, or press the RETURN key to go back to the field you came from with no selection made.

To see if there are additional items in the above list, press Keypad 2. Press Keypad 1 to go back to the beginning of the list.

Keypad 7 - Update. Pressing this key causes the data on the screen to be associated with the part of the system you are defining. Once defined, the associated data will be displayed when Keypad 5 is pressed. No changes effected until UPDATE is pressed

Keypad 6 - Delete. Pressing this key will cause a definition to be deleted. The name must have been previously defined to be deleted. The user will be queried before deletion occurs.

Keypad 4 - Cancel. This key causes information typed on the screen to be erased. The cursor will return to the first field on the screen.

Keypad 0 - Exit Screen. This key causes a menu to be displayed and may be selected at any time.

BACKSPACE - Move cursor back to previous field.

LINEFEED - Erase value displayed in current field.

3.6.4 Complete List of Keypad Function Keys and Associated Keys

TO ACCOMPLISH THIS	DO THIS ...
move to next field	press TAB
move to previous field	press BACKSPACE
erase contents of input field	press LINEFEED
exit screen	press KPO key
get help	press PF2 key
restart screen	press PF1 + KPO keys
move to first page of utility	press KP1 key
move to last page of utility or show more items in list	press PF1 + KP1 keys
move to next page of utility	press KP2 key
move to previous page of utility or show previous items	press PF1 + KP2 keys
cancel changes made to displayed screen	press KP 4 key
delete definition	press KP6 key
send definition, display new screen	press KP7
print copy on line printer	press KP9 key
print copy of all screens	press PF1 + KP9
repaint the screen	press CTRL + R keys (CTRL/R)

3.7 HELP Function

Two levels of user help are available: help for the field in which the cursor is currently located (one-line help) and help for an entire screen (help screen). When you press the PF2 (Help) key once, one-line help is displayed at the bottom of the screen. When you depress the Help key twice, the current screen clears and a full help screen is displayed. Help screens are available for all BASEWAY reports and utility programs.

3.7.1 Format of Help Screen

The format of a help screen is similar to that of a normal display screen with some exceptions:

- o The word "HELP" appears in the screen header.
- o The phrases, "Press HELP for more help, or RETURN to continue." or "Press RETURN to continue", may appear on the last line of the help screen.

3.8 Error Signaling and Recovery

Typing errors and invalid uses of editing and field termination functions are signaled by a "beep" or the terminal bell. In addition, a message may be displayed at the bottom of the screen.

Some fields may not be modified by the user; the system will skip over these fields or the terminal may "beep" if there are no more valid fields to skip to.

CHAPTER 4

USER APPLICATION MENU

When BASEWAY is installed, this menu item runs the program BSL\$SYSTEM:UTLNOTYET, which prints a message and exits.

Once your application has been developed, its name can be substituted for this menu item, and the named data updated so that your new application menu will be invoked here.

The User Application menu is displayed when you enter the letters "APP" in the "Type Choice>" field.

User Application Menu

CHAPTER 5

SYSTEM MANAGEMENT MENU

NOTE: In the sections which follow, that portion of the system being discussed is outlined in asterisks (***).

IMPORTANT: Redefinitions to the system configuration are effective immediately and are dynamic.

The System Management menu is displayed when you enter the letters "SYS" in the "Type choice>" field.

menu		10:59 PM
page 3		14-JUN-84
EDTC	Define System Configuration	application name
EDTN	Define Device Network	BASEWAY
EDTS	Define Session Defaults	System Management
Type choice>		
Then press RETURN		

The following sections explain the use of each of the above menu items.

5.1 Define System Configuration (EDTC)

menu

page 5

16:49 AM
29-JUN-84

EDTAPP

Define Application

application name

EDTGAT

Define Gateway

EDTSET

Define Device Set

BASEWAY Application Bus

Define System Configuration

Type choice>

Then press RETURN

5.1.1 Define Application (EDTAPP)

This editor lets you define the physical configuration of an application. You must give a unique name to the application, and you must associate at least one VAX Node name with the application. Up to four nodes may be defined.

Enter the letters "EDTAPP" at the Type choice> prompt to display this screen.

NOTES:

- o An application can run on only one system at a time.
- o The command file BSL\$SYSTEM:DEFINEAPP.COM should be used initially to create an application definition for an application that will be run on the current DECnet node. Besides creating the BASEWAY definition, DEFINEAPP.COM also creates CMS directories, the application system audit data file, and some command files used in starting the application.

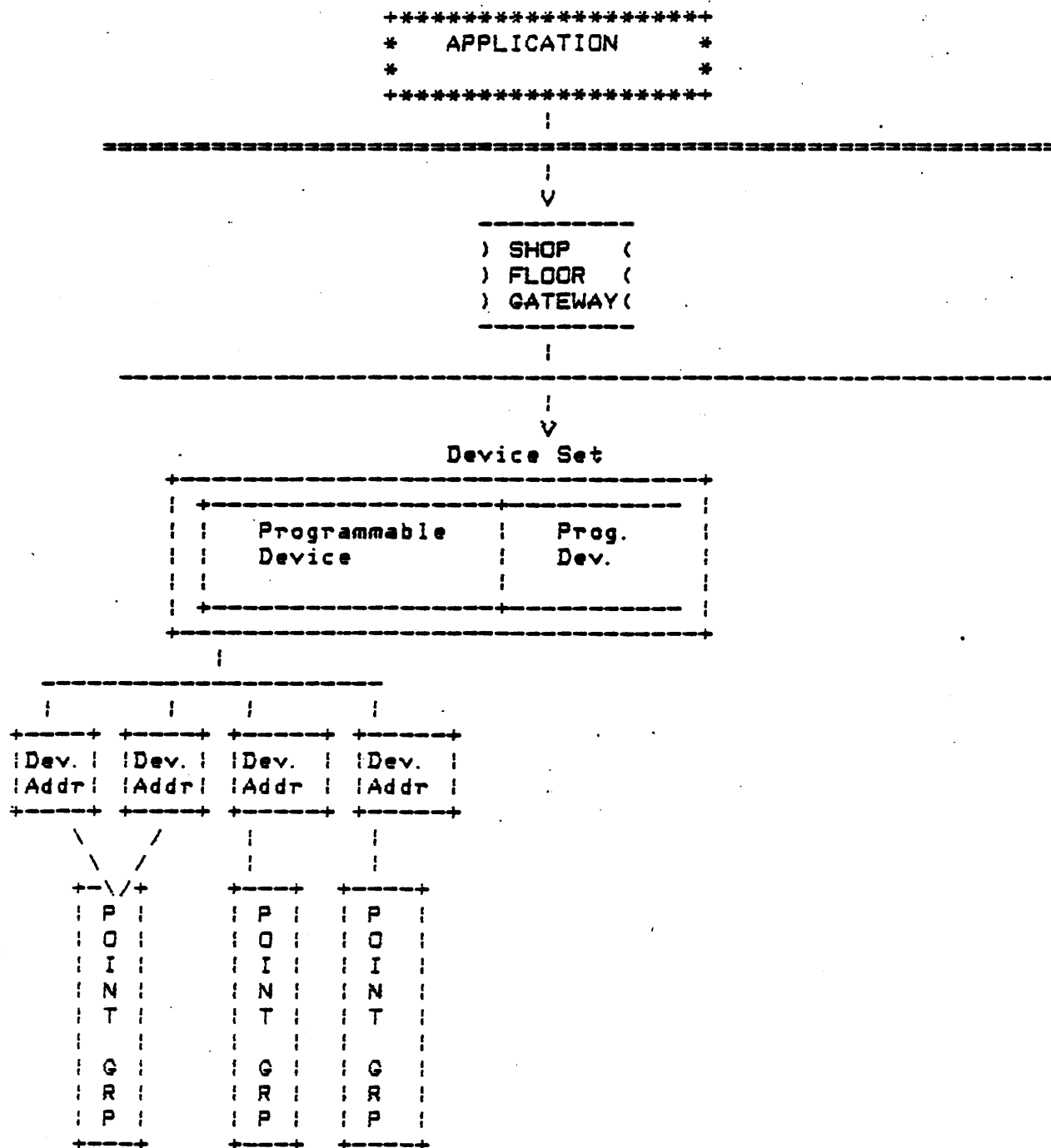


Figure 4. Editing an Application

5.1.1.1 Adding an Application -

1. Press Keypad 5 to Select an Application name, or type in a name (up to 16 characters), then press TAB.
2. (optional) Type in a description of your application (up to 32 characters), then press TAB. Notice that the display fields Defined: and Updated: will be filled in with today's date and that the By: field will be filled in with your user name.
3. Type in at least one Primary VAX Node name to be associated with the application (up to 6 characters permitted) and press TAB.
4. Enter up to three additional (alternate) VAX node names.

NOTE: Alternate nodes are other DECnet nodes that are capable of running this application. If you define your application to run on more than one node, no database definitions will need to be changed to switch configurations when a particular computer is unavailable.

5. Press Keypad 7 to update the database with the application and its associated VAX node(s).

NOTE: Each VAX Node name must be unique; i.e., names should NOT be duplicates.

6. A message stating that the application has been defined will be displayed.

5.1.1.2 Deleting an Application -

REMINDER: The application must be known to BASEWAY before it can be deleted. If you simply wish to start over, press Keypad 4 (Cancel).

1. After the Define Application screen has been displayed, press Keypad 5 to select a current application. The cursor will move to the Description field.
2. Now press Keypad 6 to delete the application, its associated data, and any polling sets and device addresses referencing the application.
3. A message stating that the application and its associated device addresses and polling sets have been deleted will be displayed.

```
+-----+
|edtapp          Define Application          00:01 AM|
|page 1 of 1                                           14-JUN-84|
+-----+
```

```
+-----+
|Application > TEST FACTORY      Primary Node > FACVX1|
|Description > Our experiment    Alternate Node >    |
|                                Alternate Node >    |
|                                Alternate Node >    |
|Defined:   14-JUN-84            |
|Updated:   14-JUN-84            |
|By:        R. S. NOW            |
+-----+
```

Example Application Definition

5.1.2 Define Gateway (EDTGAT)

This editor allows you to define the PDP-11 processor node name.

Enter the letters "EDTGAT" at the Type choice> prompt. to display this screen.

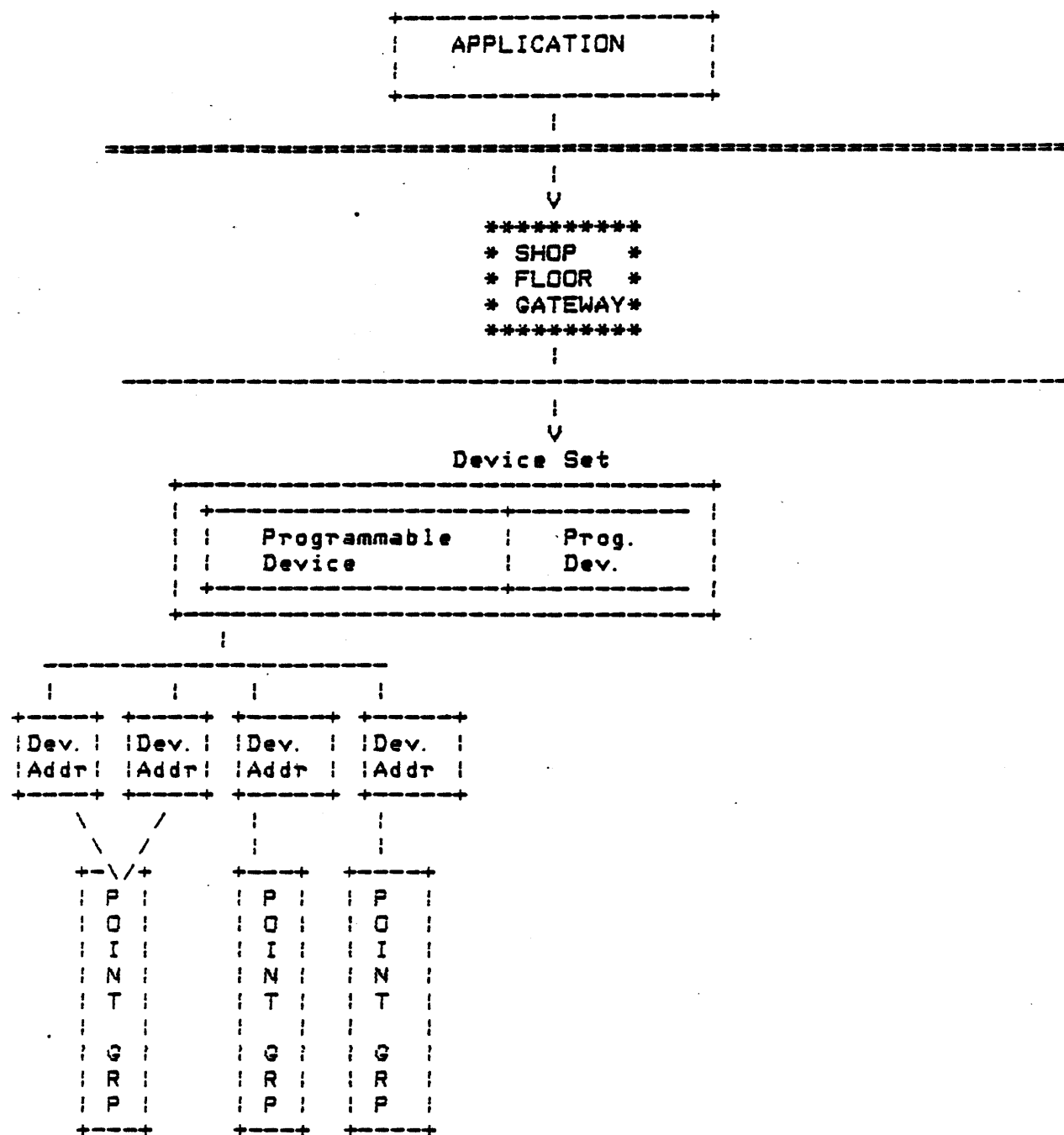


Figure 5. Editing a Gateway

5.1.2.1 Adding a Gateway -

1. Press Keypad 5 to select a current gateway Node name) or type in a gateway Node name (up to 6 characters).
2. (optional) Type in a description of the gateway (up to 32 characters).
3. Press Keypad 7 to update the BASEWAY database.
4. A message stating that the gateway has been defined will be displayed.

5.1.2.2 Deleting a Gateway -

1. After the Define Gateway screen has been displayed, press Keypad 5 to select the desired gateway Name.
2. Press Keypad 6 to delete the gateway Node name.
3. A message stating that the gateway has been deleted will be displayed.

edtgat	Define Gateway	9:05 AM
page 1 of 1		14-JUN-84
Gateway Name> GATE01		
Description> Special test gateway		
Date Defined: 14-JUN-84		
Date Updated: 14-JUN-84		
By: R. S. NOW		

Example Gateway Definition

5.1.3 Define Device Set (EDTSET)

A device set is a group of devices that are known to a gateway. This screen is used to define a device set by associating particular gateway nodes with it. A device set may have up to four gateway nodes associated with it. A gateway node may have up to four device sets associated with it.

Normally, each gateway has one device set associated with it, and each device set is associated with only one gateway.

Enter the letters "EDTSET" at the Type choice> prompt.

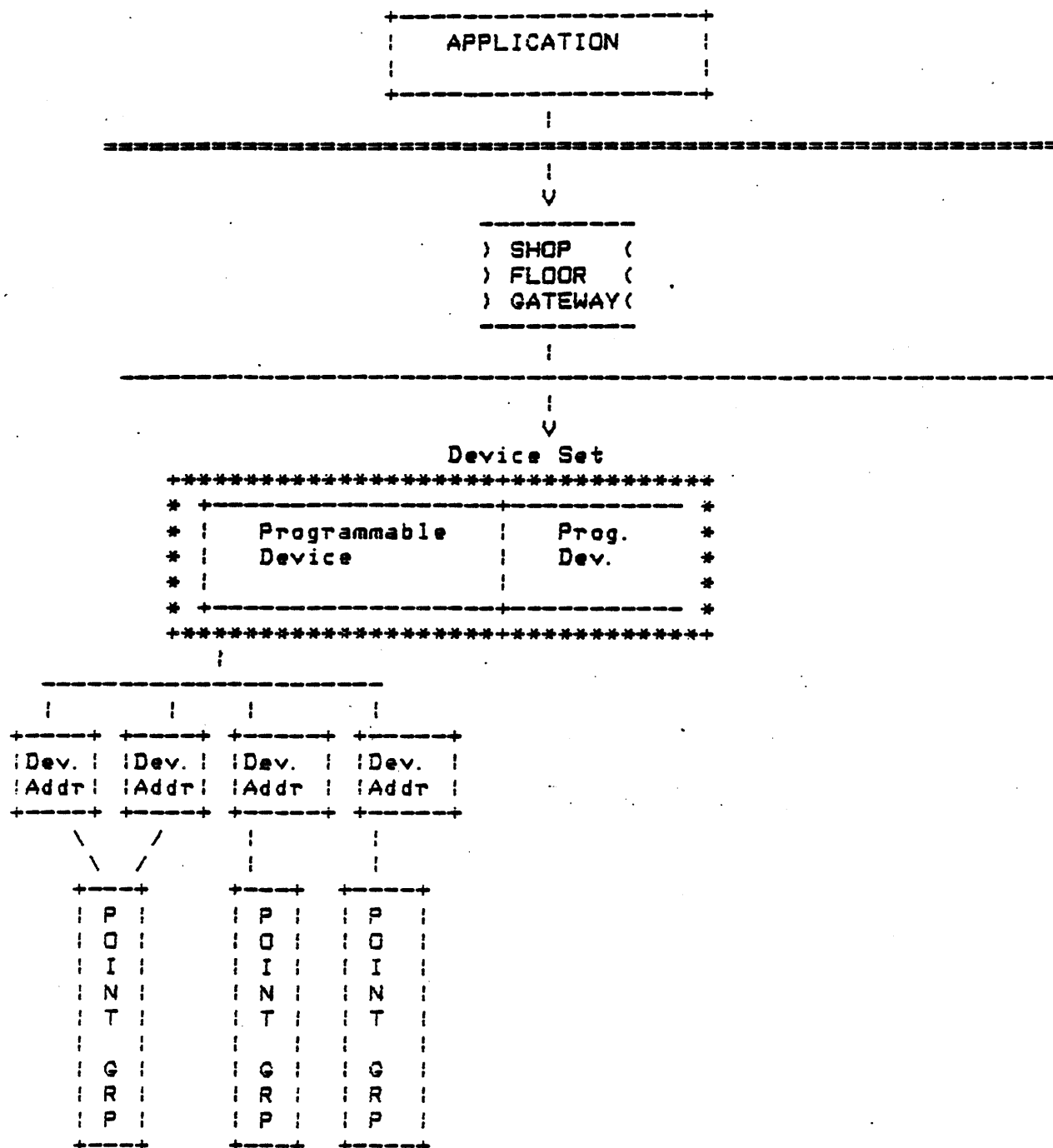


Figure 6. Editing a Device Set

5.1.3.1 Adding a Device Set -

1. Press Keypad 5 to select a current Device Set name, or type in a new name (up to 16 characters permitted).
2. (optional) Press TAB to move to the Description field and enter up to 32 characters.
3. Press TAB to move to the first Gateway node Name field.
4. Type in at least one Gateway node Name to be associated with the device set. The name must previously have been defined.
5. Enter up to three additional Gateway node Names, then press Keypad 7 to define the Device Set and its associated Gateway nodes. Each node name must be unique.

NOTE: The three additional Gateway name fields may be used to designate alternate or additional gateways that might be capable of communicating with this device set. This will apply to those systems which are able to switch programmable devices from one gateway to another.

6. A message stating that the Device Set is defined will be displayed.

5.1.3.2 Deleting a Device Set -

1. After the Define Device Set screen has been displayed, press Keypad 5 to select the Device Set name you wish to delete.
2. Press Keypad 6 to delete the Device Set.
3. A message stating that the Device Set and its associated nodes have been deleted will be displayed.

edtset
page 1 of 1

Define Device Set

06:15
02-JAN

Device Set >	DEVICE SET 1	Gateway Name >	GATE01
Description>	The first device set	Gateway Name >	
		Gateway Name >	
Date Defined:	02-JAN-84	Gateway Name >	
Date Updated:	02-JAN-84		
By:	KY		

Example Device Set Definition

5.2 Define Device Network (EDTN)

Programmable devices may be defined interactively using the Define Device Network menu option. Attributes assigned to the programmable devices are checked for validity when the device is defined. Up to 8000 programmable devices may be defined.

Individual pieces of data in a programmable device are defined interactively and are termed "known points". Any address in a programmable device may be read or written when referred to by address, but known points may be referred to by point name.

Known points may be defined as monitor, control, or both. Monitored points are sampled at user-specified intervals by the SHOP FLOOR GATEWAY. Controlled points are known points that are written to by application programs.

To view the Define Device Network menu, enter the letters "EDTN" at the Type choice> prompt. The Define Device Network menu will be displayed.

menu		10:04 AM
page 6		02-JUN-84
EDTDEV	Define Programmable Device	application name
EDTADR	Define Device Address	BASEWAY Application Bus
		Define Device Network
Type choice>		
Then press RETURN		

5.2.1 Define Programmable Devices (EDTDEV)

This screen is used to define the characteristics of a shop floor programmable Device and its associated device addresses. A device set must exist before a device may be defined.

Enter the letters "EDTN" at the Type choice> prompt.

5.2.1.1 Adding a Device -

1. Press Keypad 5 to select a current Device name, or type in a Device name of up to 16 characters.
2. (optional) Type in a Device Description (maximum of 32 characters) and press TAB.
3. Press Keypad 5 to select a Manufacturer name.
4. Press Keypad 5 to select a Model name.
5. (optional) Type in the memory size (up to 9 digits) and press TAB.
6. (Device Set names must be previously defined.) Press Keypad 5 to select a Device Set name and then press TAB.
7. Press Keypad 5 to select a Network.
8. Type in a Port number (maximum of 2 digits). Port numbers may be found on the distribution panel on the back of the PDP-11 processor. Now press TAB.
9. (optional) Type in a Station number (maximum of 3 digits) and press TAB. This number is the programmable device's address on a vendor's network.
10. (optional) Type in a Contractor name (maximum of 16 characters) and press TAB.
11. (optional) Type in a Location (maximum of 10 characters) and press TAB.
12. The Installed Date will be displayed as today's date. If you wish to change it, clear the field by pressing LINEFEED. Then type in the desired date in the form DAY-MONTH-YEAR (e.g., 14-JUL-84) and press TAB.
13. (optional) Indicate whether this device is a production device by typing an "X" in the Production) and press TAB.
14. (optional field) Indicate whether you wish the device to be enabled by TABbing through the Enabled field (an "X" is displayed as the default value). To clear the field, press LINEFEED.
15. Press Keypad 7 to define.

16. A message stating that the device has been defined will be displayed.

5.2.1.2 Deleting a Device -

1. After the Define Programmable Device screen has been displayed, press Keypad 5 to select the current Device name you wish to delete.
2. Press Keypad 6 to delete the Device name and its associated addresses.

```
edtddev                      Define Programmable Device          02:24 PM
page 1 of 1                  02-JAN-
```

Device Name>	1LB0033	Contractor>	Electro-Cntr
Description>	Piston Supply Conveyor Control	Location >	E-4
Manufacturer>	Modicon	Date Installed >	14-JUN-84
Model>	584	Production>	
Memory Size>	000016384	Enabled>	X
Device Set>	ASSEMBLY AREA		
Network>	Modbus	Date Defined:	14-JUN-84
Port>	04	Date Last Updated:	14-JUN-84
Station>	024	By:	R. S. NOW

Example Device Definition

5.2.2 Define Device Address (EDTADR)

Data from programmable devices is stored in device addresses. Different programmable devices have different ways of storing this data (i.e., different "formats"). This device address data can be connected with names meaningful to the user (e.g., Total Parts Produced). Thus, a point must be defined for each individual piece of data in a device address.

A point is an individual piece of data in a point group, and may indicate if a machine is running, the number of parts that have passed through it, etc.

A point group is a collection of points. Normally, a point group is associated with a particular machine on the shop floor, such as a conveyor.

The three screens that comprise the Define Device Address menu option allow you to define device address, point, and point groups.

NOTE: Interface-type devices, such as Allen-Bradley KF, do not require device address definition. For nonaddressable devices, such as a bar code reader, only one device point may be defined.

There are three screens associated with the Define Device Address editor. If you are not at the last screen and wish to return to a previous screen, press BACKSPACE.

To display the first Define Device Address screen, enter EDTADR at the Type choice> prompt.

5.2.2.1 Page 1--Define Device Address -

Press Keypad 5 to select a current device name.

5.2.2.2 Page 2--Define Device Address -

1. Press Keypad 5 to select a valid address for this device, or type in an address and press TAB.
2. A default format will be displayed for the device. Press TAB to accept the default format, or press Keypad 5 to see the list of valid formats for the current address.
3. Now type a Sampling Interval (default value is one-tenth of a second) in the range 0.1--1800.0 seconds, or press TAB to accept the default value.

4. Press TAB to continue.

5.2.2.3 Page 3--Define Device Address -

NOTE: The information you enter about each point is stored until you press Keypad 7 (Update). When you have finished typing in information for one point, you can go on to the next by pressing Keypad 2. The reverse video area in the format field identifies the current part of the device memory that you are defining. To go back to a immediately previous point, press PF1 + Keypad 2. To go to the first point in the device address press Keypad 1; to go to the point in the device address, press PF1 + Keypad 1. You can "undefine" a currently defined point for this device address by pressing LINEFEED to clear the Point Name field.

WARNING/RESTRICTION:

- ! You may not modify a point's type once the point has been defined.
 - ! A point must not be referenced more than once for a point group.
1. Press Keypad 5 to select a current point name, or type in a point name of up to 32 characters. Press TAB.
 2. Press Keypad 5 to select a Point Type and then press TAB. Currently supported Point Types are:
 1. control--writing only, no polling
 2. monitor--polling only
 3. both--polling and modification
 4. trigger--status point format only (monitored)

3. The following fields appear for trigger point types:

<u>Field(s)</u>		<u>Meaning</u>
Active High	>	active, high state
Buffer Address	>	address of buffer
Count	>	size of buffer
Reset Address	>	address of reset bit
Reset High	>	active state of reset bit

4. The following field appears for device addresses that contain status data:

Active High > active, high state

5. The following field appears for device addresses that contain string data:

Count > maximum length of
 string to read

6. Type in a Point Group Name (normally this name reflects the category of machine, e.g., Conveyor) and press TAB to move to the next field.
7. Type in a description of the point and press TAB.
8. (optional for Controlled points) Type in the name of the BASEWAY Application where you want data from this point to be sent and press TAB.
9. (optional for Controlled points) Type in the name of the Message Port that you want to receive the data.
10. Press Keypad 7 key to update the database with the device address and its associated point(s).
11. A message stating that the device address has been defined will be displayed.

5.2.2.4 Deleting Device Addresses and Points -

1. After the Device Address screen has been displayed, press Keypad 5 to select the device address you wish to delete.
2. Press Keypad 6 to delete. The device address will be deleted along with its associated point(s), unless another device address currently references those points.
3. Respond to the deletion verification question with "Y" or "N".
4. If your response is "Y", a message stating that the device address has been deleted will be printed.

ledtadr
page 1 of 3

Define Device Address

11:00 AM
02-JUN-84

Device Name> 1L80033

ledtadr
page 2 of 3

Define Device Address

11:02 AM
02-JUN-84

Device Name: 1L80033 Sampling Interval> 0030.0
Address> 40032
Format> BINARY VALUE

Word containing a named value

Point Name> PARTS_IN Type> MONITOR
Point Group> PISTON SUPPLY CONVEYOR

Description> Total parts entered this shift
Application> PRODUCTION
Message Port> DATA_PROC

Example 1. Device Address Definition

System Management Menu

ledtadr
page 1 of 3

Define Device Address

11:00 AM
02-JUN-89

Device Name> 1LS0033

ledtadr
page 2 of 3

Define Device Address

11:02 AM
02-JUN-89

Device Name: 1LS0033 Sampling Interval> 0010.0
Address> 100
Format> STATUS POINT

Point Name> CONVEYOR JAMMED Type> MONITOR
Point Group> PISTON SUPPLY CONVEYOR
Active High> X
Description> Piston supply conveyor is jammed
Application> PRODUCTION
Message Port> DATA_PROC

Example 2. Device Address Definition

5.3 Define Session Defaults (EDTS)

This editor lets you define defaults for both users and terminals.

Enter EDTS at the Type choice> prompt. The Define Session Defaults menu will be displayed.

```
+-----+
| menu                                         2:00 PM |
| page 7                                     14-JUN-84 |
|
|      EDTUSR      Define User Defaults      | application name |
|      EDTTRM      Define Terminal Defaults   | BASEWAY Application Bus |
|                                                    | Define Session Defaults |
|
|                                     Type choice>
|                                     Then press RETURN
+-----+
```

5.3.1 Define User Defaults (EDTUSR)

Each user is defined to BASEWAY. A user definition contains demographic data, user-customization data, privileges, and application-specific data.

The specific attributes that may be defined for each user include:

- o user name
- o user's VMS user name
- o nickname
- o address
- o telephone number
- o title or position

System Management Menu

- o department
- o default line printer device
- o password for user verification
- o library for user
- o initial menu form and form library
- o privilege masks

To display the Define User Defaults screens, enter the letters "EDTUSR" at the prompt.

5.3.1.1 Page 1--Define User Defaults -

1. Press Keypad 5 to select a user name, or type in a name. Now press TAB. The next screen will be displayed.

5.3.1.2 Page 2--Define User Defaults -

NOTE: The only field that requires input on this screen is Nickname> .

1. Type in a VMS Username (up to 12 characters).
2. Type in a user Nickname and press TAB.
3. (optional) Type in up to 16 characters for the user's password. Press TAB.
4. (optional) Type in the user's position or title (up to 20 characters) and press TAB.
5. (optional) Type in the user's department or unit (up to 20 characters) and press TAB.
6. (optional) Type in the user's phone number (up to 20 digits) and press TAB.
7. (optional) Type in up to 3 lines of an address for this user (30 characters per line). Press TAB.
8. (optional) Type in the name of the user's library and press TAB.

9. (optional) Type in a Root Menu Form name and press TAB.
10. (optional) Type in a Root Menu Library name and press TAB.
11. (optional) Type in the default printer name.
12. Press Keypad 2 to display the next screen.

5.3.1.3 Page 3--Define User Defaults -

1. Type in a privilege class for the user:
 - System Manager
 - Engineer
 - Skilled Trades
 - Normal User
2. Now press the TAB key to move forward through the various fields (press BACKSPACE to go back), typing an "X" if you wish this user to have a particular default characteristic and pressing LINEFEED to clear a field (omit the default).
3. Press Keypad 7 (Define) to define the defaults for this user.

ledtuser
page 1 of 3

3:00 PM
14-JUN-84

Name>JOHN BROWN

VMS Username>
Nickname>
Password>

Title>
Department>
Phone>

Address> _____
Address> _____
Address> _____

Library >
Root Menu Form>
Root Menu Library>
Default Printer>

Privilege Class> SYSTEM MANAGER

Configure system	> X	Access programmable device path	> X
Monitor system	> X	Update programmable device path	> X
Perform system diagnostics	> X	Perform path diagnostics	> X
		Define new path	> X
Update production library	> X		
Access production devices	> X	Access another's library	> X
		Write to another's library	> X
Access programmable device	> X	Delete entry in another's library	> X
Write to programmable device	> X	Perform library diagnostics	> X
Load, Dump, Compare device	> X		
Update device definition	> X		

Example User Defaults Definition

5.3.2 Define Terminal Defaults (EDTTRM)

Each terminal device is defined to BASEWAY. A terminal definition contains privileges and application-specific data. If both a terminal definition and a user definition exist for the current session, the terminal definition overrides the user definition. The attributes that may be defined for each terminal include:

- o terminal device name
- o physical location
- o default line printer device
- o initial menu form and form library
- o privilege masks

To display this screen, enter EDTTRM at the prompt.

5.3.2.1 Page 1--Define Terminal Defaults -

1. Press Keypad 5 to select a terminal name, or type in a terminal name containing up to 31 characters and ending with a colon. (A colon will be appended automatically if you forget it).
2. Press TAB to display the next screen.

5.3.2.2 Page 2--Define Terminal Defaults -

NOTE: All fields on this screen are optional.

1. Type in a terminal location of up to 16 characters and press TAB.
2. Type in any information specific to your terminal (up to 20 characters) and press TAB.
3. Type in the Root Menu Form for this terminal and press TAB.
4. Type in the Root Menu Library and press TAB.
5. Type in the Default Printer.

6. To go to the next screen, press Keypad 2.

5.3.2.3 Page 3--Define Terminal Defaults -

1. Press Keypad 5 to select a Privilege Class Name. The valid classes are: System Manager, Engineer, Skilled Trades, and Normal User.
2. Now press the TAB key to move forward through the various fields (press BACKSPACE to go back), typing an "X" if you wish the terminal to have a particular default characteristic and pressing LINEFEED to clear a field (omit a default).

edtrm
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3:01 PM
14-JUN-84

Terminal Name> TTA7:

Terminal location> F-18
Device specific>

Root Menu Form> MENU_PAGE_1
Root Menu Library> BSL\$MENU:PDSINC
Default Printer> SYS\$PRINT

Privilege Class> SYSTEM MANAGER

Configure system	> X	Access programmable device path	> X
Monitor system	> X	Update programmable device path	> X
Perform system diagnostics	> X	Perform path diagnostics	> X
		Define new path	> X
Update production library	> X		
Access production devices	> X	Access another's library	> X
		Write to another's library	> X
Access programmable device	> X	Delete entry in another's library	> X
Write to programmable device	> X	Perform library diagnostics	> X
Load, Dump, Compare device	> X		
Update device definition	> X		

CHAPTER 6

SYSTEM STATUS MENU

The System Status menu is obtained by entering the letters "STS" in the "Type choice> " field. This menu contains BASEWAY utility programs.

16:59 AM:
04-JUN-84:

APPSTS	Display	Application Status	:	application name
GATSTS	Display	Gateway Status	:	BASEWAY Application Bus
AUDIT	Display	System Audit	:	
DEVICES	Display	Defined Devices	:	System Status
POINTS	Display	Defined Points	:	
USERS	Display	Defined Users	:	
TERMS	Display	Defined Terminals	:	

Type choice>
Then press RETURN

6.1. Printing Utility Program Screens

You can press Keypad 9 to print a copy of the current screen. This causes a file (with the shortened name of the utility program and no extension) to be created in your directory (e.g., UTLGATSTS.).

6.2 Returning To the System Status Menu

To leave a utility display screen, press Keypad 0 once, or until the System Status menu is displayed.

6.3 Returning To the System Overview Menu

Press RETURN at the prompt to leave the System Status menu. The BASEWAY System Overview menu will be displayed. If you wish to stop using the BASEWAY system at this point, enter "EXIT" at the prompt.

6.4 Restarting Gateway Status Utility

One System Status program, Display Gateway Status, allows you to "restart" the utility at any point. This allows you to see a report based on new values entered at the program prompt. To restart, press PF1 + Keypad 0.

6.5 Display Application Status (APPSTS)

The status of an application is displayed on a series of eight screens. Each screen is dynamically updated every 10 seconds. These screens (in the order they are displayed) are:

- o Application Overview
- o DECnet Routing Tables
- o Gateway Routing Tables
- o Device Set Routing Tables
- o Application Routing Tables
- o Named Port Tables
- o Temporary Port Tables
- o User Parameters

6.5.1 Application Overview

The current status modes of an application may be any of the following:

- o running
- o standby
- o diagnostic

lutlappsts
page 1 of 8

Display Application Status

10:40 AM
02-JAN-84

Application: GATE01		ID: 65	Node: GATE01
Started at: 02-JAN-84 03:28 PM			
Current Mode: Running			
Intra-Application		Inter-Application	
MBX Messages Read:	2202	Messages Read:	1073
MBX Messages Written:	2303	Messages Written:	996
		Messages Lost:	3
Current NAU usage:	0	DECnet Errors:	15
Counters last zeroed: 02-JAN-84 03:28 PM			

6.5.2 DECnet Routing Tables

utlappsts		Display Application Status	10:40 AM
page 2 of 8			02-JAN-84
DECnet Node	Current Systems		
GATE01	GATE01, DEVICE SET 1		

6.5.3 Gateway Routing Tables

lutlappsts
page 3 of 8

Display Application Status

10: A
02-JAN-8

Gateway	Reachable	DECnet Node
GATE01	Yes	GATE01

6.5.4 Device Set Routing Tables

utlappsts
page 4 of 8

Display Application Status

10:40 AM
02-JAN-94

Device Set	Reachable	Gateway
DEVICE SET 1	YES	GLGATE

6.5.5 Application Routing Tables

utlappsts
page 5 of 8

Display Application Status

10:40 1
02-JAN-84

Application	Reachable	DECnet Node
GATE01	Yes	GATE01

6.5.6 Named Port Tables

utlappsts		Display Application Status		10:40 AM
page 6 of 8				02-JAN-84
Port Index	Port Name	Messages Read	Messages Written	
0010	EVENT_PROC	45	0	
0011	EVENT_LOG	1810	0	
0012	NET_INTER	407	407	
0014	GATE_INIT	0	0	
0064	DATA_PROC	869	0	

System Status Menu

6.5.7 Temporary Port Tables

utlappsts
page 7 of 8

Display Application Status

10:4 A
02-JAN-8

Port Index	Process Name	Messages Read	Messages Written
0001	<unknown>	427	429

6.5.8 User Parameters

utlappsts
page 8 of 8

Display Application Status

10:41 AM
02-JAN-84

User Flags		User Parameters	
1	Off	1	0
2	Off	2	0
3	Off	3	0
4	Off	4	0
5	Off	5	0
6	Off	6	0
7	Off	7	0
8	Off	8	0
9	Off	9	0
10	Off	10	0

6.6 Display Gateway Status (GATSTS)

The following screens are displayed by this menu choice. They are dynamically updated every 10 seconds. The screens, in the order they appear are:

- o Gateway Overview
- o Device Set Tables
- o Polling I/O Statistics
- o Task Mailbox Statistics

To use this utility, enter the letters "GATSTS" from the menu. Press Keypad 5 to select a gateway (the gateway must be reachable through DECnet).

utlgatsts	Display Gateway Status	10:40 AM
page 1 of 5		02-JAN-84
Gateway name> GATE01		

6.6.1 Gateway Overview

A gateway may have the following statuses:

- o Loaded; the VDR is being loaded
- o Running; the gateway is running
- o POL Stby; standby, the gateway is not accepting requests
- o GEN Stby; standby, the gateway is not accepting requests
- o DIR Stby; standby, the gateway is not accepting requests
- o Stby; standby, downloading VDR
- o Shutting down; the gateway is shutting down

*Virt. Data Region; holds ^{GW} DB
(data points, etc.)*

A gateway may have the following errors:

- o PD tmd; a device has timed out
- o VDR corrupt; VDR has been corrupted, must be reloaded
- o Net failure; network error
- o Poll missed; a polling cycle has been missed
- o Resource failure; a task could not access an RSX resource
- o Message error; a task received an invalid message
- o Net full; network could not handle message traffic
- o VDR full; no more VDR blocks can be added to VDR
- o Data buffers full; no more data buffers are available
- o Task aborted; a gateway task has aborted

utlgatsts
page 2 of 5

Display Gateway Status

10:40 AM
02-JAN-F

Gateway:	GATE01	Id:	1	Node:	GATE01
Started at:	02-JAN-84	11:26 AM			
VDR Loaded at:	02-JAN-84	11:26 AM			
Status:	Init, Running, POL Stby, GEN, Stby, DIR Stby				
Errors:					
	VDR	GLB		Network	
Blocks Allocated:	3072	1023		Messages Read:	12
Blocks in Use:	1093	27		Messages Written:	4
Blocks Free:	1979	996		Messages Queued:	0
Largest Block:		0		Messages Lost:	0
Numb of Sgmnts:		0		DECnet Errors:	0
Address Maps:	232142				
Counters last zeroed: 02-JAN-84 11:26 AM					

6.6.2 Device Set Tables

utl gat sts
page 3 of 5

Display Gateway Status

10:40 AM
02-JAN-84

Current Device Sets	Defined Device Sets
DEVICE SET 1	DEVICE SET 1

6.6.3 Polling I/O Statistics

outlgatsts
page 4 of 5

Display Gateway Status

10:41 AM
02-JAN-9

Device	Requests	Errors	Timeouts	Last Error
MZ04	1	0	0	0
KZ00	3	0	0	0
KZ04	1	0	0	0

6.6.4 Task Mailbox Statistics

utlgatsts
page 5 of 5

Display Gateway Status

10:41 AM
02-JAN-84

Task Name	Current Status	Messages Delivered	Messages Queued	Maximum Queued
TSKWCH	Running	3	0	1
NETINT	Running	24	0	0
GATEVP	Running	21	0	1
DIRSRV	Running	1	0	0
POLSRV	Running	3	0	0
GENSRV	Running	1	0	0
BUSWCH	Running	1	0	0
NETSRV	Running	0	0	0

6.7 Display System Audit (AUDIT)

The BASEWAY audit trail records system events about user logins, task selection, programmable device events, and other events. This report can be used to view specific information about users and devices.

To display this utility, enter AUDIT from the System Status menu.

First, type in the number of the message class you wish to see displayed. System messages will be displayed by default. To display others, clear the field first by pressing LINEFEED, and then type in the number of the type of message you want to see displayed.

If you wish to change the Search Time (which defaults to today's date), press TAB after typing the Message Class number. Press TAB again to move through the date and time fields. The date must be in the form day-mon-yr, and the time must be in the form hh:mn am (or pm). Now press RETURN to display event messages.

Note that the most recent data is displayed on the first page of the screen.

```
+-----+
|utlevthis          Display System Audit          10:41 AM|
|page 1 of 2                                     02-JAN-84|
+-----+
| 1 System Events           6 Session Events      |
| 2 Configuration Changes   7 Data Exception Events|
| 3 Network Events          8 User Application Events|
| 4 Gateway Events          9 All Events            |
| 5 Programmable Device Events|
|                                     |
|           Message Class >0          |
|                                     |
|           Search Time> 14-JUN-84 10:41 AM      |
+-----+
```

utlevthis
page 2 of 2

Display System Audit

10:41 AM
02-JAN-84

04-JAN-84	12:52 AM	Connected to Device Set DEVICE SET 1
04-JAN-84	12:52 AM	Connected to Gateway GATE01
04-JAN-84	12:50 AM	Read failed in AST path to network partner node
04-JAN-84	12:50 AM	Lost communications with Gateway GATE01
04-JAN-84	12:50 AM	Lost communications with Device Set DEVICE SET 1
04-JAN-84	12:24 AM	Connected to Device Set DEVICE SET 1
04-JAN-84	12:24 AM	Connected to Gateway GATE01
04-JAN-84	12:22 AM	Read failed in AST path to network partner node
04-JAN-84	12:22 AM	Lost communications with Gateway GATE01
04-JAN-84	12:22 AM	Lost communications with Device Set DEVICE SET 1
04-JAN-84	12:10 AM	Connected to Device Set DEVICE SET 1
04-JAN-84	12:10 AM	Connected to Gateway GATE01
04-JAN-84	12:08 AM	Read failed in AST path to network partner node
04-JAN-84	12:08 AM	Lost communications with Gateway GATE01
04-JAN-84	12:08 AM	Lost communications with Device Set DEVICE SET 1

6.8 Display Defined Devices (DEVICES)

This utility is accessed by entering DEVICES from the menu.

NOTE: It may take several seconds for the screen to display the information.

utldisdev		Display Defined Devices	11:01 AM
page 1 of 1			14-JUN-84
Device Name	Description	Last Updated	
AB_3_B	Factory PLC-3	24-SEP-84	

6.9 Display Defined Points (POINTS)

Enter POINTS from the menu to display this utility program.

NOTE: This utility takes a few seconds to display the information.

utldisdev		Display Defined Points		12:01 PM
page 1 of 1				14-JUN-84
Group/Point Name		Device	Address	Last Update
TEST PANEL		230	112/1	08-JUN-84

System Status Menu

6.10 Display Defined Users (USERS)

To use this utility, enter USERS from the menu.

NOTE: A few seconds may elapse before this screen is displayed.

utldisusr		Display Defined Users		4:01 PM
page 1 of 1				14-JUN-84
Full Name	VMS User Name	Nickname	Last Updated	
JOHN BROWN	BROWN	JOHN	07-JUN-84	
MARY SMITH	SMITH	M	08-JUN-84	

6.11 Display Defined Terminals (TERMS)

Enter the letters, "TERMS" from the menu to display this utility program.

NOTE: It may take several seconds before the information for this utility is displayed.

utldistrm	Display Defined Terminals	11:31 AM
page 1 of 1		14-JUN-84
Terminal Device Name	Location	Last Updated
TTAO:	East Bay	08-JUN-84
TTBO:	East Wall	14-JUN-84

CHAPTER 7

MESSAGES

This chapter lists BASEWAY software messages that can occur at run time.

7.1 Informational Messages

APPCRE New application

Informational. The application specified is not currently defined, and a new record is being created.

User Action. Press CANCEL to stop this record from being defined, or press UPDATE to define the new application.

APPDEF Application defined

Informational. This message is displayed after the UPDATE key has been pressed, and indicates that a new application record has been written to the configuration database.

User Action. None.

APPDEL Application deleted

Informational. This message is displayed after the DELETE key has been pressed, and indicates that the application record has been deleted from the configuration database.

User Action. None.

Messages

APPUPD Application updated

Informational. This message is displayed after the UPDATE key has been pressed, and indicates that the application record has been updated in the configuration database.

User Action. None.

CONAPPL Connected to application

Informational. The application Network Interface has established communications with another application.

User Action. None.

CONDEVICE Established communications with device

Informational. The programmable device has been successfully polled.

User Action. None.

CONDEVSET Connected to device set

Informational. The application Network Interface has established communications with a device set.

User Action. None.

CONFIGCHANGE Programmable device configuration has changed

Informational. The program detected a difference in the configuration of the programmable device and the specified file. Possible causes are a hardware or software change on the specified programmable device, or use of a file created from a programmable device different from the target programmable device.

User Action. None, if the message reflects an accurate situation. If the programmable device has not been changed or the file specified is not from a different programmable device, please submit a complete SPR.

CONGATEWAY Connected to gateway

Informational. The application Network Interface has established communications with a GATEWAY system.

User Action. None.

Informational. Gateway does not have an image file yet, so the

utility is creating an empty, initialized parameter file.

User Action. None.

DECNETDOWN DECnet has shut down

Informational. The Network Interface has detected that DECnet has shut down, and therefore, the BASEWAY must shut down.

User Action. None.

DELPROC BASEWAY shutdown requested by process

Informational. The EVENTPROC process has determined that a required BASEWAY real-time monitoring process has aborted. BASEWAY is shutting down.

User Action. Check the BASELINE.DMP log file in BSL\$SYSTEM, and correct the problem.

DEVCRE New device

Informational. The device specified is not currently defined, and a new record is being created.

User Action. Press CANCEL to stop this record from being defined, or press UPDATE to define a new device.

DEVDEF Programmable device defined

Informational. This message is displayed after the UPDATE key has been pressed, and indicates that a new programmable device record has been written to the configuration database.

User Action. None.

DEVDEL Programmable device deleted

Informational. This message is displayed after the DELETE key has been pressed, and indicates that the programmable device record has been deleted from the configuration database.

User Action. None.

DEVUPD Programmable device updated

Informational. This message is displayed after the UPDATE key has been pressed, and indicates that the programmable device record has been updated in the configuration database.

User Action. None.

Messages

ENTCRE Defining new point

Informational. The data point specified is not currently defined, and a new record is being created.

User Action. Press CANCEL to stop the record from being defined, or press UPDATE to create a new data point.

ENTDEF Point defined

Informational. This message is displayed after the UPDATE key has been pressed, and indicates that a new data point record has been written to the configuration database.

User Action. None.

ENTDEL Point deleted

Informational. This message is displayed after the DELETE key has been pressed, and indicates that the data point record has been deleted from the configuration database.

User Action. None.

ENTUPD Point updated

Informational. This message is displayed after the UPDATE key is pressed, and indicates that the data point record has been updated in the configuration database.

User Action. None.

FIRSTPAGE This is the first page

Informational. You are already on the first page of the screen.

User Action. None.

GATDEF Gateway defined

Informational. This message is displayed after the UPDATE key has been pressed, and indicates that a new gateway record has been written to the configuration database.

User Action. None.

GATDEL Gateway deleted

Informational. This message is displayed after the DELETE key has been pressed, and indicates that the gateway record has been deleted from the configuration database.

User Action. None.

GATETMO Communications with gateway timed out

Informational. A gateway has not responded to a message within a reasonable time.

User Action. Check node for reachability.

GATUPD Gateway updated

Informational. This message is displayed after the UPDATE key has been pressed, and indicates that the gateway record has been updated in the configuration database.

User Action. None.

LASTPAGE This is the last page

Informational. You are already on the last page of the screen.

User Action. None.

LOSTAPPL Lost communications with application

Informational. The application Network Interface has lost communications with another application system.

User Action. Check node for reachability.

OSTDEVICE Lost communications with device

Informational. The application Network Interface has lost communications with a programmable device.

User Action. Check programmable device network for errors.

LOSTDEVSET Lost communications with device set

Informational. The application Network Interface has lost communications with a device set.

User Action. Check gateway for reachability.

LOSTGATE Lost communications with gateway

Informational. The application Network Interface has lost communications with a GATEWAY system.

User Action. Check node for reachability.

Messages

LOSTMSG Interprocess message lost

Informational. The Network Interface was not able to deliver an interprocess message to the proper destination mailbox.

User Action. Check system resources, mailbox quota, etc.

LSTPRT Listing printed

Informational. This message is displayed after the PRINT key has been pressed, and indicates that a listing has been sent to the line printer.

User Action. None.

MBXFULL Mailbox full for process

Informational. The destination mailbox for a process was full, and the Network Interface had a message to deliver. The message is lost.

User Action. Check mailbox buffer quota.

MOREDATA More selections follow

Informational. There are more selections to be displayed.

User Action. None.

NOAPPS No applications defined

Informational. No applications are known to BASEWAY.

User Action. None.

NODEVS No programmable devices found.

Informational. No programmable devices are known to BASEWAY.

User Action. None.

NOENTS No points are defined

Informational. No data points are known to BASEWAY.

User Action. None.

NOGATS No gateways are defined

Informational. No gateways are known to BASEWAY.

User Action. None.

NOREGS No registers defined for this device

Informational. No registers for this device are known to BASEWAY.

User Action. None.

NORMAL Normal, successful completion

Informational. BASEWAY command completed successfully.

User Action. None.

NOSETS No device sets defined

Informational. No device sets are known to BASEWAY.

User Action. None.

NOTATTACHED Programmable device not allocated by this user

Informational. The programmable device that was specified in a deallocate operation is not currently allocated by the calling process.

User Action. None.

NOTRMS No terminals defined

Informational. No terminals are known to BASEWAY.

User Action. None.

NOTSUPPORTED Function not supported by this programmable device

Informational. The programmable device that was specified in a operation does not support the function.

User Action. Try another device.

NOUSRS No users defined

Informational. No users are known to BASEWAY.

User Action. None.

REGDEF Register defined

Informational. This message is displayed after the UPDATE key is

Messages

pressed and indicates that a new register record has been written to the configuration database.

User Action. None.

REGCRE New register

Informational. The register specified is not currently defined, and a new record is being created.

User Action. Press CANCEL to stop the record from being defined, or press UPDATE to create a new register.

REGDEL Register deleted

Informational. This message is displayed after the DELETE key has been pressed, and indicates that the register record has been deleted from the configuration database.

User Action. None.

REGUPD Register updated

Informational. This message is displayed after the UPDATE key has been pressed, and indicates that the register record has been updated in the configuration database.

User Action. None.

ROUTERR Partial message routing loss--Network configuration error

Informational. There are inconsistencies in the System Definition file, the Gateway Definition file, or both.

User Action. Correct database definitions and restart BASEWAY.

SCRPRN Screen printed

Informational. This message is displayed after the PRINT key has been pressed, and indicates that the currently displayed screen has been sent to the line printer.

User Action. None.

SETCRE New device set

Informational. The device set specified is not currently defined, and a new record is being created.

User Action. Press CANCEL to stop this record from being

defined, or press UPDATE to define a new device set.

SETDEF Device set defined

Informational. This message is displayed after the UPDATE key has been pressed, and indicates that a new device set record has been written to the configuration database.

User Action. None.

SETDEL Device set deleted

Informational. This messages is displayed after the DELETE key has been pressed and indicates that the device set record has been deleted from the configuration database.

User Action. None.

SETUPD Device set updated

Informational. This message is displayed after the UPDATE key has been pressed, and indicates that the device set record has been updated in the configuration database.

User Action. None.

SHUTDOWN BASEWAY shutting down

Informational. You requested that the BASEWAY be shut down, or recovery was not possible from previous error(s), so processing has been aborted.

User Action. Check previously issued messages to determine the cause of the problem.

STARTUP BASEWAY starting

Informational. The BASEWAY real-time monitoring processes have been started.

User Action. None.

TRMCRE New terminal

Informational. The terminal specified is not currently defined, and a new record is being created.

User Action. Press CANCEL to stop this record from being defined, or press UPDATE to create a new terminal.

TRMDEF Terminal defined

Messages

Informational. This message is displayed after the UPDATE key has been pressed, and indicates that a new terminal record has been written to the configuration database.

User Action. None.

TRMDEL Terminal deleted

Informational. This message is displayed after the DELETE key has been pressed, and indicates that the terminal record has been deleted from the configuration database.

User Action. None.

TRMUPD Terminal updated

Informational. This message is displayed after the UPDATE key has been pressed, and indicates that the terminal record has been updated in the configuration database.

User Action. None.

UPDGATVDR Updating database for gateway

Informational. The editor is rebuilding the memory-resident database for the specified gateway because you have modified the gateway data structures.

User Action. None.

USRDEF User defined

Informational. This message is displayed after the UPDATE key has been pressed, and indicates that a new user record has been written to the configuration database.

User Action. None.

USRDEL User deleted

Informational. This message is displayed after the DELETE key has been pressed, and indicates that the user record has been deleted from the configuration database.

User Action. None.

USRUPD User updated

Informational. This message is displayed after the UPDATE key has been pressed, and indicates that the user record has been updated in the configuration database.

User Action. None.

VDRCHG Programmable device database changed, gateway

Informational. The gateway VDR database has been updated with the new configuration data. The VDR image file has not yet been changed.

User Action. None.

VDRUPD Gateway VDR image file updated

Informational. The gateway VDR image file has been updated with the new configuration data.

User Action. None.

ZEROED Message counters cleared

Informational. The Network Interface received and successfully processed a Reset Network Counters message.

User Action. None.

Messages

7.2 Warning Messages

APPNAMUSD Application name already in use--select another name

Warning. When renaming an application, you selected a name that is already being used.

User Action. Select a different name, and try defining again.

APPREACHABLE Unable to delete--application currently reachable

Warning. You tried to delete an application that was currently reachable. Applications may not be deleted when they are running.

User Action. Shut down the application before trying to delete it from the BASEWAY database.

ATTACHED Programmable device allocated to another user

Warning. The programmable device that was specified is currently being used by another user.

User Action. Try again later.

BADADDR Invalid address for this programmable device

Warning. An address is in an invalid format or outside the range of legal addresses for this model of programmable device.

User Action. Specify correct address.

BADFMT Bad format name--try again

Warning. The format name specified is invalid for the device address.

User Action. Try another format specifier, or press SELECT for a list of valid formats for this address.

BADMODEL Invalid model for current function

Warning. The model specified is invalid for the current operation.

User Action. Specify a valid model.

DEVADRUSED Device network address already in use--select another address

Warning. The programmable device communication network that was specified is already being used by another device.

User Action. Select a different address, and try defining again.

DEVNAMUSD Device name already in use--select another name

Warning. When renaming a programmable device, you selected a name that is already being used.

User Action. Select a different name, and try defining again.

ENTNAMUSD Point name already in use--select another name

Warning. When renaming a data point, you selected a name that is already being used.

User Action. Select a different name, and try defining again.

GATNAMUSD Gateway name already in use--select another name

Warning. While renaming a gateway, you selected a name that is already being used.

User Action. Select a different name, and try defining again.

GATREACHABLE Unable to delete--gateway currently reachable

Warning. You tried to delete a gateway that was currently reachable. Gateways may not be deleted when they are running.

User Action. Shut down the gateway before trying to delete it from the BASEWAY database.

ILDATE Invalid date specified

Warning. You typed the date in a format that is not recognized.

User Action. Enter the date correctly.

ILMEMSIZE Invalid memory size for this device--try again

Warning. You specified a memory size that is outside the range of valid memory sizes for this programmable device.

User Action. Verify the proper memory size, and reenter the value.

ILMENU DATA MENU form has an invalid command in NAMED DATA for this option

Warning. The current menu form specifies an action to be taken

Messages

for this command, but it is not recognizable to BASEWAY.

User Action. Check the format of the NAMED DATA entry for this option.

ILMENUFORM Form not a valid MENU form

Warning. The VAX FMS form that was to be displayed on your terminal is not a valid BASEWAY menu form.

User Action. The BASEWAY menu program looks for a VAX FMS form with the field "choice", or a series of indexed fields named "select". If neither of these exist, then the form is deemed unusable.

ILNUM Entry out of range—try again

Warning. The user typed a numeric response that is not within the valid limits.

User Action. Enter the number correctly.

ILTIME Invalid time specified

Warning. You typed the time in a format that is not recognized.

User Action. Enter the time correctly.

NODEINUSE DECnet node already referenced

Warning. You entered a DECnet node name twice for the same application.

User Action. Enter a different DECnet node, or press Update.

NODOWNFILE Unable to open download file

Warning. The program was unable to open the specified download file. Possible problems are: improper file quotas, improper file or directory specifications, file protection violations, file locked, insufficient privileges, or invalid logical name assignments.

User Action. Check for problems specified in explanation and try again.

NOHELP No help available

Warning. You have tried to get online help for a function that does not have any help messages defined.