

Cincom

SUPRA SERVER PDM

VMS Installation Guide
(VAX & Alpha)

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SUPRA[®] Server PDM VMS Installation Guide (VAX & Alpha)

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Release information for this manual

The *SUPRA Server PDM VMS Installation Guide (VAX & Alpha)*, P25-0147-03, is dated January 15, 2002. This document supports Release 2.4 of SUPRA Server under VMS 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 document provides an overview of SUPRA Server, plus planning considerations and step-by-step instructions for installing SUPRA PDM.



Release notes can be found in the SUPRA_HELP directory included on the installation tape.

Document organization

The information in this guide is organized as follows:

Chapter 1—Overview of SUPRA Server

Provides an overview of SUPRA products.

Chapter 2—Planning for SUPRA Server PDM/RDM support

Gives resource requirements and considerations for planning your SUPRA PDM installation.

Chapter 3—Release levels and installation media

Provides the a list of release levels for the components of SUPRA Server PDM Release 2.4 in Open VMS, and a description of the contents of the installation media.

Chapter 4—Preparing the SUPRA Server PDM environment

Describes the prerequisites for installing SUPRA Server PDM Release 2.4.

Chapter 5—Installing SUPRA Server PDM

Describes the procedures for installing SUPRA Server PDM Release 2.4.

Chapter 6—Initialization and configuration

Describes steps on initialization and configuration of SUPRA PDM Release 2.4.

Appendix A—SUPRA Server PDM space requirements

Provides information on the total space requirements required for all of the SUPRA Server PDM directories and lists the size requirements (in blocks) for each individual directory.

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Revisions to this manual

The following changes have been made for this release:

- ◆ Planning and overview information have been moved to this manual from the former *Planning Guide*. See the first three chapters of this manual.
- ◆ All references to release 2.3 have been changed to 2.4.
- ◆ Added “[Upgrading from 2.3 to 2.4](#)” on page 56.
- ◆ Added new release notes listings for [.SUPRA.PDM_24.HELP](#) on page 86.
- ◆ Removed VAX tags from members of [.SUPRA.PDM_24.REPORT](#) on page 87 as they are now usable on ALPHA as well.

Conventions

The following table describes the conventions used in this document series:

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>
Braces { }	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. The example indicates that you must enter ON or OFF when using the MONITOR statement.	<pre>MONITOR {ON OFF}</pre>

Convention	Description	Example
<p><u>Underlining</u> (In syntax)</p>	<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> <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>	<p>[WAIT] [NOWAIT]</p> <p><u>STATISTICS</u></p>
<p>Ellipsis points...</p>	<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>	<p>INTO :host-variable [:ind-variable],...</p>
<p>UPPERCASE lowercase</p>	<p>In most operating environments, keywords are not case-sensitive, and they are represented in uppercase. You can enter them in either uppercase or lowercase.</p>	<p>COPY MY_DATA.SEQ HOLD_DATA.SEQ</p>
<p><i>Italics</i></p>	<p>Indicate variables you replace with a value, a column name, a file name, and so on.</p> <p>The example indicates that you must substitute the name of a table.</p>	<p>FROM <i>table-name</i></p>
<p>Punctuation marks</p>	<p>Indicate required syntax that you must code exactly as presented.</p> <p>() parentheses . period , comma : colon ' ' single quotation marks</p>	<p>(<i>user-id</i>, <i>password</i>, <i>db-name</i>) INFILE 'Cust.Memo' CONTROL LEN4</p>
<p>SMALL CAPS</p>	<p>Represent a required keystroke. Multiple keystrokes are hyphenated.</p>	<p>ALT-TAB</p>

SUPRA Server PDM 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. For a brief synopsis of each manual, refer to the *SUPRA Server PDM Digest for VMS Systems*, P25-9062.

Overview

- ◆ *SUPRA Server PDM Digest for VMS Systems*, P25-9062

Getting started

- ◆ *SUPRA Server PDM VMS Installation Guide*, P25-0147
- ◆ *SUPRA Server PDM VMS Tutorial*, T25-2263

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 (VMS)*, P25-0130
- ◆ *SUPRA Server PDM Utilities Reference Manual (UNIX & VMS)*, P25-6220
- ◆ *SUPRA Server PDM Directory Views (VMS)*, P25-1120
- ◆ *SUPRA Server PDM Windows Client Support User's Guide*, P26-7500*
- ◆ *SPECTRA Administrator's Guide*, P26-9220**

Application programming tasks

- ◆ *SUPRA Server PDM Programming Guide (UNIX & VMS)*, P25-0240
- ◆ *SUPRA Server PDM System Administration Guide (VMS)*, P25-0130
- ◆ *SUPRA Server PDM RDM Administration Guide (VMS)*, P25-8220
- ◆ *SUPRA Server PDM Windows Client Support User's Guide*, P26-7500*
- ◆ *MANTIS Planning Guide*, P25-1315**

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

Overview of SUPRA Server

SUPRA[®] Server is an advanced, relational database management system providing a three-schema architecture. SUPRA Server includes tools for information retrieval, report generation, application programming, and database management and control. SUPRA Server provides various options. Depending on your business requirements, you may have one or a combination of these options. For an overview of how SUPRA Server PDM can be used in combination with other SUPRA Server products, refer to *SUPRA Server PDM Digest for VMS Systems*, P25-9062.

PDM

The Physical Data Manager (PDM) is a database management system that manages the data structures of the physical files which store your organization's data.

How the PDM stores data. The PDM physically stores data in RMS files.

How you access PDM data. You access PDM data using Physical View Data Manipulation Language (PDML) to present the data in the order you require.

Benefits of SUPRA Server PDM support. SUPRA Server PDM support provides a high degree of control over the storage and maintenance of data and is designed for high-performance, large-scale applications.

RDM

The Relational Data Manager (RDM) provides relational access to your PDM physical files.

Where/how data is stored. The PDM stores data physically in RMS files.

How RDM accesses data. You issue Relational Data Manipulation Language (RDML) statements to the RDM. RDM takes your RDML requests and formulates and issues a physical call to extract data from the PDM; then it presents the information to you in two-dimensional tables.

Benefits of SUPRA Server with RDM support. SUPRA Server with RDM support provides customers relational access to PDM data.

SUPRA Server components

SUPRA Server provides several components and associated products. You may or may not have all of these components, depending on your product configuration. For an overview of how SUPRA Server PDM components can be configured with other Cincom products, refer to *SUPRA Server PDM Digest for VMS Systems*, P25-9062.

SUPRA Server PDM support

SUPRA Server PDM support provides the following components and associated products:

- ◆ **Physical Data Manager (PDM).** Database management system that manages the data structures of the physical files and processes requests for data.
- ◆ **Directory.** A repository of information about your physical data structures, your logical data structures, your users, and your SUPRA Server implementation options.
- ◆ **DBA Utilities.** Allow you to organize and maintain data in an efficient, flexible manner. You access most of the utilities through DBA, a menu-driven tool for database maintenance. You can execute some DBA utilities from the command level.
- ◆ **MANTIS.** Application programming tool.
- ◆ **SPECTRA.** Sophisticated end-user report writer and query facility (not available in UNIX or Alpha environments). SPECTRA can access PDM data through RDM views or SQL views.

SUPRA Server with RDM support

SUPRA Server with RDM support provides the following components:

- ◆ **Relational Data Manager (RDM).** Processes applications' requests to access PDM data as though it were arranged in two-dimensional tables.
- ◆ **DBAID.** A utility that allows you to test your views to ensure they work correctly before putting them into production use. With DBAID, you can define a new view without affecting the Directory, open the view, issue RDML statements, and examine the results. You can then change the view, reorder for efficiency, or try different navigation methods until it works the way you want it to work. A subset of the DBAID utility is available to application programmers to test views they use in base programs.
- ◆ **Precompilers.** Allow you to embed RDML statements within application programs. SUPRA Server provides precompilers for COBOL, FORTRAN and BASIC.
- ◆ **MANTIS.** Application programming tool.
- ◆ **SPECTRA.** Sophisticated end-user report writer and query facility (not available in UNIX or Alpha environments). SPECTRA can access PDM data through RDM views or SQL views.

SUPRA Server features

SUPRA Server provides a full range of features depending on your configuration and the components you have at your installation.

SUPRA Server PDM support

SUPRA Server PDM support provides the following features:

- ◆ **File types.** The PDM supports the following types of files:
 - Data files (primary and related, including Directory files) that contain your user data and Directory information.
 - Index files that are optional and contain pointers (called secondary key values) to data file records and secondary key definitions.
 - System files that are optional and are for recording statistics, task-level recovery information, and system-level recovery information.

- ◆ **Active schema (database) maintenance.** You can perform maintenance on entities in an active schema, or database. For example, you may want to change the length of a data item or increase the number of records held in a file or data set.

Perform active database maintenance using DBA utilities, DBA functions, and Batch Directory Maintenance.

- ◆ **Storage optimization.** The PDM optimizes storage by running as a multithreaded, detached process. Multithreading allows numerous applications to use the PDM at the same time and leads to efficient use of system resources. Running the PDM as a detached process results in smaller application programs and, thereby, saves on disk space and memory.

- ◆ **Recovery.** Two types of recovery are available:
 - Task logging. Ensures that the PDM saves enough information for all tasks and transactions to perform task level recovery. This information is stored on the PDM task log file.
 - System logging. Allows you to recover the database if the task log file is unreadable or unused, or if an updated data file is unreadable and must be reloaded. When you specify system logging, the PDM saves chronological audit information to the system log file.

SUPRA Server with RDM support

SUPRA Server with RDM support provides the following features:

- ◆ **Data access.** User applications issue commands using Relational Data Manipulation Language (RDML). RDM then formulates and issues a physical call to satisfy the user's request. With RDM, you can access your files in the following ways:
 - Directly by primary key.
 - Directly or sequentially by secondary key.
 - Sequentially (forward or backward).
- ◆ **Two types of views.** A view is a table containing logical data that the RDM derives from physical locations on the database using the RDML commands in your program. There are two types of views:
 - Base views access physical files. Base views are part of the conceptual schema.
 - Derived views access other views. Derived views are part of the external schema.
- ◆ **View validation using domains.** A domain is the set of all permissible values for specified fields. Domains provide two types of validation: (1) they indicate whether a value is valid for a given field, and (2) they indicate whether two given fields are logically compatible.
- ◆ **Referential integrity.** Referential integrity ensures that two items representing the same data do not become inconsistent. You must use foreign keys in your base views so RDM can maintain referential integrity. RDM checks for referential integrity using foreign key value integrity and deletion integrity.
- ◆ **Tools for optimizing performance.** You can optimize the performance of RDM by reducing processing time using Global View Support and View Binding. Depending on your environment, you can also store the RDM program in shared memory or in extended memory to optimize performance. In OS/390 and VSE, you can store RDM in shared memory only. In OS/390 and VSE/ESA (if you are using the extended storage option), you can also store CICS RDM task context in extended memory.

- ◆ **RDM reports.** RDM provides a number of reports for DBAs and programmers for maintaining views. An end-user report is also available for the nontechnical user (such as a SPECTRA user) which includes information such as the view name, users related to the view, and column names and description.
- ◆ **Directory Views.** The Directory Views are a set of predefined views of the SUPRA Server database. They provide read-only access to the entities and relationships held on the SUPRA Directory so that you can report on user-defined databases and views.

New features in release 2.4

Release 2.4 of SUPRA Server PDM support includes the following new features:

- ◆ The new Serial ReadAhead Cache feature dramatically improves performance for readonly sweeping of datasets. See the *SUPRA Server PDM System Administration Guide (VMS)*, P25-0130 for further information.
- ◆ A new script procedure check_identification.com displays the internal file identifications of .exe image files. This procedure is only used under the direction of Cincom Support and is not documented in these manuals.
- The database reports provided in the supra_report directory are now available on Alpha. See the *SUPRA Server PDM RDM Administration Guide (VMS)*, P25-8220, for more information on generating reports.

2

Planning for SUPRA Server PDM/RDM support

To install SUPRA Server under the VMS operating system, you need to know about:

- ◆ Space and resource requirements
- ◆ Logical names
- ◆ PDM initialization

The SUPRA Server database operates in the VMS operating environment as follows:

- ◆ A PDM detached process acts as a central server to applications
- ◆ The PDM process manages the data and coordinates access to the database files

Space and resource requirements

Space and resource requirements for installing SUPRA Server, as well as VMS resource requirements, include:

- ◆ Prerequisite software
- ◆ Initial space requirements
- ◆ Dynamic resource requirements

Prerequisite software

VAX

The COBOL run-time library image COBRTL.EXE must be the one supplied with the Digital COBOL compiler version 5.0 and higher.

To check which version you have, use the VMS command Analyze/Image:

```
$ Analyze/Image Sys$Library:COBRTL.EXE
```

```
IMAGE HEADER

Fixed Header Information

image format major id: 02, minor id: 05
header block count: 1
image type: shareable (IHD$K_LIM)
global section major id: %X'01', minor id: %X'00000D'
match control: ISD$K_MATLEQ

Image Identification Information

image name: "COBRTL"
image file identification: "COBRTL V5.1-005"
link date/time: 9-MAR-1994 01:49:05.77
linker identification: "05-13"
```

Alpha

The COBOL run-time library image COBRTL.EXE must be the one supplied with DEC COBOL V2.1-543 or higher for OpenVMS AXP Systems.

To check which version you have, use the VMS command Analyze/Image:

```
$ Analyze/Image Sys$Library: COBRTL_D56_TV.EXE
```

```
IMAGE HEADER

Fixed Header Information

image format major id: 3, minor id: 0
header block count: 2
image type: shareable (EIHD$K_LIM)
global section major id: %X'01', minor id: %X'00000D'
match control: ISD$K_MATLEQ

Image Identification Information

image name: "COBRTL_TV"
image file identification: "COBRTL V5.0-008"
link date/time: 2-APR-1994 01:19:54.46
linker identification: "V1.1"
```

Initial space requirements

To install SUPRA Server, you need these privileges and resources:

- ◆ SETPRV privilege, or (CMKRNL, SYSNAM, SYSPRV, DETACH, LOG_IO, PRMGBL, SHARE, SHMEM, & PRMMBX).
- ◆ A minimum of 25,000 blocks of temporary free space on your system device. This is temporary space needed by VMSINSTAL only during installation.
- ◆ A total of 65,000 blocks of disk space on the device where SUPRA Server will reside (this may or may not be your system device). It is recommended that SUPRA Server not reside on the system device. If it does not, 25,000 blocks of temporary free space are required for the system identifier on the device where SUPRA Server resides.



Digital recommends that you back up your system disk before installing any layered software. Cincom suggests that you follow this recommendation before installing SUPRA Server.

Dynamic resource requirements

SUPRA Server uses the following dynamic resources:

- ◆ Disk space for SUPRA Server database and log files
- ◆ One global section per SUPRA Server PDM process
- ◆ Four installed shareable images
- ◆ Blocks from the global page file
- ◆ System dynamic memory for enqueues
- ◆ System dynamic memory for timer elements

Logical names

Ensure that you have defined the logical names required to run SUPRA Server. For information on setting up a PDM environment, refer to the *SUPRA Server PDM System Administration Guide (VMS)*, P25-0130.

PDM initialization

You must understand the differences between manual and automatic PDM initialization and the procedures required for each. For more information on manual and automatic PDM initialization, refer to the *SUPRA Server PDM System Administration Guide (VMS)*, P25-0130.

3

Release levels and installation media

Contents of the SUPRA Server installation media

The SUPRA Server installation tape contains executable code, command files, command language definitions (.CLD files), and a set of standard Directory database files.

System compatibility

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.

Compatible system software

To ensure compatibility with this version of SUPRA Server PDM, you should be running OpenVMS V6.2 or higher.

If you use RDM application programming languages, you can use any language that complies with Digital's standard calling convention to communicate with the PDM via standard Physical DML function calls.

The following list provides the current release levels for components of SUPRA Server PDM Release 2.4 in the OpenVMS **VAX** and **ALPHA** environment:

Component	Service level
SUPRA PDM	2400
Indexing Support	2400*
Cobol Precompiler	2400*
Basic Precompiler	2400*
Fortran Precompiler	2400*
RMS Journaling	2400*
PDM Cache Support	2400*

* May or may not be enabled depending on the security codes used by your site

4

Preparing the SUPRA Server PDM environment

When installing SUPRA Server PDM Release 2.4 on the OpenVMS operating system for both **VAX** and **ALPHA** you should be aware of the following environment preparation considerations:

- ◆ Installing prerequisite software
- ◆ Understanding installation procedure requirements
- ◆ Understanding SUPRA Server PDM Release 2.4 considerations
- ◆ Using VMSINSTAL

The following sections provide detailed information on each of these considerations.



Read “[Preparing the SUPRA Server PDM environment](#)” on page 27 and “[Installing SUPRA Server PDM](#)” on page 29 before you begin installing this product.

Installing prerequisite software

SUPRA Server PDM Release 2.4 requires OpenVMS version 6.2 or higher.

Understanding installation procedure requirements

The SUPRA Server PDM installation takes approximately twenty minutes to two hours, depending on the type of media and your system configuration.

In order to install SUPRA Server PDM, you must have these privileges and resources:

- ◆ SETPRV privilege, or CMKRNL, SYSNAM, SYSPRV, DETACH, LOG_IO, PRMGBL, SHARE, SHMEM & PRMMBX.
- ◆ If disk quotas are enabled for the system device or for the device on which SUPRA will reside, the privilege EXQUOTA may also be required.
- ◆ A minimum of 25,000 blocks of free space on the system disk (this is temporary space only; it is used by VMSINSTAL during the tape installation).
- ◆ An additional 150,000 blocks of disk space on the device where SUPRA Server PDM will reside (this may or may not be your system device). SUPRA Server PDM requires 100,000 blocks. Also on this device, you need a quota of 25,000 blocks for the system identifier (this is only required while the savesets are moved from the system disk to this device).



If you already have a prior service level of SUPRA Server PDM Release 2.4 installed, Cincom recommends that you install this service level in the same location. You will be able to run all service levels, as long as you properly define your logical names.

Understanding SUPRA 2.4 PDM considerations

The COBRTL image should be at least the one supplied with COBOL version 4.4-65. The global section major ID is X'01' and the minor ID is X'0D'.

Use ANALYZE/IMAGE SYS\$LIBRARY:COBTRL.EXE **VAX** or SYS\$LIBRARY:COBRTL_D56_TV.EXE **ALPHA** to check these values.

Using VMSINSTAL

After you log into a privileged account to install SUPRA, invoke the VMSINSTAL installation procedure. For detailed instructions on starting VMSINSTAL, see “[Invoking VMSINSTAL](#)” on page 33.

5

Installing SUPRA Server PDM

If you are at the same version release and are doing a maintenance release upgrade, the steps you need to follow are simply to install with the new savesets. Your environment is still properly set. Then re-execute SUPRA_COMS:LOGICALS.COM to currently redefine logical names.



If upgrading from a previous installation of SUPRA Server PDM or installing a maintenance-level, Cincom recommends following these steps before beginning a new install:

- ◆ Establish a recovery point
 - ◆ Take a full backup
 - ◆ Reformat system log files and task log files
-

To install SUPRA Server PDM Release 2.4, you perform these steps:

1. Log-in to a privileged account.
2. Invoke VMSINSTAL.
3. Insert the first installation kit volume.
4. Select installation options.
5. Understand installation messages and information.

The following sections provide detailed instructions for completing these steps.



At a prompt during the installation, you may key in a single \$ to spawn out to a subprocess (this is useful if you need to research your response). When you are ready to return to the installation command procedure, just LOGOUT of the subprocess and the last question that was being asked when you spawned the subprocess will be repeated. However, additional text will not be repeated, so make sure you read the text before spawning the subprocess.

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 there.



Enhancements to VMSINSTAL may cause additional prompts to display during the course of the installation. These prompts may not be documented in this manual, but the installation should proceed as expected.

You may want to save hard copy output from the installation.



During the upgrade from SUPRA 1.1.1 when you have completed the first step of the upgrade on SUPRAD.MOD, you will need to recompile your user dbmod. Due to possible compile errors caused by loading the 111 user dbmod file if it is present, it is recommended to rename or delete the user dbmod file so that the compile of the user dbmod can complete.

Logging in to a privileged account



In the installation steps, all information that appears on the terminal screen will be set off in blocks. Cincom recommends that you install software from the system manager's account. To do so, log-in using the username SYSTEM, and type the correct password, as shown in the following code sample:

```

USERNAME: SYSTEM
PASSWORD:

```

Maintenance-level test installation

If this is a maintenance level of the same version of SUPRA and you want to perform a separate installation for testing purposes, then you will need to complete the following steps to ensure that the newer maintenance level is not used for production before you are ready:

1. Define the logical name CSI_PRODUCT_FILE for the CINCOM_PRODUCTS.DAT file using the test directory path you want to install in. For example:

```

$DEFINE CSI_PRODUCT_FILE
<TESTDISK>:[<TESTDIR>]CINCOM_PRODUCTS.DAT

```

If the install finds no file where it's looking via the logical, it will create the CINCOM_PRODUCTS.DAT file. This file will in turn contain a pointer to the PROFILE.DAT file that is used to tell the system where the images, and so on, are located for installing and setting up environments.

2. Run the install procedure as normal, answering the questions about directories with the test path you want the install to use.

Testing maintenance-level test installation

To run the new test set of images, perform the following steps:

1. Define the CSI_PRODUCT_FILE logical to point to the CINCOM_PRODUCTS.DAT file created during the test install. For example:

```
$DEFINE CSI_PRODUCT_FILE_<TESTDISK>: [ <TESTDIR> ]CINCOM_PRODUCTS.DAT
```



Caution: You will also need to change definitions of this and the image logical names when you leave the test environment as well.

2. Invoke the LOGICALS.COM procedure to define the logical names in the group table. For example:

```
$@<TESTDISK>: [ <TESTDIR> .SUPRA.PDM_24.COMS ]LOGICALS.COM GROUP
```

3. Invoke the original PDM_LOGICALS_GROUP#.COM as well, or copy it to the test SUPRA_LIBRARY and edit as desired. For example:

```
$@<PRODDISK>: [ <PRODDIR> .SUPRA.PDM_24.LIBRARY ]PDM_LOGICALS_<GROUP#>.COM
```

4. Once you have invoked all of the setup COM procedures that are needed, you may run in this environment for testing purposes. You may want to create a test COM procedure to automate the above steps for ease of switching environments.



There may be additional DCL command procedures that your company normally uses.

5. Because these images will not automatically be installed on the system reboot, you will need to manually invoke the install procedure. For example:

```
$@SUPRA_COMS:INSTALL_SUPRA24_PDM_IMAGES>.COM
```

6. You may undo the above steps as follows:

```
$@SUPRA_COMS:DEINSTALL_SUPRA24_PDM_IMAGES.COM
```

```
$DEASSIGN CSI_PRODUCT_FILE
```

```
$@<PRODDISK>: [ <PRODDIR> .SUPRA.PDM_24.COMS ]LOGICALS.COM GROUP
```

```
$@SUPRA_LIBRARY:PDM_LOGICALS_<GROUP#>.COM
```

7. To move this setup to production you may either use CUSTOM.COM by choosing option 3 (“Move Portions of the SUPRA system to different VMS Directories”) from SUPRA_MENU.COM, or reinstall the images with the production CINCOM_PRODUCTS.DAT file as the default.

Invoking VMSINSTAL

To begin the installation, enter the following command to invoke VMSINSTAL:

```
$ @SYS$UPDATE:VMSINSTAL product device
```

where:

product is the product and version that you are installing (SUPRA024 is for SUPRA Version 2.4).

device represents the device name where the distribution volume(s) will be mounted for the SUPRA Server PDM installation media.



The format is *ddd**n* where *ddd* is the device code and *n* is the unit number (MUA0 is the device name used in this manual).

```
$ @SYS$UPDATE:VMSINSTAL SUPRA024 MUA0:

      VAX/VMS Software Product Installation Procedure V6.1

It is 16-APRIL-1996 at 12:00.
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:
      BATCH_1234
      CONTROL
      TEST
* Do you want to continue anyway [NO]? YES
* Are you satisfied with the backup of your system disk [YES]?
```

When you invoke VMSINSTAL, it checks the following:

- ◆ Whether you logged into a privileged account (you should install software from the system manager's account).
- ◆ 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:

- ◆ DECnet is up and running.
- ◆ Any users are logged onto 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, press RETURN.

VMSINSTAL then asks if you are satisfied with the backup of your system disk. If you are satisfied, press RETURN. If you are not satisfied with the backup, type NO to discontinue the installation.

Inserting the first volume of the installation kit

Mount volume 1 of the installation kit, as shown in the following example:

```
Please mount the first volume of the set on MUA0:  
  
* Are you ready? YES  
  
%MOUNT-I-MOUNTED, CINCOM mounted on _MUA0:
```

If you are ready to proceed with the installation, type YES and press RETURN. The following screen displays:

```
The following products will be processed:  
  
SUPRA V2.4  
  
Beginning installation of SUPRA V2.4 at 12:01  
  
%VMSINSTAL-I-RESTORE, Restoring product saveset A...  
  
%VMSINSTAL-I-INFO, Installing/Updating the Cincom Common Utilities.
```

Selecting installation options

In this step, you must enter values for the following installation options:

- ◆ **UIC Ownership.** Establishes ownership for all of the SUPRA files loaded from the tape. Otherwise, the files will be owned by [SYSTEM].
- ◆ **SUPRA Root Directory.** Specifies the location that will contain all of the SUPRA Server PDM directories and files. It should be a disk device name and directory 'device:[dir]', or it can be a valid logical name.

```
I need the UIC that will own the SUPRA files.
Please enter one of the following formats:

[ggg,mmm] - where 'ggg' is the UIC Group number, &
            'mmm' is the UIC Group Member number.
'or'
[uuuuuuuu] - where 'uuuuuuuu' is the account username.

* What is the UIC that will own the SUPRA files? (SYSTEM)
* What is the SUPRA Root Directory? ( )
```

The SUPRA subdirectories are then created based upon the SUPRA root directory you supplied, as shown in the following example:

Based upon the SUPRA Root Directory given, the following SUPRA subdirectories will be created:

```
disk:[dir.SUPRA]
disk:[dir.SUPRA.PDM_24]
disk:[dir.SUPRA.PDM_24.AUXIL]
disk:[dir.SUPRA.PDM_24.BURRYS]
disk:[dir.SUPRA.PDM_24.CLEAN_DICT]
disk:[dir.SUPRA.PDM_24.CLEAN_EXE]
disk:[dir.SUPRA.PDM_24.COMS]
disk:[dir.SUPRA.PDM_24.DICT]
disk:[dir.SUPRA.PDM_24.EXAMPLES]
disk:[dir.SUPRA.PDM_24.EXE]
disk:[dir.SUPRA.PDM_24.HELP]
disk:[dir.SUPRA.PDM_24.LIBRARY]
disk:[dir.SUPRA.PDM_24.PATCHES]
disk:[dir.SUPRA.PDM_24.PATCH_WORK]
disk:[dir.SUPRA.PDM_24.REPORT]
disk:[dir.SUPRA.PDM_24.TEST_EXE]
disk:[dir.SUPRA.PDM_24.UPGRADE]
```

If this Directory structure is acceptable, then take the default of YES and press the RETURN key to continue processing. Else, type NO and press the RETURN key to re-enter the SUPRA Root Directory.

* Are the SUPRA Directories acceptable? (YES)

If the subdirectories are acceptable, press RETURN. The following prompt displays:

```
You must indicate if you wish to load the SUPRA 2.4 PDM .CLD files (SUPRA 2.4 PDM
Commands) into the VMS DCLTABLES at this time?
```

```
NOTE: If you have installed a prior release of SUPRA you will NOT
want to load the SUPRA 2.4 PDM .CLD files until you convert
completely to this release of SUPRA 2.4 PDM.
```

```
The problem is that there can only be one definition for each
SUPRA Command in the VMS DCLTABLES. If you load the SUPRA 2.4
PDM Commands into the DCLTABLES, your prior release of SUPRA
PDM (either 1.x or 2.x) will not work.
```

```
If you decide NOT to load the SUPRA 2.4 PDM Commands at this
time, you may do so at a later time by invoking the
following:
```

```
    $ SET COMMAND/OUTPUT=SYS$COMMON:[SYSLIB]DCLTABLES.EXE -
      /TABLE=SYS$COMMON:[SYSLIB]DCLTABLES.EXE -
      disk:[dir.SUPRA.PDM_24.LIBRARY]*.CLD
```

```
* Do you wish to load the SUPRA PDM .CLD files ? (NO)
```

If you wish to load the SUPRA PDM .CLD files into the VMS DCLTABLES, enter Y or YES and press RETURN. Next, the SUPRA PDM subdirectories are created, as shown in the following example:

```
%VMSINSTAL-I-INFO, The SUPRA PDM subdirectories are now being created.
```

```
%CREATE-I-EXISTS, disk:[dir.SUPRA.PDM_24] already exists
%CREATE-I-EXISTS, disk:[dir.SUPRA.PDM_24.BURRYS] already exists
%CREATE-I-EXISTS, disk:[dir.SUPRA.PDM_24.CLEAN_DICT] already exists
%CREATE-I-EXISTS, disk:[dir.SUPRA.PDM_24.CLEAN_EXE] already exists
%CREATE-I-EXISTS, disk:[dir.SUPRA.PDM_24.COMS] already exists
%CREATE-I-EXISTS, disk:[dir.SUPRA.PDM_24.DICT] already exists
%CREATE-I-EXISTS, disk:[dir.SUPRA.PDM_24.EXE] already exists
%CREATE-I-EXISTS, disk:[dir.SUPRA.PDM_24.HELP] already exists
%CREATE-I-EXISTS, disk:[dir.SUPRA.PDM_24.PATCHES] already exists
%CREATE-I-EXISTS, disk:[dir.SUPRA.PDM_24.REPORT] already exists
%CREATE-I-EXISTS, disk:[dir.SUPRA.PDM_24.TEST_EXE] already exists
```

You will receive the following %CREATE-I-EXISTS informational messages only when loading files into already-existing directories:

```
%CREATE-I-EXISTS, disk:[dir.SUPRA.PDM_24] already exists
%CREATE-I-EXISTS, disk:[dir.SUPRA.PDM_24.BURRYS] already exists
%CREATE-I-EXISTS, disk:[dir.SUPRA.PDM_24.CLEAN_DICT] already exists
%CREATE-I-EXISTS, disk:[dir.SUPRA.PDM_24.CLEAN_EXE] already exists
%CREATE-I-EXISTS, disk:[dir.SUPRA.PDM_24.COMS] already exists
%CREATE-I-EXISTS, disk:[dir.SUPRA.PDM_24.DICT] already exists
%CREATE-I-EXISTS, disk:[dir.SUPRA.PDM_24.EXE] already exists
%CREATE-I-EXISTS, disk:[dir.SUPRA.PDM_24.HELP] already exists
%CREATE-I-EXISTS, disk:[dir.SUPRA.PDM_24.PATCHES] already exists
%CREATE-I-EXISTS, disk:[dir.SUPRA.PDM_24.REPORT] already exists
%CREATE-I-EXISTS, disk:[dir.SUPRA.PDM_24.TEST_EXE] already exists
```

The following message is received when loading the .CLD files. This message only appears if you specified "YES" to these questions during the installation:

```
%VMSINSTAL-I-INFO, The SUPRA 2.4 PDM .CLD files now being loaded to the VMS DCLTABLES.

%VMSINSTAL-I-RESTORE, Restoring product saveset B... (or "C" on Alpha)
%VMSINSTAL-I-RESTORE, Restoring product saveset D...
%VMSINSTAL-I-RESTORE, Restoring product saveset E...
%VMSINSTAL-I-RESTORE, Restoring product saveset F...
%VMSINSTAL-I-RESTORE, Restoring product saveset G...
%VMSINSTAL-I-RESTORE, Restoring product saveset H... (or "I" on Alpha)
%VMSINSTAL-I-RESTORE, Restoring product saveset J...
%VMSINSTAL-I-RESTORE, Restoring product saveset K...
%VMSINSTAL-I-RESTORE, Restoring product saveset L...
%VMSINSTAL-I-RESTORE, Restoring product saveset M...
%VMSINSTAL-I-RESTORE, Restoring product saveset N...
```

VAX only

```
%VMSINSTAL-I-INFO, Now applying the SUPRA PDM Security Codes Patch.  
%PATCH-I-NOLCL, image does not contain local symbols  
%PATCH-I-NOGBL, some or all global symbols not accessible  
%PATCH-I-WRTFIL, updating image file disk:[dir.SUPRA.PDM_24.EXE]CSIPDM_2400.EXE.2  
%PATCH-I-WRTFIL, updating image file disk:[dir.SUPRA.PDM_24.EXE]CSIPDM_DEB_2400.EXE.2
```

```
%VMSINSTAL-I-INFO, The file SYS$COMMON:[CINCOM]CINCOM_PRODUCTS.DAT was  
%VMSINSTAL-I-INFO, created/updated with Product Installation information!
```

The file SYS\$COMMON:[CINCOM]CINCOM_PRODUCTS.DAT (or the file pointed to by logical name CSI_PRODUCT_FILE) will be used to store pertinent information concerning all Cincom product installations.

```
Installation of SUPRA V2.4 completed at 12:20
```

The loading of the SUPRA installation tape is now finished.

Upgrading an existing PDM system

Invoke the SUPRA menu:

```
$ @disk:[dir.supra.pdm_24.coms]supra_menu.com
```



If you are upgrading from a release of SUPRA PDM prior to 2.4.00, then you must reglobalize all global views before accessing SUPRA PDM through RDM.

```

SUPRA  2.4  PDM  MENU
-----
1)  Move TEST LIBRARY to production
2)  Create a new PDM system
3)  Move Portions of the SUPRA system to different VMS Directories
4)  Upgrade an existing PDM system from SUPRA 1.0, 1.1.1, 2.2, or 2.3
    to SUPRA 2.4
5)  Add required SUPRA images to the VMS known file list of installed
    images
6)  Remove SUPRA images from the VMS known file list
9)  Introduction/Tutorial to the above routines
99) EXIT
Key in the corresponding option number, and press RETURN:

```

To upgrade an existing PDM system, type 4 and press RETURN. The following screen displays:

```

This procedure will upgrade a previous SUPRA release to SUPRA 2.4.

No other SUPRA PDM should have access to the SUPRA Directory that is
being upgraded during the upgrade process. If it is necessary to
continue your operational systems, it will be necessary to do the
upgrade on copies of the SUPRA Directory under a different group.

If your database description file (SUPRAD.MOD) is System-wide, and it
necessary to continue your operational systems, it will be necessary
to create a Group-wide version of both the dict (SUPRAD.MOD) and user
(e.g. MRPDBO.MOD) dbmods for the upgrade.

This procedure will ask various questions. If there is a Default value
for the question asked, it is shown in parentheses '()'. You can accept
the Default by simply pressing the RETURN key.

At any point you may exit this procedure by entering CONTROL-Y.

Please press the RETURN key to continue.

```

On the following screen, type the corresponding option number for your current upgrade needs, and press RETURN:

Which incremental upgrade would you like to perform?

- 1) 1.0 -> 1.1.1 (Vax only)
- 2) 1.1.1 -> 2.2
- 3) 2.2 -> 2.3
- 4) 2.3 -> 2.4

99) EXIT

Enter item number: (3) 1

If you are performing an incremental upgrade from:

SUPRA version	Proceed to
1.0 → 1.1.1	“Upgrading from 1.0 to 1.1.1 (Vax only)” on page 43
1.1.1 → 2.2	“Upgrading from 1.1.1 to 2.2” on page 50
2.2 → 2.3	“Upgrading from 2.2 to 2.3” on page 53
2.3 → 2.4	“Upgrading from 2.3 to 2.4 “ on page 56

Upgrading from 1.0 to 1.1.1 (Vax only)

This section displays the screens you will see when upgrading from SUPRA 1.0 to 1.1.1.

This procedure relies on an operational SUPRA release 1.0 PDM, All logical names necessary to use the PDM and to access the SUPRA release 1.0 Directory that is to be upgraded must be defined before the upgrade.

If CSIPDM is not 1.0 then you should abort now.

Press the RETURN key to continue, or ctrl/Y to abort.

The 1.0 SUPRAD.MOD *must* be group-wide dbmod for the upgrade to work. If SUPRAD is not group-wide then you should abort now.

Press the RETURN key to continue, or ctrl/Y to abort.

%DCL-I-SUPERSEDE, previous value of CSI_UPG has been superseded
SINON status ****

2) LOGICAL NAMES

The only additional logical name that needs definition is CSI_UPG. This must be defined to be the directory containing this upgrade software.

3) ON COMPLETION OF THE UPGRADE PROCESS

Updated SUPRA Directory files will have been created.

A SUPRA 1.1.1 version of the Directory database description file will be placed in the current directory and will be named SUPRAD111.MOD. This will be required when running SUPRA release 1.1.1.

You will need to re-compile all Databases.

You will need to re-create all Global View files.

Please enter your account identification

Password:

Central files not available

Welcome to Spectra - Service Level 8.0

Ready

Process completed

Ready

Query session complete

Please enter your account identification

Password:

Central files not available

Welcome to Spectra - Service Level 8.0

Ready

Process completed

Ready

No data qualified

Ready

Process completed

Ready

```
Process completed
Ready
Query session complete
SINON  status ****
SINOF  status ****
/DATASET=UDD2/RELATED
/DATASET=UDD3/RELATED
```

```
Related data set statistics for UDD2
file #1          : CSI_DIRDB:UDD2.CSI (520 blocks)
Total-logical-records : 10400
Records-per-block  : 20
Sectors-per-block  : 6
Block-size         : 3072 bytes
Record-size        : 150 bytes
Control-interval-size : 1040 records
Load-limit         : 832 records = 80.00% of C.I. size.

Active records          : 3706 = 35.67% of capacity
  records with code A8  : 12 records
  records with code A7  : 12 records
  records with code A6  : 12 records
  records with code A5  : 16 records
  records with code 3E  : 64 records
  records with code A4  : 14 records
  records with code A3  : 18 records
  records with code A9  : 23 records
  records with code A2  : 16 records
  records with code A1  : 653 records
  records with code 2E  : 1774 records
  records with code HD  : 1092 records
True principal linkpath UDD1LK21 : 1102 chains
  shortest chain       : 1 records
  longest chain        : 268 records
  average chain length : 3.363 records
```

```
Related data set statistics for UDD3
file #1      : CSI_DIRDB:UDD3.CSI (512 blocks)
Total-logical-records  :      8192
Records-per-block     :        16
Sectors-per-block     :         4
Block-size           :      2048 bytes
Record-size          :       124 bytes
Control-interval-size :      512 records
Load-limit           :      410 records =  80.08% of C.I. size.

Active records      :      854 = 10.45% of capacity
  records with code XX :      83  records
  records with code HD :     771  records
True principal linkpath UDD1LK31 :     700  chains
  shortest chain      :         1  records
  longest chain       :        21  records
  average chain length :      1.220 records

Data set UDD2 completed successfully
Data set UDD1 completed successfully
Data set UDD3 completed successfully
Fast utilities succeeded.

Function:          VALIDATE
Database:         SUPRAD
User:             DATA-DICTIONARY
```

```
CINCOM SYSTEMS          DATABASE DESCRIPTION VALIDATION          30-Sep-98  11:41

                                Number processed          Errors found
Database description        1                          0
Data sets                   3                          0
File spec sets             3                          0
Records                    17                         0
Data items                  69                         0
Linkpaths                   8                          0
Indices                     0                          0
Index file spec sets       0                          0
Secondary Keys              0                          0
Buffers                     3                          0
Task log                    1                          0
System log                  0                          0

VALIDATE of database 'SUPRAD' completed successfully

Function:                   COMPILER
Database:                   SUPRAD
User:                       DATA-DICTIONARY
Logical database name:      SUPRAD
Compiled database file spec: DISK:[DIR]SUPRAD111.MOD;

COMPILE of database 'SUPRAD' completed successfully

SINON status ****
SINOF status ****
```

The incremental upgrade procedure is now complete.

- Updated SUPRA Directory files have been created.
- A SUPRA 1.1.1 version of the Directory database description file has been placed in the current directory and is named SUPRAD111.MOD. This will be required when performing the next upgrade increment.
- After completing all the incremental upgrade steps to 2.4
 - You will need to re-compile all Databases.
 - You will need to re-create all Global View files.

If you wish to reinvoke this procedure for the next increment, then you must first establish a SUPRA release 2.4 PDM environment. Please press the RETURN key to exit.

SUPRA 2.4 PDM MENU

- 1) Move TEST LIBRARY to production
- 2) Create a new PDM system
- 3) Move Portions of the SUPRA system to different VMS Directories
- 4) Upgrade an existing PDM system from SUPRA 1.0, 1.1.1, 2.2, or 2.3 to SUPRA 2.4
- 5) Add required SUPRA images to the VMS known file list of installed images
- 6) Remove SUPRA images from the VMS known file list
- 9) Introduction/Tutorial to the above routines
- 99) EXIT

Key in the corresponding option number, and press RETURN:

Upgrading from 1.1.1 to 2.2

This section displays the screens you will see when upgrading from SUPRA 1.1.1 to 2.2.

This procedure expects an operational SUPRA release 2.4 PDM, All logical names necessary to use the PDM must be defined before the upgrade.

If CSIPDM is not 2.4 then you should abort now. Press the RETURN key to continue, or ctrl/Y to abort.

```
%DCL-I-SUPERSEDE, previous value of CSI_UPG has been superseded
```

```
SINON status ****  
SINOF status ****
```

```
UPGRADE.COM
```

This procedure will upgrade a SUPRA 1.1.1 Directory to SUPRA 2.2.

No other SUPRA PDM should have access to the SUPRA Directory that is being upgraded during the upgrade process. If it is necessary to continue your operational systems, it will be necessary to do the upgrade on copies of the SUPRA Directory under a different group.

If your database description file (SUPRAD.MOD) is System-wide, and it necessary to continue your operational systems, it will be necessary to create a Group-wide version for the upgrade.

This procedure will ask various questions. If there is a Default value for the question asked, it is shown in parentheses '()'. You can accept the Default by simply pressing the RETURN key.

Please press the RETURN key to continue.

You must enter the VMS directory specification that contains the database description file of the SUPRA Directory to be upgraded.

Where is the SUPRA Dictionary file located? (DISK:[DIR])

You must enter the name of the database description file of the SUPRA Directory to be upgraded (e.g. MYSUPRAD.MOD).

Enter the DBMOD name for SUPRAD. (SUPRAD.MOD)

Based upon the answers that you gave, the following Logical names will be defined for the upgrade procedure:

```
$ DEFINE/GROUP CSI_DIRDB DISK:[DIR]
```

```
$ DEFINE/GROUP SUPRAD DISK:[DIR]SUPRAD.MOD
```

The upgrade procedure for SUPRA 1.1.1 to SUPRA 2.2 will now be started:

```
%DCL-I-SUPERSEDE, previous value of CSI_DIRDB has been superseded
```

```
%DCL-I-SUPERSEDE, previous value of SUPRAD has been superseded
```

The incremental upgrade procedure is now complete.

Please check above for error messages...

- Updated SUPRA Directory files have been created.
- A SUPRA 2.2 version of the Directory database description file been created.
- After completing all the incremental upgrade steps to 2.4
 - You will need to re-compile all User Databases.
 - You will need to re-create all user Global View files.

Please press the RETURN key to continue.

The incremental upgrade procedure is now complete.
You may wish to reinvoke this procedure for the next increment.
Please press the RETURN key to exit.

SUPRA 2.4 PDM MENU

- 1) Move TEST LIBRARY to production
- 2) Create a new PDM system
- 3) Move Portions of the SUPRA system to different VMS Directories
- 4) Upgrade an existing PDM system from SUPRA 1.0, 1.1.1, 2.2, or 2.3 to SUPRA 2.4
- 5) Add required SUPRA images to the VMS known file list of installed images
- 6) Remove SUPRA images from the VMS known file list
- 9) Introduction/Tutorial to the above routines
- 99) EXIT

Key in the corresponding option number, and press RETURN:

Upgrading from 2.2 to 2.3

This section displays the screens you will see when upgrading from SUPRA 2.2 to 2.3.

This procedure expects an operational SUPRA release 2.4 PDM, All logical names necessary to use the PDM must be defined before the upgrade.

If CSIPDM is not 2.4 then you should abort now.

Press the RETURN key to continue, or ctrl/Y to abort.

```
%DCL-I-SUPERSEDE, previous value of CSI_UPG has been superseded
SINON  status ****
SINOF  status ****
```

UPGRADE.COM

This procedure will upgrade a SUPRA 2.2 Directory to SUPRA 2.3.

No other SUPRA PDM should have access to the SUPRA Directory that is being upgraded during the upgrade process. If it is necessary to continue your operational systems, it will be necessary to do the upgrade on copies of the SUPRA Directory under a different group.

If your database description file (SUPRAD.MOD) is System-wide, and it necessary to continue your operational systems, it will be necessary to create a Group-wide version for the upgrade.

This procedure will ask various questions. If there is a Default value for the question asked, it is shown in parentheses '()'. You can accept the Default by simply pressing the RETURN key.

Please press the RETURN key to continue.

You must enter the VMS directory specification that contains the database description file of the SUPRA Directory to be upgraded.

Where is the SUPRA Dictionary file located? (DISK:[DIR])

You must enter the name of the database description file of the SUPRA Directory to be upgraded (e.g. MYSUPRAD.MOD).

Enter the DBMOD name for SUPRAD. (SUPRAD.MOD)

Based upon the answers that you gave, the following Logical names will be defined for the upgrade procedure:

```
$ DEFINE/GROUP CSI_DIRDB DISK:[DIR]
$ DEFINE/GROUP SUPRAD DISK:[DIR]SUPRAD.MOD
```

The upgrade procedure for SUPRA 2.2 to SUPRA 2.3 will now be started:

```
%DCL-I-SUPERSEDE, previous value of CSI_DIRDB has been superseded
%DCL-I-SUPERSEDE, previous value of SUPRAD has been superseded
```

The incremental upgrade procedure is now complete.
Please check above for error messages...

- SUPRAD directory files UDD%.CSI have been updated.
- You will need to re-create all user Global View files.
- You will need to re-format all user database system log files and task log files.

2.2 database files are compatible with 2.4 with the exception of global view files, system log files, and task log files. However, if you have upgraded from 1.0 or 1.1.1 then

- You will need to re-compile all User Databases.

Please press the RETURN key to continue.

The upgrade procedure is now complete.
Please press the RETURN key to exit.

SUPRA 2.4 PDM MENU

- 1) Move TEST LIBRARY to production
- 2) Create a new PDM system
- 3) Move Portions of the SUPRA system to different VMS Directories
- 4) Upgrade an existing PDM system from SUPRA 1.0, 1.1.1, 2.2, or 2.3
to SUPRA 2.4
- 5) Add required SUPRA images to the VMS known file list of installed
images
- 6) Remove SUPRA images from the VMS known file list

- 9) Introduction/Tutorial to the above routines
- 99) EXIT

Key in the corresponding option number, and press RETURN:

Upgrading from 2.3 to 2.4

This section displays the screens you will see when upgrading from SUPRA 2.3 to 2.4.

```
This procedure expects an operational SUPRA release 2.4 PDM, All
logical names necessary to use the PDM must be defined before
the upgrade.
If CSIPDM is not 2.4 then you should abort now.
Press the RETURN key to continue, or ctrl/Y to abort.
```

```
%DCL-I-SUPERSEDE, previous value of CSI_UPG has been superseded
SINON  status ****
SINOF  status ****
```

UPGRADE.COM

This procedure will upgrade a SUPRA 2.3 Directory to SUPRA 2.4.

No other SUPRA PDM should have access to the SUPRA Directory that is being upgraded during the upgrade process. If it is necessary to continue your operational systems, it will be necessary to do the upgrade on copies of the SUPRA Directory under a different group.

If your database description file (SUPRAD.MOD) is System-wide, and it necessary to continue your operational systems, it will be necessary to create a Group-wide version for the upgrade.

This procedure will ask various questions. If there is a Default value for the question asked, it is shown in parentheses '()'. You can accept the Default by simply pressing the RETURN key.

Please press the RETURN key to continue.

You must enter the VMS directory specification that contains the database description file of the SUPRA Directory to be upgraded.

Where is the SUPRA Dictionary file located? (DISK:[DIR])

You must enter the name of the database description file of the SUPRA Directory to be upgraded (e.g. MYSUPRAD.MOD).

Enter the DBMOD name for SUPRAD. (SUPRAD.MOD)

Based upon the answers that you gave, the following Logical names will be defined for the upgrade procedure:

```
$ DEFINE/GROUP CSI_DIRDB DISK:[DIR]
$ DEFINE/GROUP SUPRAD DISK:[DIR]SUPRAD.MOD
```

The upgrade procedure for SUPRA 2.3 to SUPRA 2.4 will now be started:

```
%DCL-I-SUPERSEDE, previous value of CSI_DIRDB has been superseded
%DCL-I-SUPERSEDE, previous value of SUPRAD has been superseded
```

The incremental upgrade procedure is now complete.
Please check above for error messages...

- SUPRAD directory files UDD%.CSI have been updated.
- You will need to re-create all user Global View files.
- You will need to re-format all user database system log files and task log files.

2.3 database files are compatible with 2.4 with the exception of global view files, system log files, and task log files. However, if you have upgraded from 1.0 or 1.1.1 then

- You will need to re-compile all User Databases.

Please press the RETURN key to continue.

The upgrade procedure is now complete.
Please press the RETURN key to exit.

SUPRA 2.4 PDM MENU

- 1) Move TEST LIBRARY to production
- 2) Create a new PDM system
- 3) Move Portions of the SUPRA system to different VMS Directories
- 4) Upgrade an existing PDM system from SUPRA 1.0, 1.1.1, 2.2, or 2.3
to SUPRA 2.4
- 5) Add required SUPRA images to the VMS known file list of installed
images
- 6) Remove SUPRA images from the VMS known file list

- 9) Introduction/Tutorial to the above routines
- 99) EXIT

Key in the corresponding option number, and press RETURN:

6

Initialization and configuration

To initialize and configure SUPRA PDM, you perform these steps:

1. Reinvoke the LOGIN command procedures.
2. Install the SUPRA PDM executable images.
3. Set your process to use the SUPRA PDM command verbs.
4. Create a new PDM system.
5. Invoke the command procedure EXPLAIN.COM .

The following sections provide detailed instructions for completing these steps.

Reinvoking the LOGIN command procedures

To begin the initialization and configuration process, you must reinvoke your LOGIN command procedure or log in under a different account (an account other than the system manager's account).



If you decide to use a different VMS account, the privileges SYSPRV, CMKRNL and possibly EXQUOTA (if disk quotas are enabled) will still be needed.

Enter the following commands to reinvoke your LOGIN command procedures:

```
$ @SYS$SYLOGIN  
$ @SYS$LOGIN:LOGIN.COM
```

Installing the SUPRA PDM executable images

To install the SUPRA PDM executable images using the VMS INSTALL utility, invoke the following command procedure:

```
$ @disk:[dir.SUPRA.PDM_24.COMS]INSTALL_SUPRA24_PDM_IMAGES.COM

disk:[dir.SUPRA.PDM_24.EXE].EXE
  CSIDAP_2400;1      Open HDR Shar      Prot Lnkbl      WRT

disk:[dir.SUPRA.PDM_24.EXE].EXE
  CSIGIM_2400;1      Open HDR Shar              Lnkbl

disk:[dir.SUPRA.PDM_24.EXE].EXE
  CSIPDM_2400;1      Open HDR Shar              Prv

disk:[dir.SUPRA.PDM_24.EXE].EXE
  CSISTR_2400;1      Open HDR Shar              Prv

disk:[dir.SUPRA.PDM_24.EXE].EXE
  CSI_FINDPDM_2400;1 Open HDR Shar              Prv

disk:[dir.SUPRA.PDM_24.EXE].EXE
  CSTUFMTSHR_2400;1  Open HDR Shar              Lnkbl

disk:[dir.SUPRA.PDM_24.EXE].EXE
  CSTURCVSHR_2400;1  Open HDR Shar              Lnkbl

disk:[dir.SUPRA.PDM_24.EXE].EXE
  CSVIPLVS_2400;1    Open HDR Shar              Lnkbl
```



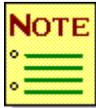
Remember that `INSTALL_SUPRA24_PDM_IMAGES.COM` should be invoked from your system startup command procedure.

Setting your process to use the SUPRA PDM command verbs

Before you can execute many SUPRA 2.4 PDM commands, you must set your process to use the SUPRA 2.4 PDM .CLD files with the following:

```
$ SET COMMAND disk:[dir.SUPRA.PDM_24.COMS]CHANGEDB.CLD
$ SET COMMAND disk:[dir.SUPRA.PDM_24.COMS]COMBAT.CLD
$ SET COMMAND disk:[dir.SUPRA.PDM_24.COMS]CSIDBVER.CLD
$ SET COMMAND disk:[dir.SUPRA.PDM_24.COMS]CSIINDEX.CLD
$ SET COMMAND disk:[dir.SUPRA.PDM_24.AUXIL]GETLOCKS.CLD
```

This defines the SUPRA 2.4 PDM commands at the process level.



If you have not added these to the VMS DCLTABLES, then you must do these SET COMMANDS each time you login to access this SUPRA 2.4 PDM system.

Creating a new PDM system

Now you will want to initialize and configure the SUPRA environment. To do this, invoke the SUPRA Menu:

```
$ @disk:[dir.SUPRA.PDM_24.COMS]SUPRA_MENU.COM
```

```
SUPRA 2.4 PDM MENU
-----

1) Move Test Library to Production

2) Create a new PDM system

3) Move Portions of the SUPRA system to different VMS Directories

4) Upgrade an existing PDM system from 1.0, 1.1.1, 2.2, or 2.3
   to SUPRA 2.4

5) Add required SUPRA images to the VMS known file list of installed
   images

6) Remove SUPRA images from the VMS known file list

9) Introduction/Tutorial to the above routines

99) EXIT

Key in the corresponding option number, and press RETURN:
```

To create a new PDM system, type 2 and press RETURN. The following screen displays:

```
This procedure will generate the files needed to create a new SUPRA 2.4 PDM/RDM
environment.

This procedure will ask various questions. If there is a default value for the
question asked, it is shown in parentheses '()'. You can accept the default by
pressing the RETURN key.

If at any time you need to spawn a subprocess to check something, you may type '$' at
any prompt. When you are finished with the subprocess, type LOGOUT to return to this
command procedure. The last prompt will be repeated at that time, for your
convenience.

You may exit this routine by responding with the word EXIT at any question, or by
pressing CONTROL/Y at any time.

Please press the RETURN key to continue.
```

Note: The responses given to the following questions can be modified at a later date by changing the appropriate command procedures or input files. The names of the necessary command procedures and input files will be provided toward the end of this routine.



If you are installing a new version of SUPRA while continuing to use an older version in production, you will need to create your environment at a group level. This allows a production PDM running at any level (group, systemwide, or multisystemwide) to function without interference from the newer version's installation.

The following screen allows you to specify your PDM as you choose. The choice can be GROUP, SYSTEM, or MULTIPLE systemwide:

```
A database can be either SYSTEM wide or GROUP wide.
A SYSTEM wide database can be accessed by users in different VMS UIC groups.
A GROUP wide database can be accessed only by members of that VMS UIC group.
The Physical Data Manager ("PDM") that will service your databases may be SYSTEM
wide or GROUP wide.
A SYSTEM wide PDM may service SYSTEM wide or GROUP wide databases.
A GROUP wide PDM may only service GROUP wide databases for that group.
You may also select MULTIPLE System Wide PDMs to permit use of more than one system
wide PDM.
Does your PDM need to be GROUP, SYSTEM or MULTIPLE System Wide? (GROUP)
```

Depending on your answer, you will be prompted with the following screen(s):

◆ If you answered GROUP:

```
Since this is to be a GROUP wide PDM, SUPRA must know what group
to run in. Please enter a valid VMS UIC group number or Identifier.
```

```
What is the UIC for the GROUP wide PDM? (xxxxxxxx)
```

◆ If you answered GROUP or SYSTEM:

SUPRA has the capability of automatically starting the Detached PDM process when a user attempts to sign on.

Do you wish to enable automatic startup for this PDM? (YES)

The PDM must be given a name. The name must not contain spaces, and must be eight (8) or fewer characters.

What is the name of this PDM? (GRP_SRV)

◆ If you answered MULTIPLE:

You have chosen to use a MULTIPLE System Wide PDM. To set this up, you must enter a Multiple System Wide PDM Name.

The name must be 1 to 8 characters in length, with no spaces.

Please enter a Multiple System Wide PDM Name: (xxxxxxxx)

SUPRA has the capability of automatically starting the Detached PDM process when a user attempts to sign on.

Do you wish to enable automatic startup for this PDM? (YES)

You can designate any operator console to receive CSIDAP messages on the following screen:

During operations, the Database Access Program (CSIDAP) will need to send detailed informational and error messages to an operator console. You can designate any operator console (1 through 12) to receive these messages.

Which operator (1-12) do you wish to receive CSIDAP messages? (12)

The following screen allows you to choose whether or not you want to send CSIDAP messages to a mailbox:

Also during operations the Database Access Program (CSIDAP) may optionally send detailed informational and error messages to a VMS mailbox which may be read by a user-written program.

Do you wish to send CSIDAP messages to a mailbox? (NO)

After you answer whether or not you wish to send CSIDAP messages to a mailbox, the following screen displays:

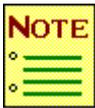
The SUPRA Directory ("SUPRAD") stores information about your site-specific databases.

A clean set of SUPRA Directory files contains no information about site-specific databases.

You will want a clean set of SUPRA Directory files created if this is a new SUPRA environment.

You will not want a clean set of SUPRA directory files created if you are converting from a previous release of SUPRA. This is because the conversion process provides an upgraded set of SUPRA Directory files. The upgraded set of SUPRA Directory files will contain the information already defined about your site-specific databases.

Do you want a clean set of SUPRA Directory files created? (YES)



If you answer yes, the following two screens will be displayed. If you answer no, skip to page 67.

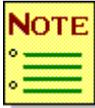
If you answer yes, the following screen displays, prompting you to specify where the SUPRA clean directory files will be copied to:

```
Where do you want the SUPRA directory files placed?  
(note: I will attempt to create the VMS Directory for you if it  
does not exist)  
  
What VMS UIC do you want to be the owner of this VMS Directory? (xxxxxxxx)
```

You are asked where you want this working copy placed. The screen will then display %COPY-S-COPIED messages showing the following files being copied from disk:[dir.SUPRA.PDM_24.CLEAN_DICT] to the directory that you specified (and the files will be renamed):

```
The new VMS directory disk:[dir] was created successfully.  
  
Now proceeding with creating a clean set of SUPRA Directory files...  
  
      UDD1.DBA      to UDD1.CSI  
      UDD2.DBA      to UDD2.CSI  
      UDD3.DBA      to UDD3.CSI  
      UDDTLOG.DBA   to UDDTLOG.CSI  
      SUPRAD.DBA    to SUPRAD.MOD  
  
Please press the RETURN key to continue.
```

Whether you answered yes or no to the question “Do you want a clean set of SUPRA Directory files created?” on page 65, the following screens appear:



Repeat the following two screens for each User database you wish to have Automatic Failover:

In which VMS directory will the DBMOD for xxxxxxxx be located?
(note: I will attempt to create the VMS directory for you if it does not exist)

SUPRA has an automatic failover capability that will cause the Detached PDM process to automatically restart on another node in the cluster or network. PDM failover is controlled by a logical name, which is defined as follows:

```
$DEFINE ddddd_CSI_PDM_MACS node_name_list

      where 'dddddd'          is the 6 character database name, and
            'node_name_list' is a list of node names on which the PDM for
                           this database can run, in order of preference.
```

Example:

```
$ DEFINE SUPRAD_CSI_PDM_MACS VAXA,VAXB,VAXC
```

The example above informs SUPRA to first attempt to start the PDM for the SUPRAD database on VAXA; if VAXA is not available, then try to start the PDM for the SUPRAD database on VAXB; if VAXA and VAXB aren't available, then try to start the PDM for the SUPRAD database on VAXC.

Please enter a node name list for SUPRAD as shown above, with a comma between nodes names, and no spaces.

On which nodes do you want to run the PDM for SUPRAD? (XXXXXX)

Please enter the 6 character names of databases that you want this PDM to service. When you are finished, press <RETURN> at the database name prompt.

Note: SUPRAD is already defined as a database that will be serviced by this PDM, so do not enter SUPRAD.

Enter the 6 character name of a database to be serviced by this PDM (or press Return to continue):

Two sets of SUPRA executable files are available:

One of the sets of executable files is intended for standard use. The other set of executable files is intended for testing SUPRA maintenance tapes.

You must decide whether this SUPRA environment will use the standard set of SUPRA executables, or the set of executables intended for testing SUPRA maintenance tapes.

Do you want this SUPRA environment to use the standard set of SUPRA executable files? (YES)

Now you must select the values that the various PDM options will have. The values of these PDM options can be easily changed by modifying the file:

```
DISK:[DIR.SUPRA.PDM_24.LIBRARY]PDM_OPTIONS_XXXXXXXX.INP
```

Each question will be preceded by a brief explanation of what the PDM option specifies.

Please press the RETURN key to continue.

ACLCHECK specifies whether or not the PDM checks any ACLs set on data files, task log files, and system log files before allowing a task to access them.

Do you wish to enable ACLCHECK for this PDM? (N)

UICCHECK specifies whether or not the PDM checks UIC-based protection set on data files, task log files, and system log files before allowing a task to access them.

Do you wish to enable UICCHECK for this PDM? (N)

RETRY specifies the number of times, from 1 to 100, that the PDM will attempt to obtain a held record before returning a HELD status.

What value should RETRY have ? (5)

INTERVAL specifies the amount of time the PDM is to wait between successive retries, measured in hundredths of a second.

Acceptable values are in the range of 1 to 1000.

What value should INTERVAL have ? (33)

TIMEOUT specifies the period, in numbers of INTERVALs, before a task is dynamically signed-off if it remains inactive. The value zero (0) means that there will be no dynamic sign-off due to inactivity.

Acceptable values are in the range of 0 to 10000.

What value should TIMEOUT have ? (0)

MAXTASKS specifies the maximum number of tasks allowed concurrent access to the PDM.

Acceptable values are in the range of 1 to 1000.

What value should MAXTASKS have ? (50)

MAXDATA specifies the maximum size (in number of bytes) of the message buffer used for communication between the PDM and applications. This message buffer must be large enough to contain all of the parameters passed to the PDM.

The value for this option must not be greater than 32767.

Note: The value of MAXDATA * MAXTASKS determines the size of the global section used by the PDM. The greater either of these are, the greater the global page requirement.

The following sizes are suggested starting points for this parameter:

CONTROL:Manufacturing/Financial	14336 - V7.0 (and below)
	5120 - V7.0 to V7.1 Conversion
	4096 - V7.1 to 7.4.1
	5120 - V7.4.5 (and above)
Other Databases	4096

How large should MAXDATA be? (5120)

MAXTHREADS specifies the maximum number of functions that the PDM can process concurrently for each database that it services.

Too low a value for MAXTHREADS could cause the PDM to hibernate while there is work to do. This will happen if each of the active threads is waiting on an event, such as the completion of a physical disk I/O.

Too high a value can waste virtual memory.

It is better to have too high a value than too low a value because PDM threads use only 168 bytes of virtual memory each, and they can increase database throughput dramatically.

The optimal value for MAXTHREADS is the maximum number of tasks + 2 up to a maximum of 100.

What value should MAXTHREADS have? (52)

PRIORITY sets the VMS priority of the detached PDM process.

At what PRIORITY (1-15) should the detached PDM process run? (5)

The PDM can communicate directly to OPERATOR consoles.

A specific VMS operator number can be designated to send commands to the PDM and receive messages from the PDM.

Which OPERATOR (1-12) do you want to use to communicate with the PDM? (12)

SYSOPCOM specifies whether or not you can send commands to the SUPRA PDM using the VMS OPCOM utility.

Operator consoles will receive the VMS OPCOM prompt, "Reply with a SUPRA PDM Command" every five or ten minutes if you select 'Y'.

Note: you can send commands to the SUPRA PDM using SUPRA's CSIOPCOM utility, regardless of whether you select 'Y' or 'N' for this parameter.

Do you wish to enable SYSOPCOM? (N)

CONSOLE specifies whether or not the PDM will send informational and error messages to operator terminals.

Do you wish to have these PDM messages displayed on operator terminals? (Y)

MRELAY specifies whether or not the PDM and the system log dump utility will send their informational and error messages to a VMS mailbox.

If you select 'Y', users may write programs to read these messages from the VMS mailbox.

Do you want these messages sent to a VMS mailbox? (N)

The SUPRA PDM gathers extensive STATISTICS. These statistics include physical I/O counts, the number of in-memory buffer hits, and many more items.

If you specify 'Y' then PDM statistics will be sent to the PDM log file and to the PDM mailbox (if MRELAY is set to 'Y').

If you specify 'N' then statistics will be gathered but not automatically displayed.

Note: Even when the STATISTICS parameter is set to N you can display PDM statistics by issuing the ENABLE STATISTICS and DISPLAY/STATISTICS commands in the CSIOPCOM utility.

Do you wish to automatically send PDM STATISTICS to the PDM log file and any PDM mailbox? (N)

MULTIHOLD specifies whether or not you want a task to be able to explicitly read and hold more than one record per file in a single logical unit of work.

If you want your VAX SUPRA applications to be more compatible with ULTRA, you should enable MULTIHOLD. If however, you want your applications to be more compatible with IBM SUPRA, you should disable MULTIHOLD.

Do you wish to enable MULTIHOLD for this PDM? (Y)

IDXCNVERR specifies what action the PDM will take when it encounters an error while converting data into a sortable format for the index file.

If you set IDXCNVERR to Y, the PDM will back out the updates to the PDM data set and return a status of IDAT to the application. This will cause the PDM to keep the index file consistent with its associated PDM data set.

If you set IDXCNVERR to N, the PDM will not back out the updates to the PDM data set in this situation. Instead, the PDM will deactivate the index file because that file is inconsistent with its associated PDM data set.

What value do you want for IDXCNVERR? (Y)

IDXDUPERR specifies what action the PDM will take when it attempts to insert into an index file a record that has the same secondary key value as another record in that index file, when duplicate secondary keys are not allowed.

If you set IDXDUPERR to Y, the PDM will back out the updates to the PDM data set and return a status of DUPI to the application. This will cause the PDM to keep the index file consistent with its associated PDM data set.

If you set IDXDUPERR to N, the PDM will not back out the updates to the PDM data set in this situation. Instead, the PDM will deactivate the index file because that file is inconsistent with its associated PDM data set.

What value do you want for IDXDUPERR? (Y)

IDXTIMEOUT specifies the number of INTERVALs to wait for an index file's I/O request to complete before canceling that index file's I/O request.

Specify 0 to indicate that the index files' I/O requests should never be cancelled.

What value do you want to have for IDXTIMEOUT? (0)

This completes the selection of values for the PDM options.
Please wait...

%RENAME-I-RENAMED, DISK:[DIR.SUPRA.PDM_24.COMS]TEMP_SUP_SYS.COM;2 renamed
to DISK:[DIR.SUPRA.PDM_24.COMS]SUPRA_SYSTEM.COM;18

Please press the RETURN key to continue.

The logicals needed for this SUPRA environment must be defined before you attempt to access the PDM.

Do you want the logicals defined now? (YES) no

The following screen shows the initialization of a SUPRA 2.4 PDM/RDM environment completed for Group and System:

I created two command procedures called:

```
disk:[dir.SUPRA.PDM_24.LIBRARY]PDM_START_XXXXXXXX.COM
disk:[dir.SUPRA.PDM_24.LIBRARY]PDM_LOGICALS_XXXXXXXX.COM
```

These procedures are used to start the PDM and define the logicals for the specific SUPRA environment.

Please press the RETURN key to continue.

The following screens show the initialization of a SUPRA 2.4 PDM/RDM environment completed for Multiple:

Initialization completed of MULTIPLE System Wide SUPRA 2.4 PDM XXXXXXXXX

I created three command procedures named:

```
DISK:[DIR.SUPRA.PDM_24.LIBRARY]PDM_START_XXXXXXXX.COM
DISK:[DIR.SUPRA.PDM_24.LIBRARY]PDM_LOGICALS_XXXXXXXX.COM
DISK:[DIR.SUPRA.PDM_24.LIBRARY]XXXXXXXX_USER_INIT.COM
```

These procedures are used to start the PDM and define the logicals for the specific SUPRA environment.

Please press the RETURN key to continue.

You may eventually need to edit the PDM_LOGICALS_XXXXXXXX.COM file to:

- add or change the databases that it sets up
- add or change the preferred machine lists for the databases
- add or change the CSI_MRELAY mailbox indicator for CSIDAP
- change the CSI_CONSOLE definition for CSIDAP
- use the CSISTRINP file to specify the PDM's process quotas and limits
- add or change the automatic startup capability of the PDM

Each person who is to use this Multiple System Wide PDM must run the procedure XXXXXXXX_USER_INIT.COM before attempting to use this PDM system. Prior to accessing the PDM the procedures LOGICALS.COM and PDM_LOGICALS_XXXXXXXX.COM must also be run. These last two will be executed by SUPRA_SYSTEM.COM (which is described in more detail below).

Please press the RETURN key to continue.

I have also created the file:

```
DISK:[DIR.SUPRA.PDM_24.LIBRARY]PDM_OPTIONS_XXXXXXXX.INP
```

This PDM input file contains the PDM options that were specified in this procedure. You may need to change the PDM input file occasionally. For example, you might need to change the MAXTASKS parameter to increase the maximum number of tasks allowed concurrent access to the PDM.

You can change any of the command procedures and input files listed above with a standard text editor.

Please press the RETURN key to continue.

This routine also maintains the file:

DISK:[DIR.SUPRA.PDM_24.COMS]SUPRA_SYSTEM.COM

This file invokes two command procedures:

DISK:[DIR.SUPRA.PDM_24.LIBRARY]PDM_LOGICALS_XXXXXXXX.COM

- the command procedure (mentioned above) that defines the specific SUPRA environment logicals selected earlier in this routine

DISK:[DIR.SUPRA.PDM_24.COMS]LOGICALS.COM

- defines standard SUPRA environment logicals

Please press the RETURN key to continue.

```
*****
** NOTE:    CRITICAL Command Procedures for system startup:    **
*****
```

You should invoke the following two command procedures during system startup:

DISK:[DIR.SUPRA.PDM_24.COMS]SUPRA_SYSTEM.COM

- to define the logicals necessary for the SUPRA environments on this machine

DISK:[DIR.SUPRA.PDM_24.COMS]INSTALL_SUPRA24_PDM_IMAGES.COM

- to install critical SUPRA images

Please press the RETURN key to continue.

You may also wish to review the command procedure:

```
DISK:[DIR.SUPRA.PDM_24.COMS]SUPRA_SYMBOL.COM
```

and invoke it from the SYLOGIN procedure or from the users' LOGIN.COM files.

Please press the RETURN key to continue.

Note: an explanation of the above command procedures is available in the tutorial section of:

```
DISK:[DIR.SUPRA.PDM_24.COMS]SUPRA_MENU.COM.
```

Please press the RETURN key to continue.

```
*****  
** NOTE:      IMPORTANT Considerations for Utilizing the PDM      **  
*****
```

1) VMS Process Quotas and Limits:

The SUPRA 2.4 Physical Data Manager (PDM) runs on the system as a detached process. We suggest that you follow the guidelines listed in the SUPRA 2.4 System Administration Guide (publication # P25-0130) in order to grant the desired VMS Process Quotas and Limits to the detached PDM process.

2) Optional Logical Names:

There are optional logical names that you may wish to include in the PDM_LOGICALS_xxxxxxx.COM file. Please refer to the SUPRA 2.4 System Administration Guide (publication # P25-0130) for more details.

Please press the RETURN key to continue.

This completes the steps necessary to create a SUPRA 2.4 PDM/RDM environment.
Please press the RETURN key.

SUPRA 2.4 PDM MENU

- 1) Move TEST LIBRARY to production
- 2) Create a new PDM system
- 3) Move Portions of the SUPRA system to different VMS Directories
- 4) Upgrade an existing PDM system from SUPRA 1.0, 1.1.1, 2.2, or 2.3
to SUPRA 2.4
- 5) Add required SUPRA images to the VMS known file list of installed
images
- 6) Remove SUPRA images from the VMS known file list
- 9) Introduction/Tutorial to the above routines
- 99) EXIT

Key in the corresponding option number, and press RETURN: 99

Invoking the command procedure EXPLAIN.COM

Now that the SUPRA PDM installation is complete, you will need to invoke the command procedure EXPLAIN.COM, which will help you better understand the SUPRA product that you just installed. To do this, invoke the following:

```
$ @disk:[dir.SUPRA.PDM_24.COMS]EXPLAIN.COM
```

The following screen displays:

```
Do you want information on:

1)  Overview of COMMON PROCEDURES
2)  Suggested changes to SYSTARTUP command procedure
4)  Creating a NEW PDM system
5)  Moving / Altering portions of the installed system
6)  Upgrading an existing previous SUPRA release directory to SUPRA 2.4 PDM
7)  Installing or Removing SUPRA's known images
8)  Generic logical name creation
9)  Automatic PDM startup procedures
99) EXIT

Key in the corresponding option number, and press RETURN:
```



The EXPLAIN.COM can be invoked from the SUPRA_MENU also.

A

SUPRA Server PDM space requirements

Total directory space requirements

The total space required for all of the SUPRA Server PDM directories is 82,000 **VAX** or 97,000 **ALPHA** blocks. The following table lists the size requirements (in blocks) for each directory:

Directory	Members	Size
.SUPRA.PDM_24	AUXIL.DIR BURRYS.DIR CLEAN_DICT.DIR CLEAN_EXE.DIR COMS.DIR DICT.DIR EXAMPLES.DIR EXE.DIR HELP.DIR LIBRARY.DIR PATCHES.DIR PATCH_WORK.DIR PROFILE.DAT REPORT.DIR SC_READ_PROFILE_DATA.COM TEST_EXE.DIR UPGRADE.DIR	43

Directory	Members	Size
.SUPRA.PDM_24.AUXIL	CHAINSTATS.DOC	1374 VAX
	CHAINSTATS_2400.EXE	4358 ALPHA
	CSD_USEREXIT_2400.EXE	
	CSICCR_2400.EXE	
	CSICHCKR_2400.EXE	
	CSIDBCHK_2400.EXE	
	CSIDBPDM_2400.EXE	
	CSIDBPDM_2400_TV.EXE	ALPHA
	CSIDBPMD_2400_TV.LIS	ALPHA
	CSIDBTST.DOC	
	CSIDBTST_2400.EXE	
	CSIDTLPRT_2400.EXE	
	CSIENADISA_2400.EXE	
	CSILOCKS_2400.EXE	
	CSIMTR.COM	
	CSISPCHK_2400.EXE	
	CSISTATS_2400.EXE	
	CSISYNAN_2400.EXE	
	GETLOCKS.CLD	
	SUPRA_PDM_COMMANDER_2400.EXE	

Directory	Members	Size
.SUPRA.PDM_24.BURRYS	BASCUSTUPD.RDML BRAN.BUR BRIN.BUR BRMA.BUR BURRYS.MOD COBCUSTUPD.RDML CUST.BUR DBAEDT.EDT EDUCLOGIN.COM EDUCPDM.INP FORCUSTUPD.RDML INVC.BUR INVL.BUR LV002.PFS MANF.BUR MANL.BUR PGRP.BUR POLN.BUR PORD.BUR PROD.BUR RDMEXITS.EXE REGN.BUR STARTPDM.COM STCK.BUR STRU.BUR SUPP.BUR SUPRAD.LIS SUPRAD.MOD TLOG.BUR UDD1.CSI UUD2.CSI UDD3.CSI UDDTLOG.CSI UTLERR.MSG UTLNAT.SEQ VSNO.BUR	11,528

Directory	Members	Size
.SUPRA.PDM_24. CLEAN_DICT	PROC1UDD1.COM PROC2UDD2.COM PROC2UDD3.COM SUPRAD.DBA UDD1.DBA UDD2.DBA UDD3.DBA UDDTLOG.DBA UTLNAT.SEQ	10,424
.SUPRA_24.PDM. CLEAN_EXE	CSIDAP_2400.NEW CSIDAP_DEB_2400.NEW CSIDAP_PRV_2400.NEW CSIDAP_TRC_2400.NEW CSIDBAUTL_2400.NEW CSIDBA_2400.NEW CSIDBVER_2400.NEW CSIDDLLOAD_2400.NEW CSIDMPANL_2400.NEW CSIGIM_2400.NEW CSIGIM_DEB_2400.NEW CSIGIM_PRV_2400.NEW CSIGIM_TRC_2400.NEW CSIOAUTH_2400.NEW CSIOPCOM_2400.NEW CSIPDMTCP_2400.NEW CSIPDM_2400.NEW CSIPDM_DEB_2400.NEW CSIPDM_PRV_2400.NEW CSIPDM_TRC_2400.NEW CSISTR_2400.NEW CSISTR_PRV_2400.NEW CSISTR_TRC_2400.NEW CSIUPG22_2400.NEW CSI_CRASHPDM_2400.NEW CSI_EXEC_DISPATCH_2400.NEW CSI_EXEC_DISPATCH_DEB_2400.NEW CSI_EXEC_DISPATCH_PRV_2400.NEW	16,551 VAX 26,750 ALPHA

Directory	Members	Size
.SUPRA_24.PDM.	CSI_EXEC_DISPATCH_TRC_2400.NEW	
CLEAN_EXE (cont.)	CSI_FINDPDM_2400.NEW	
	CSI_KERNEL_DISPATCH_2400.NEW	
	CSI_KERNEL_DISPATCH_DEB_2400.NEW	
	CSI_KERNEL_DISPATCH_PRV_2400.NEW	
	CSI_KERNEL_DISPATCH_TRC_2400.NEW	
	CSI_SMENU_2400.NEW	
	CSMCHANGEDB_2400.NEW	
	CSMCOMBAT_2400.NEW	
	CSTUDSLF_2400.NEW	
	CSTUFMTSHR_2400.NEW	
	CSTUFMT_2400.NEW	
	CSTUIDXSHR_2400.NEW	
	CSTUIDX_2400.NEW	
	CSTURCVSHR_2400.NEW	
	CSTURCV_2400.NEW	
	CSUBGRN_2400.NEW	
	CSVBASIC_2400.NEW	
	CSVCOBOL_2400.NEW	
	CSVDBAID_2400.NEW	
	CSVFORTRA_2400.NEW	
	CSVGLOBAL_2400.NEW	
	CSVIPLVS_2400.NEW	
	CSVIPLVS_DEB_2400.NEW	
	CSVIPLVS_TRC_2400.NEW	
	CSXSCREEN_2400.NEW	

Directory	Members	Size
.SUPRA.PDM_24.COMS	CHANGEDB.CLB COMBAT.CLD CSIDBVER.CLD CSIINDEX.CLD CSIPDMTCP_RUN.COM CSIPDMTCP_SETUP.COM CSIPROCS.COM CSVLINK.COM CUSTOM.COM DEINSTALL_SUPRA24_PDM_IMAGES.COM EXPLAIN.COM INSTALL_SUPRA24_PDM_IMAGES.COM LOGICALS.COM MAKE_CLASS.COM RUNBASIC.COM RUNCOBOL.COM RUNCSV.COM RUNDBAID.COM RUNDIRM.COM RUNFORTRA.COM SUPRAPDM_SERVICE_LEVEL.COM SUPRA_MENU.COM SUPRA_SYMBOL.COM SUPRA_SYSTEM.COM UPGRADE.COM	317
.SUPRA.PDM_24. EXAMPLES	CSIFINDRRN.C CSIFINDRRN.OBJ CSIFINDRRN.VAX_EXE CSI_USEREX.COM CSI_USEREX.MAR CSI_USEREX.OBJ CSI_USEREX.OPT CSI_USEREX.VAX_EXE CSI_USEREX_TV.EXE DEFINE_LATEST_RELEASE.COM HELD_RECORDS.COM MSWPDM_SETUP.COM PDM_SHUTDOWN.COM UPDATE_PRODUCT_VALUE.COM WHEREIS_LOGICALS.COM	311

Directory	Members	Size
.SUPRA.PDM_24.EXE	CSICHKSUM.DOC VAX	16,564 VAX
	CSIDAP_2400.EXE	26,761 ALPHA
	CSIDAP_DEB_2400.EXE	
	CSIDAP_PRV_2400.EXE	
	CSIDAP_TRC_2400.EXE	
	CSIDBAUTL_2400.EXE	
	CSIDBA_2400.EXE	
	CSIDBVER_2400.EXE	
	CSIDDLLOAD_2400.EXE	
	CSIDMPANL_2400.EXE	
	CSIGIM_2400.EXE	
	CSIGIM_DEB_2400.EXE	
	CSIGIM_PRV_2400.EXE	
	CSIGIM_TRC_2400.EXE	
	CSIOAUTH_2400.EXE	
	CSIOPCOM_2400.EXE	
	CSIPDMTCP_2400.EXE	
	CSIPDM_2400.EXE	
	CSIPDM_DEB_2400.EXE	
	CSIPDM_PRV_2400.EXE	
	CSIPDM_TRC_2400.EXE	
	CSISTR_2400.EXE	
	CSISTR_PRV_2400.EXE	
	CSISTR_TRC_2400.EXE	
	CSIUPG22_2400.EXE	
	CSI_CRASHPDM_2400.EXE	
	CSI_EXEC_DISPATCH_2400.EXE	
	CSI_EXEC_DISPATCH_DEB_2400.EXE	
	CSI_EXEC_DISPATCH_PRV_2400.EXE	
	CSI_EXEC_DISPATCH_TRC_2400.EXE	
	CSI_FINDPDM_2400.EXE	
	CSI_KERNEL_DISPATCH_2400.EXE	
	CSI_KERNEL_DISPATCH_DEB_2400.EX	
	E	
	CSI_KERNEL_DISPATCH_PRV_2400.EX	
	E	
	CSI_KERNEL_DISPATCH_TRC_2400.EX	
	E	
	CSI_SMENU_2400.EXE	
	CSMCHANGEDB_2400.EXE	
	CSMCOMBAT_2400.EXE	
	CSTUDSLF_2400.EXE	
	CSTUFMTSHR_2400.EXE	

Directory	Members	Size
.SUPRA.PDM_24.EXE (cont.)	CSTUFMT_2400.EXE CSTUIDXSHR_2400.EXE CSTUIDX_2400.EXE CSTURCVSHR_2400.EXE CSTURCV_2400.EXE CSUBGRN_2400.EXE CSVBASIC_2400.EXE CSVBERROR.BAP CSVCOBOL_2400.EXE CSVDError.FOP CSVDBAID_2400.EXE CSVFORTRA_2400.EXE CSVGLOBAL_2400.EXE CSVIPLVS_2400.EXE CSVIPLVS_DEB_2400.EXE CSVIPLVS_PRIV_2400.EXE CSVIPLVS_TRC_2400.EXE CSXSCREEN_2400.EXE DBAEDT.EDT SUPRA.OPT UTLERR.MSG	
.SUPRA.PDM_24.HELP	RELEASE_NOTES_2301.TXT RELEASE_NOTES_2302.TXT RELEASE_NOTES_2320.TXT RELEASE_NOTES_2320A.TXT RELEASE_NOTES_2320B.TXT RELEASE_NOTES_2330.TXT RELEASE_NOTES_2330A.TXT RELEASE_NOTES_2330B.TXT RELEASE_NOTES_2330C.TXT RELEASE_NOTES_2330F.TXT RELEASE_NOTES_2330G.TXT RELEASE_NOTES_2330H.TXT RELEASE_NOTES_2330M.TXT RELEASE_NOTES_2330N.TXT RELEASE_NOTES_2400.TXT RELEASE_NOTES_2400_BETA2.TXT RELEASE_NOTES_2400_BETA3.TXT RELEASE_NOTES_2400_BETA4.TXT SUPRA-HELP.HLB	1709
.SUPRA.PDM_24.PATC HES	Z00000000.COM	4

Directory	Members	Size
.SUPRA.PDM_24.REPORT	CSGDBA.EXE	18,935 VAX
	CSIDBA.GBL	14,522 ALPHA
	CSIDBA.PFS	
	CSIDEASS.COM	
	CSIDEFS.COM	
	CSIEXPORTDB.COM	
	CSIIMPORTDB.COM	
	CSILOAD.COM	
	CSIREP-ALL.COM	
	CSIREP.COM	
	CSIREQ.COM	
	CSIUNLOAD.COM	
	CSXDBA.EXE	
	DIRVIEWS.COM	
	DIRVIEWS.EXP	
	DIRVIEWS.GBL	
	MANTISCRE.FDL	
	MANTISSUB.COM	
	MANTIS_DIRM_INIT.COM	
	MANTIS_DIRM_25.DATA_AXP	
	MANTIS_DIRM_25.DATA_VAX	
	MANTIS_DIRM_2504.EXE_VAX	
	MANTIS_DIRM_2591.EXE_AXP	
	SUPRAD.GBL	

Directory	Members	Size
.SUPRA.PDM_24.UPGRADE	CHANGEDB.CLD <input type="checkbox"/>	4111 <input type="checkbox"/>
	COMBAT.CLD <input type="checkbox"/>	86 <input type="checkbox"/>
	CSGDBA.EXE <input type="checkbox"/>	
	CSIUPG22_2400.EXE	
	CSIUPG23_2400.EXE	
	CSMCOMBAT.EXE <input type="checkbox"/>	
	CSMUPGSTOP.EXE	
	METAUPG.COM2 <input type="checkbox"/>	
	METAUPG.COM4 <input type="checkbox"/>	
	METAUPG.COM5 <input type="checkbox"/>	
	METAUPG.COM6 <input type="checkbox"/>	
	METAUPG.COM7 <input type="checkbox"/>	
	METAUPG.COM8 <input type="checkbox"/>	
	METAUPG.COM9 <input type="checkbox"/>	
	METAUPG.TXT1 <input type="checkbox"/>	
	METAUPG.TXT2 <input type="checkbox"/>	
	METAUPG11.COM3 <input type="checkbox"/>	
	SUPRAUPG.COM <input type="checkbox"/>	
	SUPRAUPG1011.COM <input type="checkbox"/>	
	SUPRAUPG11.GBL <input type="checkbox"/>	
	SUPRAUPG11.PFS <input type="checkbox"/>	
	UPGRADE.COM	
	UPGRADE22.COM	
	UPGRADE23.COM	
	UPGRADE24.COM	
.xxxxxxx *	SUPRAD.MOD	>10,421
	UDD1.CSI	
	UDD2.CSI	
	UDD3.CSI	
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	UTLNAT.SEQ	

* Your working copy.

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