

Cincom

SUPRA SERVER PDM

UNIX Installation Guide

P25-1008-01



SUPRA[®] Server PDM UNIX Installation Guide

Publication Number P25-1008-01

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Release information for this manual

The *SUPRA Server PDM UNIX Installation Guide*, P25-1008-01, is dated January 15, 2002. This document supports Release 1.3 of SUPRA Server PDM in UNIX environments.

We welcome your comments

We encourage critiques concerning the technical content and organization of this manual. Please take the [survey](#) provided with the online documentation at your convenience.

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About this book

Using this document

This manual contains information needed to install SUPRA Server PDM on a UNIX system.

Document organization

The contents of this manual are organized as follows:

Chapter 1—System requirements

Lists resource and system requirements that must be in place before installing SUPRA Server.

Chapter 2—Installation

Contains step-by-step instructions for installing SUPRA Server and verifying the installation.

Revisions to this manual

The following changes have been made for this release:

- ◆ Listings of system resource requirements that previously appeared in the *Planning Guide* have been moved into this manual. See chapter 1.

Conventions

The following table describes the conventions used in this document:

Convention	Description	Example
Constant width type	Represents screen images and segments of code.	<pre>PUT 'customer.dat' GET 'miller\customer.dat' PUT '\DEV\RMT0'</pre>
Slashed b (<i>b</i>)	Indicates a space (blank). The example indicates that four spaces appear between the keywords.	<pre>BEGNbbbbSERIAL</pre>
Brackets []	Indicate optional selection of parameters. (Do not attempt to enter brackets or to stack parameters.) Brackets indicate one of the following situations:	
	A single item enclosed by brackets indicates that the item is optional and can be omitted. The example indicates that you can optionally enter a WHERE clause.	<pre>[WHERE <i>search-condition</i>]</pre>
	Stacked items enclosed by brackets represent optional alternatives, one of which can be selected. The example indicates that you can optionally enter either WAIT or NOWAIT. (WAIT is underlined to signify that it is the default.)	<pre>[<u>WAIT</u> NOWAIT]</pre>

Convention	Description	Example
Braces { }	<p>Indicate selection of parameters. (Do not attempt to enter braces or to stack parameters.) Braces surrounding stacked items represent alternatives, one of which you must select.</p> <p>The example indicates that you must enter ON or OFF when using the MONITOR statement.</p>	<pre>MONITOR { ON OFF }</pre>
<u>Underlining</u> (In syntax)	<p>Indicates the default value supplied when you omit a parameter.</p> <p>The example indicates that if you do not choose a parameter, the system defaults to WAIT.</p>	<pre>[(WAIT)] [(NOWAIT)]</pre>
	<p>Underlining also indicates an allowable abbreviation or the shortest truncation allowed.</p> <p>The example indicates that you can enter either STAT or STATISTICS.</p>	<pre><u>STATISTICS</u></pre>
Ellipsis points...	<p>Indicate that the preceding item can be repeated.</p> <p>The example indicates that you can enter multiple host variables and associated indicator variables.</p>	<pre>INTO :host-variable [:ind- variable],...</pre>

Convention	Description	Example
UPPERCASE lowercase	In most operating environments, keywords are not case-sensitive, and they are represented in uppercase. You can enter them in either uppercase or lowercase.	COPY MY_DATA.SEQ HOLD_DATA.SEQ
	In the UNIX operating environment, keywords are case-sensitive, and you must enter them exactly as shown.	cp *.QAR /backup
<i>Italics</i>	Indicate variables you replace with a value, a column name, a file name, and so on. The example indicates that you must substitute the name of a table.	FROM <i>table-name</i>
Punctuation marks	Indicate required syntax that you must code exactly as presented. () parentheses . period , comma : colon ' ' single quotation marks	<i>(user-id, password, db-name)</i> INFILE 'Cust.Memo' CONTROL LEN4
SMALL CAPS	Represent a keystroke. Multiple keystrokes are hyphenated.	ALT-TAB
<div style="border: 1px solid black; padding: 2px; display: inline-block; margin-bottom: 5px;">HP</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">NCR 3000</div>	Information specific to a certain operating system is flagged by a symbol in a shadowed box (<div style="border: 1px solid black; padding: 2px; display: inline-block;">HP</div>) indicating which operating system is being discussed. Skip any information that does not pertain to your environment.	<div style="border: 1px solid black; padding: 2px; display: inline-block; margin-bottom: 5px;">HP</div> For information on the SAM utility, refer to the <i>HP System Administration Tasks</i> manual.

SUPRA Server documentation series

SUPRA Server is the advanced relational database management system for high-volume, update-oriented production processing. A number of tools are available with SUPRA Server including DBA Functions, DBAID, precompilers, SPECTRA, and MANTIS. The following list shows the manuals and tools used to fulfill the data management and retrieval requirements for various tasks. Some of these tools are optional. Therefore, you may not have all the manuals listed.

Getting started

- ◆ *SUPRA Server PDM UNIX Installation Guide*, P25-1008
- ◆ *SUPRA Server PDM UNIX Tutorial*, T25-2262

General use

- ◆ *SUPRA Server PDM Glossary*, P26-0675
- ◆ *SUPRA Server PDM Messages and Codes Reference Manual (PDM/RDM Support for UNIX & VMS)*, P25-0022

Database administration tasks

- ◆ *SUPRA Server PDM Database Administration Guide (UNIX & VMS)*, P25-2260
- ◆ *SUPRA Server PDM System Administration Guide (UNIX)*, P25-0132*
- ◆ *SUPRA Server PDM Utilities Reference Manual (UNIX & VMS)*, P25-6220
- ◆ *SUPRA Server PDM Windows Client Support User's Guide*, P26-7500*
- ◆ *SPECTRA Administrator's Guide*, P26-9220**



Manuals marked with an asterisk (*) are listed twice because you use them for different tasks.

Application programming tasks

- ◆ *SUPRA Server PDM Programming Guide (UNIX & VMS)*, P25-0240
- ◆ *SUPRA Server PDM System Administration Guide (UNIX)*, P25-0132*
- ◆ *MANTIS Planning Guide*, P25-1315**
- ◆ *SUPRA Server PDM Windows Client Support User's Guide*, P26-7500*

Report tasks

- ◆ *SPECTRA User's Guide*, P26-9561**



Manuals marked with an asterisk (*) are listed twice because you use them for different tasks.



Educational material is available from your regional Cincom education department.

1

System requirements

General planning considerations

Before installing SUPRA Server PDM support, you must ensure that your software, hardware, and any field-developed products you have are compatible with SUPRA Server. Read the README file on your installation medium as well.

System considerations

The version of UNIX you are using should be UNIX System V R3 or higher.

Resource requirements for SUPRA Server PDM release 1.3

Resource requirements for SUPRA Server include the following:

- ◆ **Initial resource requirements.** SUPRA Server installations require about 80 MB of disk space
- ◆ **Dynamic resource requirements.** SUPRA Server uses the following dynamic resources:
 - Disk space for SUPRA Server database files and log files.
 - Shared memory segment for communications.
 - Shared memory segments for each database description module. The size depends on the number of files, the size of the records, the number of buffers, and so on.
 - UNIX process per thread per database plus one dispatcher process, one caretaker process, and two required daemon processes.
 - A variable number of semaphores depending on the number of users and the complexity of the database.
 - Additional shared memory segments (five or more) for logical names.
 - Approximately five message queues.
 - Approximately 1.5 MB of nonshared, virtual memory per thread.
 - Approximately 0.5 MB of shared, virtual memory per thread.

Prerequisite software

The Micro Focus COBOL run-time library is a prerequisite for running UNIX PDM on all platforms. The following table shows the operating systems and versions of Micro Focus COBOL that are supported in SUPRA Server release 1.3:

Operating system	Micro Focus COBOL version number
HP-UX 10.x	10.29
HP-UX 11	13.35
AIX 4.2 and 4.3	4.1
Digital UNIX 4.0 and up	4.1
NCR 3000 3.2 and up	4.1

Minimum and maximum values

The following sections list the minimum and maximum values for SUPRA Server PDM support in UNIX environments.

Database descriptions

Maximum concurrent tasks	1–32766 (Default=10)
Maximum update tasks	0–32766 (Default=10)
Access methods	UNIX
Maximum number of data sets (files)	1024 per database
File types supported	SUPRA Server primary and related files
Network support	TCP/IP
Maximum number of databases on a SUPRA Server Directory	Unlimited
Recovery methods	Shadow logging Task logging System logging
Maximum number of buffer pools per database	1000

SUPRA Server physical data manager

Maximum concurrent PDM tasks	1–32766 (Default=50)
Maximum overlapping threads per database	1–100 (Default=3)
Maximum number of PDM operator terminals	Unlimited
Maximum size of PDM message buffer	32767 (Default=4096)
Maximum number of loaded databases	Unlimited
Maximum retries on held records	100 (Default=5)
Maximum time interval between retries	1000 seconds (Default=5)

SUPRA Server primary files

Total number of logical records	2–2147483647 (Default calculated during validation)
Logical records per block	1–32767 (Default=10)
Maximum primary record length	32766 bytes
Minimum primary record length	21 bytes
Maximum number of data items (fields)	4088
Maximum data item (field) length	4088 bytes
Maximum length of the control key	255 bytes
Maximum number of primary keys	1
Maximum number of linkpaths	510
Number of copies of a buffer	1–32767 (Default=5)
Maximum buffer size	32256

SUPRA Server related files

Total number of logical records	2–2147483647 (Default calculated during validation)
Logical records per block	1–32767 (Default=10)
Maximum record length	32766 bytes
Minimum record length	41 bytes
Maximum number of data items (fields)	4088
Maximum data item (field) length	4088 bytes
Maximum number of coded records	36 squared
Maximum length of the related key	255 bytes
Maximum number of related keys	454
Minimum number of related keys	1
Maximum number of linkpaths	511
Minimum number of linkpaths	1
Number of copies of a buffer	1–32767 (Default=5)
Maximum buffer size	32556

SUPRA Server index files

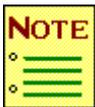
Maximum number of indexes per database	Unlimited
Maximum number of secondary keys per index	80
Maximum number of data items per secondary key	251
Maximum key size	255

Supported data-access techniques

Direct access	Yes
Hashed	Yes
ISAM (Indexed Sequential Access Method)	No
Sequential	Yes
B tree	Yes
Indexed	Yes
Linked	Yes

2

Installation



This installation process requires privilege to root access and assumes that the installer has UNIX system administration knowledge and capabilities.

The complete SUPRA PDM installation process consists of the following general steps:

1. [Setting up your environment](#)
2. [Restoring your tape to disk](#)
3. [Executing the install script](#)
4. [Setting up one or more PDM systems](#)
5. [Setting up users](#)

This chapter also discusses:

6. [Activating SUPRA PDM](#)
7. [Validating the SUPRA PDM installation](#)
8. [Deactivating SUPRA PDM](#)



If you are installing SUPRA PDM for the first time, start with “[Step 1: Setting up your environment](#)” on page 20. If you are upgrading to a new release, start with “[Step 2: Restoring your tape to disk](#)” on page 23.

Step 1: Setting up your environment

To install SUPRA PDM *for the first time*, perform the following steps:

1. Review the resource requirements in the preceding chapter. SUPRA PDM requires approximately 60M of disk space to install.
2. Set the following system parameters to values greater than or equal to these values:

Parameter	Minimum value	Definition
SHMMAX	64,000,000	Maximum shared memory in bytes
SHMMNI	512	Maximum shared memory IDs in system
SHMSEG	512	Maximum shared memory attaches per process
SEMMNI	500	Maximum semaphore IDs in system
SEMMNS	512	Maximum semaphores in system
SEMMNU	256	Number of semaphore undo structures
SEMUME	32	Semaphore undo entries per process
MSGMAX	8192	Maximum message size in bytes
MSGMNI	256	Maximum message queue IDs
MSGMNB	16,384	Maximum number of bytes on message queue
MAXUPRC	128	Maximum user processes
NFILES	1024	Maximum number of open files

For a detailed explanation of system-sizing requirements, refer to the section on modifying system parameters in the *SUPRA Server PDM System Administration Guide (UNIX)*, P25-0132.

DEC ALPHA OSF/1

For information on setting system parameters, refer to the *DEC OSF/1 Guide to System Administration*.

HP

For information on the SAM utility, refer to the *HP System Administration Tasks* manual.

IBM RS6000 AIX

These parameters are adjusted dynamically by the UNIX system during operation.

NCR 3000

Use the `id tune` and `id build` commands to adjust these parameters.

3. The `s1_install` script will automatically add the following default TCP/IP base socket address to the `/etc/services` file if the entry does not already exist:

```
supral 8000/tcp
```

If you wish to use a different base socket address, add your entry manually prior to executing the `s1_install` script. Modify the `/etc/services` file by adding your entry in the following format:

```
supral nnnn/tcp
```

4. Ensure that all UNIX file systems in which you intend to install SUPRA PDM are set up to allow for long file names.

DEC ALPHA OSF/1

IBM RS6000 AIX

NCR 3000

All UNIX file systems allow long file names.

HP

Use the SAM utility or the `newfs` UNIX system command. For details on using the SAM utility, refer to the *HP System Administration Tasks* manual.

5. Create the supra1 group and user that will own the SUPRA PDM files restored to your disks from the release tape. To do this:
 - a. Create a UNIX group with the name supra1 and a group ID of 8000. This account must have permission to read, write, and execute in the SUPRA PDM install directory (to be created in item 7 below).
 - b. Create a UNIX user with the name supra1, a user ID of 8000, and a group ID of 8000. This account must have permission to read, write, and execute in the SUPRA PDM install directory (to be created in item 7 below).
6. Create a supra1 subdirectory in the root directory with read, write, and execute permissions for owner, group, and other. This subdirectory will be created automatically by the s1_install script if it determines that /supra1 does not exist.
7. Create the SUPRA PDM install directory where you will restore the SUPRA PDM release tape. This directory can be anywhere on the system and can have any valid UNIX name. The PDM install tape requires approximately 60M of disk space. The supra1 account created in item 5 above must have permission to read, write, and execute in this directory.

Step 2: Restoring your tape to disk

If you are installing SUPRA PDM for the first time, proceed to item 1. If you are upgrading to a new release of SUPRA PDM, read the following note before proceeding to item 1.



Upgrading to a new release. The `s1_install` procedure is designed to install the PDM on your system along with older releases of the PDM. It is not necessary to remove older releases of the PDM in order to install a new release. You can install the new release without affecting your production system if you have sufficient disk space for both install directories on your system.

It is not necessary for the install directories to be on the same device because the `s1_install` script creates a soft link in the `/supra1` directory pointing to the install directory. Each release can have its own install directory or all releases can be installed in the same install directory.

The `s1_install` script is designed to update existing scripts and files if they exist and will not overwrite any existing suprad database files containing your existing database definitions. It is advisable to set up only a test SUPRA PDM system and a few users who will be using the new release (usually the system administrator and the programming staff). When the new release is validated, you can run the `s1_system_setup` script to set up the production system and its users and remove the old release.

If you choose not to update the user's `.profile` or `.login` file when you run the `s1_user_setup` script, you will have to modify the `PATH` environment variable to point to the new SUPRA PDM release directories.

Perform the following steps to restore your tape to disk:

1. Log in to your system using the supra1 account created in item 5 under “[Step 1: Setting up your environment](#)” on page 20.
2. Use the UNIX cd command to change the current directory to the SUPRA PDM install directory created in item 7 under “[Step 1: Setting up your environment](#)” on page 20. The install directory is the target for restoring the SUPRA PDM release tape.
3. Restore the files from tape by using this command:

```
tar -xvp[tape drive number]
```

The default tape-drive number is 0. The following files will be in the SUPRA PDM install directory after the restore:

File	Comment
install.doc	A copy of this installation document.
Relnotes.doc	Release notes for this release.
s1_install	The script for installing a SUPRA PDM.
s1_system_setup	The script for setting up one or more SUPRA PDM systems.
s1_user_setup	The script for setting up users for one or more SUPRA PDM systems.

Step 3: Executing the s1_install script

To execute the s1_install script, perform the following steps:

1. Change to super user (root) using the su UNIX command.
2. Perform the following tasks:
 - a. Execute the s1_install script by typing:

```
./s1_install
```
 - b. You will be asked if you wish to continue (Y/N):
 - If Yes, the script provides the minimum system-parameter values listed in item 2 under “[Step 1: Setting up your environment](#)” on page 20. You will be asked to confirm that these system parameters have been set. After receiving your confirmation, the s1_install script creates the /supra1 subdirectory, if it does not already exist.
 - If No, you are returned to the UNIX prompt.
 - c. When prompted, supply the name for the SUPRA PDM install directory. This is the directory you created in item 7 under “[Step 1: Setting up your environment](#)” on page 20, and where you restored the SUPRA PDM release tape in item 3 under “[Step 2: Restoring your tape to disk](#)” on page 23. The script will create a soft link, /supral/supra1_relx.x.x, that points to the SUPRA PDM install directory. If the soft link already exists, it is removed and a new one is created.

The SUPRA PDM is now installed; proceed to “[Step 4: Setting up a SUPRA PDM system](#)” on page 26.

Step 4: Setting up a SUPRA PDM system

At this point, you can choose to set up your SUPRA PDM system now or stop and set it up later:

1. You will be asked if you want to continue (Y/N):
 - If Yes, the `s1_install` script will execute the `s1_system_setup` script. The `s1_system_setup` script allows you to set up or upgrade any number of SUPRA PDM systems and set up the UNIX users for those systems. Proceed to item 2.
 - If No, the `s1_install` script ends and you will be returned to the UNIX prompt. You may then execute the `s1_system_setup` script as needed. You will not have to rerun the `s1_install` script in order to run a setup later.

When you later wish to execute the `s1_system_setup` script, enter the following as super user at the UNIX prompt:

```
/supra1/supra1_relx.x.x/scripts/s1_system_setup
```

where `x.x.x` = the release number for this SUPRA PDM.

2. When prompted, type in the name of the SUPRA PDM system you want to set up. A valid system name must be 1–8 alphanumeric characters.

If you press ENTER without entering a name, the script stops. If you are allowing the `s1_install` script to run system setup, you will be returned to the `s1_install` script; if you executed system setup manually, you will be returned to the UNIX prompt.

3. When prompted, specify whether the PDM will be systemwide or groupwide:
 - Enter S for systemwide if this PDM will have many users from many different UNIX groups.
 - Enter G for groupwide if this PDM will be accessed by only one UNIX group.

4. When prompted, specify the SUPRA PDM Database Administrator's (DBA's) UNIX user ID. All files generated for this SUPRA PDM system will be owned by this user and belong to this user's UNIX group. This user will be given DBA privileges and will be automatically set up for this SUPRA PDM system.

The `s1_user_setup` script will be executed automatically. The user's `.login` or `.profile` file will not be modified, which will allow the DBA user to be the DBA user for many SUPRA PDM systems. To access each system, the DBA user must execute the `name.env` script created in the home directory by the `s1_user_setup` script. The results of executing the `s1_user_setup` script are appended to the file `dbauser.out` in the current directory.

5. When prompted, specify a name for the SUPRA PDM system directory. Each SUPRA PDM system has a directory where all startup files are placed. This directory is the one from which you will start this SUPRA PDM system. A soft link will be created in the `/supra1` directory with the name of the SUPRA PDM system you provide. This soft link will point to the system directory for this system. The setup script will create the following files in this system directory:

File	Description
<code>daemon_startup</code>	A script to start the four daemons.
<code>opcom.dat</code>	The <code>csiopcom</code> authorization file.
<code>pdm.inp</code>	A text file of input parameters.
<code>pdm_startup</code>	A script to start the daemons, define logicals, and start SUPRA PDM.
<code>priv.dat</code>	The privilege file for this SUPRA PDM system.

The `pdm_startup` script created by the `s1_system_setup` script is the preferred method of starting the daemons and SUPRA PDM. It will check to determine whether each daemon is up before starting the next one. The script also checks to see whether SUPRA PDM is running. This allows the script to be executed under a variety of circumstances.

6. When prompted, specify a name for the SUPRA PDM resource directory. The resource directory controls the shared memory and semaphore usage for this SUPRA PDM system and contains all of the .log files for SUPRA PDM and the daemons. The SUPRA PDM log file will be the SUPRA PDM system name plus .log. The daemon log files will be the daemon name plus .log.

The default SUPRA PDM resource directory's name is s1res, and it will be created as a subdirectory of the SUPRA PDM system directory. If a resource directory other than this default is specified, a soft link will be created in the /supra1 directory with the name of the SUPRA PDM system plus /s1res. This soft link will point to the resource directory for this system.

The SUPRA PDM resource directory may be shared between any number of groupwide SUPRA PDM systems and a single systemwide SUPRA PDM system. If multiple systemwide SUPRA PDM systems are required, each system must have its own resource directory. It is possible to set up multisystemwide SUPRA PDM systems. For more details, refer to the *SUPRA Server PDM System Administration Guide (UNIX)*, P25-0132.

7. When prompted, specify the name for the SUPRA PDM Directory directory. The SUPRA PDM Directory database will be copied to this directory from the files restored from the release tape. By default, this directory will be named *directory* and will be created in the SUPRA PDM system directory. However, it may be desirable for two SUPRA PDM systems to share a single copy of the SUPRA PDM Directory database. This can be done by specifying a directory name other than the default name. Either way, if the SUPRA PDM Directory database files already exist in the directory, the files are not copied from the SUPRA PDM Install directory.

8. The `s1_system_setup` script now performs the following tasks and displays the appropriate information:
 - The script creates the `pdm.inp` file, which specifies `MAXTHREADS=4` and `MAXTASKS=100`. For details on `pdm.inp` file parameters, refer to the *SUPRA Server PDM System Administration Guide (UNIX)*, P25-0132. If the `pdm.inp` file already exists in the SUPRA PDM system directory, no action is taken.
 - The script creates the `pdm_startup` file in the SUPRA PDM system directory. If the script already exists, the release number is changed in the existing script.
 - The script creates the `daemon_startup` file in the SUPRA PDM system directory. If this script already exists, the release number is changed in the existing script.
 - The script sets up the DBA user with DBA privilege.

You will be notified when the setup operation for this system has been completed. You can then continue by setting up users for this system or continue setting up additional systems. If you do not set up users now, you can execute the `s1_user_setup` script at any time (as shown in “[Step 5: Setting up users for a SUPRA PDM system](#)” on page 30). If you do not set up users now, the script will ask for a name for another SUPRA PDM system. You can exit the `s1_system_setup` script by pressing ENTER. You will be returned to the UNIX prompt.

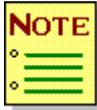
Step 5: Setting up users for a SUPRA PDM system

To set up any number of UNIX users for a SUPRA PDM system, perform the following steps:

1. Execute the `s1_user_setup` script. You can do this in one of the following ways:
 - When the `s1_system_setup` script completes system setup, you will be asked if you wish to continue by setting up additional users (Y/N). If Yes, `s1_user_setup` will be executed automatically. The SUPRA PDM system name, system directory, groupwise/systemwide flag, DBA user name, and the DBA group name are passed as parameters values.
 - If No, you can later enter the following as super user at the UNIX prompt:

```
/supra1/supra1_relx.x.x/scripts/s1_user_setup
```

where `x.x.x` = the release number for this SUPRA PDM.



You will be prompted to supply the SUPRA PDM system name, system directory, groupwise/systemwide flag, DBA user name, and the DBA group name as outlined in the preceding section for setting up SUPRA PDM.

2. After accepting the system information for user setup, the script asks you for a UNIX user name. If you press ENTER without entering a name, user setup will stop. If you started user setup from the `s1_system_setup` script, you will be returned there to set up more PDM systems. If you started user setup with the preceding command, you will be returned to the UNIX prompt.

If you enter a valid UNIX user name, the script will automatically determine the home location for this user. You will then be asked if you wish the script to modify the user's `.profile` or `.login` file (Y/N). Respond in one of the following ways:

- If this user is to access *only one* SUPRA PDM system, it is better to say Yes and let the script modify the `.profile` or `.login` file. The script defines all environment variables required to access this SUPRA PDM system and will add the following two paths to the PATH environment variable:

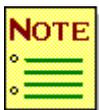
```
/supral/supral_relx.x.x/bin
/supral/supral_relx.x.x/scripts
```

where `x.x.x` = the release number for this SUPRA PDM.

- If the user is to access *multiple* SUPRA PDM systems, it is better to say No and *not* let the script modify the `.profile` or `.login` file. Depending on the user's current configuration, it may be necessary to add the two paths listed above to the PATH environment variable. You can do this by adding the following UNIX statement to the `.profile` or `.login` file in the user's home directory:

```
PATH=$PATH:/supral/supral_relx.x.x/bin:
/supral/supral_relx.x.x/scripts
```

where `x.x.x` = the release number for this SUPRA PDM.



If the `.profile` or `.login` file has already been modified or the `name.env` file already exists, the script will modify the SUPRA PDM release number in the file.

The `s1_user_setup` script creates a script in the user's home directory containing all of the required environment variables to access this SUPRA PDM system. The script will be named `name.env`, where `name` = SUPRA PDM system name. The user can execute this script at any time to access this SUPRA PDM system.

3. When prompted, specify the privilege you want to give to this user:

D = DBA (ALL permissions)

S = System (SYSLOG permissions)

G = Group (GRPLOG permissions)

This executes the `csisetpriv` utility. The results of this execution are appended to the file `csisetpriv.out` in the current directory. For details about privileges and the `csisetpriv` utility, refer to the *SUPRA Server PDM System Administration Guide (UNIX)*, P25-0132.

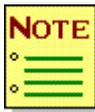
This completes the setup for this user. You can enter another UNIX user name or you can press ENTER to stop setting up users. If you started user setup from the `s1_system_setup` script, you will be returned there to set up more PDM systems. If you started user setup from the UNIX prompt, you will be returned to the UNIX prompt.

Step 6: Activating SUPRA PDM

After installation, system setup, and user setup are complete, you can activate the SUPRA PDM by performing the following steps:

1. Log in to the UNIX system as the SUPRA PDM DBA (created in item 4 under “[Step 4: Setting up a SUPRA PDM system](#)” on page 26).
2. Execute the *name.env* file corresponding to the SUPRA PDM system you intend to activate. This should be done with the following UNIX command executed from the user’s home directory:

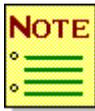
```
. name.env
```



The period and space before the command cause the environment variables defined in the script to persist after the script has exited.

3. Use the `cd` UNIX command to change the current directory to the system directory for the SUPRA PDM system you intend to activate.
4. Execute the `pdm_startup` script by entering the following at the UNIX prompt:

```
pdm_startup
```



Items 3 and 4 need to be executed only once for each system. The `pdm_startup` script can be executed even if the daemons and SUPRA PDM are running. This startup script can be useful for redefining logical names after the SUPRA PDM system is executing. The logical names and daemons for a SUPRA PDM system can be used by any user who has been set up to use the SUPRA PDM system. The `pdm_startup` script can be added to the `/etc/rc` file to automatically start SUPRA PDM during the system’s boot procedure.

Step 7: Validating the SUPRA PDM installation

To validate the SUPRA PDM installation, perform the following steps:

1. Validate that the processes are running by executing the following UNIX command:

```
ps -ef | grep csi
```

You should see csichkpriv, csitidy, csistr, csioper, and two csipdm processes.

2. To further validate that SUPRA PDM is operational, execute the SUPRA PDM Directory Facility by entering the following at the UNIX prompt:

```
csidba
```

When the initial sign-on screen appears, enter the following user name with no password:

```
database-descriptions
```

The main SUPRA PDM Directory Facility menu should appear. Press ENTER at the menu item's selection field to exit the SUPRA PDM Directory Facility.



For some platforms and terminals, it may be necessary to redefine the standard terminfo database entry in order to obtain the proper operation of the function keys while using the SUPRA PDM utilities. The terminfo text file contains the preferred definition for some common terminal types. The path is:

```
/supra1/$SUPRA1_RELEASE_NUMBER/tools/pdm.tic
```

You can use the tic UNIX command to produce a terminfo database from the pdm.tic text file. For more information on the terminfo database, refer to the appropriate UNIX manuals.

For details on the SUPRA PDM Directory Facility, refer to the [SUPRA Server PDM Database Administration Guide \(UNIX & VMS\)](#), P25-2260. For details on the default SUPRA PDM Directory user names and passwords, refer to the [SUPRA Server PDM System Administration Guide \(UNIX\)](#), P25-0132.



It will be necessary to add logical names to the pdm_startup file for each database module that will be used by the SUPRA PDM system. Refer to the [SUPRA Server PDM Database Administration Guide \(UNIX & VMS\)](#), P25-2260, for more details on the requirements for defining user databases.

Step 8: Deactivating SUPRA PDM

To deactivate a SUPRA PDM system, perform the following steps:

1. Execute the SUPRA PDM Operator Command utility by entering the following at the UNIX prompt:

```
csiopcom
```

2. When the csiopcom prompt appears, enter the following command:

```
shutdown/force name
```

where *name* = SUPRA PDM system name.

3. Exit the csiopcom utility by entering CTRL-D at the csiopcom prompt.
4. Execute the csiremall script to bring down the daemons and to release all of the system resources for the SUPRA PDM system. To do this, enter the following at the UNIX prompt:

```
csiremall
```

A message is displayed as each daemon is shut down and as each resource is released.

