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VMS Installation

This chapter describes how to install DEC SoftPC for VMS. File protection for VMS is discussed in <REFERENCE>(protection).

Definitions: Real floppy and SlavePC *A real floppy is a floppy disk on your Digital workstation. In contrast, SlavePC is software that allows you to use a floppy disk on a real PC connected to your Digital system. Either configuration allows you to load and unload software.*

Note *During the installation you are asked if you wish to use a real floppy device and for the name of this device. You need this device name before starting installation. To find out the name, enter:*

```
$ SHO DEV D  Return
```

You are asked about SlavePC. Then you are asked to specify which communications port is being used to connect to the real PC. You need this communications port name before starting the installation. To find out the communications port, consult the user's manual for your system for more information.

Preparing to Install SoftPC Under VMS

Your bill of materials (BOM) and indented bills report (BIL) specify the number and contents of your media. Be sure to check the contents of your kit against this information. If your kit is damaged or if you find that parts of it are missing, call your Digital sales representative.

Distribution media must be mounted in numerical order. The installation procedure prompts you to mount the volumes. For more information on how to mount distribution media, see your processor-specific installation/operations guide, which also details several options to the installation procedure.

Accessing the Online Release Notes

SoftPC provides online release notes. The prompt to display or print the release notes during the installation appears in step 5 of the installation procedure when you invoke VMSINSTAL with the OPTIONS N parameter.

To obtain the release notes after the installation, type or print the file SYS$HELP:SOFTPC022.RELEASE_NOTES. After the installation, type the following command:

```
$ TYPE SYS$HELP:SOFTPC022.RELEASE_NOTES  Return
```

Installation Procedure Requirements

The installation takes 10 to 20 minutes, depending on the type of media and your system configuration. Before installing SoftPC, you must have the following privileges and resources:

- VMS 5.3 or 5.4.
- SETPRV privileges, or CMKRNL, WORLD, and SYSPRV privileges.
- A minimum of 7,500 blocks of free disk space during installation; approximately 6,400 blocks are used after installation.
- An additional 21,000 blocks are required for each 10-Mbyte hard disk. (There is usually one 10-Mbyte hard disk for each user.)
- A minimum of 10 free global sections at installation.

Note *You must ensure that your system has the necessary global page and global section SYSGEN quotas for the installation. Failure to do so could corrupt the DCL tables.*

To determine the number of available global pages on your system, invoke the VMS Install Utility:

```
$ INSTALL :== $INSTALL/COMMAND_MODE  Return
$ INSTALL  Return
```

Then enter the following command:

```
INSTALL>  LIST/GLOBAL/SUMMARY  Return
        Summary of Local Memory Global Sections

189 Global Sections Used,  11964/18036 Global Pages Used/Unused

INSTALL>  EXIT  Return
```

The system displays a summary of the number of global sections used. Write down the number of global sections used. To exit from the VMS Install Utility, type EXIT.

To determine the number of available global sections, invoke SYSGEN:

```
$ RUN SYS$SYSTEM:SYSGEN Return

SYSGEN> SHOW GBLSECTIONS Return

SYSGEN> EXIT Return
```

The number displayed under current used is the number of global sections in use. Compare this number to the number of global sections in use displayed by the VMS Install Utility.

SoftPC requires 10 global sections.

Therefore, if the number of global sections used plus 10 exceeds the maximum number of global sections, you must increase the number of available global sections before you can install SoftPC.

To increase the number:

1. Use SYSGEN to increase the GBLSECTIONS system parameter.
2. Edit the file SYS$SYSTEM:MODPARAMS.DAT.
3. Invoke the SYS$UPDATE:AUTOGEN.COM procedure.

For more information on the AUTOGEN.COM procedure, see your processor-specific installation/operations guide.

User Account Quotas and Privileges

To use SoftPC, each account must have TMPMBX and NETMBX privileges and the following requirements:

- Working set quota (WSquo) 2,048 (minimum)
- Working set extent (WSextent) 4,096 (minimum)
- Paging file quota (Pgflquota) 20,000 pages (minimum)
- Working set size (WSdef) 1,200 pages (minimum)

Use the VMS Authorize Utility (AUTHORIZE) to compare the current values of these quotas with the requirements for SoftPC. For example, the account used in the following example is the SYSTEM account:

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

The following example shows how to change the values of these quotas:

```
$  SET DEFAULT SYS$SYSTEM  Return
$  RUN AUTHORIZE  Return
UAF>  MODIFY SYSTEM/WSQUO= 2048 Return
UAF>  MODIFY SYSTEM/WSEXTENT=4096  Return
UAF>  MODIFY SYSTEM/PGFLQUOTA=20,000  Return
UAF>  MODIFY SYSTEM/WSDEF=1200  Return
```

VMS License Management Facility

The VMS License Management Facility (LMF) is available with Version 5.0 of the VMS operating system. If you are installing SoftPC on a VMS system, you must register your SoftPC software license.

The license registration information you need is contained in the Product Authorization Key (PAK) that is shipped with SoftPC. The PAK is a paper certificate that contains information about the license you have to run a particular piece of software.

During the installation, you are asked if you have registered the SoftPC license and loaded the appropriate authorization key. You must register and load your license for SoftPC *before* you start the installation in order to use the software.

To register a license under VMS, first log in to the system manager's account, SYSTEM. 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 Product Authorization Key (PAK).
- Issue the LICENSE REGISTER DCL command with the appropriate qualifiers that correspond to information on the PAK.

For complete information on using LMF, see the manual on the License Management Utility in the VMS documentation set.

Using VMSINSTAL

Log in to the system account to install SoftPC; invoke VMSINSTAL, the command procedure that installs this product. An example of this procedure is shown in steps 1 and 2 of the Installing SoftPC section.

The VMSINSTAL command procedure has the following syntax:

```
$ @SYS$UPDATE:VMSINSTAL SOFTPC022 ddcu: [OPTIONS N]
```

ddcu:

Represents a device name where the distribution volumes will be mounted for the SoftPC installation media, where *dd* is the device code, *c* is the controller code, and *n* is the unit number. It is not necessary to use the console drive to install SoftPC. If you do use the console drive, you should replace any media you removed from the drive. MUA0: is the device name used in examples in this document.

OPTIONS N

Is an optional parameter you should provide if you want to be prompted to display or print the release notes. If you do not include the OPTIONS N parameter, VMSINSTAL does not prompt you to display or print the release notes. VMSINSTAL permits the use of several other options. For more information on the other options, see your processor-specific installation/operations guide.

If you do not supply the first two parameters, VMSINSTAL prompts you for the product and device names. If you wish to be prompted for the product and device names and to display or print the release notes, enter the following:

```
$  @SYS$UPDATE:VMSINSTAL  Return
```

When you invoke VMSINSTAL, it checks the following:

- Whether you are logged in to a privileged account. Digital recommends that you install software from the system manager's account with your default device and directory set to SYS$UPDATE.
- Whether you have adequate quotas for installation. VMSINSTAL checks for the following quota values:
  - ASTLM = 24
  - BIOLM = 18
  - BYTLM = 18,000

- DIOLM = 18
- ENQLM = 30
- FILLM = 20

VMSINSTAL then checks whether the following conditions exist. If so, discontinue the conditions before resuming the installation procedure.

- Whether DECnet is up and running
- Whether any users are logged in to the system

If VMSINSTAL detects either of these conditions, you will be asked whether you want to continue the installation. If you want to continue, type YES. If you want to stop the installation, press Return.

Installing SoftPC

This section contains excerpts from the installation procedure and explains each step. Defaults appear in brackets throughout the installation procedure.

To abort the installation procedure at any time, press Ctrl/Y. When you press Ctrl/Y, the installation procedure deletes all files it has created up to that point and then returns you to DCL level. If you want to retry the installation procedure after pressing Ctrl/Y, you must proceed from step 2.

Step 1: Log in to the system account and set your default device and directory to SYS$UPDATE.

```
Return
Username:  SYSTEM   Return
Password:           Return
$  SET DEFAULT SYS$UPDATE  Return
```

Step 2: Invoke VMSINSTAL.

```
$  @VMSINSTAL SOFTPC022 MUA0: OPTIONS N  Return

      VAX/VMS Software Product Installation Procedure VX.X


It is dd-mmm-yyyy at hh:mm.
Enter a question mark (?) at any time for help.

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

If you are satisfied with the backup of your system disk, press Return. Otherwise, type N and press Return to discontinue the installation.

Step 3: Insert the first installation kit volume.

```
Please mount the first volume of the set on MUA0:.
* Are you ready?  YES  Return
The following products will be processed:

  SOFTPC V2.2


    Beginning installation of SOFTPC V2.2 at hh:mm

%VMSINSTAL-I-RESTORE, Restoring product saveset A...
```

To indicate that you want to continue the installation, mount volume 1, type YES, and press Return.

Step 4: Select a release notes option.

This step applies only if you specified OPTIONS N in step 2.

```
Release Notes Options:

    1. Display release notes
    2. Print release notes
    3. Both 1 and 2
    4. Copy release notes to SYS$HELP
    5. Do not display, print or copy release notes

* Select option [3]:  Return
```

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

If you select option 2, VMSINSTAL prompts you for a queue name. Either type a queue name or press Return to send the file to the default output print device.

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

If you select option 3, VMSINSTAL displays the release notes on line immediately. You can terminate the display at any time by pressing Ctrl/C. VMSINSTAL then prompts you for a queue name. Either type a queue name or press Return to send the file to the default output print device. The SoftPC release notes are then copied to SYS$HELP:SOFTPC022.RELEASE_NOTES.

If you select option 4, VMSINSTAL copies the release notes to SYS$HELP immediately.

If you select option 5, VMSINSTAL does not display, print or copy the release notes; typically this option is selected when the user wants to terminate the installation. If you select release note option 5 which specifies that the release notes are not copied to SYS$HELP, you cannot access the release notes without installing the product kit again.

Note *This version of the release notes file installed by VMSINSTAL is labeled with the current product name and version number. Take care not to delete release notes for previous versions of SoftPC.*

Next, VMSINSTAL displays the following prompt:

```
* Do you want to continue the installation [N]?:  Y  Return
%VMSINSTAL-I-RELMOVED, The product release notes have been successfully
    moved to SYS$HELP.
```

If you want to continue the installation, type YES and press Return. If you type NO or press Return, VMSINSTAL discontinues the installation. In either case, VMSINSTAL moves the release notes to SYS$HELP.

Step 5: Select installation options.

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

The directories SYS$COMMON:[SOFTPC], SYS$HELP, SYS$LIBRARY, SYS$MANAGER, and SYS$SYSTEM may contain previous versions of SoftPC files. These files are replaced during the installation with new files, but the old files are not automatically purged. Purging is recommended. In response to the purging prompt, press Return to purge the files or type NO to keep them.

```
* Do you want to run the IVP after the installation
[YES]?  Return
```

The Installation Verification Procedure (IVP) runs tests to check whether the installation procedure was successful. Press Return to run the IVP after the installation. If you do not want to run the IVP, type NO in response to the prompt.

Step 6: Respond to license registration queries.

SoftPC supports the VMS LMF. The installation procedure displays license information about your product and then asks if you have registered and loaded your authorization key for SoftPC. The following is an example of such information:

```
Product:       SOFTPC
Producer:       DEC
Version:        2.2
Release Date:  dd-mmm-yyyy

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

If you have not registered and loaded your authorization key, you must answer NO to this question. You have to register and load your PAK to successfully complete the installation.

During the installation procedure, the SoftPC LMF key is invoked and the following questions are asked:

Step 7: Read informational messages.

The SoftPC installation procedure produces a number of informational messages that report on the progress of the installation.

If the installation procedure is successful, the new or modified files are 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 SOFTPC HELP text.

If you typed YES in response to the prompt that requests a file purge at step 5, previous versions of the SoftPC files are now purged.

Step 8: Observe the installation verification procedure.

If you chose to run the IVP in step 5, VMSINSTAL now calls the IVP to verify that SoftPC was installed successfully.

Step 9: End the installation procedure.

```
Installation of SoftPC V2.2 completed at 11:22
SoftPC IVP completed with 0 errors
VMSINSTAL procedure done at 11:35
```

Quit your session.

When the product installation procedure is complete, you can choose to install more products or to log out. If you removed any media from the console drive before beginning the installation, you should replace it now.

System Manager's Notes

You must perform the following steps:

Step 1: Add the SoftPC startup procedure.

The installation procedure must add a SoftPC startup procedure to the SYS$STARTUP directory. This file sets up system-wide information for SoftPC such as where your floppy device is located. It must be executed by SYSTEM when VMS starts up. Add:

```
@SYS$STARTUP:SOFTPC$STARTUP.COM
```

to

```
SYS$COMMON:[SYSMGR]SYSTARTUP_V5.COM
```

and delete it from:

```
SYS$COMMON:[SYSMGR]SYSLOGIN.COM
```

Step 2: Set up possible devices for your floppy and SlavePC.

SOFTPC$STARTUP.COM sets up _NL: default assignments for the SOFTPC$FLOPPY and SOFTPC$SLAVEPC device names. If you wish to use a real diskette drive or a SlavePC diskette drive with SoftPC, edit the SOFTPC$FLOPPY and SOFTPC$SLAVEPC logical names with the appropriate device name.

SoftPC Fonts The installation procedure copies the SoftPC fonts to the DECwindows font directories; however, the DECwindows server does not recognize the SoftPC fonts until it reloads the fonts. This happens when you reboot the system.

SoftPC Help Text Help text for the SOFTPC command is released with SoftPC and added to the DCL help library.

SoftPC Floppy Configuration File SoftPC reads the configuration file SOFTPC$SYSTEM:RFLOPPY.DAT to determine the mapping between VMS device type numbers and PC drive types. The file includes comments describing the required data format so the knowledgeable system manager can change the configuration.

Step 3: You must reboot the system when the installation is complete.

Rebooting the system reloads the SoftPC fonts. Also, VMSINSTAL deletes or changes entries in the process symbol tables during the installation. You must log out and log in again.

Installing SoftPC on a VAXcluster

If you want to run SoftPC on multiple nodes of a VAXcluster, first check to see that you have the appropriate software license. Then, follow these steps after installing SoftPC:

1. Issue the LICENSE LOAD command to activate the license on each node in the VAXcluster on which SoftPC is to be executed.
2. Run SYS$STARTUP:SOFTPC$STARTUP.COM on each node of the cluster that has a software license.
3. To use the product on other nodes in the VAXcluster, you must replace the version of the DCL tables that is installed on the other VAXcluster nodes. To do this, perform the following steps:
   a. Log in to a node on the cluster.
   b. Run INSTALL and enter the following command at the INSTALL> prompt:

   ```
   INSTALL>  REPLACE SYS$LIBRARY:DCLTABLES.EXE Return
   ```
4. Repeat steps a and b for each node of the cluster.

After the Installation

Some utilities are included with the VMS SoftPC kit that are not installed as DCL commands. You must create symbols in your LOGIN.COM file to invoke these commands before using these additional utilities.

Add the following commands to the user's LOGIN.COM file:

```
$ SOFTPC$V*MVTODOS :== $ SOFTPC$SYSTEM:VMSTODOS
$ SOFTPC$D*OSTOVMS :== $ SOFTPC$SYSTEM:DOSTOVMS
$ SOFTPC$M*KHD    :== $ SOFTPC$SYSTEM:MKHD
```

The SOFTPC startup file must be executed by the system manager or by the system startup procedure for these commands to work properly.

Installing the SoftPC License

Any existing SoftPC license must be disabled before the new SoftPC license and SoftPC software can be installed. To do this, enter the following command:

```
$>  LICENSE LIST SOFTPC/FULL[Return]
```

A list of existing SoftPC licenses displays. For each existing license, copy the string following "Authorization" in the display, then disable the license by entering the following commands (replacing xx with the authorization code):

```
$> LICENSE UNLOAD SOFTPC[Return]
```

```
$> LICENSE DISABLE SOFTPC/AUTH=xx[Return]
```

Repeat the commands for each enabled license listed in the database. Once this is done, the new license can be registered (refer to the installation instructions for SoftPC). The new license must be loaded before SoftPC is installed by issuing the following command:

```
$> LICENSE LOAD SOFTPC[Return]
```

Setting File Protections

The files in SYS$COMMON:[SOFTPC] are set to "world" read and execute when SoftPC is installed. The 1MB.HDF file can be set to "world" read, write, and execute protection by issuing the following command from the SYSTEM account:

```
$> SET PROTECTION=W:RWE SYS$COMMON:[SOFTPC]1MB.HDF[Return]
```

An alternative method is to copy the file into each SoftPC user's directory.

SoftPC is now installed and can be invoked by all users with the SoftPC command.

The installation procedure modifies the DCL command table so that the SoftPC 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 SoftPC command must log out of the system and log in again.

- Modifying system or process parameters or quotas that need to be changed before people can use the product.
- Editing the error message file.

Running the Installation Verification Procedure Separately

The Installation Verification Procedure (IVP) is usually run at installation. If you want to run the IVP separately to ensure the integrity of installed files if system problems occur, execute the following command procedure:

```
$  @SYS$TEST:SOFTPC$IVP.COM  Return
```

If the IVP fails for any reason, the failed files are marked.

If the installation fails, you must restart the installation procedure from step 2. If the installation fails due to an IVP failure, contact a Digital Customer Services representative.

Maintenance Updates

Digital may periodically issue maintenance updates of SoftPC. Each update consists of an installation kit. You should install this kit as described in this document or in any documentation that accompanies the maintenance update.

Each time a maintenance update is released, the version number changes. For example, if the current version is 1.0, the version number of the first maintenance update will be 1.1. In addition, each maintenance update includes new release notes. The release notes describe the changes that have been made to SoftPC since the previous release.

The update release notes are provided on line. You should read the release notes when you first install SoftPC; they are also accessible at any time after the product is installed. For information on reading the release notes when you install SoftPC, follow the installation procedure through step 5. To locate the release notes after SoftPC is installed, display or print the file SYS$HELP:SOFTPC022.RELEASE_NOTES.

Determining and Reporting Problems

If an error occurs while you are using SoftPC and you believe that the error is caused by a problem with SoftPC, take one of the following actions:

- If you purchased SoftPC within the past 90 days and you think the problem is caused by a software error, you can submit a Software Performance Report (SPR).

- If you have a Basic or DECsupport Software Agreement, you should call your Customer Support Center. With these services, you receive telephone support that provides high-level advisory and remedial assistance. For more information, contact your local Digital representative.
- If you have a Self-Maintenance Software Agreement, you can submit an SPR.

If you find an error in the SoftPC documentation, you should fill out and submit a Reader's Comments form from the back of the document in which the error was found. Include the section and page number where the error was found.

Sample Installation

This section contains a sample installation of SoftPC. Note that this is only a sample. Sometimes the installation procedure is modified in maintenance updates of this product. Because this installation guide is not usually revised for maintenance updates, be sure to read the *Read Before Installing or Using SoftPC* letter before you install this product. This letter notes any significant changes in the installation that vary from this sample.

```
 Welcome to VAX/VMS V5.3-1

Username: SYSTEM
Password:
 Welcome to VAX/VMS version V5.3-1 on node MAGGIE
    Last interactive login on Thursday,  7-JUN-1990 20:18
    Last non-interactive login on Thursday,  7-JUN-1990 19:42

$ set def sys$update
$ @vmsinstal

 VAX/VMS Software Product Installation Procedure V5.3-1

It is 8-JUN-1990 at 10:57.

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

* Are you satisfied with the backup of your system disk [YES]?
* Where will the distribution volumes be mounted: mkb400

Enter the products to be processed from the first distribution volume set.
* Products: SOFTPC022
* Enter installation options you wish to use (none):
Please mount the first volume of the set on  MKB400:.
* Are you ready? y
%MOUNT-I-MOUNTED, SPC022 mounted on _MAGGIE$MKB400:
The following products will be processed:

  SOFTPC V2.2
```

```
 Beginning installation of SOFTPC V2.2 at 10:58

%VMSINSTAL-I-RESTORE, Restoring product save set A ...
%VMSINSTAL-I-RELMOVED , The product's release notes have been successfully
moved to SYS$HELP.
* Do you want to purge files replaced by this installation [YES]?
* Do you want to run the IVP after the installation [YES]?
%SOFTPC-I-COMMENCE, SoftPC V2.2 installation is commencing ...
%SOFTPC-I-CHECKVMS, Checking for VMS version 5.3 or greater ...

        Product:      SOFTPC
        Producer:     DEC
        Version:      2.2
        Release Date: 31-DEC-1989


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

 All the questions regarding the installation have
 now been asked.  The installation will now continue
 for another 10 minutes.

%VMSINSTAL-I-RESTORE, Restoring product save set B ...
%SOFTPC-I-COPYFILES, Copying images and required files ...
%SOFTPC-I-COPY75DPI, Copying 75 dpi fonts ...
%SOFTPC-I-COPY100DPI, Copying 100 dpi fonts ...
%SOFTPC-I-COPYUTIL, Copying utilities ...
%SOFTPC-I-COPYHDIMG, Copying hard disk image ...
%SOFTPC-I-ADDHELP, Adding DCL help text ...
%SOFTPC-I-ADDDCL, Adding DCL commands ...
%SOFTPC-I-COPYSTARTUP, Copying startup script ...

 A startup procedure for SoftPC has been added to the SYS$STARTUP
 directory. This file sets up system wide information for SoftPC
 and must be executed by SYSTEM when VMS starts up using:
        @SYS$STARTUP:SOFTPC$STARTUP.COM

 SoftPC V2.2 Installation is completed.

 Before using SoftPC V2.2, your system must
 be rebooted to properly load fonts.

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

Beginning SoftPC V2.2 installation verification procedure (IVP) on
8-JUN-1990 11:05:13.30
```

```
SYS$COMMON:[SOFTPC]DOSTOVMS.EXE ................................ OK
SYS$STARTUP:SOFTPC$STARTUP.COM ................................. OK
SYS$COMMON:[SOFTPC]SOFTPC.CLD .................................. OK
SYS$COMMON:[SOFTPC]SOFTPC.EXE .................................. OK
SYS$COMMON:[SOFTPC]SOFTPC.UID .................................. OK
SYS$COMMON:[SYSMSG]SOFTPCMSG.EXE ............................... OK
SYS$COMMON:[SYSFONT.DECW.USER_75DPI]SPC08X08E.DECW$FONT ......... OK
SYS$COMMON:[SYSFONT.DECW.USER_100DPI]SPC08X08E.DECW$FONT ........ OK
SYS$COMMON:[SYSFONT.DECW.USER_75DPI]SPC08X14E.DECW$FONT ......... OK
SYS$COMMON:[SYSFONT.DECW.USER_100DPI]SPC08X14E.DECW$FONT ........ OK
SYS$COMMON:[SYSFONT.DECW.USER_75DPI]SPC08X14H.DECW$FONT ......... OK
SYS$COMMON:[SYSFONT.DECW.USER_100DPI]SPC08X14H.DECW$FONT ........ OK
SYS$COMMON:[SYSFONT.DECW.USER_75DPI]SPC08X14HB.DECW$FONT ........ OK
SYS$COMMON:[SYSFONT.DECW.USER_100DPI]SPC08X14HB.DECW$FONT ....... OK
SYS$COMMON:[SYSFONT.DECW.USER_75DPI]SPC08X16C.DECW$FONT ......... OK
SYS$COMMON:[SYSFONT.DECW.USER_100DPI]SPC08X16C.DECW$FONT ........ OK
SYS$COMMON:[SYSFONT.DECW.USER_75DPI]SPC08X16CB.DECW$FONT ........ OK
SYS$COMMON:[SYSFONT.DECW.USER_100DPI]SPC08X16CB.DECW$FONT ....... OK
SYS$COMMON:[SYSFONT.DECW.USER_75DPI]SPC12X12E.DECW$FONT ......... OK
SYS$COMMON:[SYSFONT.DECW.USER_100DPI]SPC12X12E.DECW$FONT ........ OK
SYS$COMMON:[SYSFONT.DECW.USER_75DPI]SPC12X21E.DECW$FONT ......... OK
SYS$COMMON:[SYSFONT.DECW.USER_100DPI]SPC12X21E.DECW$FONT ........ OK
SYS$COMMON:[SYSFONT.DECW.USER_75DPI]SPC12X21H.DECW$FONT ......... OK
SYS$COMMON:[SYSFONT.DECW.USER_100DPI]SPC12X21H.DECW$FONT ........ OK
SYS$COMMON:[SYSFONT.DECW.USER_75DPI]SPC12X21HB.DECW$FONT ........ OK
SYS$COMMON:[SYSFONT.DECW.USER_100DPI]SPC12X21HB.DECW$FONT ....... OK
SYS$COMMON:[SYSFONT.DECW.USER_75DPI]SPC12X24C.DECW$FONT ......... OK
SYS$COMMON:[SYSFONT.DECW.USER_100DPI]SPC12X24C.DECW$FONT ........ OK
SYS$COMMON:[SYSFONT.DECW.USER_75DPI]SPC12X24CB.DECW$FONT ........ OK
SYS$COMMON:[SYSFONT.DECW.USER_100DPI]SPC12X24CB.DECW$FONT ....... OK
SYS$COMMON:[SYSFONT.DECW.USER_75DPI]SPC16X08E.DECW$FONT ......... OK
SYS$COMMON:[SYSFONT.DECW.USER_100DPI]SPC16X08E.DECW$FONT ........ OK
SYS$COMMON:[SYSFONT.DECW.USER_75DPI]SPC16X14E.DECW$FONT ......... OK
SYS$COMMON:[SYSFONT.DECW.USER_100DPI]SPC16X14E.DECW$FONT ........ OK
SYS$COMMON:[SYSFONT.DECW.USER_75DPI]SPC16X16C.DECW$FONT ......... OK
SYS$COMMON:[SYSFONT.DECW.USER_100DPI]SPC16X16C.DECW$FONT ........ OK
SYS$COMMON:[SYSFONT.DECW.USER_75DPI]SPC16X16CB.DECW$FONT ........ OK
SYS$COMMON:[SYSFONT.DECW.USER_100DPI]SPC16X16CB.DECW$FONT ....... OK
SYS$COMMON:[SYSFONT.DECW.USER_75DPI]SPC24X12E.DECW$FONT ......... OK
SYS$COMMON:[SYSFONT.DECW.USER_100DPI]SPC24X12E.DECW$FONT ........ OK
SYS$COMMON:[SYSFONT.DECW.USER_75DPI]SPC24X21E.DECW$FONT ......... OK
SYS$COMMON:[SYSFONT.DECW.USER_100DPI]SPC24X21E.DECW$FONT ........ OK
SYS$COMMON:[SYSFONT.DECW.USER_75DPI]SPC24X24C.DECW$FONT ......... OK
SYS$COMMON:[SYSFONT.DECW.USER_100DPI]SPC24X24C.DECW$FONT ........ OK
SYS$COMMON:[SYSFONT.DECW.USER_75DPI]SPC24X24CB.DECW$FONT ........ OK
SYS$COMMON:[SYSFONT.DECW.USER_100DPI]SPC24X24CB.DECW$FONT ....... OK
SYS$COMMON:[SOFTPC]VMSTODOS.EXE ................................ OK
SYS$COMMON:[SOFTPC]BIOS1.ROM ................................... OK
SYS$COMMON:[SOFTPC]BIOS2.ROM ................................... OK
SYS$COMMON:[SOFTPC]TERM.KEY .................................... OK
SYS$COMMON:[SOFTPC]X11.KEY ..................................... OK

SoftPC IVP completed with 0 error(s).

 Installation of SOFTPC V2.2 completed at 11:06
```

```
Enter the products to be processed from the next distribution volume set.
* Products:
 VMSINSTAL procedure done at 11:08

$ lo
  SYSTEM       logged out at  8-JUN-1990 11:08:31.65
```