VSI BASIC for OpenVMS I64 Installation Guide

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Preface

This guide describes how to install VSI BASIC on the OpenVMS I64 operating system.

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

1. About VSI

VMS Software, Inc. (VSI) is an independent software company licensed by Hewlett Packard Enterprise to develop and support the OpenVMS operating system.

2. Intended Audience

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

3. Document Structure

This guide contains the following chapters and appendixes:

- Chapter 1 describes the preparations necessary for installing VSI BASIC.

- Chapter 2 describes how to install VSI BASIC.

- Chapter 3 describes post-installation tasks.

- Appendix A shows a sample VSI BASIC installation.

- Appendix B lists the files installed on your system during the VSI BASIC installation.

- Appendix C describes how to recover from failures and errors that may occur during installation and product use.

4. Related Documents

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

- *The VSI BASIC for OpenVMS User Manual*

- *The VSI BASIC for OpenVMS Reference Manual*

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

  ```
  SYS$HELP:BASIC01n.RELEASE_NOTES
  ```

5. OpenVMS Documentation

The full VSI OpenVMS documentation set can be found on the VMS Software Documentation webpage at https://docs.vmssoftware.com.

6. VSI Encourages Your Comments

You may send comments or suggestions regarding this manual or any VSI document by sending electronic mail to the following Internet address: `<docinfo@vmssoftware.com>`. Users who have VSI OpenVMS support contracts through VSI can contact `<support@vmssoftware.com>` for help with this product.

7. Conventions

The following product names may appear in this manual:

- OpenVMS Industry Standard 64 for Integrity Servers

- OpenVMS I64

- I64

All three names — the longer form and the two abbreviated forms — refer to the version of the OpenVMS operating system that runs on the Intel ® Itanium ® architecture.

The following typographic conventions may be used in this manual:

Convention	Meaning
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.
. . .	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.

Convention	Meaning
{ }	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 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.

Chapter 1. Preparing for VSI BASIC Installation

Your distribution kit includes a letter titled *Read Before Installing or Using VSI BASIC for OpenVMS I64 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 VSI 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 VSI BASIC 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 VSI 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 VSI BASIC, review the PAK status and install the PAKs for any prerequisite or optional software before you install VSI BASIC.

You must register and load your license for VSI 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 VSI 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 *VSI OpenVMS License Management Utility Manual*.

1.2. Required Hardware

For a complete list of required hardware and supported processors, see the *VSI BASIC for OpenVMS Software Product Description* (SPD).

1.3. Required Operating System Components and Software

VSI BASIC for OpenVMS I64 systems requires VSI OpenVMS I64 V8.4-1H1.

The following optional software can be used with VSI BASIC:

- Oracle CDD/Repository

- Language-Sensitive Editor

- Source Code Analyzer

1.4. Installation Procedure Requirements

This section describes the requirements for installing VSI 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 VSI 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 3.3.1.

1.7. System Parameters

Table 1.1 lists the minimum required system parameter values for the installation.

Table 1.1. Minimum Required System Parameter Values

System Parameter	Minimum Value
Contiguous free global pagelets[1]	7000
Global sections[1]	3

[1]These values represent the number of free global pagelets and global sections required for the installation, not the total number you need to run your system and other software.

1.7.1. Disk Space

VSI 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 1.2 summarizes the storage requirements.

Table 1.2. Disk Space Requirements

Kit	Blocks During Installation	Blocks After Installation
VSI BASIC	53,500 blocks	44,900 blocks

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 *VSI 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

- Calculate values for global pagelets and global sections

- 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.

1.10. 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.

1.11. Calculating the Values for Global Pagelets and Global Sections

To install and run VSI BASIC, you must have sufficient free global pagelets and global sections. You must first find out how many free global pagelets and sections you have on your system. Then use AUTOGEN if you need to increase the global pagelets and global sections system parameters.

Enter the following DCL command to determine the number of global pagelets required by SYS$LIBRARY:DCLTABLES.EXE:

```
$ DIR/SIZE SYS$LIBRARY:DCLTABLES.EXE
```

This command returns the size (in blocks) of SYS$LIBRARY:DCLTABLES.EXE. As an approximation, use this figure as the number of global pagelets for the file.

You can use the WRITE command with the F$GETSYI lexical function to find the number of free global pagelets and global sections. The following example shows how to get this information at your terminal (the default for SYS$OUTPUT):

```
$ WRITE SYS$OUTPUT F$GETSYI("CONTIG_GBLPAGES")
15848
$ WRITE SYS$OUTPUT F$GETSYI("FREE_GBLSECTS")
24
```

If the values displayed by the system are greater than the values in Table 1.1, you do not need to increase the values for these parameters. If the value of free global pagelets or global sections is less than the value in Table 1.1, you must increase the system parameter setting.

Section 1.12 describes the procedures for increasing these values using AUTOGEN.

1.12. 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.

1.13. 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.

The dynamic parameter values for VSI BASIC are listed in Table 1.1.

If the dynamic parameter values on your system are less than the values in Table 1.1, use the following series of commands to change the values. This example changes the value of CLISYMTBL:

```
$ RUN SYS$SYSTEM:SYSGEN
SYSGEN> USE ACTIVE
SYSGEN> SET CLISYMTBL new_value
SYSGEN> WRITE ACTIVE
SYSGEN> EXIT
```

Chapter 2. Installing VSI 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 VSI 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 VSI 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 VSI BASIC save set. For example, DKA300: is the device name used in examples in this guide. The directory is [BASIC01n.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 VSI 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 VSI 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 E8.2

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 VSI 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 VSI 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.

     VSI BASIC V1.n Installation Procedure

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Confidential computer software.  Valid license from HP required for
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 four possible installation options. They are as follows:
        1) Perform a complete installation of VSI BASIC.
        2) Install only the Motif bindings and examples for BASIC.
        3) Install only the VSI BASIC language help library.
        4) Obtain a copy of the VSI BASIC message text for
           modification.
      * 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 Motif definitions.

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

    Answering YES to this option puts the VSI BASIC version of the Motif definitions, DECW $MOTIF.BAS, into the SYS$LIBRARY directory. These definitions require 15000 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.

8. Install BASIC Help files.

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

    The Help files describe how to invoke VSI 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.

9. Obtain the BASIC message file.

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

    The BASIC message source file contains the text of the VSI 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.

10. 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 VSI 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.

11. Respond to license registration queries.

VSI BASIC supports the OpenVMS License Management Facility (LMF). The installation procedure displays license information about VSI 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.

12. 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 VSI 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 VSI BASIC files are now purged.

13. Observe the IVP.

VMSINSTAL now places the IVP files into the directory SYS$TEST and invokes the IVP to verify that VSI BASIC was installed successfully. You can also run the IVP independently, after VSI BASIC is installed, to verify that the software is available on your system. You might need to run the IVP after a system failure to make sure that users can access VSI BASIC. You can do this by invoking the following command procedure:

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

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

```
%VMSINSTAL-I-IVPSUCCESS, VSI BASIC V1.n Installation test
 PASSED
The VSI BASIC V1.n IVP has succeeded!
```

14. 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.

Chapter 3. After Installing VSI BASIC

After VSI 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 VSI 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
```

3.2. Making VSI BASIC Usable in an Open VMScluster Environment

If you want to run VSI 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 VSI BASIC:

1. Enter the LICENSE LOAD command to activate the license on each node on which VSI 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 VSI 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 VSI 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 VSI 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. Setting User Account Requirements

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

3.3.1. User Account Privileges

To use VSI 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.

Appendix A. Sample Installation

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

Example A.1. Sample VSI BASIC Installation

```
* 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 purge files replaced by this installation [YES]?


        Product:       BASIC
        Producer:      DEC
        Version:       1.n
        Release Date: 1-FEB-2004


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

  No further questions will be asked.  The installation will take
  up to approximately 5 more minutes depending upon options chosen,
  configuration, and system activity.

%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-INSSTARLET, Correct version of BASIC$STARLET.TLB already
 present
%VMSINSTAL-I-RESTORE, Restoring product save set E ...
%VMSINSTAL-I-INSMOTIG, Installing Motif definitions and examples
%VMSINSTAL-I-RESTORE, Restoring product save set F ...
%VMSINSTAL-I-INSHELP, Installing HP BASIC language Help file
%VMSINSTAL-I-RESTORE, Restoring product save set G ...
%VMSINSTAL-I-MSGLOC, BASIC$MSG.MSG will be placed in [SYSUPD]
%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target
 directories...


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  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.n IVP has succeeded!


        Installation of BASIC V1.n completed at 09:54

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

    Creating installation data file: VMI$ROOT:[SYSUPD]BASIC016.VMI_DATA

        VMSINSTAL procedure done at 09:54
$
```

Appendix B. Files Installed on Your System

B.1. Installed Files

The VSI 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:[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]BASICHELP.HLB
SYS$COMMON:[SYSLIB]DECW$MOTIF.BAS
SYS$COMMON:[SYSLIB]DECW$MOTIF_DEFS.BAS
SYS$COMMON:[SYSMSG]BASIC$MSG.EXE
SYS$COMMON:[SYSTEST.BASIC]BASIC$IVP.BAS
SYS$COMMON:[SYSTEST]BASIC$IVP.COM
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
```

Appendix 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.n has failed.
```

If the IVP fails, you see these messages:

```
%VMSINSTAL-E-IVPFAIL, HP BASIC Installation test FAILED.
The HP BASIC V1.n 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 VSI BASIC, and your software contract or warranty agreement entitles you to telephone support, call VSI.

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 VSI for reporting SPD nonconformance problems.