HP BASIC for OpenVMS Alpha Systems

Installation Guide

April 2005

This guide describes how to install HP BASIC on the HP OpenVMS Alpha Systems operating system.

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Operating System:	OpenVMS Alpha Version 6.2 to Version 8.2
Software Version:	HP BASIC Version 1.6

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Palo Alto, California

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Preface

This guide describes how to install HP BASIC on the OpenVMS Alpha operating system.

Keep this guide with your distribution kit. You will need it to install maintenance updates or to reinstall HP BASIC for any other reason.

Intended Audience

This guide is intended for system managers who install HP BASIC.

Document Structure

This guide contains the following chapters and appendixes:

- Chapter 1 describes the preparations necessary for installing HP BASIC.
- Chapter 2 describes how to install HP BASIC.
- Chapter 3 describes postinstallation tasks.
- Appendix A shows a sample HP BASIC installation.
- Appendix B lists the files installed on your system during the HP BASIC installation.
- Appendix C describes how to recover from failures and errors that may occur during installation and product use.

Related Documents

In addition to this guide, the HP BASIC documentation set includes the following:

- The *HP BASIC for OpenVMS Systems User Manual*
- The *HP BASIC for OpenVMS Systems Reference Manual*
- A letter titled *Read Before Installing or Using HP BASIC Version 1.6 for OpenVMS Alpha Systems*

- The HP BASIC online release notes, which provide more information about HP BASIC. The release notes are located in (*n* is the minor point release):

  SYS$HELP:BASIC01*n*.RELEASE_NOTES

Reader's Comments

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Internet	**openvmsdoc@hp.com**
Postal Mail	Hewlett-Packard Company OSSG Documentation Group, ZKO3-4/U08 110 Spit Brook Rd. Nashua, NH 03062-2698

You can also send email to:

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Conventions

The following typographic conventions might be used in this manual:

Ctrl/*x*	A sequence such as Ctrl/*x* indicates that you must hold down the key labeled Ctrl while you press another key or a pointing device button.
PF1 *x*	A sequence such as PF1 *x* indicates that you must first press and release the key labeled PF1 and then press and release another key or a pointing device button.
Return	In examples, a key name enclosed in a box indicates that you press a key on the keyboard. (In text, a key name is not enclosed in a box.) In the HTML version of this document, this convention appears as brackets, rather than a box.
. . .	A horizontal ellipsis in examples indicates one of the following possibilities: • Additional optional arguments in a statement have been omitted. • The preceding item or items can be repeated one or more times. • Additional parameters, values, or other information can be entered.

. . .	A vertical ellipsis indicates the omission of items from a code example or command format; the items are omitted because they are not important to the topic being discussed.
( )	In command format descriptions, parentheses indicate that you must enclose choices in parentheses if you specify more than one.
[ ]	In command format descriptions, brackets indicate optional choices. You can choose one or more items or no items. Do not type the brackets on the command line. However, you must include the brackets in the syntax for OpenVMS directory specifications and for a substring specification in an assignment statement.
|	In command format descriptions, vertical bars separate choices within brackets or braces. Within brackets, the choices are optional; within braces, at least one choice is required. Do not type the vertical bars on the command line.
{ }	In command format descriptions, braces indicate required choices; you must choose at least one of the items listed. Do not type the braces on the command line.
bold type	Bold type represents the introduction of a new term. It also represents the name of an argument, an attribute, or a reason.
italic type	Italic type indicates important information, complete titles of manuals, or variables. Variables include information that varies in system output (Internal error *number*), in command lines (/PRODUCER=*name*), and in command parameters in text (where *dd* represents the predefined code for the device type).
UPPERCASE TYPE	Uppercase type indicates a command, the name of a routine, the name of a file, or the abbreviation for a system privilege.
-	A hyphen at the end of a command format description, command line, or code line indicates that the command or statement continues on the following line.
numbers	All numbers in text are assumed to be decimal unless otherwise noted. Nondecimal radixes—binary, octal, or hexadecimal—are explicitly indicated.

1
Preparing for HP BASIC Installation

Your distribution kit includes a letter titled *Read Before Installing or Using HP BASIC Version 1.6 for OpenVMS Alpha Systems*. This letter discusses important information that might not be included in this guide. You should read this letter now. You should also read the HP BASIC Release Notes before continuing with the installation. For information about accessing the Release Notes, see Chapter 2.

1.1 Registering Your Software License

Before you install and run HP BASIC Version 1.6 on a newly licensed node or an Open VMScluster environment, you must first register a License Product Authorization Key (License PAK) using the License Management Facility (LMF). The License PAK may be shipped along with the kit if you ordered the license and media together; otherwise, it is shipped separately to a location based on your license order. If you are installing HP BASIC as an update on a node or cluster already licensed for this software, you have already completed the License PAK registration requirements.

If you are installing prerequisite or optional software along with HP BASIC, review the PAK status and install the PAKs for any prerequisite or optional software before you install HP BASIC.

You must register and load your license for HP BASIC before you start the installation in order to run the Installation Verification Procedure (IVP) and use the software.

To register a license under the OpenVMS operating system, first log in to a privileged account. You then have a choice of two ways to perform the registration:

- Invoke the SYS$UPDATE:VMSLICENSE.COM procedure. When it prompts you for information, respond with data from your License PAK.
- At the DCL prompt, enter the LICENSE REGISTER command with the appropriate qualifiers that correspond to License PAK information.

If you plan to use HP BASIC on more than one node in an Open VMScluster environment, you will need to perform a license load on the other nodes after you complete this installation. See Section 3.2 for more information.

For complete information about using the LMF, see the *HP OpenVMS License Management Utility Manual*.

1.2 Required Hardware

For a complete list of required hardware and supported processors, see the HP BASIC Version 1.6 Software Product Description (SPD).

1.3 Required Operating System Components and Software

HP BASIC Version 1.6 for OpenVMS Alpha systems requires OpenVMS for Alpha Systems Version 6.2 to Version 8.2 (Version 7.1 to Version 8.2 with IEEE floating-point support).

The following optional software can be used with HP BASIC:

- Oracle CDD/Repository
- Language-Sensitive Editor
- Source Code Analyzer

1.4 Installation Procedure Requirements

This section describes the requirements for installing HP BASIC (process account quotas, system parameters, disk space, and so on).

1.5 VMSINSTAL Checks

VMSINSTAL checks:

- If the user is logged in to a privileged account
- If any other processes are running on the system
- If minimum account quotas are met

1.6 Account Privileges

To install HP BASIC, you must be logged in to an account that has SETPRV or at least the following privileges:

- CMKRNL
- WORLD
- SYSPRV

Note that VMSINSTAL turns off BYPASS privilege at the start of the installation.

Privileges required for product use are defined in Section 3.4.1.

1.7 Disk Space

HP BASIC requirements for free disk storage space are different during installation and after installation. The total blocks needed include Help, Starlet, and Motif files. Table 1–1 summarizes the storage requirements.

Table 1–1 Disk Space Requirements

Kit	Blocks During Installation	Blocks After Installation
HP BASIC Version 1.6	35400	28700
HP BASIC Translator Version 1.3	4400	4400
HP BASIC Translator RTL Version 1.3	20000	20000

To determine the number of free disk blocks on the target disk, enter the following command at the DCL prompt:

```
$ SHOW DEVICE device_name
```

1.8 Backing Up Your System Disk

At the beginning of the installation, VMSINSTAL asks if you have backed up your system disk. It is recommended that you do a system disk backup before installing any software.

Use the backup procedures that are established at your site. For details about performing a system disk backup, see the section on the Backup utility in the *HP OpenVMS System Manager's Manual*.

1.9 Standard System Maintenance Procedures

This section explains how to do various standard procedures:

- Check and set process account quotas
- Check system parameter values
- Change parameter values with the OpenVMS AUTOGEN command procedure
- Set dynamic parameter values with the OpenVMS System Generation utility (SYSGEN)

1.9.1 Checking and Setting Process Account Quotas

User account quotas are stored in the file SYSUAF.DAT. Use the OpenVMS Authorize utility (AUTHORIZE) to verify and change user account quotas. First set your directory to SYS$SYSTEM and then run AUTHORIZE:

```
$ SET DEFAULT SYS$SYSTEM
$ RUN AUTHORIZE
UAF>
```

At the UAF> prompt, enter the SHOW command with an account name to check a particular account. For example:

```
UAF> SHOW SMITH
```

To change a quota, enter the MODIFY command. The following example changes the FILLM quota for the SMITH account and then exits from the utility:

```
UAF> MODIFY SMITH /FILLM=50
UAF> EXIT
```

After you exit from the utility, the system displays messages indicating whether changes were made. Once the changes have been made, you must log out and log in again for the new quotas to take effect.

For more information about modifying account quotas, see the description of the Authorize utility in the OpenVMS System Management Subkit.

1.9.2 Checking System Parameter Values

To check the values of your system parameters, enter the following command at the DCL prompt to invoke the System Generation utility (SYSGEN):

```
$ RUN SYS$SYSTEM:SYSGEN
SYSGEN>
```

At the SYSGEN> prompt, enter the SHOW command to display the value of a system parameter. The following example displays the value for the WSMAX system parameter:

```
SYSGEN> SHOW WSMAX
```

After checking the parameters with the SHOW command, enter the EXIT command at the SYSGEN> prompt to return to DCL level.

1.9.3 Changing System Parameter Values with AUTOGEN

Use the AUTOGEN command procedure to change system parameters. AUTOGEN automatically adjusts values for parameters that are associated with the values you reset manually. To change system parameters with AUTOGEN, edit the following file:

```
SYS$SYSTEM:MODPARAMS.DAT
```

To change a parameter value listed in this file, delete the current value associated with that parameter and enter the new value.

To add a new parameter, add a line to the file that includes both the name of the parameter and its value. For example:

```
WSMAX = 8096
```

To modify incremental parameters such as free global pagelets and global sections, use ADD_. The following example increases the global page setting by 2000:

```
ADD_GBLPAGES = 2000
```

Note that when you set the page file quota, do not use a value that exceeds the amount of page file space available on the system.

After you make all your changes, exit from the editor and execute the AUTOGEN procedure to recalculate your system parameters. The following command recalculates your system parameters and reboots the system:

```
$ @SYS$UPDATE:AUTOGEN GETDATA REBOOT
```

When you specify REBOOT, AUTOGEN performs an automatic system shutdown and then reboots the system. Any users logged on to the system are immediately disconnected during the shutdown. The automatic reboot puts the new parameter values into effect.

The AUTOGEN utility automatically adjusts some of the SYSGEN parameters based on the consumption of resources since the last reboot. If you do not want to take advantage of this automatic adjustment, include the NOFEEDBACK qualifier on the AUTOGEN command line.

For more information about using AUTOGEN, see the OpenVMS System Management Subkit.

1.9.4 Setting Dynamic Parameter Values

Use the System Generation utility (SYSGEN) to set dynamic parameter values. Dynamic parameters changed with the SYSGEN WRITE ACTIVE command become active immediately without any need to reboot your system. Rebooting returns the dynamic parameter values to their previous settings.

After you change the dynamic parameter values, complete the installation before rebooting the system. After you finish with the installation, you can reset the dynamic parameters to their previous values or let them be reset automatically when you next reboot your system.

2
Installing HP BASIC

After you register and load the license PAK, the installation takes approximately 5 minutes, depending on your system configuration and the kit components chosen.

If you encounter any failures during installation, see Appendix C.

2.1 Installation Procedure

Mount the media.

To abort the installation procedure at any time, press Ctrl/Y. When you press Ctrl/Y, the installation procedure deletes all the files it has created up to that point and exits. You can then start the installation again.

When the system prompts you with a question during the installation procedure, the default answer is often listed in brackets ([]).

To install HP BASIC, perform the following steps:

1. **Log in to a privileged account and set your default device and directory to SYS$UPDATE.**

```
Username: SYSTEM
Password:

$ SET DEFAULT SYS$UPDATE
```

2. **Invoke VMSINSTAL.**

```
$ @VMSINSTAL saveset-name device-name option-list
```

VMSINSTAL is in the SYS$UPDATE directory. The elements that you specify when you invoke the VMSINSTAL command procedure are as follows:

saveset-name
The installation name for the component. For HP BASIC, enter the following installation name (*n* is the minor point release number):

```
BASIC01n
```

device-name
The name of the device on which you have mounted the media and the directory containing the HP BASIC save set. For example, DKA300: is the device name used in examples in this guide. The directory is [BASIC01*n*.KIT].

To specify the device name on the @VMSINSTAL command line, enter:

```
DKA300:[BASIC01n.KIT]
```

option-list
The word OPTIONS followed by one or more of the following option designators—A, G, L, N, R:

- Auto_answer option (A)

  Initially creates a file that contains your answers to VMSINSTAL questions and prompts. You can then use the option (and the answer file) to save time during a reinstallation (typically after upgrading your system).

- Get save-set option (G)

  Lets you store product save sets temporarily on a magnetic tape or in a disk directory.

- File log option (L)

  Logs all activity to the terminal during installation.

- Display or print the release notes (N)

  Indicates that you want to see the installation question on release notes. If you do not include the N option, VMSINSTAL does not ask you about the release notes. You should review the release notes before proceeding with the installation in case they contain additional information about the installation.

  If you are restarting the installation and have already reviewed the release notes, you do not need to specify the N option. (Even if you omit the N option when you invoke VMSINSTAL, the HP BASIC release notes are copied automatically to the SYS$HELP directory.)

- Alternate root option (R)

Lets you install the product to a system root other than that of the running system.

For detailed information on these software installation options, see the OpenVMS operating system documentation. If you specify more than one option, separate each option with a comma, such as:

```
OPTIONS A,N
```

The following example invokes VMSINSTAL to install HP BASIC and shows the system response. This example uses the OPTIONS N release note option.

```
$ @VMSINSTAL BASIC01n DKA300:[BASIC01n.KIT] OPTIONS N

      OpenVMS Software Product Installation Procedure V8.2

It is dd-mmm-yyyy at hh:mm.

Enter a question mark (?) at any time for help.
```

If you do not supply the product name, or the device name, VMSINSTAL prompts you for this information later in the installation procedure.

When you invoke VMSINSTAL, it checks whether you are logged in to a privileged account. It is recommended that you install software from the system manager's account with your default device and directory set to SYS$UPDATE.

VMSINSTAL then checks to determine whether any users are logged in to the system. If users are logged in, VMSINSTAL asks whether you want to continue the installation:

```
* Do you want to continue anyway [NO]?
```

If you want to continue, enter Y. If you want to stop the installation, press Return.

3. **Confirm system backup.**

```
* Are you satisfied with the backup of your system disk [YES]?
```

If you are satisfied with the backup of your system disk, press Return. Otherwise, enter N to discontinue the installation. After you back up your system disk, you can restart the installation.

If you omitted the device name on the VMSINSTAL command line, the following prompt appears:

```
* Where will the distribution volumes be mounted:
```

If this prompt appears, enter the name of the distribution (media) device and directory that contains the HP BASIC kit (save set). For example, if the media is contained on a CD–ROM located on unit DKA300:, enter DKA300:[BASIC01*n*.KIT] in reply to this question (where *n* is the minor version number).

If you omitted the product name on the VMSINSTAL command line, the following prompt appears:

```
Products:
```

Enter the kit name, BASIC01*n*.

If you did not choose an installation option at the options prompt on the VMSINSTAL command line, the following prompt appears and you can enter one of the installation options:

```
Enter installation options you wish to use (none): N
```

Depending on the type of device and whether the device is already mounted, the following prompt may appear:

```
Please mount the first volume of the set on DKA300:.
* Are you ready? YES
%MOUNT-I-MOUNTED, DKA300:  mounted
```

If you have not already done so, you should now insert the distribution volume on the device you specified when you invoked VMSINSTAL. The device name appears in the line preceding the question. VMSINSTAL then asks if you are ready to continue with the installation.

If you respond Y to indicate that you are ready, VMSINSTAL displays a message that the media containing HP BASIC has been mounted on the specified device and that the installation has begun.

If you entered the wrong device name when you invoked VMSINSTAL and need to restart the installation, enter N in response to the "Are you ready?" question. To stop the installation for other reasons, press Ctrl/Y.

4. **Verify the product being installed.**

```
 The following products will be processed:
   BASIC V1.n

         Beginning installation of BASIC V1.n  at hh:mm
 %VMSINSTAL-I-RESTORE, Restoring product saveset A...
```

The product name and version are displayed. The first save set (A) is restored to a subdirectory of SYS$UPDATE.

5. **Select a release notes option.**

```
Release notes included with this kit are always copied to SYS$HELP.

    Aditional Release Notes Options:

        1.  Display release notes
        2.  Print release notes
        3.  Both 1 and 2
        4.  None of the above

* Select option [2]:
```

If you specified OPTIONS N when you invoked VMSINSTAL or at the options prompt, you are now asked to choose one of the options for reviewing the release notes. All options copy the release notes to SYS$HELP.

If you select option 1, VMSINSTAL displays the release notes immediately on the console terminal. You can terminate the display at any time by pressing Ctrl/C.

If you select option 2, VMSINSTAL prompts you for the name of the print queue that you want to use. Either supply the name of the print queue that you want to use or press Return to send the file to the default output print device. For example:

```
* Queue name [SYS$PRINT]: CLUSTER_PRINT
```

If you select option 3, VMSINSTAL displays the release notes immediately on the console terminal and then prompts you for a queue name for the printed version.

If you select option 4, the installation procedure will only copy the release notes to the SYS$HELP directory.

Next, VMSINSTAL asks if you wish to continue the installation process.

```
* Do you want to continue the installation [NO]?
```

If you want to continue, enter Y. If you want to stop the installation, press Return. If you are continuing the installation, VMSINSTAL displays the following message:

```
%VMSINSTAL-I-RELMOVED, Product's release notes have been moved to SYS$HELP.
%VMSINSTAL-I-RELNOTMOV, A PostScript version of the release notes has been moved
 to SYS$HELP.

           HP BASIC V1.n Installation Procedure

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possession, use or copying.  Consistent with FAR 12.211 and 12.212,
Commercial Computer Software, Computer Software Documentation, and
Technical Data for Commercial Items are licensed to the U.S. Government
under vendor's standard commercial license.
```

The release notes are copied to the following files in the SYS$HELP directory:

```
BASIC01n.RELEASE_NOTES
BASIC01n_RELEASE_NOTES.PS
```

After the installation, you can enter the following command to view the location of the release notes through the Help facility:

```
$ HELP BASIC RELEASE_NOTES
```

6. **Select an installation option.**

   The installation procedure lets you select the components of the kit that you want to install. The choices are as follows:

```
There are six possible installation options. They are as follows:

1) Perform a complete installation of HP BASIC.

2) Install only OpenVMS Alpha system definitions text library (5-15 minutes).

3) Install only the Motif bindings and examples for BASIC.

4) Install only the HP BASIC language help library.

5) Obtain a copy of the HP BASIC message text for modification.

6) Install only the HP BASIC Translator.

* Which option do you want to use [1]:
```

If you specify option 1, which is the default, the installation continues.

Select the components you want to install by answering Y or N to the questions. If you want a more detailed description of any component, enter a question mark (?). After the explanation is displayed, you are prompted again for a response.

If you enter Y, the installation procedure installs the component.

7. **Install OpenVMS Alpha system definitions.**

```
* Do you want to install the OpenVMS Alpha system definitions [NO]?
```

This option generates a text library (SYS$LIBRARY:BASIC$STARLET.TLB) that contains OpenVMS Alpha system definitions. Depending on your processor and system load, creating this library takes approximately 5 to 15 minutes. The OpenVMS Alpha system definitions require 5000 blocks of disk space.

Note: Beginning with OpenVMS Version 8.2, the BASIC$STARLET.TLB text library is included with OpenVMS and does not need to be installed separately.

8. **Install Motif definitions.**

```
* Do you want to install the Motif definitions [YES]?
```

Answering YES to this option puts the HP BASIC version of the Motif definitions, DECW$MOTIF.BAS, into the SYS$LIBRARY directory. These definitions require 1500 blocks of disk space and contain the Constant, Record, and External declarations needed to do Motif programming. Examples are also put into the DECW$EXAMPLES area provided it exists. Note that if the DECW$EXAMPLES area does not exist, the default for this question is NO, and the examples are not provided.

9. **Install BASIC Help files.**

```
* Do you want to install the HP BASIC language HELP library [YES]?
```

The Help files describe how to invoke HP BASIC from the DCL command line and the BASIC language features. The Help files require 400 blocks of disk space. It is recommended that you install these files.

10. **Obtain the BASIC message file.**

```
* Do you want to copy the HP BASIC message file [NO]?
```

The BASIC message source file contains the text of the HP BASIC messages that may be copied for customization purposes. It is placed in SYS$UPDATE:BASIC$MSG.MSG. The message file requires 100 blocks of disk space. Normally you do not need to copy this file.

11. **Install the HP BASIC Translator.**

```
* Do you want to install the HP BASIC Translator [NO]?
```

The HP BASIC Translator assists in translating HP BASIC source programs into Visual BASIC programs. Information about the Translator is provided in separate HP BASIC Translator Release Notes. The Translator requires 4400 blocks of disk space.

If you elect to install the HP BASIC Translator, the following question is asked.

```
* Do you want a copy of the HP BASIC Translator RTL [NO]?
```

Answering YES to this option puts a copy of the HP BASIC Translator RTL file, DB2VB$DBTRTL_I.ZIP, into the SYS$LIBRARY directory. This file must be copied to and installed on the target Windows system (see Section 2.2 for information).

The file is also available from the Internet, which is the recommended source for this file. Because DB2VB$DBTRTL_I.ZIP is large (20000 blocks) and is not used on the OpenVMS system, direct downloading from the Internet to the Windows system is simpler. See Section 2.2 for the Internet location of this file.

12. **Purge files.**

```
* Do you want to purge files replaced by this installation [YES]?
```

The directories SYS$HELP, SYS$LIBRARY, SYS$MESSAGE, SYS$SYSTEM, SYS$TEST, and SYS$EXAMPLES may contain previous versions of HP BASIC files. These files are replaced with new files during the installation, but the previous files are not automatically purged. Purging is recommended. In response to the purging prompt, press Return or enter Y to purge the files, or enter N to keep them.

13. **Respond to license registration queries.**

HP BASIC supports the OpenVMS License Management Facility (LMF). The installation procedure displays license information about HP BASIC. It asks whether you have registered and loaded your Product Authorization Key (PAK) for each product. The following is an example of the information and the queries presented by the installation procedure:

```
Product:      BASIC
Producer:     DEC
Version:      1.n
Release Date: dd-mmm-yyyy

* Does this product have an authorization key registered and loaded?
```

If you have not registered and loaded your PAK, you must answer NO to this question. You have to register and load a PAK to successfully complete the installation (see Section 1.1). If you have not done so, you should stop the installation, register and load your PAK, and then restart the installation.

14. **Read informational messages.**

At this point, the installation procedure displays a number of informational messages that report on the progress of the installation. There are no further questions. If the installation procedure has been successful up to this point, VMSINSTAL moves the new or modified files to their target directories, updates help files, and updates DCL tables, if necessary.

```
%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target directories...
```

The SYS$HELP:HELPLIB.HLB and SYS$LIBRARY:DCLTABLES.EXE files are updated to include the new versions of the HP BASIC help text and the BASIC command-line definition.

Also, if you answered Y in response to the prompt that requests a file purge, previous versions of the HP BASIC files are now purged.

15. **Observe the IVP.**

    VMSINSTAL now places the IVP files into the directory SYS$TEST and invokes the IVP to verify that HP BASIC and/or the HP BASIC Translator were installed successfully.

    You can also run the IVPs independently, after HP BASIC and/or the HP BASIC Translator are installed, to verify that the software is available on your system. You might need to run the IVPs after a system failure to make sure that users can access HP BASIC and/or the HP BASIC Translator. You can do this by invoking either of the following command procedures:

    ```
    $ @SYS$TEST:BASIC$IVP.COM
    ```

    or

    ```
    $ @SYS$TEST:DB2VB$IVP.COM
    ```

    If HP BASIC was installed successfully, the IVP displays the following:

    ```
    %VMSINSTAL-I-IVPSUCCESS, HP BASIC V1.n Installation test PASSED

    The HP BASIC V1.n IVP has succeeded!
    ```

    If the HP BASIC Translator was installed successfully, the IVP displays the following:

    ```
    %VMSINSTAL-I-IVPSUCCESS, HP BASIC Translator V1.n Installation test PASSED

    The HP BASIC Translator V1.n IVP has succeeded!
    ```

16. **End the installation procedure.**

The end of the installation is indicated by the following message:

```
        Installation of BASIC V1.n completed at hh:mm

    Adding history entry in VMI$ROOT:{SYSUPD]VMSINSTAL.HISTORY

    Creating installation data file: VMI$ROOT:[SYSUPD]BASIC01n.VMI_DATA


        VMSINSTAL procedure done at hh:mm
```

Depending on whether you specified parameters on the VMSINSTAL command line, the `* Products:` prompt or the DCL prompt `($)` may appear. If the `* Products:` prompt appears, you can return to the DCL prompt `($)` by pressing Ctrl/Z.

VMSINSTAL deletes or changes entries in the process symbol tables during the installation. Therefore, if you are going to continue using the installation account (such as SYSTEM) and you want to restore these symbols, you should log out and log in again.

2.2 Installing the HP BASIC Translator Run–Time Library

The home page for the HP BASIC Translator for OpenVMS Systems is at:

`http://h71000.www7.hp.com/commercial/basic/db2vb_index.html`

The Run-Time Library for the HP BASIC Translator is available as a .ZIP file named DBTRTL_I.ZIP. See this location:

`http://h71000.www7.hp.com/commercial/basic/db2promo_readme.html`

It is also available in the compiler kit at SYS$LIBRARY:DB2VB$DBTRTL_I.ZIP. You must install the Run-Time Library on every Windows system that runs translated applications.

Follow these steps to install the Run-Time Library:

1. Create an empty folder. The installation requires approximately six megabytes of disk space (four megabytes on the device where it is unpacked and two megabytes on the system device).
2. Make a copy of the Run–Time Library .ZIP file available either on some removable media or via a network connection.
3. Copy DBTRTL_I.ZIP or DB2VB$DBTRTL_I.ZIP as applicable to the empty folder (rename DB2VB$DBTRTL_I.ZIP to DBTRTL_I.ZIP).
4. Unpack the .ZIP file using an Unzip utility.

5. Run SETUP.EXE and follow the instructions.

2.3 Installing the HP BASIC Translator RMS Server

Two images are required to provide the server side of the RMS support provided by the HP BASIC Translator RTL. These are:

- DB2VB$SPAWNER.EXE
- DB2VB$RMS_SERVER.EXE

They have been placed in SYS$SYSTEM by the installation procedure. Also placed in SYS$SYSTEM during installation of the HP BASIC Translator are two sets of corresponding images, one for the VAX platform and one for the Alpha platform. They are named as follows:

VAX	ALPHA
DB2VB$SPAWNER.EXE_VAX	DB2VB$SPAWNER.EXE_ALPHA
DB2VB$RMS_SERVER.EXE_VAX	DB2VB$RMS_SERVER.EXE_ALPHA

To access RMS files from a translated application, the appropriate pair of server images must be copied and renamed to the server platform. For example, if the server platform is an Alpha machine, then the files DB2VB$SPAWNER.EXE_ALPHA and DB2VB$RMS_SERVER.EXE_ALPHA must be copied to the Alpha platform and renamed to have the .EXE file type, as follows:

```
$ COPY SYS$SYSTEM:DB2VB$SPAWNER.EXE_ALPHA alpha_node::SYS$SYSTEM:DB2VB$SPAWNER.EXE
$ COPY SYS$SYSTEM:DB2VB$RMS_SERVER.EXE_ALPHA alpha_node::SYS$SYSTEM:DB2VB$RMS_SERVER.EXE
```

3
After Installing HP BASIC

After HP BASIC is installed, it can be invoked by all users with the BASIC command.

The installation procedure modifies the DCL command table so that the BASIC command is recognized and processed. However, the previous command table is still in effect for those users who are currently logged in. All logged-in users who want to use the BASIC command must log out and log in again, or use the following DCL command:

```
$ SET COMMAND /TABLES=SYS$LIBRARY:DCLTABLES
```

You can perform the following tasks after HP BASIC is installed:

- Running the Installation Verification Procedure (IVP) separately
- Making the product usable in an Open VMScluster environment

3.1 Running the Installation Verification Procedure Separately

You usually run the Installation Verification Procedure (IVP) during installation. If you have system problems and want to run the IVP separately to ensure the integrity of installed files, use the following command:

```
$ @SYS$TEST:BASIC$IVP.COM
```

or

```
$ @SYS$TEST:DB2VB$IVP.COM
```

as appropriate.

3.2 Making HP BASIC Usable in an Open VMScluster Environment

If you want to run HP BASIC on multiple nodes of an Open VMScluster environment, first check to see that you have the appropriate software license (see Section 1.1). Then, perform the following steps after you install HP BASIC:

1. Enter the LICENSE LOAD command to activate the license on each node on which HP BASIC is to be executed.
2. Use the OpenVMS System Management (SYSMAN) utility to execute a set of commands on all cluster nodes, whether or not the nodes are licensed to use HP BASIC; failure to do so may cause unexpected errors for users.

Note

If you are using a dual-architecture heterogeneous cluster, before executing these commands, make sure the appropriate logical names have been set to define the scope of the SYSMAN DO commands. For more information, see the OpenVMS system management documentation.

While logged in as SYSTEM or as another user name that has the SETPRV privilege or the CMKRNL and SYSPRV privileges, use SYSMAN to update the version of DCLTABLES.EXE available, as follows:

```
$ RUN SYS$SYSTEM:SYSMAN
SYSMAN> SET ENVIRONMENT/CLUSTER
%SYSMAN-I-ENV, current command environment:
        Clusterwide on local cluster
        Username SYSTEM       will be used on nonlocal nodes
SYSMAN> DO INSTALL REPLACE SYS$LIBRARY:DCLTABLES.EXE
%SYSMAN-I-OUTPUT, command execution on node NODE1
%SYSMAN-I-OUTPUT, command execution on node NODE2
```

SYSMAN will cause each DO command to be executed on all nodes of the local cluster.

3. If HP BASIC is installed as a known image, then do the following:

```
SYSMAN> DO INSTALL REPLACE SYS$SYSTEM:BASIC.EXE
%SYSMAN-I-OUTPUT, command execution on node NODE1
%SYSMAN-I-OUTPUT, command execution on node NODE2
```

4. If the HP BASIC message file is installed as a known image, then do the following:

```
SYSMAN> DO INSTALL REPLACE SYS$MESSAGE:BASIC$MSG.EXE
%SYSMAN-I-OUTPUT, command execution on node NODE1
%SYSMAN-I-OUTPUT, command execution on node NODE2
```

5. Finally, exit from SYSMAN:

```
SYSMAN> EXIT
$
```

3.3 Making the HP BASIC Translator Usable in an OpenVMS Cluster Environment

If you want to run the HP BASIC Translator on multiple nodes of an OpenVMS Cluster environment, first check to see that you have the appropriate software license (see Section 1.1). The HP BASIC Translator uses the same license as HP BASIC. Then, perform the following steps after you install the HP BASIC Translator:

1. Enter the LICENSE LOAD command to activate the license on each node on which the HP BASIC Translator is to be executed.
2. Use the OpenVMS System Management utility (SYSMAN) to execute a set of commands on all cluster nodes, whether or not the nodes are licensed to use the HP BASIC Translator. Failure to do so may cause unexpected errors for users.

Note

If you are using a mixed-architecture (VAX and Alpha systems), heterogeneous cluster, before executing these commands, make sure the appropriate logical names have been set to define the scope of the SYSMAN DO commands. For more information, see the OpenVMS system management documentation.

While logged in as SYSTEM or as another user name that has the SETPRV privilege or the CMKRNL and SYSPRV privileges, use SYSMAN to update the version of DCLTABLES.EXE available as follows:

```
$ RUN SYS$SYSTEM:SYSMAN
SYSMAN> SET ENVIRONMENT/CLUSTER
%SYSMAN-I-ENV, current command environment:
        Clusterwide on local cluster
        Username SYSTEM       will be used on nonlocal nodes
SYSMAN> DO INSTALL REPLACE SYS$LIBRARY:DCLTABLES.EXE
%SYSMAN-I-OUTPUT, command execution on node NODE1
%SYSMAN-I-OUTPUT, command execution on node NODE2
```

SYSMAN will cause each DO command to be executed on all nodes of the local cluster.

3. If the HP BASIC Translator is installed as a known image, then enter the following:

```
SYSMAN> DO INSTALL REPLACE SYS$SYSTEM:DB2VB.EXE
%SYSMAN-I-OUTPUT, command execution on node NODE1
%SYSMAN-I-OUTPUT, command execution on node NODE2
```

4. If the HP BASIC Translator message file is installed as a known image, then enter the following:

```
SYSMAN> DO INSTALL REPLACE SYS$MESSAGE:DB2VB$MSG.EXE
%SYSMAN-I-OUTPUT, command execution on node NODE1
%SYSMAN-I-OUTPUT, command execution on node NODE2
```

5. Finally, exit from SYSMAN:

```
SYSMAN> EXIT
$
```

3.4 Setting User Account Requirements

To work with HP BASIC, user accounts on your system must have certain privileges.

3.4.1 User Account Privileges

To use HP BASIC, each account must have at least the TMPMBX and NETMBX privileges. Use the OpenVMS Authorize utility to determine whether users have the privileges they require.

A
Sample Installation

This appendix provides a sample listing for the HP BASIC full development kit.

Example A–1 Sample HP BASIC Installation

```
$ @sys$update:vmsinstal basic016 DKA200:[BASIC.KIT] options n

        OpenVMS AXP Software Product Installation Procedure V7.3-1

It is 1-APR-2005 at 10:40.

Enter a question mark (?) at any time for help.

%VMSINSTAL-W-ACTIVE, The following processes are still active:
       TCPIP$FTP_1
       _RTA2:
* Do you want to continue anyway [NO]? y
* Are you satisfied with the backup of your system disk [YES]?

The following products will be processed:

  BASIC V1.6

        Beginning installation of BASIC V1.6 at 10:40

%VMSINSTAL-I-RESTORE, Restoring product save set A ...

    Release notes included with this kit are always copied to SYS$HELP.

    Additional Release Notes Options:

        1.  Display release notes
        2.  Print release notes
        3.  Both 1 and 2
        4.  None of the above

* Select option [2]: 4
```

(continued on next page)

Example A–1 (Cont.) Sample HP BASIC Installation

```
* Do you want to continue the installation [NO]? y
%VMSINSTAL-I-RELMOVED, Product's release notes have been moved to SYS$HELP.
%VMSINSTAL-I-RELNOTMOV, A PostScript version of the release notes has been moved to SYS$HELP.

          HP BASIC V1.6 Installation Procedure

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   possession, use or copying.  Consistent with FAR 12.211 and 12.212,
   Commercial Computer Software, Computer Software Documentation, and
   Technical Data for Commercial Items are licensed to the U.S. Government
   under vendor's standard commercial license.


   There are six possible installation options. They are as follows:

   1) Perform a complete installation of HP BASIC.

   2) Install only OpenVMS Alpha system definitions text library (5-15 minutes).

   3) Install only the Motif bindings and examples for BASIC.

   4) Install only the HP BASIC language help library.

   5) Obtain a copy of the HP BASIC message text for modification.

   6) Install only the HP BASIC Translator.

* Which option do you want to use [1]:

* Do you want to install the OpenVMS Alpha system definitions [NO]? y
* Do you want to install the Motif definitions [YES]?
* Do you want to install the HP BASIC language HELP library [YES]?
* Do you want to copy the HP BASIC message file [NO]? y
* Do you want to install the HP BASIC Translator [NO]? y
* Do you want a copy of the HP BASIC Translator RTL [NO]? y

* Do you want to purge files replaced by this installation [YES]?

        Product:      BASIC
        Producer:     DEC
        Version:      1.6
        Release Date: 11-NOV-2004

* Does this product have an authorization key registered and loaded? y

   No further questions will be asked.  The installation will take
   5 - 15 more minutes depending upon options chosen, configuration,
   and system activity.
```

(continued on next page)

Example A–1 (Cont.) Sample HP BASIC Installation

```
%VMSINSTAL-I-RESTORE, Restoring product save set B ...
%VMSINSTAL-I-SYSDIR, This product creates system disk directory  VMI$ROOT:[SYSTEST.BASIC].
%VMSINSTAL-I-INSHELP, Installing HP BASIC environment emulator
%VMSINSTAL-I-SYSDIR, This product creates system disk directory  VMI$ROOT:[SYSHLP.EXAMPLES.BASIC].
%VMSINSTAL-I-RESTORE, Restoring product save set D ...
%VMSINSTAL-I-INSSTARLET, Installing HP BASIC system definitions
%VMSINSTAL-I-INSSTARLET, may require up to approximately 15 minutes
%VMSINSTAL-I-RESTORE, Restoring product save set E ...
%VMSINSTAL-I-INSMOTIG, Installing Motif definitions and examples
%VMSINSTAL-I-RESTORE, Restoring product save set F ...
%VMSINSTAL-I-INSHELP, Installing HP BASIC language Help file
%VMSINSTAL-I-RESTORE, Restoring product save set G ...
%VMSINSTAL-I-MSGLOC, BASIC$MSG.MSG will be placed in [SYSUPD]
%VMSINSTAL-I-RELNOTMOV, Text and PostScript versions of the HP BASIC Translator
release notes have been moved to SYS$HELP.
%VMSINSTAL-I-RESTORE, Restoring product save set H ...
%VMSINSTAL-I-SYSDIR, This product creates system disk directory  VMI$ROOT:[SYSTEST.DB2VB].
%VMSINSTAL-I-RESTORE, Restoring product save set I ...
%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target directories...

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  possession, use or copying.  Consistent with FAR 12.211 and 12.212,
  Commercial Computer Software, Computer Software Documentation, and
  Technical Data for Commercial Items are licensed to the U.S. Government
  under vendor's standard commercial license.

%VMSINSTAL-I-DOIVP, Executing the HP BASIC V1.6 Installation Verification Procedure

%VMSINSTAL-I-IVPSUCCESS, HP BASIC V1.6 Installation test PASSED

The HP BASIC V1.6 IVP has succeeded!


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  under vendor's standard commercial license.

%VMSINSTAL-I-DOIVP, Executing the HP BASIC Translator V1.3 Installation Verification Procedure

%VMSINSTAL-I-IVPSUCCESS, HP BASIC Translator V1.3 Installation test PASSED
```

(continued on next page)

Example A–1 (Cont.) Sample HP BASIC Installation

```
The HP BASIC Translator V1.3 IVP has succeeded!

        Installation of BASIC V1.6 completed at 10:50
    Adding history entry in VMI$ROOT:[SYSUPD]VMSINSTAL.HISTORY
    Creating installation data file: VMI$ROOT:[SYSUPD]BASIC016.VMI_DATA

        VMSINSTAL procedure done at 10:50

$
```

B

Files Installed on Your System

B.1 Installed Files

The HP BASIC installation procedure installs a number of files on your system. The first list shows the files installed during installation. The second list shows the files modified by the installation. Note that this list assumes that all options were selected.

Files Provided by the Installation

```
SYS$COMMON:[SYSEXE]BASIC.EXE
SYS$COMMON:[SYSEXE]DB2VB.EXE
SYS$COMMON:[SYSEXE]DB2VB$RMS_SERVER.EXE
SYS$COMMON:[SYSEXE]DB2VB$RMS_SERVER.EXE_ALPHA
SYS$COMMON:[SYSEXE]DB2VB$RMS_SERVER.EXE_VAX
SYS$COMMON:[SYSEXE]DB2VB$SPAWNER.EXE
SYS$COMMON:[SYSEXE]DB2VB$SPAWNER.EXE_ALPHA
SYS$COMMON:[SYSEXE]DB2VB$SPAWNER.EXE_VAX
SYS$COMMON:[SYSHLP.EXAMPLES.BASIC]BASIC$ENV.TPU
SYS$COMMON:[SYSHLP.EXAMPLES.DECW]BASIC$HELLOMOTIF.BAS
SYS$COMMON:[SYSHLP.EXAMPLES.DECW]BASIC$HELLOMOTIF.UIL
SYS$COMMON:[SYSHLP.EXAMPLES.DECW]BASIC$MOTIFBURGER.BAS
SYS$COMMON:[SYSHLP.EXAMPLES.DECW]BASIC$MOTIFBURGER.UIL
SYS$COMMON:[SYSHLP.EXAMPLES.DECW]BASIC$MOTIFBURGER_DEFS.BAS
SYS$COMMON:[SYSHLP]BASIC016.RELEASE_NOTES
SYS$COMMON:[SYSHLP]BASIC016_RELEASE_NOTES.PS
SYS$COMMON:[SYSHLP]DB2VB013.RELEASE_NOTES
SYS$COMMON:[SYSHLP]DB2VB013_RELEASE_NOTES.PS
SYS$COMMON:[SYSHLP]BASICHELP.HLB
SYS$COMMON:[SYSLIB]DEC$BASRTL.EXE
SYS$COMMON:[SYSLIB]BASIC$STARLET.TLB
SYS$COMMON:[SYSLIB]DECW$MOTIF.BAS
SYS$COMMON:[SYSLIB]DECW$MOTIF_DEFS.BAS
SYS$COMMON:[SYSLIB]DB2VB$LIBRARY.TLB
SYS$COMMON:[SYSLIB]DB2VB$DBTRTL_I.ZIP
SYS$COMMON:[SYSMSG]BASIC$MSG.EXE
SYS$COMMON:[SYSMSG]DB2VB$MSG.EXE
SYS$COMMON:[SYSTEST]BASIC$IVP.COM
SYS$COMMON:[SYSTEST.BASIC]BASIC$IVP.BAS
SYS$COMMON:[SYSTEST]DB2VB$IVP.COM
```

```
SYS$COMMON:[SYSTEST.DB2VB]DB2VB$IVP.BAS
SYS$COMMON:[SYSTEST.DB2VB]DB2VB$IVP.BMK
SYS$COMMON:[SYSTEST.DB2VB]DB2VB$IVP.EXE
SYS$COMMON:[SYSTEST.DB2VB]DB2VB$IVP.VBP_BMK
SYS$COMMON:[SYSTEST.DB2VB]DB2VB$IVP.VPD_BMK
SYS$COMMON:[SYSTEST.DB2VB]DB2VB$IVP_GBLS.BMK
SYS$COMMON:[SYSUPD]BASIC$MSG.MSG
```

Files Modified by the Installation

```
SYS$COMMON:[SYSHLP]HELPLIB.HLB
SYS$COMMON:[SYSLIB]DCLTABLES.EXE
SYS$COMMON:[SYSLIB]IMAGELIB.OLB
```

Files Provisionally Provided by the Installation

```
SYS$COMMON:[SYSLIB]BASIC$STARLET.TLB
SYS$COMMON:[SYSLIB]DEC$BASRTL.EXE
```

C
Recovering from Errors

This appendix provides information to help you deal with failures or errors that might occur during product installation or product use.

C.1 Failures During Product Installation

If VMSINSTAL detects any problems during the installation, it notifies you and asks if you want to continue the installation. In some instances, you can enter Y to continue. To stop the installation process and correct the situation, enter N or press Return. Then correct the problem and restart the installation.

If errors occur during the installation itself or when the Installation Verification Procedure (IVP) is running, VMSINSTAL displays failure messages. If the installation fails, you see the following message:

```
%VMSINSTAL-E-INSFAIL, The installation of HP BASIC V1.6 has failed.
```

If the IVP fails, you see these messages:

```
%VMSINSTAL-E-IVPFAIL, HP BASIC Installation test FAILED.

The HP BASIC V1.6 IVP has failed!
```

Errors can occur during the installation if any of the following conditions exist:

- The operating system version is incorrect.
- A prerequisite software version is incorrect.
- Quotas necessary for successful installation are insufficient.
- System parameter values for successful installation are insufficient.
- The OpenVMS help library is currently in use.
- The product license has not been registered and loaded.

For descriptions of the error messages generated by these conditions, see the OpenVMS documentation on system messages, recovery procedures, and OpenVMS software installation. If you are notified that any of these conditions exist, you should take the appropriate action as described in the message.

For information about installation requirements, see Chapter 1.

C.2 Failures During Product Use

If you encounter a problem while using HP BASIC, and your software contract or warranty agreement entitles you to telephone support, call HP.

Review the Software Product Description (SPD) and Warranty Addendum for an explanation of warranty. If you encounter a problem during the warranty period, report the problem as previously indicated or follow alternate instructions provided by HP for reporting SPD nonconformance problems.