VAX REMS Installation Guide

Order Number AA-MA75B-TE

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This document contains instructions for installing VAX Remote Environmental Monitoring Software (REMS) on the VAX/VMS operating system. It also explains how to read the online release notes before or after installing the product. This document applies to VAX REMS Version 1.2 and all maintenance updates in that version.

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Preface

This document describes how to install the VAX Remote Environmental Monitoring System (REMS) on the VAX/VMS operating system. It is intended for system managers. This document applies to Version 1.2 and all maintenance updates through the next major version. A major version number is represented by the digits to the left of the decimal point, and the maintenance update version number is indicated by the digits to the right of the decimal point. Therefore, this document applies to VAX REMS Version 1.2 and all maintenance updates up to but not including Version 2.0.

Before continuing with this manual, please take note of the following:

- Keep this document with your distribution kit. You will need to refer to it again should you receive any maintenance updates or need to reinstall VAX REMS for any other reason.
- The installation procedure is described step by step. The procedure, for the most part, is self-explanatory. The system prompts you to answer questions and waits for you to tell it to continue.
- For information on reporting problems with VAX REMS, see the section entitled ''Determining and Reporting Problems''.
- This document does not contain release notes information; instead, release notes are provided on line. You can read the release notes before you install VAX REMS and at any time after the product is installed.

For more information on installing VAX REMS on VAX/VMS systems, see the *Guide to VAX/VMS Software Installation* and the *Guide to VAX/VMS System Management and Daily Operations*.

Associated Documents

The following may be helpful in understanding VAX REMS:

- *VAX REMS User's Guide*
- *VAX REMS Release Notes*
- *H7317 Power Distribution System Plus Technical Manual, EK-H7317-TM-00*
- *H7318 Power Conditioning System Plus Technical Manual, EK-H7318-TM-00*
- *HA3000 Uninterruptible Power System User Guide, EK-HA32X-UG*

Conventions

The following conventions are used in this document:

- All letters and numbers shown inside a box indicate keyboard keys. For example, RET indicates the return key.
- System prompts and messages appear throughout the text. For example,

```
$ Define/Table=
```

- **Note** is used to emphasize important information.

1 Preparing to Install VAX REMS

This section discusses the preparations and requirements necessary for installing VAX REMS.

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

VAX REMS provides online Release Notes. DIGITAL strongly recommends that you read the Release Notes before proceeding with the installation.

1.1 Prerequisite Software

This section identifies the software you must have installed on your system before installing VAX REMS.

- VAX/VMS Version 4.7 or later
- VAX FMS Version 2.3

1.2 Prerequisite Hardware

The following hardware must be installed to run VAX REMS:

- VAX system
- VT100, VT200, *or* VT300 terminal
- An H731x or HA3000 unit

1.3 VMS License Management Facility

You will need to register and load your license for VAX REMS before you start the installation. Refer to the VMS documentation on the License Management Utility for information about registering your license. VAX REMS will install without the registered license, but will not run.

For instructions on registering the VAX REMS license, refer to Section 3, License Management Utility Requirements.

2 Installation Procedure Requirements

The following sections discuss various requirements for installing VAX REMS.

2.1 Time

Installing VAX REMS and running the IVP takes approximately 5 to 10 minutes, depending on your type of media and your system configuration.

2.2 Privileges

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

- CMKRNL
- WORLD
- SYSPRV

2.3 Disk Space

Installing VAX REMS requires 5,500 blocks of free storage disk space during the installation.

2.4 System Parameters

Table 1 lists the minimum required system parameter values for the installation. Depending on the kinds of programs and applications running at your site, you might need higher values for some settings.

Table 1: Required System Parameter Values

System Parameter	Value
Additional GBLPAGES[2]	52 + (x * 16)
Total GBLPAGES[1,2]	n + 52 + (x * 16)
GBLSECTIONS[1]	n + 1

[1]The n variable refers to the system parameter values that are currently in use. To install VAX REMS, you must raise those values by the number indicated.

[2]The x variable refers to the number of PDS units being used.

The following sections show you how to check system parameter values, calculate values for the GBLPAGES and GBLSECTIONS system parameters, and change parameter values with the VMS AUTOGEN command procedure.

Checking System Parameter Values

To check system parameter values, enter the following command at the DCL prompt:

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

At the SYSGEN> prompt, enter the SHOW command to display the value of each system parameter. The values displayed should equal or exceed the value of each parameter listed in Table 1. The following command displays the value for the GBLPAGES system parameter:

```
SYSGEN> SHOW GBLPAGES
```

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

Calculating the Values for GBLPAGES and GBLSECTIONS

To install and run VAX REMS, you must set the correct values for the GBLPAGES and GBLSECTIONS system parameters.

The n + nnn values for GBLPAGES and GBLSECTIONS in Table 1 indicate that you must have at least nnn unused pages and sections available on your system for the software to run successfully. To calculate how many unused global pages and global sections your system has, perform the following steps:

- Run the VMS Install Utility (INSTALL) using the following DCL commands:

```
$ INSTALL == "$SYS$SYSTEM:INSTALL /COMMAND_MODE"
$ INSTALL LIST /GLOBAL /SUMMARY
```

  The INSTALL utility displays a summary of global pages and global sections used by your system, as well as the current number of unused global pages. For example:

```
                Summary of Local Memory Global Sections

258 Global Sections Used,  22580/3420 Global Pages Used/Unused
```

- Determine if the number of unused pages (3420 in the example) is equal to or greater than the number of additional global pages entry using the algorithm in Table 1. If the number of unused pages is less than the number listed in the table, you need to increase the value for GBLPAGES.
- Note the amount shown for ‘‘Global Sections Used’’ (258 in the example).
- Run the SYSGEN utility and use the SHOW command to determine the number of global sections that has been allocated:

```
SYSGEN> SHOW GBLSECTIONS


Parameter Name       Current   Default    Minimum    Maximum Unit  Dynamic
--------------       -------   -------    -------    ------- ----  -------
GBLSECTIONS            512       250         20        4095  Sections
```

- Subtract the amount shown in the summary (258 in the example) from the amount allocated (current). If the difference is less than the number required in Table 1, you need to increase the value of the GBLSECTIONS parameter.

The *Changing System Parameter Values with AUTOGEN* section describes the procedures for increasing these values as well as those of other system parameters. Refer to the VMS documentation on system management and operations for more information.

Changing System Parameter Values with AUTOGEN

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

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

For example, to change the setting for the GBLSECTIONS system parameter, add this line to the file:

```
GBLSECTIONS = 1
```

Or, for incremental SYSGEN parameters:

```
ADD_GBLPAGES = 52
```

Now, run the AUTOGEN procedure to recalculate your system parameters. Enter the following command at the DCL prompt:

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

AUTOGEN performs an automatic system shutdown and reboots when it has finished. Rebooting your system makes the new parameter values active. Also on VMS V5.x systems you may wish to add the NOFEEDBACK or FEEDBACK parameter to the AUTOGEN command line. For more information about using AUTOGEN, see the instructions on modifying system parameters in the VMS documentation on System Management and Operations.

2.5 Account Quotas

The account you use to install VAX REMS must have sufficient quotas to be able to perform the installation. Table 2 summarizes the account quotas required to perform the installation.

Table 2: Required Account Quotas for Installation

Account Quota	Value
ASTLM	24
BIOLM	18
BYTLM	18,000
DIOLM	18
ENQLM	30
FILLM	20

User account quotas are stored in the file SYSUAF.DAT. You use the VMS Authorize Utility 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 AUTHORIZE prompt (UAF>), use the SHOW command with an account name to check a particular account. For example:

```
UAF>  SHOW SMITH
```

To change a quota, use the MODIFY command at the UAF> prompt. MODIFY has the following format:

```
MODIFY account-name /quota-name=nnnn
```

This example changes the FILLM quota for the SMITH account and then exits from the Authorize Utility:

```
UAF>  MODIFY SMITH /FILLM=20
UAF>  EXIT
```

After you exit from the utility, the VMS system displays messages indicating whether or not 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 on modifying account quotas, see the description of the AUTHORIZE utility in the VMS documentation on System Management and Operations.

2.6 VMSINSTAL Requirements

When you invoke VMSINSTAL, it checks the following:

- Whether you have set your default device and directory to SYS$UPDATE
- Whether you are logged in to a privileged account
- Whether you have adequate quotas for installation
- Whether DECnet is up and running
- Whether any users are logged in to the system

If VMSINSTAL detects any problems during the installation, it notifies you of the problem and asks if you want to continue the installation. In some instances, you can enter YES to continue. To stop the installation process and correct the situation, enter NO or press RETURN. Then correct the problem and restart the installation.

2.7 Backing Up Your System Disk

At the beginning of the installation, VMSINSTAL asks if you have backed up your system disk. DIGITAL recommends that you do a system disk backup before installing any software on top of the operating system.

Use the backup procedures that have been established at your site. For details on performing a system disk backup, see the section on the Backup Utility in the VMS documentation set.

2.8 VAX REMS Installation Requirements

You must determine values for the following before installing VAX REMS:

- Ownership assigned to the VAX REMS directory
- The device on which VAX REMS will reside
- The directory for VAX REMS

If a separate account is to be created which will have ownership of VAX REMS, it must be created and its ownership identifier determined prior to the installation. Section 7.3 describes how to modify this account so that it can run REMS once the installation is complete.

3 License Management Utility Requirements

The VMS License Management Facility is available with Version 5.0 of the VMS operating system. If you are installing VAX REMS on a VMS V5.0 system, you must register your software license.

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

It is required that the VAX REMS license is registered before you perform the installation. During the installation, you are asked if you have registered and loaded the VAX REMS license. If you have not already done so, please answer "NO". Once you perform the license registration and load, you may restart the installation and choose to run the IVP.

To register a license under VMS V5.0, 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 V5.0 documentation set.

4 The Installation Procedure

The VAX REMS installation process consists of a series of questions and informational messages.

4.1 Invoking VMSINSTAL

To start the installation, invoke the VMSINSTAL command procedure from a privileged account, such as the SYSTEM account. Next, invoke VMSINSTAL. You use the following syntax to invoke VMSINSTAL:

```
@SYS$UPDATE:VMSINSTAL product-name device-name OPTIONS N
```

Product-name is the installation name for the component. For VAX REMS, use the following installation name:

```
REMS012
```

Device-name is the name of the device on which you plan to mount the media. For example, MTA0: is the device name for a tape drive. It is not necessary to use the console drive for this installation. However, if you do use the console drive, you should replace any media you removed once the installation is completed.

OPTIONS N is an optional parameter that indicates 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. You are strongly recommended to read the Release Notes before proceeding with this installation.

VMSINSTAL has several other options; for information, see the VMS documentation on Software Installation.

The following example displays the command to invoke VMSINSTAL to install VAX REMS from tape drive MTA0: and the system response. This example uses the OPTIONS N parameter for printing or displaying Release Notes.

```
$  @SYS$UPDATE:VMSINSTAL REMS012 MTA0: OPTIONS N

       VAX/VMS Software Product Installation Procedure V4.7


It is 12-AUG-1988 at 09:30.
Enter a question mark (?) at any time for help.
```

If you do not supply either the product name or the device name, VMSINSTAL prompts you for this information later on in the installation procedure. VMSINSTAL does not prompt you for any options, so be sure to include OPTIONS N on the VMSINSTAL command line to access the Release Notes during the installation.

5 Installing VAX REMS

This section describes how to install VAX REMS. Sections 4 through 11 contain a step-by-step description of the installation procedure.

5.1 General Information

This section includes information about accessing Release Notes, determining files [and logical names] added to your system, running the Installation Verification Procedure (IVP), and aborting the installation.

Accessing the Online Release Notes

VAX REMS provides online Release Notes. If you specify OPTIONS N when you invoke VMSINSTAL, the installation procedure asks you if you want to display or print the Release Notes. The Release Notes question comes near the beginning of the installation. You should review the Release Notes in case they contain any information about changes in the installation procedures.

After VAX REMS has been installed, the Release Notes are located in the following file:

```
SYS$HELP:REMS012.RELEASE_NOTES
```

The prompt to display or print the release notes appears in the installation procedure, as noted in the description of step 4, only when you invoke VMSINSTAL with OPTION N.

Determining the Files Added to the System

The files created by the installation of VAX REMS are:

- REMS.EXE
- REMS$DATA.EXE
- REMS$FORMS.FLB

5.2 Running the Installation Verification Procedure (IVP)

The Installation Verification Procedure (IVP) for VAX REMS verifies the installation. During the installation, you are asked if you want to run the IVP as part of the installation. If you respond YES, VMSINSTAL runs the IVP. It is recommended that you run the IVP to be sure that VAX REMS is installed correctly.

After VAX REMS is installed, you can run the IVP independently to verify that the software is available on your system. You might also want to run the IVP after a system failure to be sure that users can access VAX REMS. See Section 7.6.

5.3 Aborting the Installation

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 exits. You can then start the installation again.

This section also contains excerpts from the installation procedure and provides explanatory text. See Section 10 for a sample installation procedure.

Each question in the installation is marked with an asterisk (*) at the beginning of the line. Some questions show the default response in brackets, for example [YES]. If you want to give the default response, press the RETURN key.

Note

Enhancements to VMSINSTAL in future releases of the VAX/VMS operating system may result in additional prompts appearing during the course of the installation. Although such prompts may not be documented in this installation guide, the installation should proceed normally.

5.4 Step 1: Log in to the system manager's account.

The installation procedure must be run from the system manager's privileged account.

```
Username:  SYSTEM      RET
Password:  password    RET
```

5.5 Step 2: Invoke VMSINSTAL

This step calls up the VMSINSTAL procedure that resides on the VMS operating system. It is here that the VAX REMS software is loaded onto your system.

On the command line you can specify the product to be installed and the device in which the media will be mounted. VMSINSTAL will prompt you for this information if you omit it. If you specify this information, you can also specify OPTIONS N, which will tell VMSINSTAL to ask if you want to display or print the Release Notes. It is highly recommended that you read the Release Notes before continuing the installation.

After entering the first command you will receive a system message notifying you the DECnet network is up and running. You will also receive a system query asking you if you wish to continue. Answer Y (YES) and press RETURN. VAX REMS does not affect any other users on the network and does not delete any files.

```
$  @SYS$UPDATE:VMSINSTAL      RET

   VAX/VMS Software Product Installation Procedure V4.7

It is 21-JUL-1988 at 15:37.
Enter a question mark (?) at any time for help.

%VMSINSTAL-W-DECNET, Your DECnet network is up and running.
%VMSINSTAL-W-ACTIVE, The following processes are still active:

       User  1
       User  3
       User  2
       User  4

* Do you want to continue anyway [NO]?  YES  RET

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

* Where will the distribution media volume be mounted: MUA0: RET
```

If you entered the wrong device name when you invoked VMSINSTAL and need to restart the installation, enter NO in response to the ‘‘Do you want to continue anyway?’’ question. To abort the installation for other reasons, press CTRL/Y.

5.6 Step 3: Insert the installation kit volume.

Now you are ready to mount the distribution media. The installation procedure prompts you with the following message:

```
Enter the products to be processed from the first distribution volume set.
* Products:  REMS012
The following products will be processed:

  VAX REMS V1.2

     Beginning installation of REMS V1.2 at 15:37
%VMSINSTAL-I-RESTORE, Restoring product saveset A...
```

5.7 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
* Select option [3]:   RET
```

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

If you select option 2, VMSINSTAL prompts you for a queue name.

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

You can type a queue name (or press RETURN to indicate the default output print device, SYS$PRINT).

Now choose whether or not to continue the installation when the following message displays:

```
Do you want to continue the installation [NO]?:  YES  RET
```

Press N (NO) and RETURN to discontinue the installation.

Press Y (YES) and RETURN to continue the installation. VMS shows the following message:

```
% VMSINSTAL-I-RELMOVED.  The product's release notes have been
successfully moved to SYS$HELP.
```

5.8 Step 5: Choosing to run the Installation Verification Procedure (IVP)

The installation procedure now asks if you want to run the Installation Verification Procedure. The IVP for VAX REMS checks to be sure that the installation is successful. It is recommended that you run the IVP.

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

The installation procedure now asked for the location of the VAX REMS software. If it is located on the systems default disk (named SYS$SYSROOT, by convention) then press the Return key to accept the default, YES.

```
* Is the installation device a system disk [YES]?
```

If you answer NO to this question, the following prompt appears:

```
* Enter the installation device:
```

Type the name of the installation device (for example, SYS$USERSET:) and press RETURN. SYS$SPECIFIC: is the default device.

After the installation device has been defined, whether you answered YES or NO to the installation device query, you are now prompted for the installation directory:

```
* Enter the installation directory:  REMS   RET
```

(By convention, "REMS" is the default directory name.)

Note

Although the release notes file installed by VMSINSTAL has a unique name from one maintenance update to the next, take care not to delete previous versions of that file.

5.9 Step 6: 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 (except for any that apply to the IVP). 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. If you asked for files to be purged, that work is done now. The following messages are displayed:

```
% REMS-I-REMSDIR, Creating logical REMS$EXE directory
% REMS-I-LNKING, Linking Executables
% VMSINSTAL-I-MOVEFILES, files will now be moved to their
target directories...
```

5.10 Step 7: Running the Installation Verification Procedure

The installation procedure now calls the Installation Verification Procedure (IVP) to verify that VAX REMS was successfully installed.

```
Starting Installation Verification Procedure for VAX REMS V1.2.

Installation Verification Procedure for VAX REMS V1.2 successful.

     Installation of REMS V1.2 completed at 12:45
```

5.11 Step 8: Completing the installation procedure.

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

You have now installed VAX REMS. End the installation by pressing RETURN at the following prompts:

```
Enter the products to be installed from the next distribution volume set.
* Products [EXIT]:  RET

        VMSINSTAL procedure done at 02:00

$  LOGOUT   RET
SYSTEM     logged out at 21-JUL-1988 15:47:00.11
```

Note

VMSINSTAL deletes or changes entries in the process symbol tables during the installation. Therefore, if you are going to continue using the system manager's account, and want to restore those symbols, you should log out and log in again.

6 Error Recovery

If errors occur during the installation or when the IVP is running, VMSINSTAL displays failure messages. If the installation fails, the following message is displayed:

```
%VMSINSTAL-E-INSFAIL, The installation of VAX REMS V1.2 has failed.
```

If the IVP fails, the following messages are displayed:

```
Installation Verification Procedure has failed for VAX REMS V1.2.

%VMSINSTAL-E-IVPFAIL, The IVP for VAX REMS V1.2 has failed.
```

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

- The operating system version is incorrect.
- Quotas necessary for successful installation are insufficient.

For descriptions of the error messages generated by these conditions, see the *VAX/VMS System Messages and Recovery Procedures Reference Manual* and the *Guide to VAX/VMS Software Installation*. If you are notified that any of these conditions exist, you should take the appropriate action as described in the message. (You might need to change a system parameter or increase an authorized quota value.)

7 After Installing VAX REMS

After installing VAX REMS, you also need to perform the following tasks:

- Edit the system startup file
- Edit the REMS$STARTUP command file to define REMS$EXE logical name and enable the automatic (auto) startup mode.
- Execute the REMS$STARTUP command file
- Set the user account quotas
- Modify the system parameters settings if necessary
- Reboot the system if system parameters were adjusted

7.1 Editing the System Files

You must edit the system startup to provide for automatic setup of VAX REMS when your system is rebooted.

Add the command line that sets up VAX REMS to the system startup file, SYS$MANAGER:SYSTARTUP.COM (for VMS V4.7) or SYS$MANAGER:SYSTARTUP_V5.COM (for VMS V5.0):

```
$ @SYS$MANAGER:REMS$STARTUP.COM
```

7.2 Editing the REMS$STARTUP Command File

To edit the REMS$STARTUP command file:

- Remove the comment delimiter (!) from the following line:

  ```
  $! DEFINE/SYSTEM REMS$EXE device:[directory]
  ```

- Substitute values for the *device* and *directory* names as specified during the installation. If REMS was installed on a system disk, the device name is SYS$SPECIFIC:.

- Remove the comment delimiter (!) from the following lines:

  ```
  $! SET PROTECTION=(S,O,G,W)/DEVICE port_device_name
  $! SET DEVICE/ACL=(IDENT= rems_user_UIC, ACCESS=READ) port_device_name
  $! SET TERM/PERM/NOTYPE/NOHOST/NOBROAD port_device_name
  ```

- Substitute values for *port_device_name* and *rems_user_UIC*. *Port_device_name* is the name of the device through which REMS will talk to the environmental product. *Rems_user_UIC* is the identifier of the account that will run REMS. If you have multiple ports, copy the template as many times as needed.

- Remove the comment delimiter (!) from the following lines:

  ```
  $! RUN REMS$EXE:REMS$DATA.EXE /DETACHED-
   !          /INPUT="NL:" /OUTPUT="NL:" /ERROR="NL:"-
   !          /PRIV=(NETMBX, TMPMBX, GRPNAM, PHY_IO, OPER)-
   !          /UIC= rems_user_UIC
  ```

- Substitute the account identifier that will run REMS for *rems_user_UIC*. This should be the same as was used in setting up the terminal ports.

7.3 User Account Requirements

To use VAX REMS, user accounts on your system must:

- Have certain privileges and quotas
- Select an account to be used for VAX REMS
- Allocate a port or ports exclusively to VAX REMS

The next sections contain information on these requirements.

Default Privileges

To use VAX REMS, an account must have these default privileges:

- TMPMBX
- NETMBX
- OPER
- GRPNAM
- PHY_IO

Use the VMS Authorize Utility to determine whether users have the required privileges.

User Account Quotas

You must make sure that the appropriate user accounts have sufficient quotas to be able to use VAX REMS. Table 3 summarizes the required user account quotas.

Table 3: User Account Requirements for Account That Will Use VAX REMS

Account Quota	Value
ASTLM	150
BIOLM	150
BYTLM	20,000
DIOLM	150
ENQLM	30
FILLM	20

User account quotas are stored in the file SYSUAF.DAT. Use the Authorize Utility 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 AUTHORIZE prompt (UAF>), use the SHOW command with an account name to check a particular account. For example:

```
UAF>  SHOW SMITH
```

To change a quota, use the MODIFY command at the UAF> prompt. MODIFY has the following format:

```
MODIFY account-name /quota-name=nnnn
```

This example changes the FILLM quota for the SMITH account and then exits from the utility:

```
UAF>  MODIFY SMITH /FILLM=20
UAF>  EXIT
```

After you exit from the utility, the VMS system displays messages indicating whether or not changes were made. Once you have finished making the changes, the users must log out and log in again for the new quotas to take effect.

For more information on modifying account quotas, see the description of the Authorize Utility in the VMS documentation on system management and operations.

Modifying account that will use VAX REMS

An account to be used for VAX REMS should be modified from the system manager's privileged account. Log into the system manager's account and enter the following commands:

```
$ SET DEFAULT SYS$SYSTEM        RET
$ MCR AUTHORIZE        RET
UAF> MODIFY xxxx/ASTLM=150/BIOLM=150/DIOLM=150/BYTLM=20000
RET
```

Note: xxxx is the account identifier that will use VAX REMS

```
UAF> EXIT  RET
$ SET DEFAULT SYS$MANAGER     RET
```

Allocate a port

To dedicate a port solely to VAX REMS, be sure to edit the REMS$STARTUP command file as described in Section 7.2.

7.4 Modifying System Parameters Settings

The installation for VAX REMS requires that you raise the values of the GBLPAGES and GBLSECTIONS system parameters, if necessary.

7.5 Rebooting the System

You can reboot your system after you have installed VAX REMS, edited the system file, and adjusted the system parameters (if necessary). A system reboot verifies that VAX REMS is ready for use, and ensures that the edits to the system startup command file are correct, and establishes any new parameter settings.

Note

Rebooting is optional.

7.6 Running the Installation Verification Procedure (IVP) Independently

The logical name REMS$EXE must be defined for the IVP to execute successfully. After REMS has been installed, the IVP is available and can be executed by typing:

```
$  @SYS$TEST:REMS$IVP        RET
```

8 Running REMS in a VAXcluster environment

If the REMS images were installed on the system disk (SYS$SPECIFIC), you must create a directory for REMS in each nodes SYS$SPECIFIC directory. The directory name must be the same on all the nodes to allow for a common logical name definition. Then, copy the following files into each of the newly created directories:

- REMS$EXE
- REMS$DATA.EXE
- REMS$FORMS.FLB

When each system is booted, REMS$STARTUP.COM will define the logical name for all nodes in the cluster.

If the REMS images were not installed on the system disk, the REMS$STARTUP.COM file must be edited to provide a separate logical name definition for each system. Each system must have a separate REMS directory and the first directory name should be changed to include the system name. For example:

```
Cluster system names:  SYS1, SYS2

Installed directory location:  SYS$USERSET:[REMS]
Changed to:                    SYS$USERSET:[SYS1_REMS]

Second directory:              SYS$USERSET:[SYS2_REMS]
```

Additional REMS directories will have to be created. The logical names for each system should point to the specified directory. The REMS$STARTUP.COM file should be edited to define the specified logical name or names.

9 Determining and Reporting Problems

If an error occurs while VAX REMS is being used and you believe that the error is caused by a problem with VAX REMS, take one of the following actions:

- 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.)
- If you have a Self-Maintenance Software Agreement, you can submit a Software Performance Report (SPR).
- If you purchased VAX REMS 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 find an error in the VAX REMS documentation, you should fill out and submit the Reader's Comments form at the back of the document in which the error was found. Include the section and page number where the error was found.

10 Sample Installation

This section contains a sample installation of VAX REMS. This sample was run on a system that had no previous version of VAX REMS installed.

The sample installation assumes that DECnet is running, that users are logged on to the system, and that OPTIONS N is specified to print the Release Notes. The Installation Verification Procedure (IVP) runs at the end of the installation.

```
$! @SYS$UPDATE:VMSINSTAL REMS012 MUA0: OPTIONS N

 VAX/VMS Software Product Installation Procedure V4.7


It is 21-JUL-1988 at 15:37.
Enter a question mark (?) at any time for help.

% VMSINSTAL-W-DECNET, Your DECnet network is up and running.
% VMSINSTAL-W-ACTIVE, The following processes are still active:
 User 1
 User 3
 User 2
 User 4
* Do you want to continue anyway [NO]? YES RET
* Are you satisfied with the backup of your system disk [YES] YES?  RET )
* Where will the distribution volumes be mounted: MUA0:

Enter the products to be processed from the first distribution volume set.
* Products: REMS012
The following products will be processed:

  VAX REMS V1.2

     Beginning installation of REMS V1.2 at 15:37

% VMSINSTAL-I-RESTORE, Restoring product saveset A...
Release Notes Options:

     (1) Display release notes
     (2) Print release notes
     (3) Both 1 and 2
* Select option [3]:  3 RET

* Queue name [SYS$PRINT]:  RET
* Do you want to continue the installation [NO]?:  YES RET
% VMSINSTAL-I-RELMOVED.  The products release notes have been
successfully moved to SYS$HELP.

* Do you want to run the IVP after the installation [YES]?  YES RET
* Is the installation device a system disk [YES]? NO RET

* Enter the installation device:  SYS$USERSET: RET


        Ownership of the VAX REMS directory will only be assigned if the
        directory is created during the installation.  The ownership
        identifier has to be a valid UIC previously defined on the system.

* Enter the directory ownership identifier: SYSTEM
* Enter the installation directory: REMS  RET
```

```
% REMS-I-REMSDIR, Creating logical REMS$EXE directory
% REMS-I-LNKING, Linking Executables
% VMSINSTAL-I-MOVEFILES, Files will now be moved to their
target directories...

Starting Installation Verification Procedure for VAX REMS V1.2.
Installation Verification Procedure for VAX REMS V1.2 successful.

     Installation of REMS V1.2 completed at 12:45


Enter the products to be processed from the next distribution volume set.
* Products [EXIT]:    RET

            VMSINSTAL procedure done at 02:00

$ LOGOUT    RET
SYSTEM       logged out at 10-JUN-1988 01:15:00.11
```

11 H731x Preparations

After VAX REMS has been installed on your system, the communications settings for the H731x unit need to be set up.

At the H731x keypad, select the main menu by pressing the pound key (#). The H731x needs to be set up to communicate under VAX Control and at 9600 baud in full duplex mode. The correct settings can be achieved by following these steps:

- Press the # key for the main menu
- Press keypad 4 for the setup menu
- Enter the security code as, XXXX
- Press keypad 3 for the parameter menu
- Press keypad 4 for the communications menu
- Press keypad 1 for the terminal type prompt and select option 4, VAX Control mode
- Return to the communications menu by pressing the * key
- At the communications menu, select the serial communications option by pressing keypad 3
- At the serial communications options, select option 3, 9600 baud with full duplex
- Press the * key to return to the communications menu
- Press the # key to return to the main menu

For the H7317 and H7318 models, the M4 board is located inside the door. Check for pins J1 and J3. Both sets of pins should be set with the BC combinations.

The correct unit number must also be set up for all H731x units. For a single-unit network, the H731x *must* be unit number 0. For a multi-unit network, the units should be numbered sequentially, starting with unit 0. Unit 0 will be the master unit and should be the unit that

is connected to the VAX. The H7317 and H7318 default to unit number 0; however, the H7310 defaults to unit number 7. The unit number can be changed by following these steps:

- Press the # key for the main menu.
- Press keypad 4 for the setup menu.
- Enter the security code as, XXXX.
- Press keypad 3 for the parameter menu.
- Press keypad 2 for the unit number prompt and select the correct unit number.
- Return to the parameter menu by pressing the * key.
- Press the # key to return to the main menu.

For a multi-unit network, it is also necessary that the communications be set up correctly. Each unit should have communications enabled with all other units in the network. To modify the communications, press keypad 2 from the setup menu after entering the security code. Then, for each unit in the network, enter 1 to enable or 0 to disable communications with that unit. Note that a unit must have communications enabled with itself as well as other units in the network.

12 HA3000 Preparation

After VAX REMS has been installed on your system, the communications settings for the HA3000 unit need to be set up. Because this requires personalized settings on the HA3000, this needs to be performed by a Qualified Digital Customer Service Technician.

The HA3000 needs to be setup to communicate through channel 1 at 1200 baud, 8 bits, 1 stop bit, no parity.

- Scroll through the main menu and select option 8, personalization.
- Enter the password XXXX, followed by the "ENTER" key
- The UPS will tell you to stop the inverter, enter 0 followed by the "ENTER" key.
- The UPS will tell you to stop the charger, enter 0 followed by the "ENTER" key.
- Use the scroll down arrow to scroll through the menu until you get to PCB DISO, enter 1 followed by the "ENTER" key.
- Hit the "ENTER" key to store the personalization data, and get back to the main menu.
- Scroll through the main menu and select option 9, communications, followed by the "ENTER" key.
- Enter the password XXXX followed by the "ENTER" key.
- Select the desired channel, enter 1.
- Select the UPS number, enter 001 followed by the "ENTER" key.
- Scroll down to select the baud rate, scroll down until you see 5=1200, enter 5 followed by the "ENTER" key.
- Scroll down to select the number of data bits, enter 8 followed by the "ENTER" key.

- Scroll down to select the number of stop bits, enter 1 followed by the "ENTER" key.
- Scroll down to select the parity, enter 0 followed by the "ENTER" key.
- Scroll down to select modem type, enter 0 followed by the "ENTER" key.
- Hit the "ENTER" key to select all of the changes.
- Hit the "MENU" key to get back to the main menu.
- Scroll up to select option 1 of the main menu, START-UP, and complete the start-up sequence.

13 Maintenance Updates

DIGITAL may periodically issue maintenance updates of VAX REMS. Each update will consist of an installation kit containing the installation command procedure and list of changes incorporated in the update. The maintenance update replaces the first volume of the original distribution kit. You should install this kit as described in this document unless new documentation accompanies the maintenance update.

Each time a maintenance update is released, the version number will change. For example, if the current version is 1.2, the version number of the first maintenance update will be 1.1. In addition, the maintenance update will usually include changes to the release notes. The release notes describe the changes that have been made to VAX REMS since the previous release.

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