

Cincom

SUPRA SERVER PDM

Glossary

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SUPRA[®] Server PDM Glossary

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Release information for this manual

The *SUPRA Server PDM Glossary*, P26-0675-70, is dated January 15, 2002. This document supports:

- ◆ Release 1.3 of SUPRA Server with UNIX PDM support
- ◆ Release 2.4 of SUPRA Server with VMS PDM support
- ◆ Release 2.7 of SUPRA Server with IBM PDM support

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

The *SUPRA Server Glossary* contains information pertinent to the entire SUPRA product series including PDM, RDM, and SQL. The Glossary covers all platforms and environments supported by SUPRA.

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 (b)	Indicates a space (blank). The example indicates that four spaces appear between the keywords.	<pre>BEGIN XXXX SERIAL</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. 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>[WHERE <i>search-condition</i>]</pre> <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>	<p>MONITOR { ON } { OFF }</p>
<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> <hr/> <p><u>STATISTICS</u></p>
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>	<p>INTO :host-variable [:ind-variable],...</p>
SMALL CAPS	<p>Represent a small keystroke. Multiple keystrokes are hyphenated.</p>	<p>ALT-TAB</p>

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 filename, and so on. In the example 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
<div style="border: 1px solid black; padding: 2px; display: inline-block; margin-bottom: 5px;">UNIX</div> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-bottom: 5px;">VMS</div>	Information specific to a certain operating system is flagged by a symbol in a shadowed box (UNIX), 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;">UNIX</div> DBA will run on any terminal that supports the cursor library. <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-bottom: 5px;">VMS</div> DBA will run on any VT100 compatible terminal (this includes upwardly compatible terminals such as VT300).

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. For a brief synopsis of each manual, refer to the *SUPRA Server PDM Digest (OS/390 & VSE)*, P26-9062, or the *SUPRA Server PDM Digest (VMS)*, P25-9062.

PDM support (OS/390 and VSE)

Overview

- ◆ *SUPRA Server PDM Digest (OS/390 & VSE)*, P26-9062

Getting started

- ◆ *SUPRA Server PDM Migration Guide (OS/390 & VSE)*, P26-0550*
- ◆ *SUPRA Server PDM CICS Connector Systems Programming Guide (OS/390 & VSE)*, P26-7452

General use

- ◆ *SUPRA Server Glossary*, P26-0675
- ◆ *SUPRA Server PDM Messages and Codes Reference Manual (RDM/PDM Support for OS/390 & VSE)*, P26-0126

Database administration tasks

- ◆ *SUPRA Server PDM and Directory Administration Guide (OS/390 & VSE)*, P26-2250
- ◆ *SUPRA Server PDM Directory Online User's Guide (OS/390 & VSE)*, P26-1260
- ◆ *SUPRA Server PDM Directory Batch User's Guide (OS/390 & VSE)*, P26-1261
- ◆ *SUPRA Server PDM DBA Utilities User's Guide (OS/390 & VSE)*, P26-6260
- ◆ *SUPRA Server PDM Logging and Recovery (OS/390 & VSE)*, P26-2223
- ◆ *SUPRA Server PDM Tuning Guide (OS/390 & VSE)*, P26-0225
- ◆ *SUPRA Server PDM RDM Administration Guide (OS/390 & VSE)*, P26-8220
- ◆ *SUPRA Server PDM RDM PDM Support Supplement (OS/390 & VSE)*, P26-8221
- ◆ *SUPRA Server PDM RDM VSAM Support Supplement (OS/390 & VSE)*, P26-8222
- ◆ *SUPRA Server PDM Migration Guide (OS/390 & VSE)*, P26-0550*
- ◆ *SUPRA Server PDM Windows Client Support User's Guide*, P26-7500*
- ◆ *SPECTRA Administrator's Guide*, P26-9220

Application programming tasks

- ◆ *SUPRA Server PDM DML Programming Guide (OS/390 & VSE)*, P26-4340
- ◆ *SUPRA Server PDM RDM COBOL Programming Guide (OS/390 & VSE)*, P26-8330
- ◆ *SUPRA Server PDM RDM PL/1 Programming Guide (OS/390 & VSE)*, P26-8331
- ◆ *SUPRA Server PDM Migration Guide (OS/390 & VSE)*, P26-0550*
- ◆ *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 more than once because you use them for multiple tasks.



Educational material is available from your regional Cincom education department.

PDM support (VMS and UNIX)

Overview

- ◆ *SUPRA Server PDM Digest (VMS)*, P25-9062

Getting started

- ◆ *SUPRA Server PDM UNIX Tutorial*, T25-2262
- ◆ *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 System Administration Guide (UNIX)*, P25-0132*
- ◆ *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 System Administration Guide (UNIX)*, P25-0132*
- ◆ *SUPRA Server PDM RDM Administration Guide (VMS)*, P25-8220
- ◆ *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.



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Glossary

A-type foreign key

RDM **OS/390** **VSE** See [assigned foreign key \(A-type\)](#).

access definition

RDM The list of ACCESS statements that make up the second portion of a view definition in the Directory Access Set category. These statements describe the physical access to the files and the navigation paths from the base file through all other files needed for the view. Previously known as *navigation definition*.

OS/390 **VSE** The second portion of a view in the Directory Access Set category.

access key

RDM A value an application uses in an RDML GET statement to access a view through a logical key. It may or may not be the primary key for a relation. It may be unique or nonunique and may be a combination of fields (compound key).

Access Set

OS/390 **VSE** An entity you maintain in the Directory Access Set category. It contains an RDM view definition, consisting of the attribute and access definitions statements. You must relate the Access Set to a Logical View entity to make it available for RDM, SPECTRA, and Comprehensive Retrieval to access data on the database. Users cannot update the Access Set directly.

active environment description

OS/390 **VSE** The environment description from the Directory currently in use by the PDM.

activate index

A PDM operator command that enables the PDM to update index records each time the corresponding data file is updated. Use the check index function if the index has been deactivated for any length of time. See *also* [populate index](#).

active environment description

The environment description from the Directory currently in use by the PDM.

active schema

The schema currently in use by the PDM.

active schema maintenance

OS/390 **VSE** A function that allows you to perform Directory maintenance on entities in the active schema. You enable it with the Schema category Special Function command.

Administration Utility

VMS Utilities supplied to assist the DBA in administering SUPRA.

after image

A record on the system log file indicating a modification to the database. The after image contains a copy of a record after a change has been made. See *also* [before image](#).

alias

Another name for a table that is valid only within the SQL statement in which it is used. See *also* [synonym](#).

alpha character

A character in the DRDM that represents a non-ASCII or a non-EBCDIC character. It is intended to represent letters with diacritical marks such as a tilde (~) or a circumflex (^) and is used to change standard ASCII or EBCDIC sort order. You use the ALPHA CHAR option under the UTILITY functions INIT CONFIG or ALTER CONFIG to define these character substitutions.

arbitrary text indicator

See [wild card character](#).

argument

A user-supplied list of items for the DBA utilities functions. Also a parameter in a PDML FINDX command. See also [PDML](#).

arithmetic expression

An expression formed by applying arithmetic operators to values, for example, (7 * SALARY).

ASI

See [attribute status indicator \(ASI\)](#).

assigned foreign key (A-type)

OS/390 VSE A foreign key whose referencing row can exist independently, but the foreign key value must match a primary key value in the referenced relation. No null value is allowed. The required match is dictated by a business decision that there shall be an association to the referenced relation; for example, an employee is assigned to a valid department. See also [foreign key type](#) and [referential integrity](#).

associated record layout

A record layout in an existing file profile. During file design, you may want to use an existing file profile rather than create a new one.

atomic value

OS/390 VSE An attribute separated into the most fundamental, significant parts usable by an organization.

attached central mode

A method of executing a multitask PDM in the same region as an application (batch or CICS) while the PDM is also accessible to other applications in different regions.

attached mode

A method of executing a multitask PDM in the same region as an application (batch or CICS). The PDM is not accessible to applications in other regions.

Attacher program

A SUPRA component that serves as a monitor for an application (batch or online) accessing a multitask PDM. Attacher attaches (using the IBM ATTACH macro) and controls both the application and the multitask PDM.

attribute

The characteristic(s) of an item in a relation. It corresponds to a column in a table. *See also* [column](#).

attribute status indicator (ASI)

RDM The symbol RDM returns to DBAID or a database application program indicating the status of each field in an RDM logical view after an RDML. *See also* [RDML](#).

automatic PDM initiation

UNIX **VMS** Defining the environment so that the first attempt to use the PDM causes the PDM to start. *See also* [manual PDM initiation](#).

automatic restart

UNIX **VMS** Defining the environment so that the first attempt to use the PDM after a failure causes the PDM to restart. If task logging is enabled, Warm start will occur. *See also* [automatic PDM initiation](#), [task logging](#), and [Warm start](#).

back out

The process of reversing transaction updates to the database to the previous commit.

OS/390 For example, the PDM backs out a transaction when it encounters a RESET command from an application, TP monitor, or subsystem. *See also* [reset](#).

background process

A process that executes without an associated terminal or login shell. For example, to execute a command, the **UNIX** shell normally creates a new process and waits for it to finish. The command, however, may be run without waiting for a previous process to finish (“in the background”) by using the post-fix operator “&” after a command in response to a shell prompt.

base file

RDM The first file named in the access definition of an RDM logical view definition. *See also* [logical view](#).

base relation

A Directory Relation entity and/or File entity. A base relation is considered a real relation because a row retrieved from it contains attributes from one physical record.

base table

An array of data consisting of columns and rows. Each row is uniquely identified by a primary key. *See also* [primary key](#).

base view

OS/390 VSE The [conceptual schema](#) generates a Directory logical view definition for each relation defined. The Directory view definition contains the following:

- ◆ Primary key attribute as the logical key
- ◆ All other attributes in the relation
- ◆ Access statements for integrity constraint information
- ◆ Mapping to other relations in the schema

The access statements name only files, not other logical views.

UNIX VMS A Directory view definition the user creates whose access statements refer to physical files rather than to base view names. Base views access SUPRA data sets directly, not other views which contain all of the integrity constraint information, and map to the base relations.

Batch Directory Maintenance

A SUPRA component you use to perform Directory Maintenance functions in batch mode. *See also* [Online Directory Maintenance](#).

batch mode

The mode for processing transactions without interruption or user interaction on a screen. Termination of batch mode before normal completion can occur only if a fatal error forces the end of the session. It is also known as background, or noninteractive, processing. *See also* [background process](#).

before image

OS/390 **VSE** A record on the system log file and task log file indicating a modification to the database. The before image contains a copy of a record before the change was made.

boot-driven PDM

OS/390 **VSE** A PDM running without reading a Directory-stored schema and environment description. It uses only the bootstrap definition of the Directory files. This mode is used for Recover/Restore execution and for other DBA utilities when maintaining the Directory files. You indicate this mode by naming only a bootstrap in the CSIPARM file (no Directory-stored schema and environment description; only a DIRECTORY parameter, no REALM parameter), and by UCL control parameters naming the bootstrap. *See also* [Directory-driven PDM](#).

bootstrap environment

OS/390 **VSE** A description of the Directory files, Task Log file, and run-time options for the PDM. Contains one or more sets of a bootstrap schema and environment description(s). The Create VALMOD bootstrap generator describes these sets. The CSIPARM file specifies which bootstrap schema and environment description to use at PDM run time.

bootstrap environment description

OS/390 VSE A description of the run-time options (which Directory files, their access, logging, buffering, etc.) the PDM uses when initializing and running in a boot-driven mode.



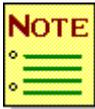
At installation, Cincom supplies several descriptions, created with the Create Environment Description bootstrap generator.

bootstrap generators

OS/390 VSE A set of utilities that build a bootstrap environment. The bootstrap generators are Modify Schema, Create Environment Description, and Create VALMOD.

bootstrap schema

OS/390 VSE A description of the files the PDM uses when initializing and running in a boot-driven mode. It describes the physical characteristics of the five Directory files, a system log file, a task log file, and a statistics file. The bootstrap schema is created using the Modify Schema bootstrap generator.



At installation, Cincom supplies schema tailored to your physical requirements

bound view

RDM A copy of a logical view that is partially open and stored on the Directory through DBAID. Bound views reduce processing time for RDM view-opening requests.

buffer

A temporary storage area in memory used for data input or output.

Buffer Cache facility

OS/390 VSE A performance option to keep PDM file buffers above the 16 MB level.

buffer pool

Shared buffers for PDM data sets to reduce load on the operating environment. Often used in tuning for performance.

OS/390 VSE An entity you maintain in the Directory buffer pool category. It defines an amount of storage area for PDM retrieval of database records when the PDM is Directory driven. The buffer pool for the bootstrap is defined in the bootstrap Directory environment description.

built-in function

A keyword function, such as MAX, MIN, or ADDDATE, that you can use to create a value. SQL provides the following types of built-in functions:

- ◆ Set functions
- ◆ Numeric result functions
- ◆ Character string result functions
- ◆ Conversion functions
- ◆ Date functions
- ◆ Time functions

Burrys database

A Cincom-supplied SUPRA database. You can use this database for testing and education purposes. Burrys database is being replaced with the Common Database (CDB) and is used with the SUPRA SQL PDM. See also [Common Database](#).

candidate key

Any column combination uniquely identifying the rows in a relation. For example, an employee number and a social security number in an employee relation are both candidates for the primary key.

cascade delete

RDM A multirow (or multiple row) delete involving multiple records from one or more files. The rows share a full or partial logical key.

category

OS/390 VSE On the Directory, a fundamental and distinct class of metadata consisting of a collection of entities. For example, all individual logical view entities in a database make up the logical view category on the Directory.

category code

OS/390 VSE In Directory Maintenance, the two-letter abbreviation that identifies the category for processing (BP for buffer pool).

CDB

See [Common Database \(CDB\)](#).

central mode

OS/390 VSE A method of executing a multitask PDM in its own address space that makes it accessible as a server to client applications (batch or CICS) in different address spaces.

chain

A set of PDM-related records connected to each other through the common linkpath field. The entire chain is connected to one primary file record through its linkpath file of the same name. If the related record has more than one linkpath, it is a member of more than one chain. See [also head-of-chain, previous-in-chain, next-in-chain, and end-of-chain](#).

character device

UNIX Disk partitions which use character I/O and, thereby, bypass the UNIX file-system buffers. Character devices are often called raw devices.

check index

An indexing function you access through DBA which uses the index maintenance utility CSTUIDX.EXE. Check index verifies that the index records match the records in the corresponding data file. Check will automatically correct any inconsistencies and is particularly useful for indices that have been deactivated for any length of time. See [activate index](#).

CICS connector exit

OS/390 VSE An optional-use, written routine that gains control at specific points during CICS and CICS connector processing. Refer to the *SUPRA Server PDM and Directory Administration Guide*, P26-2250 for details.

CICS exits

OS/390 VSE The Cincom modules you add to CICS system programs for Dynamic Transaction Backout (DTB) support, or the user-coded exit routines you add to the CICS interface modules.

CICS multitask interface (CSMT)

OS/390 VSE An interface that supports multiple CICS tasks within the same address space and accesses a multitask PDM.

client

An application, tool, or other computing service that asks for work to be done by a server. See also [client/server](#).

client/server

A subset of cooperative processing in which user applications run on one or more client processors and work cooperatively with specialized applications running on one or more server nodes. The application logic usually runs on the client computer and requests specialized services from the server, such as printing, communications, or data management. A client can be connected to multiple servers but can only communicate to one server at a time. A server, however, can manage multiple clients. See also [distributed processing](#).

close file utility

OS/390 VSE A Directory Maintenance utility subcommand that closes a PDM data file.

close subcommand

A Directory File category-utility subcommand that uses active schema maintenance to close a data file for secondary key population.

cluster

OS/390 VSE A group of SUPRA database-related file records physically stored in close proximity for PDM retrieval purposes. You create this structure using the cluster option for a foreign key during generation.

VMS See [VAXcluster](#), [heterogeneous VAXcluster](#), and [homogeneous VAXcluster](#).

code-directed read

A reading method that returns only those records in a chain with designated record code(s).

coded related records

A record in a coded related file. Coded related records may have varying formats and are divided into two portions: base data (has the same format in all records) and redefined data (has varying formats depending on the 2-byte record code). The records contain record code, referback control key(s), linkpath(s), and data fields. See also [redefined data portion](#).

Cold start

A startup of the PDM using either the current task log file that indicates no recovery is necessary, or a freshly formatted task log file that has no recovery indication. No file recovery is performed.

collating sequence

The order in which characters of a given character set (ASCII or EBCDIC) are sorted.

column

A vertical arrangement of like values in a table. See also [attribute](#) and [domain](#).

column definition

RDM The specification of a column in a view with all qualifiers (KEY, NONUNIQUE KEY, REQ, etc.) and logical data items (fields), which are equal in this column. See also [Access Set](#) and [access definition](#).

COMIT

The PDML function that physically writes all updates to disk.

command code

In Directory Maintenance, the two-letter abbreviation that identifies the command for processing (CG for CHANGE).

command file

A text file containing a series of commands that you enter at a terminal. Once created, you can repeatedly execute a command file or submit it to batch.

UNIX See [script](#).

VMS See [command procedure](#).

command level

Level from which the user can enter input to the command interpreter. Also referred to as system level.

UNIX See [shell](#).

command line

See [command level](#).

command procedure

VMS A text file containing a series of commands that you type in at a terminal. Once created, you can repeatedly execute a command file or submit it to batch.

UNIX See [script](#).

Common Database (CDB)

A Cincom-supplied SUPRA SQL schema you can use for testing, demonstration, and experimental purposes.

compiled database description

UNIX **VMS** A file containing the physical definition of the database, filenames, buffer names, and so on. This file is sometimes referred to in error messages as the DBMOD. See also [database description](#).

compound key

A key made up of more than one column.

Comprehensive Retrieval

OS/390 **VSE** A SUPRA component that extracts file data and produces reports. The component processes programs written in Retrieval Definition Language (RDL) to retrieve selected data from SUPRA database files with or without using an RDM or compatible view. It can also retrieve data from user files that are not defined to the Directory. The data is extracted to a sequential file, sorted, and printed as one or more reports in a user-defined format. This component uses Cincom-supplied RDL programs to produce the standard Directory reports and the RDM Impact of Change logical view report.

conceptual schema

The schema within the three-schema architecture that is derived from the logical database design process. This schema contains normalized, nonredundant tables organized the same way you conduct business. See also [external schema](#), [internal schema](#), and [three-schema architecture](#).

conceptual schema data

OS/390 **VSE** One of the five categories of data maintained on the Directory. This category contains relational definitions of your data. The definitions are used in database design to create relational data models of your organization's functions. Conceptual schema data includes the following: attribute, domain, foreign key, and relation. See also [metadata](#).

connector

The CICS multitask interface connection to the PDM. It uses operator control commands to initiate and terminate communications.

consistency check

OS/390 **VSE** A Directory Maintenance command to validate the characteristics of the database after performing maintenance.

CONTROL:Financial

A Cincom product that provides accounting and financial applications.

control interval size

OS/390 **VSE** See **VSAM control interval size**.

UNIX **VMS** The number of related records contained in an internal, space-management unit.

control key

Primary file records (BDAM, KSDS, or ESDS) and VSAM native file records; the required field that uniquely identifies each record.

Related file records (BDAM or ESDS); the required field that identifies the associated unique, primary record from the file named in the linkpath field.

CONTROL:Manufacturing

A Cincom software product that provides advanced manufacturing applications.

control section

OS/390 **VSE** In the DBA Utilities Command Language (UCL) for PDM files, the part of a program in which you define the overall options for the utility functions.

correlated subquery

A nested SELECT statement. A correlated subquery depends on a variable that receives its value from a table used in the outer query.

Create Environment Description

OS/390 VSE A bootstrap generator that creates the bootstrap environment description. It defines the files to be selected from the bootstrap schema and specifies the selected run time options.

Create VALMOD

OS/390 VSE A bootstrap generator that validates a bootstrap Directory schema with various bootstrap environment descriptions and produces the VALMOD load module. The PDM reads the VALMOD to verify the CSIPARM filenames of one bootstrap schema and one bootstrap environment description.

cross-memory communication

Data transferal when the PDM and application are not running in the same address space **OS/390 VSE** or partition **VSE**.

CSIPARM file

OS/390 VSE A file you create for controlling a SUPRA database, Directory, interface, and PDM usage. You can create multiple CSIPARM files for various uses of the PDM; however, the PDM reads only one file at each initialization. Interfaces read the file to determine how to contact the PDM.



Cincom supplies various CSIPARM file members for utilities that run against the Directory files and for Directory Maintenance and CDB executions.

CSMT

See [CICS multitask interface \(CSMT\)](#).

cursor

In MANTIS programs and in precompiled applications using languages such as C, COBOL, PASCAL and FORTRAN, the name representing a result table and the SELECT statement that created the table.

D-type foreign key

OS/390 **VSE** See [descriptor foreign key \(D-type\)](#).

data area

The element name, as specified in the element list of a PDML command, retrieves data and sends the data to the data area.

Data Control Language (DCL)

A language used to control access to a table by granting users authority to access information. See also [Structured Query Language \(SQL\)](#).

Data Definition Language (DDL)

A language used to define a database definition.

DATA file

A Directory database-related file containing variable data for certain Directory entities. All information you enter with the Directory Maintenance VARIABLE EDIT command is stored on the DATA file.

data item

A named component of a record. In design analysis, usually the smallest unit of data that has meaning to your organization. See also [physical data item](#) and [logical data item](#).

data list

See [element list](#).

data list processing

The data transferal between the database record and the program data area using the names you supply in the data list parameter. See also [element list processing](#).

Data Manipulation Language (DML)

A set of application statements that access a data manager.

SUPRA supports Physical Data Manipulation Language (PDML) for PDM and SPECTRA files, and Relational Data Manipulation Language (RDML) for PDM files and KSDS VSAM native files.

See also [Physical Data Manipulation Language \(PDML\)](#) and [Relational Data Manipulation Language \(RDML\)](#).

data model

Illustration of the [conceptual schema](#). It is used to design the [internal schema](#) (database description). See also [relational model](#).

data set

The physical data storage described in the SUPRA Directory including physical record(s) layout and file specifications.

UNIX **VMS** The 4-character name of a data set as described in the SUPRA Directory.

data view

User view of data for a business function. Used as a starting point for database conceptual model design and logical (application) view definition.

database

A collection of data stored on a computer storage medium so that it can be used for more than one purpose. See also [hierarchical database](#) and [relational database](#).

database description (DBD)

A collection of physical record layouts, file locations, linkpaths, data items and record codes, buffer information, task and system logging and other environmental information stored on the SUPRA Directory. The database description describes the physical data, and the relationships between the data, to be maintained by SUPRA PDM and RDM.

database name

UNIX **VMS** The 6-character name of a database.

database sweep

Retrieval of an entire relation using sequential READs. Equivalent to a series of nonkeyed GETs in RDML.

database transfer utility

UNIX **VMS** Facility used to copy a database description including base and derived views and recovery logs from one SUPRA Directory to another. The two SUPRA Directories may be on the same machine or on different machines.

DATBAS

A subroutine that an application uses to access PDM functions.

DATBASXT

OS/390 **VSE** See [interface exit](#).

DBA

See [SUPRA DBA](#).

DBA (database administrator)

A privileged user type.

DBA lock

Internal lock to prevent simultaneous update of a database or data set description by more than one user. There are DBA locks on database descriptions, data set descriptions and views (views apply only to VMS).

DBAID utility

RDM A utility that processes standard application RDML commands and provides additional RDML commands for the DBA. Application programmers can use authorized commands to test logical view functioning against planned program strategies.

DBA utilities

UNIX **VMS** A SUPRA component that allows the DBA to organize, display, and maintain data on Directory files, PDM files, and user files. DBA utilities allow you to change the structure of data sets without losing existing, user-entered data and to produce statistics.

DBMOD

See [compiled database description](#).

DBMS to Directory Interface (DDI)

OS/390 **VSE** A SUPRA internal program the PDM uses to obtain information from the bootstrap and the Directory about files, buffers, and run options.

DDL

See [Data Definition Language \(DDL\)](#).

DDL convert utility

A migration utility that converts Series 80 DDL statements for DBGEN into SUPRA Batch Directory Maintenance transactions.

DEF# file

The Directory database primary file containing entity descriptions and the linkpaths to the associated Directory-related files.

default schema

OS/390 **VSE** The CSIDEFSC schema or the CSI-DEFAULT-CS [conceptual schema](#) supplied on the release tape. These schemas provide default values for certain fields in entity categories. These defaults are used when you are performing Directory maintenance and do not specify a value for an entity data field.

default value

RDM The value inserted into a physical data item when a logical view does not contain the mapping column. The column that maps to the physical data item may have been omitted from the user view, or it may be missing from the derived or base views.

delete integrity

RDM A relational check during deletion of a row containing a primary key referenced by a foreign key with the same value. When so directed by the view integrity's constraints, RDM does not allow this row to be deleted unless all referencing foreign keys of the same value are first deleted (A- or E-type), nullified (D-type), or reassigned (A-type).

depopulate subcommand

A Directory File category utility that marks a specific secondary key as no longer usable and, optionally, clears its index file space.

derived relation

A set of one or more logically derived records. Derived relations are generated from one or more relations using the relational algebraic operations. *See also* [view](#).

derived view

RDM A logical view that accesses only other logical views, not files.

descriptor foreign key (D-type)

RDM A foreign key whose referencing row can exist independently, but the foreign key value must be null or must match a primary key value in the referenced relation. The match is based on an optional association to the referenced relation, which adds further description or optional data. For example, an employee may or may not have chosen a retirement plan. *See also* [foreign key type](#) and [referential integrity](#).

device name

Identification of a physical device. The identification may be a real physical specification (DUA2), or a logical name (SYS\$USERDISK), which translates to a physical-device specification.

direct buffer

OS/390 **VSE** A field in the Directory buffer pool that contains the minimum number of reserved direct buffers to allocate for the files sharing this pool (as opposed to a serial/sequential buffer).

direct read

A type of a read in which one specific record is read.

Directory

A database used to store the external, internal and conceptual metadata. See also [metadata](#).

Directory component description

OS/390 **VSE** An entity you maintain in the Directory Component Description category that provides security and execution options for the Directory Maintenance functions.

Directory-driven PDM

OS/390 **VSE** A PDM that runs by reading the Directory for schema and environment description information (as opposed to boot-driven). You control whether the PDM is Directory-driven with a REALM parameter in the CSIPARM file, or, when running DBA utilities, with the UCL control parameters replacing REALM. If they are present and if they name a schema and environment description stored on the Directory, then the PDM runs Directory-driven after initializing with the DIRECTORY parameter values, which identify the boot environment.

Directory file utilities

OS/390 **VSE** Utilities that control and maintain database and index files. They also construct and maintain index information for secondary keys. There are utilities to close, open, depopulate, populate, or format a file or secondary key.

Directory Maintenance

The program for creating and maintaining Directory metadata. You can use Directory Maintenance either in batch or online. See also [SUPRA DBA](#), [Batch Directory Maintenance](#), and [Online Directory Maintenance](#).

Directory reports

A set of reports you can produce reflecting all the information in the Directory.

Directory start-up utility

OS/390 VSE A utility that initializes new Directory files so that metadata can be stored on them.

distributed database

In a fully distributed database, one application can access data located in a variety of databases, managed by a variety of management systems, stored on a variety of machines running a variety of operating systems and connected by a variety of communication networks. To a user, such a system should look exactly like a nondistributed system. Regardless of complexity, it should look as if only one process is executing on one processor in one location on one set of data.

distributed processing

A system for handling data within an organization. Distributed processing employs more than one geographically separate processor. Usually the processors are linked by telecommunications. See *also* [client/server](#).

DML

See [Data Manipulation Language \(DML\)](#).

domain

The set of all possible values of an attribute. It provides validation options for inserts and updates to the attribute. Assigning two or more attributes to the same domain implies that the values for those attributes are logically comparable.

dynamic indexing

A method for accessing data through the PDM with other than a control key or linkpath. It speeds data retrieval by using secondary keys stored on an index file, and it provides a method of obtaining data in a specified sequence. You can use RDM logical views or the PDML serial command to use the secondary keys.

Each index contains one or more secondary keys, (which are a physical field or its subdefinition) or a combination of physical fields (or their subdefinitions), from a single PDM-primary or PDM-related file to be used for dynamic indexing through PDML or RDM logical view definitions. See [also generalized access syntax](#) and [specific access syntax](#).

E-type foreign key

OS/390 **VSE** See [essential foreign key \(E-type\)](#).

edit character

A character used in numeric data fields to describe the data format (a dollar sign (\$)). May be any valid SUPRA character except the pound sign (#).

edit mask

OS/390 **VSE** A category maintained on the Directory that contains format masks used to edit the physical representation of data into a format suitable for displaying or printing.

EDM

See [environment dependent module \(EDM\)](#).

element list

An argument that describes the format of the data area passed to or from the PDM during function processing. The element list can have one of several forms depending on the type of file being processed (primary, coded related, or uncoded related).

element list processing

The data transfer between the record and the data area using the element list.

end-of-chain

The last record (in the forward direction) in a chain of PDM-related file records. See also [head-of-chain](#) and [first-in-chain](#).

entity

An item in a Directory category.

entity integrity

OS/390 **VSE** A method of ensuring unique identification of entities using a primary key.

Entity/Relationship Model

One method of analyzing and representing the metadata of an organization by its entities and the relationships between entities. The model is used as the basis for database design.

environment dependent module (EDM)

Any module specifically oriented to one operating system or environment.

Environment Description

OS/390 **VSE** An entity you maintain in the Directory Environment Description category. It defines selections (from the files in the qualifying schema) and the operating environment for a particular execution of the PDM in Directory-driven mode. Cincom supplies various environment descriptions for the supplied Directory schema, the Burrys schema, and the CDB schema, and you define the environment description(s) for your user.

In Directory-driven mode, the description contains SUPRA PDM run-time options such as task-logging option, buffer-pool assignments, and Directory-access mode. User files are available only in this mode. The bootstrap environment description contains the equivalent data for use in boot-driven mode. (Only directory and log files are used in this mode.) See also [Directory-driven PDM](#) and [boot-driven PDM](#).

environment library

OS/390 **VSE** The library containing output from the bootstrap generators.

equivalence string

A character string that represents a file or device and equates to a logical name. For example, when a command or program refers to a file or device by its logical name, the system translates the logical name to its predefined equivalence name.

essential foreign key (E-type)

A foreign key whose dependency is that the referencing row can exist only if the foreign key value matches the primary key value in the referenced relation. No null value is allowed. The required match is dictated by the real world (a nonbusiness decision); for example, an employee deduction row cannot exist without the employee. An E-type foreign key is usually either the full or partial primary key of its own relation (an extension or a subtype). See *also* [foreign key type](#).

exclusive user

OS/390 VSE A user who may have only one session on a database. See *also* [nonexclusive user](#).

execution statistics

OS/390 VSE Database statistics that reflect the performance of the PDM and database activity and are used for blocking, counting active tasks, totaling held records counts, utilizing resources, tuning buffers, and so on. The PDM writes the statistics to the statistics file during execution when requested by the environment description. See *also* [statistics file](#).

execution statistics utility

OS/390 VSE A utility that analyzes the contents of the PDM statistics file to generate calculated statistics and print them along with statistic file contents.

exit

See [CICS exits](#), [interface exit](#), [PDM exit](#), [RDM exit](#) and [RDM validation exit](#).

exit point

OS/390 VSE A location in a Cincom product that calls an exit program.

exit program

OS/390 **VSE** Calls and reacts to the output of an external security system.

expand function

A DBA utilities UCL function that expands the total record capacity of an existing PDM-related file without unloading or reloading it.

experience table

OS/390 **VSE** A method the PDM uses, when so specified in the CSIPARM file, to track available primary and/or related file space for adding or inserting records.

extended status

OS/390 **VSE** A status the PDM returns to an application when an error has occurred. You can retrieve the status with a PDML SHOWX command. The status contains a 4-character status code, identification numbers, the name of the module where the error occurred, and data about the error. You can also code user exits to display the extended status on the console, job listing, and so on.

extension

A subclass indicating that a dependent- or relationship-relation type has only one E-type foreign key to another relation and that the foreign key is a subset of the primary key in its own relation. An extension contains additional or repeating data attributes for the referenced relation. An extension cannot contain A- or D-type foreign keys and may be the target only of an I-type foreign key.

External Field

OS/390 **VSE** An entity you maintain in the Directory External Field category. It associates a meaningful or descriptive name with the 8-character field name defined for the database file.

external file

A disk file, magnetic tape file, or printer belonging to the particular operating system, or for **OS/390** and **VSE** interactive components, to the CICS Workspace.

external schema

The schema within three-schema architecture that contains views of data as a user sees the data.

- ◆ **OS/390** **VSE** The external view metadata entities on the Directory made up of logical views, external fields, and access sets (view definitions). The external schema defines logical entities and the structure of a database.
- ◆ The external data on the Directory made up of derived views. Accessed by application programs, such as MANTIS and SPECTRA. See also [conceptual schema](#), [internal schema](#), and [three-schema architecture](#).

fast utilities

UNIX **VMS** Utilities that allow you to alter the physical structure of data sets without losing user-entered data. Also allows you to modify logical record length. Similar to DBA utilities but uses a command-level interface.

file

A set of data treated as a unit; generally used to refer to data stored on magnetic tapes or disks describing the physical characteristics of database files.

file card format

A format for displaying results when using EASY. When using file card format, EASY displays a single result row on the query form.

file profile

Provides name, status, password, and layout specifications for records in a given file.

file specification

A character string that uniquely identifies a file. For VMS, a file specification describes the physical location of the file; it includes the filename and file-type identifiers that describe the file and its contents in the following format:

```
node::device:[directory]filename.extension;version
```

UNIX See [pathname](#).

file statistics function

A DBA utilities UCL function that reports the physical and logical characteristics of a database file.

file type

UNIX **VMS** The type component of a file specification or pathname. A file type generally describes the nature of a file or how it is used. For example, .COM (VMS) or .com (UNIX) indicates a command file; .EXE (VMS) or .exe (UNIX) indicates an executable image.

The file type is defined in the Directory. PDM files can be primary or related.

RDM RDM can use **VMS** RMS or **OS/390** **VSE** KSDS files.

file utilities

OS/390 **VSE** See [Directory file utilities](#).

first-in-chain

The Relative Record Number (RRN) in the first portion of a primary record linkpath field. It points to the first related record in a chain (head-of-chain) of PDM-related file records. The second portion is last-in-chain. See also [Relative Record Number](#), [head-of-chain](#), and [last-in-chain](#).

foreign file

See [source relation](#).

foreign key

A column, or set of columns, in one table (DPDM) or file (PDM) that corresponds to the primary key column(s) in another table (DPDM) or file (PDM). Links establish foreign key relationships between tables.

RDM A logical view defines a foreign key. Foreign keys ensure referential integrity.

foreign key type

OS/390 VSE A classification of a foreign key that further defines the relationship to the referenced primary key by indicating the degree of dependency. The types are: assigned (**A-type**), dependent (**D-type**), essential (**E-type**), and ignore (**I-type**).

format file utility

The Directory Maintenance utility subcommand that prepares a database file or index file for use. The format file utility performs the same operation as the format function available through the SUPRA DBA utilities.

format function

OS/390 VSE A Directory file category utility subcommand that formats new database or index files through active schema maintenance.

A DBA utilities UCL function that formats a new database file. Formatting sets all records within the file to spaces and builds and writes a file control record on the file.

UNIX VMS A DBA or stand-alone function that creates and formats a database file. It sets all records within the file to binary zeros and writes a file control record in the file (task and system log files are not set to binary zeros).

format index

UNIX VMS An indexing function you access from either DBA or the command level that uses the index maintenance utility CSTUIDX.EXE. CSTUIDX.EXE creates, formats and activates your index files but does not populate them. See also [populate index](#).

FSI

See [function status indicator \(FSI\)](#).

function parameter

A PDML command parameter containing the PDM function to be performed (READV or WRITV).

function status indicator (FSI)

The symbol RDM returns to DBAID or an application reflecting the success or failure of an RDML function request.

generalized access syntax

RDM A technique by which RDM discovers and uses the optimum navigation strategy to construct the rows of the logical view. Involves ACCESS statements with the WHERE clause (not the VIA or USING clauses). See *also* [access definition](#) and [specific access syntax](#).

generate

OS/390 VSE A Directory Maintenance command that creates the internal and external schema data from the [conceptual schema](#).

generated entities

OS/390 VSE The Directory internal and external schema entities that you create with the [conceptual schema](#) generation command.

generic read

If you are not using indices to access data, you can omit key values from the right. If you are using dynamic indices to access data, you can omit parts of a key value from the right, substituting one of two wild card characters. See *also* [wild card character](#).

GETVIS area

VSE The virtual storage available to SUPRA. This area is the size of the partition minus the size of the loaded programs.

global view

RDM A logical view available to CICS tasks. Use global view to save time when your task opens the logical view and to save space in the task heap. The RDM opens global views during the startup process.

Global views are defined in the Long Text of the active REALM Environment Description for the active PDM.

HDMP

See [Heterogeneous Data Management Processor \(HDMP\)](#).

head-of-chain

The first record (in the forward direction) in a chain of PDM- related file records. See also [end-of-chain](#) and [first-in-chain](#).

heap

RDM **OS/390** **VSE** The RDM uses the heap as a task-related work area to hold internal view information, physical records and logical data records. SUPRA allocates all heap storage when the RDM starts. When the RDM user task is inactive, a task's heap can be rolled to temporary storage.

Heterogeneous Data Management Processor (HDMP)

The interface that allows SQL access to non-DRDM files, such as KSDS VSAM or SUPRA PDM files.

heterogeneous VAXcluster

VMS A VAXcluster in which each node operates under a different environment. Member nodes of a heterogeneous VAXcluster serve specialized needs but share data. See also [VAXcluster](#) and [homogeneous VAXcluster](#).

HIDAM

See [hierarchical indexed direct access method](#).

hidden file

UNIX Begins with a period (.) and is invisible with a simple "ls".

hierarchical database

A database organized in a tree structure with each segment having only one owner (parent). This relationship indicates how the segments are interrelated and determines the path used to access the data. See also [relational database](#) and [network database](#).

hierarchical indexed direct access method

OS/390 A database access method used for indexed access to records in a hierarchical organization.

high speed population

OS/390 **VSE** A feature that uses secondary key information to build index files efficiently.

home address

See [Relative Record Number \(RRN\)](#).

homogeneous VAXcluster

VMS A VAXcluster in which the nodes share identical operating environments. See also [VAXcluster](#) and [heterogeneous VAXcluster](#).

I-type foreign key

See [ignore foreign key \(I-type\)](#).

ignore foreign key (I-type)

A foreign key without dependency ; no integrity relationship exists between this attribute and the referenced primary key. You usually do not define this type of foreign key. It is created as a coincidental matching of domains during the [conceptual schema](#) consistency check that you perform before generation.

RDM Ignores the implied match and does not apply delete or referential integrity. See also [foreign key type](#).

independent relation type

A relation whose existence does not depend on another relation.

OS/390 VSE An independent relation type may have any number of A-, D-, or I-type foreign keys, but no E-types.

index file

A file containing secondary key names, values, and pointers to the primary or related files. Using indexes and secondary keys can enhance performance. See also [secondary key](#).

OS/390 VSE Index files are similar to native, VSAM-alternate index files. They are Directory files.

VMS Index files are RMS indexed files.

index format function

An indexing function you access from either DBA or the command level that uses the index maintenance utility CSTUIDX.EXE. CSTUIDX.EXE creates, formats and activates your index files but does not populate them. See [populate index](#).

indicator variable

A variable used in precompiled programs that indicates a given host variable is null or truncated.

in-flight transaction

A transaction that has sent a request to the PDM or DPDM but has not yet received a response.

input file

VMS In Global View Creation, the file containing the user definition, group definitions and view definitions. This file must be assigned the logical name BATCH_GLOBAL_INPUT to enable the batch global view creation facility.

UNIX VMS During PDM initiation, the file containing the PDM initiation parameters. This file is identified by the /INPUT=qualifier in the PDM initiation command file.

integrity constraints

The rules governing referential integrity. *See also* [delete integrity](#) and [referential integrity](#).

Interactive Services

OS/390 VSE A component that provides online services. Physical file descriptions and statistics, environment statistics, and task management are available.

interdirectory copy utility

OS/390 VSE A PDM utility that copies information from one Directory to another.

interface exit

An optional, user-written routine that is given control at specific points during processing of PDML commands from an application or a system component.

Internal Record

OS/390 VSE An entity you maintain on the Directory Internal Record category. The Internal Record defines the physical record layout of the base portion of a primary or related record. You also maintain a separate Internal Record entity for each redefinition of the overlay portion of a coded-related record.

internal schema

The schema within the [three-schema architecture](#) that contains the physical data definitions.

OS/390 VSE The internal-view metadata entities on the Directory made up of all environment descriptions with their buffer pools and log groups; all index and data files with their internal records, physical fields, key codes, and secondary keys; and all relationships.

join

An operation that produces a derived table or view by combining two or more tables. To combine tables, at least one column in each table must come from the same domain.

join query

A SELECT statement that retrieves data from more than one table. A join query generally uses a WHERE clause that contains one or more comparison predicates to associate the tables to one another.

Kanji support

Support for the IBM Kanji character set of 2-byte text characters on special terminals.

key

A column or set of columns that uniquely identify a row. See also [logical key](#), [physical key](#), [access key](#), [control key](#), [foreign key](#), [primary key](#), and [secondary key](#).

key code

`OS/390 VSE` A logical entity on the Directory that specifies the fields comprising a secondary key.

key column

A column containing a primary key value.

last-in-chain

The Relative Record Number (RRN) in the second portion of a primary record linkpath field. It points to the last record in a chain of PDM-related file records. See also [end-of-chain](#), [first-in-chain](#), [next-in-chain](#), [previous-in-chain](#) and [head-of-chain](#).

link

An entity that defines a foreign key relationship between rows in two tables or between two rows in the same table.

linked list

An ordered list of data items placed anywhere in storage and linked by pointers to the next data item in the list. This may apply to a related record chain in the PDM. A linked list is a general programming technique for maintaining an ordered list.

linkpath

A linkpath is a field in a record. In a primary file, the linkpath field points to the first and last related records in the chain. In a related file, the linkpath field points to the previous and next records in the chain.

load function

UNIX **VMS** The DBA utility function that formats database files and writes data records from a sequential file to a database primary or related file.

load limit

The percentage of a control interval within which new chains of related records may be started.

log file

See **System Log File** and **Task Log File**.

load transactions

OS/390 **VSE** Batch Directory Maintenance transactions supplied on the release tape that you use to load a new Directory with reserved words, defaults, descriptions of the Directory files, and so on. The load transactions may also be loaded onto an existing Directory to add new Directory file descriptions.

Local Area Network (LAN)

A group of work stations or PCs connected with hardware and software to share FAX, printer, and file servers.

local PDM

UNIX **VMS** A PDM that runs on the same machine as the applications.

lock inactivity timeout

See [timeout](#).

lock timeout

The rolling back of a transaction after a specified number of seconds to release resources for other users. A lock timeout is performed after a lock is held for a specified period without a commit or a rollback.

locking

A method of marking a file or record for limiting its use and, thereby, preventing other tasks or other PDMs from using it. See *also* [DBA lock](#).

log file

See [system log file](#) and [task log file](#).

log group

An entity you maintain in the Directory Log Group category. It defines a set of physical files for the PDM to use as a single, logical file for system logging.

log print function

`OS/390 VSE` A DBA utilities UCL function that prints the contents of the system log file.

logging

The recording of all modifications to metadata and data.

See *also* [system logging](#) and [task logging](#).

logical data item

The name RDM uses to refer to a physical PDM field. It describes how the data is stored in the data set and how the data appears to the user.

logical data view

A set of one or more logical records defined by the DBA.

logical key

Any column in a logical view that is qualified by the keywords KEY or NONUNIQUE KEY. These columns (fields) can be used by programmers as selection criteria.

An attribute or field name in the attribute-definition portion of an Access Set entity (view definition) that is preceded by KEY or NONUNIQUE KEY. You can have up to nine logical keys in a logical view. The field(s) is(are) then available as an access key for an RDML application to retrieve a row using a specific value for that field.

logical log volume

OS/390 VSE A portion of a PDM system log file that begins with PDM initialization information records.

logical name

VMS A name you define for use instead of a character string; often a filename. Logical names are stored in the logical name tables. When you use a logical name, VMS substitutes the character string (equivalence string) it represents.

UNIX When you use the logical name, SUPRA substitutes the equivalence string it represents.

See also [equivalence string](#).

logical name tables

VMS Tables maintained by the VMS operating system or created for use with Multiple System Wide PDMs. There are four standard, logical name tables for VMS:

- ◆ Process table
- ◆ Job table
- ◆ Group table
- ◆ System table

The logical name table used for a Multiple System Wide PDM is a shareable, logical name table.

UNIX There are three logical name tables implemented for SUPRA PDM in UNIX:

- ◆ Process table
- ◆ Group table
- ◆ System table

logical read

Reading a data record from an I/O buffer with or without a disk read.

An application acquisition of a data record from an I/O buffer that the PDM filled with a physical read.

logical record

A set of one or more column values (represented by a row of data in a view) extracted from one or more relations. A logical record is to a view what a row is to a relation.

logical unit of work (LUW)

A logical unit of work is a transaction. A transaction is a group of database requests that must be completed together or not at all.

If task logging is inactive, the LUW is from SINON to SINOF. If task logging is active, the LUW is from commit point to commit point.

OS/390 VSE In CICS, a group of database requests from one task that must be completed together to perform a complete processing function. The unit is from commit point to commit point and determines how far back in processing the TP monitor goes to restart a task after an error. In MANTIS, the maximum unit is from one terminal read to the next terminal write. See *also* [transaction](#) and [task logging](#).

Logical View

RDM The definition of columns and access definitions used by RDM to construct a logical record.

logical write

An application transfer of data from working storage to an I/O buffer, later to be written by the PDM with a physical write.

LUW

See [logical unit of work](#).

macro

OS/390 VSE The program that provides customized tailoring of several SUPRA components for your installation.

mandatory column

A mandatory column is one that is defined as NOT NULL and/or with a DEFAULT.

Maintenance Restriction

OS/390 VSE An entity you maintain in the Directory Maintenance Restriction category. It defines a set of rules that permit or deny access to other entities. The Security Group entities use these sets.

MANTIS

A fourth-generation, online- and batch-programming tool for system designers and application programmers. MANTIS can be used with SUPRA PDM, RDM, or SQL.

manual PDM initiation

UNIX **VMS** Starting the detached PDM process explicitly. See also [automatic PDM initiation](#).

mass delete

A deletion of multiple database rows with one RDML operation or SQL command.

mass insert

An insertion of multiple database rows with DBAID or Batch Directory Maintenance, an SQL command, or a LOAD statement.

maxuser

The maximum number of concurrent users the database can support.

OS/390 **VSE** Maxuser is defined in XPARAM or JCL.

metadata

Information stored in the Directory that describes each entity and its relationships but does not contain the data itself.

modify function

A DBA utility you use to update specified items in a database file.

Modify Schema

OS/390 **VSE** A bootstrap generator that modifies your supplied bootstrap schema.

monadic operator

A negative or positive sign in front of a number. For example, the negative sign (-) in -7 is a monadic operator.

monitor

SUPRA SQL facility for showing various execution statistics. The monitor must be run by the SUPERDBA.

M/TEXT

A Cincom product that provides text-processing functions for creating, archiving, and retrieving documents such as correspondence, reports, manuals, and instructional publications.

multitask environment

OS/390 **VSE** An environment in which one or more CICS application programs can access a multitask PDM through the same interface (as opposed to single-task environment).

multitask mode PDM

OS/390 **VSE** A PDM that accepts requests from more than one application. You can execute a multitask PDM in attached mode, attached-central mode, or central-operating mode.

NAME file

OS/390 **VSE** A Directory file that is a cross-reference file of entity names and definition numbers. This file contains one record for each entity in the Directory.

naming data

OS/390 **VSE** The names you supply to a Directory category to uniquely identify the entity before performing a maintenance function. This includes any previously defined entity names and the name of the entity being maintained. See *also* [metadata](#).

naming data transaction

OS/390 VSE A Batch Directory Maintenance input statement that enters the naming data for a function.

navigation definition

See [access definition](#).

network database

A database organized by record ownership. Except for the root record, each record may have several owners and several access paths. See also [hierarchical database](#) and [relational database](#).

next-in-chain

The Relative Record Number (RRN) in the second portion of a PDM-related record linkpath field. It points to the next record logically following it in the related file chain. Next-in-chain is blank if this record is the end-of-chain. See also [first-in-chain](#) and [end-of-chain](#).

node specification

VMS Identifies a particular machine in a VAX cluster or network. It may prefix a user or file specification. See also [file specification](#).

nonessential foreign key

OS/390 VSE An inclusive term for A-, D-, and I-type foreign keys. See also [foreign key type](#).

nonexclusive user

OS/390 VSE A user who may have concurrent sessions on a database. See also [exclusive user](#).

normalization

The process of examining your relational data model to remove data redundancies, determine logical relationships among data items, identify data dependencies, and identify relationships between relations. This process results in the data model or [conceptual schema](#) you define in SUPRA.

null value

An assigned character string that indicates the absence of a value. A null value is not the same as blanks, zeros, and the empty character string, although you can use any of these values as the null. In addition, the null value is distinct from the default value. The length of the character string assigned as the null value is limited by the length of the field.

Online Directory Maintenance

An online program that provides maintenance or update functions on the Directory, such as adding and changing entities.

UNIX **VMS** Referred to as SUPRA DBA. See also [Batch Directory Maintenance](#).

open subcommand

OS/390 **VSE** The Directory File category utility subcommand that opens a data file after active schema maintenance secondary key population.

ordered primary key

OS/390 **VSE** A Directory Maintenance option for a relation during [conceptual schema](#) generation that results in a secondary key for the relation. The ordered primary key lets applications retrieve data in ascending order on the primary key value.

packet

VSE Also used by VSE XPCC and CMS IUCV to communicate between the central PDM and the PDM interface.

partial key access

An RDML GET USING statement that supplies less than the full compound logical key, or an access definition that uses less than the full physical key. Partial key access causes a scan for each row with the partial physical key value or a sweep for row meeting partial logical key values.

pathname

A character string that uniquely identifies a file. A pathname specifies the directory in which the file resides, as well as the filename (*directory/file-name-extension*). The pathname always starts from the root directory.

PDM

See [Physical Data Manager \(PDM\)](#).

PDM DML (PDML)

See [Physical Data Manipulation Language \(PDML\)](#).

PDM exit

An optional user-written routine to which the PDM passes control at specific points during processing. See also [user exit](#).

PDM HDMP

See [Heterogeneous Data Management Processor \(HDMP\)](#).

PDM input parameter file

UNIX **VMS** During PDM initiation, the file containing the PDM initiation parameters. This file is identified by the logical definition CSIPDMINP. See also [PDM startup resource file](#).

PDM startup resource file

UNIX **VMS** During PDM initiation, the file containing the PDM startup resource parameters. This file is identified by the logical definition CSISTRINP. See also [PDM input parameter file](#).

PDM table

An SQL table, which corresponds to a PDM file, which can be accessed via HDMP.

PDM termination utility

OS/390 **VSE** A utility that shuts down a central PDM.

PDML

See [Physical Data Manipulation Language \(PDML\)](#).

peer-to-peer

A network architecture where a user's PC doubles as a server rather than accessing centralized file or print servers.

penetration

RDM The process of constructing a row using direct access to a database record by using a primary- or secondary-key value. Access for a subsequent logical record (row) may continue with a scan, a sweep, or another penetration retrieval request. See *also* [scan](#) and [sweep](#).

performance statistics

OS/390 **VSE** See [execution statistics](#).

performance statistics utility

OS/390 **VSE** See [execution statistics utility](#).

physical data item

A named component (field) of a PDM record containing information about the physical characteristics of a database element.

Physical Data Manager (PDM)

The SUPRA component that maintains the integrity of data and physically stores and retrieves data.

Physical Data Manipulation Language (PDML)

A set of commands you use in an application to request action by the PDM. Programmers can issue open, close, read, and write commands that access and manipulate database files, records, and secondary key.



Should not be used in the same application as RDML.

physical field

The description of a field.

OS/390 VSE An entity you maintain in the Directory physical field category. It defines the physical and logical characteristics of one field in a file.

physical key

Fields that allow you to access a record in a file directly by specifying a value. See also [control key](#).

populate index

An indexing function that reads records from a data file and writes corresponding index records to the index file. Populate always formats a new index file before writing records to it. See also [activate index](#).

populate secondary key subcommand

OS/390 VSE The Directory Maintenance utility subcommand that constructs an index, making secondary keys available. The populate utility performs the same operation as the populate function available through the SUPRA DBA utilities.

populate subcommand

OS/390 VSE A Directory File category utility subcommand that causes the PDM to serially read a primary or related data file and build the required index records for specified secondary keys on their specified index files.

post-command exit

OS/390 VSE See [interface exit](#).

precommand exit

OS/390 VSE See [interface exit](#).

preprocessor

See [RDML preprocessor](#).

previous-in-chain

The Relative Record Number (RRN) in the first portion of a related record linkpath field. It points to the record immediately preceding it logically in the chain. The previous-in-chain is blank if this record is the head-of-chain. See *also* [head-of-chain](#), [last-in-chain](#), and [next-in-chain](#).

primary data set

A data set that contains records of the same type and format and that can be accessed directly by a control key, independent of other information in the database. Primary data sets can exist independently or they can be linked to related data sets. However, primary data sets cannot be related directly to other primary data sets.

primary file

A file that contains unique keyed records. Records may be accessed directly through a control key or secondary key. Primary files can exist independently or can contain linkpaths to one or more related files. A primary file cannot be linked to another primary file. See *also* [primary data set](#).

primary key

An attribute or set of attributes that uniquely identifies each row in a relation. Primary keys are automatically maintained on the Directory through a relationship to the attribute entities involved. During [conceptual schema](#) generation, the designated primary key generates the control key of a primary file and the referback key of a related file.

VMS The primary key identifies the field which is used by RDM as the main index for an RMS data set.

primary record

A record in a primary file. A primary record contains a root field, a control key field, data fields, and optional linkpath fields to related files. See *also* [primary data set](#) and [linkpath](#).

primary record linkpath

The anchor for chains of records in the related file. The primary linkpath is the one by which all related records in a particular data set should be inserted.

The PDM primary record field whose name connects the record to a related file, and whose contents connect the record to a chain of the related file's records. The linkpath field contains two relative record numbers (RRNs). The first RRN points to the first related record in the chain; the second RRN points to the last record in the chain. The primary file can have other linkpath fields to the same related file (a different chain) and to more than one related file.

primary table

A table containing the primary key used to link foreign keys from a secondary table.

print function

OS/390 VSE A DBA utilities UCL function that prints data from a PDM file.

procedure

OS/390 VSE An entity you maintain in the Directory Procedure category. It names applications that use RDM. A user program is enrolled on the Directory as a procedure entity by either the COBOL or PL/1 RDML precompiler, depending on its source programming language. The category may also contain RDL programs for Comprehensive Retrieval that you maintain and retrieve through that component.

VMS DCL command procedure.

process

A general term that may refer to a task, program, or command.

VMS The environment created for a login session. This process may be interactive (a terminal session), detached (no terminal attached), or batch. Some special processes exist independently of user accounts (the SWAPPER and the DECnet Event Logger). The PDM runs as a detached process.

project

A relational operation that produces derived rows by extracting from a table a subset of its columns based upon common values. All but one or a set of duplicate rows are removed by using the WHERE clause.

prompt

A display on a screen that requires a user to enter a value (a selection number on a menu screen, a Y or an N in response to a question, a command name following ==>, etc).

proxy account

VMS Users cannot own accounts on remote machines. A proxy account is set up on a node of a cluster or network to enable remote users to login. A proxy account can be made available to one user only or to a group of users.

proxy login

VMS The process of logging into a remote node of a cluster or network using a proxy account.

Public data

Tables and views created with ID PUBLIC.

QSAM

See [queued sequential access method \(QSAM\)](#).

qualified entity

OS/390 **VSE** A Directory entity that requires the names of the entities to which it is related in order to uniquely identify it.

qualifier

The parent of the parent-child relationship between categories on the Directory. The hierarchical structure between categories allows entities to have the same name if they belong to different parents. For example, the schema category qualifies, among other things, the file category. Two files can have the same name if they are qualified by different schemas.

Queued Sequential Access Method (QSAM)

A method of accessing data where a queue of data blocks awaits processing or, following processing, awaits storage or output.

RDL

Retrieval Definition Language

RDM

See [Relational Data Manager \(RDM\)](#).

RDM exit

RDM An optional user-written routine to which RDM passes control at specific points during processing of RDML commands from an application.

VMS See [RDM validation exit](#).

RDM validation exit

RDM **VMS** An optional, user-written routine to which RDM passes control at specific points during processing of RDML commands from an application.

RDML

See [Relational Data Manipulation Language \(RDML\)](#).

RDML preprocessor

RDM A program that translates the RDML statements in application programs into source code that can be accepted by the source language compilers.

REALM

OS/390 **VSE** The parameter in the CSIPARM file that names the schema and environment descriptions for a single-task or a multitask PDM to use in its current execution. When you use this parameter, the PDM runs in Directory-driven mode.

UNIX **VMS** For sign-on processing, the list of data sets to be opened along with the data set mode and the status of each opened data set. For sign off processing, the list of data sets to be closed along with the data set mode and the status of each closed data set.

realm option

OS/390 **VSE** An option in a PDML SINON command that names the schema and environment description for a single-task PDM to use in its current execution. When you name a bootstrap in this parameter, the PDM runs in Directory-driven mode.

realm parameter

OS/390 **VSE** A value you specify in the CSIPARM file to define the user schema and environment descriptor that SUPRA uses during PDM execution. This parameter includes the following:

- ◆ SINON command, which specifies the PDM files to be opened and the access modes in which those files are to be opened
- ◆ SINOF command, which specifies the PDM files to be unlocked and closed

record chain

A group of related records linked via a linkpath. See *also* [chain](#) and [linkpath](#).

record code

A 2-byte field at the front of each coded record. The code distinguishes various record formats on the related file.

OS/390 **VSE** The record code is the Directory Internal Record name of each redefined portion.

record holding

The method used by the PDM that keeps tasks from making simultaneous changes to a record or set of records.

recovery

The process of backing out any incomplete database processing. Recovery may be needed due to software or hardware error. Recovery requires a log file.

There are two types of recovery: Warm start, which uses a task log, and roll back or system log recovery. See *also* [Warm start](#) and [system log recovery \(SLR\)](#).

recovery point

A backup of all necessary entities so that system log recovery can be successfully applied.

recovery window

`OS/390` `VSE` The time between a CICS syncpoint and the corresponding PDM commit point.

redefined data portion

The part of a related record that contains coded data items, the format of which may vary according to record code. See *also* [coded related records](#).

redundant columns

See [redundant fields](#).

redundant fields

Two or more fields that map to the same column in a view and, therefore, contain the same data value.

referback

For PDM-related file records, the required field that identifies the associated, unique, primary record from the file named in the linkpath field.

reference parameter

The PDML parameter that stores the Relative Record Number of the record currently being accessed. *See also* [Relative Record Number](#).

referential integrity

A method of ensuring that two pieces of data representing the same fact do not become inconsistent. Foreign keys must contain values found in primary keys of another table, or they must be null. *See also* [delete integrity](#) and [integrity constraints](#).

related data set

A data set containing related records that must be linked with a primary data set. Related data sets cannot be accessed directly; instead, they are accessed by linkpaths connected to primary records. A related data set cannot exist independently nor can it be related directly to another related data set.

related file

A file that contains records that are not uniquely keyed and that might not be uniform in content or format. Related file records can be accessed through a linkpath, a secondary key, or serially. A related file must be linked with a primary file; it can neither exist independently nor be linked with another related file.

Related files contain either all coded records or all noncoded records. A related file may also contain:

- ◆ Repeating occurrences of records that are associated with a primary record.
- ◆ Lists or repeating data.

related record

A record in a PDM-related file. All related file records can be either all coded or all noncoded. *See also* [coded related records](#).

related record chain

The set of related records linked together for a given primary key and linkpath. *See also* [chain](#).

relation

A set of data items that define a grouping of row and columns.

RDM **OS/390** **VSE** For RDM/PDM support, an entity you maintain in the Directory Relation category. See also [table](#), [normalization](#), [Logical View](#), and [foreign key](#).

relational database

A database organized according to the relationships between data items. These relationships are indicated by tables containing columns (attributes) and rows. See also [database](#) and [hierarchical database](#).

Relational Data Manager (RDM)

RDM A SUPRA component that provides a non-SQL relational view of data for DBAID, SPECTRA, and application programs, including MANTIS programs. Application programmers and end users can access the database without knowledge of physical structures using logical views.

Relational Data Manipulation Language (RDML)

RDM The Data Manipulation Language used in DBAID and RDM applications to access the RDM component for Directory or database functions. Application programmers use the GET, INSERT, UPDATE, and DELETE commands to manipulate data with logical views. The DBA uses additional RDML commands in DBAID.

relational integrity

See [delete integrity](#), [referential integrity](#), and [integrity constraints](#).

relational model

OS/390 **VSE** A means of illustrating the metadata entities of an organization.

relational primary key

The primary key of a relation. Each row in a relation has a unique primary key. See also [primary key](#).

relationship commands

OS/390 **VSE** When using Directory Maintenance, the RELATE, REMOVE, RELATIONSHIP CHANGE, and RELATIONSHIP DISPLAY commands comprise the relationship commands.

relationship data

OS/390 **VSE** Descriptive information about relationships between entities on the Directory. See also [metadata](#).

relationship relation type

OS/390 **VSE** A relation whose existence depends either on another relationship relation or on multiple relations (independent, dependent, or relationship). It contains one E-type foreign key to another relationship relation, or two or more E-type foreign keys to any type. It may contain A-, D-, and I-foreign keys unless it is also subclassed as an extension.

Relative Record Number (RRN)

The number assigned by the PDM to indicate the position of a record within a file relative to the first record in the file.

remote PDM

UNIX **VMS** A PDM that runs on a different machine from the applications. The different machines may be part of a cluster **VMS** or part of a network.

repeating group

Columns in a view whose values depend on other columns that are not the same as the entire primary key.

report slot

RDM **OS/390** **VSE** A work area for processing DBAID requests.

request timeout

The rolling back of a transaction after a specified number of seconds to release resources for other users. A request timeout is performed if a requested lock is unavailable after a specified period.

required column

A nonkey column that must contain a non-null value.

reserved word

A word with a predefined meaning specific to SUPRA that cannot be used in any other capacity.

reset

The process of backing out database changes to return the database to its status at the most recent commit point.

resident memory

OS/390 **VSE** Memory reserved for programs that must reside permanently in the CICS address space even when they are not being used.

RESTORE function

See [system log recovery \(SLR\)](#).

result table

A temporary table created by an SQL SELECT statement.

review function

A DBA utilities UCL function that examines the specified files to see if they are locked and then prints an appropriate message.

RMS data set

RDM **VMS** A data set containing indexed sequential records that can be accessed via primary or alternate keys or by a sequential read. Data held in RMS data sets is physically independent of data held in other data sets (both PDM and RMS).

rollback

OS/390 VSE A CICS service request that backs out protected resources to the most recent syncpoint. CICS interface logic can synchronize PDM resets with CICS rollbacks.

root

A required portion of a primary record used by the PDM to chain synonym records to their home address or RRN. See also [Relative Record Number](#).

UNIX Privileged user account.

root directory

The directory to which you are automatically set when you log on to the system. The system administrator defines your root directory, but you may change your root directory after you have logged on.

UNIX The root directory is also called the home directory.

root field

The first field in a PDM primary record. It is used internally to chain synonym records to their home location. The field has two portions, like a linkpath, and is blank if there are no synonyms. The PDM uses the root field to point to the first synonym, which is assigned to the same block if possible. The synonym's root portions show either home or any previous synonym location and the next synonym location, if any.

row

RDM A set of one or more attribute values RDM retrieves as data using a base or derived view. A row is sometimes referred to as an RDM logical record.

RRN

See [Relative Record Number \(RRN\)](#).

scan

RDM The serial search of a file. Scan is used when no other navigation method is available. See also [penetration](#) and [sweep](#).

schema

A model of the structure of a database. See also [internal schema](#), [conceptual schema](#), and [external schema](#).

VMS In addition to the above, for PDM programming, a required parameter for sign on and sign off used to identify the database name, the access mode, and the realm.

PDM OS/390 VSE A category maintained on the Directory that defines the collection of relationships of all database files managed by the PDM. This schema includes the physical (internal), logical (external), and conceptual definitions.

script

UNIX An ASCII, line terminated, text file containing a series of commands you normally type in at a terminal. The script file can be executed either as a background process or in interactive mode.

secondary access keys

See [referback](#).

secondary indexing

Creating and maintaining an index pointer on the value of a field.

secondary key

OS/390 VSE One or more fields in a PDM file record used as an alternative to the control key for a primary file, or the linkpath for a related file in accessing the file. PDM maintains the values occurring in a secondary key in an index file in collating sequence. A control key or referback can be or participate in a secondary key.

VMS One or more fields in an index file used as an alternative to the control key for a primary file, or the linkpath for a related file in accessing the PDM file. A control key or referback can be or can participate in a secondary key.

See also [dynamic indexing](#), [generalized access syntax](#), [index file](#), [linkpath](#), and [specific access syntax](#).

security exit

OS/390 **VSE** One of the TIS/XA Software Selection Facility security exits. The supplied exits are: signon, menu, validate-user, validate-selection, validate-alternative-user and signon failure.

security group

OS/390 **VSE** An entity you maintain in the Directory Security Group category. The security group selects Maintenance Restriction entities and relates them to users.

select

A relational operation that produces a derived table or view by choosing a subset of rows from a table based on some criteria.

self-referencing link

An SQL link in which the foreign key and the primary key are in the same table.

semaphore

UNIX A hardware or software flag. In multitasking systems, a semaphore is a variable with a value that indicates the status of a common resource. It's used to lock the resource that is being used. A process needing the resource checks the status and then decides how to proceed. Semaphores are used by SUPRA as memory-locking mechanisms.

sequential read

A type of read that processes records in the order in which they are physically stored on the file.

serial read

A read that processes records in the order in which they are stored on the file. See *also* [sequential read](#).

shareable image

VMS A piece of code that may be shared by many applications, thereby reducing the size of the application programs and reducing the memory needed to run many copies of the same application program. The RDM nucleus is an example of a shareable image.

shared memory segment

UNIX Memory allocated for interprocess communication. SUPRA uses two such segments, one for global variable allocations used between separate DRDM processes, and one for dynamic data used by more than one process (shared dynamic data).

shell

The level from which you can enter input to the command interpreter.

UNIX The command interpreter used to communicate with the UNIX kernel to start program execution. At least two different shells (Korn Shell, C Shell, Bourne Shell) are usually available to the user on each system.

sign off

Generic term indicating that a task no longer needs access to a database resulting in disconnection from the SUPRA PDM.

sign on

Generic term indicating that a task needs access to a database resulting in connection to the SUPRA PDM.

single-task environment

OS/390 **VSE** An environment in which one application program can access its own copy of the PDM, through its own interface.

single-task mode PDM

OS/390 **VSE** A PDM that accepts requests from only one batch application, and is loaded and executed by that application in the same address space.

single-task multitask interface (STMT)

OS/390 **VSE** An interface that supports a single task and has access to a multitask PDM in the same or different address space.

single-task single-task interface (STST)

OS/390 **VSE** An interface that supports only one task and that has exclusive access to a single-task PDM in the same address space.

SLF

See [system log file](#).

slot

OS/390 **VSE** A work area used by DBAID to hold internal versions of views and physical and logical records. The DBAID slot is allocated dynamically when the DBAID task (batch or online) initializes. See *also* [heap](#) and [stack](#).

snap dump

Selective dynamic dumps produced at various points in a PDM run.

Software Selection Facility

A facility for defining resources and executing SUPRA components. (Not the same as the TIS/XA Software Selection Facility.)

source relation

A relation which contains a foreign key that maps to the primary key values in another relation. It is also known as a referencing relation.

In the normalization merge relations process, you can merge the source relation into a target relation. See *also* [target relation](#).

special character

A character that is not a letter, a numeral, or a blank. Punctuation marks and symbols (the ampersand (&), pound sign (#), etc.) are special characters.

specific access syntax

RDM A technique by which you explicitly tell RDM how to navigate the database to construct the rows of the logical view. This syntax involves ACCESS statements with the VIA or USING clauses, or both. See also [access definition](#) and [generalized access syntax](#).

SQL

See [Structured Query Language \(SQL\)](#).

SQL command

Structured Query Language code to access DRDM data or metadata. It is also called an SQL statement.

SSF

OS/390 VSE See [TIS/XA Software Selection Facility \(SSF\)](#).

stack

RDM OS/390 VSE The stack is a task-related work area to hold RDM task-control information.

statistics file

OS/390 VSE The sequential output file that stores execution statistics when you request them with the environment description.

sticky field

OS/390 VSE When you are coding naming data, these saved names are carried over to subsequent transactions until another naming data transaction changes them.

STMT

See [single-task multitask interface \(STMT\)](#).

string column

A column defined as STRING data type in an SQL table.

string function commands

A set of SQL commands for manipulating string column data. The commands are available only through a precompiled application program.

STRU file

The Directory-related file that contains records describing all of the relationships among the Directory database entities.

Structured Query Language (SQL)

A database management language used to manipulate data stored in tables. SUPRA SQL serves as a DML (Data Manipulation Language used to query, insert, and update data), as a DDL (Data Definition Language to create and modify tables), and as a DCL (Data Control Language used to control access to tables).

STST

OS/390 **VSE** See [single-task single-task interface \(STST\)](#).

subtype

OS/390 **VSE** A subclass indicating that a dependent or relationship relation type has only one E-type foreign key to another relation and that the foreign key is the full primary key in its own relation. A subtype contains a subset of the set of rows in the supertype relation.

SUPERDBA

One of four classes of SQL users. The SUPERDBA owns (has all privileges for) all public tables and all users. The SUPERDBA has no privileges on private tables. Only the SUPERDBA can assign DBA class to a new user ID. There is only one SUPERDBA. See also [SUPRA DBA](#).

supertype relation

OS/390 **VSE** A relation indicated by a referencing E-type foreign key in a dependent or relationship relation.

supplied bootstrap

OS/390 **VSE** A bootstrap tailored to your physical environment supplied on the release tape at installation. The bootstrap contains a bootstrap schema, various bootstrap environment descriptions, and a VALMOD.

supplied schema (SUPRAD)

OS/390 **VSE** The Directory schema supplied on the release tape when the Directory is installed.

supplied schema and environment descriptions

OS/390 **VSE** Two Cincom-supplied user schemas for your Directory (for BDAM and VSAM): a schema describing the Directory (used for Directory Maintenance) and the Burrys education schema. Both schemas contain various environment descriptions.

SUPRA

An advanced relational database management system supporting SQL and RDML. SUPRA provides tools for information retrieval, report generation, application programming, and database management and control.

SUPRA DBA

UNIX **VMS** An online program that provides maintenance or update functions on the Directory, such as adding and changing entities.

SUPRA gateways

Software products that convert one communication protocol to another. The gateways work in conjunction with SUPRA SQL server or with another SUPRA gateway to provide client/server communication.

sweep

The process of accessing physical records that are the object of one-to-many positional relationships, moving either forward or backward through the records in the file on repeated requests. A sweep occurs on generic reads (partial logical or physical key reads) and on nonunique key reads to a PDM-related file.

syncpoint

OS/390 VSE A CICS service request that commits protected resources being held for potential back out. CICS interface logic synchronizes PDM commits with CICS syncpoints.

synonym

A primary key which hashes to the same physical location (RRN) as another primary key. See also [synonym chain](#) and [synonym record](#).

synonym chain

A list of synonym records with the same home location.

synonym record

A primary file record in a PDM file that is not physically placed in its home location. The PDM hashes the value of the control key to assign a home location to every primary record. Synonym records are held on synonym chains.



The PDM chains the synonym location through the root fields of home and synonym records. If the home location is unoccupied, the root field is set to blank, and the record is placed there. If the location is already occupied by a record for whom this is the home location, the new record is a synonym and is placed in the nearest available free space. If the home location is already occupied by a record which is a synonym on another synonym chain, this “squatter” is moved to another location, and the new record is placed in its home location.

See also [synonym](#) and [synonym chain](#).

system data

OS/390 VSE One of the five categories of metadata maintained on the Directory. System data describes operating considerations. This information is independent of any schema data for a function and remains unchanged during system processing. System data includes the following: Directory component description, edit mask, reserved word, and table. See also [metadata](#).

system failure

A failure occurring within the DPDM, DRDM, PDM, operating system, or TP monitor. All active SUPRA tasks are abnormally terminated.

system log file

File to which completed PDM control functions and images of updated records are written in case of failure. These functions and images can then be reapplied to a backup copy of the database to recover or restore the Directory and PDM files.

system log recovery

A DBA utility function that applies logged database changes to a back-up of the database after a software or hardware failure. It starts at the beginning of the system log file and applies after images to the affected files until the end of the log file is reached. If task logging was in use before the failure, it then performs Warm start recovery.

system logging

The method of tracking database activity by logging any or all of the following to a log file on disk or tape: terminal I/O, after images, before images, DML functions, file status changes, and so on.

table

A grouping of data arranged in unique rows and columns that contain similar values. A table must contain a primary key. See also [relation](#).

RDM **OS/390** **VSE** An entity you maintain in the Directory Tables category. It defines table names and their values used to translate fields for Comprehensive Retrieval or to validate field values for RDM. See also [validation table](#).

target relation

The relation which contains the primary key values that match the foreign key values in another relation. It is also known as a referenced relation. In the normalization merge-relations process, the target relation is the relation you can merge into. See also [source relation](#).

task

An application that is signed on to a PDM database. An application is considered a task by the PDM from the time it signs on to the database until it signs off of the database.

task level recovery

A feature that ensures the integrity of PDM files modified by a failed task when task logging is specified. This recovers a task to the last commit point without interrupting the operation of the PDM. It also enables recovery of individual task transactions. See also [Warm start](#).

task log file

The file on which the PDM writes the before images of database records and relevant information on a task-and-transaction basis. The file is used dynamically and on a Warm start. This permits database recovery and the resetting of tasks to the beginning of each task's current transaction. See also [before image](#).

task logging

A method of logging all updates and relevant information on a task-and-transaction basis to the task log file. Using task logging, the PDM can recover and reset tasks (individually or in combination) to the beginning of each task's current transaction through task level recovery. Task logging records the activity of each task within each transaction. See also [task log file \(TLF\)](#).

task restart

A task restart occurs during a system restart (Warm start). Each task is signed on and reset to its most recent commit point if the task was active. If a task was signed on but had not issued any commits, that task is signed off during restart.

TEXT file

The Directory-related file that contains the descriptive text you added to the Directory with LONG EDIT or SHORT EDIT commands.

thread

A line of access through which the PDM performs work.

OS/390 VSE A thread can exist between an interface and a PDM, within an interface, or within a PDM. The number of requests in progress is limited by the number of threads available.

VMS A PDML command or request currently being processed by the PDM.

UNIX A process through which PDM work is performed.

three-schema architecture

The organization of a database into three layers: the internal schema, the external schema, and the conceptual schema. This architecture insulates the actual data storage organization in the internal schema from the presentation of the data as tables in the conceptual schema and as derived views of tables in the external schema. See also [internal schema](#), [external schema](#), and [conceptual schema](#).

time functions

A set of SQL built-in functions that manipulate time values. For example, the ADDTIME function adds two time values to give you a new time.

timeout

The rolling back of a transaction after a specified number of seconds to release resources for other users. There are three types of timeouts:

- ◆ **Command timeout.** A command timeout is performed after a session has no DRDM requests for a specified period.
- ◆ **Lock inactivity timeout.** A lock inactivity timeout is performed after a lock is held for a specified period without a commit or a rollback.
- ◆ **Request lock.** A request lock timeout is performed if a requested lock is unavailable after a specified period.

UNIX VMS The input file parameter used to dynamically sign off inactive tasks after the specified interval.

TIS/XA Software Selection Facility (SSF)

OS/390 VSE A PDM facility that provides a menu selection of the online SUPRA components available at your installation. These might be DBAID, SPECTRA, MANTIS, Directory Maintenance, and PDM interactive services.

TLF

See [task log file \(TLF\)](#).

TLR

See [task level recovery \(TLR\)](#).

transaction

A logical unit of work; all database activity from one commit point (or CICS sync point) to the next. See [also logical unit of work](#).

OS/390 VSE In Batch Directory Maintenance, a single function such as add schema or display file.

transfer utility

A utility that allows you to copy the description of a database from one SUPRA Directory to another.

tuple

See [row](#).

UCL

See [Utilities Command Language \(UCL\)](#).

unload function

A DBA utility function that extracts all or selected records from a database file and writes them to a sequential output medium.

unload/reload

The process of using the DBA utilities to read records from a data set, write the records to a sequential output medium, format a new data set file, and add the records to the new data set.

updateable join view

A view that joins two or more tables and that can be updated as though it were a distinct table.

User

A Directory entity that defines a user's password and authority.

RDM It defines the relationships between the user, views, and programs. It also defines access to Directory Maintenance, RDM, and SPECTRA.

user data

OS/390 VSE One of the five categories of metadata maintained on the Directory. User data describes all system users, any procedures they have defined, and all security restrictions regarding access to data maintained by the PDM. This information is used for security and privacy measures and includes the following: maintenance restriction, procedure, security group, and user. *See also metadata.*

user DSA

OS/390 VSE A portion of the CICS Dynamic Storage Area allocated to a user only while the user is logged on to Directory Maintenance.

user environment description

See [environment description](#).

user exit

An optional, user-written routine that is given control at specific points during processing of commands.

user group

A user definition that can be assigned to a set of users. All users in the group automatically get the privileges of the group.

user schema

See [schema](#).

user view

A subset of columns and rows from one or more views. See also [view](#).

utilities

The facilities that allow the DBA to do the following:

- ◆ Organize, display and maintain data on the Directory to maintain database descriptions.
- ◆ Use utilities such as format, recovery, unload/reload, and, in VMS database transfer.

Utilities Command Language (UCL)

OS/390 **VSE** The procedural language for the DBA utilities component.

Utilities Component Description

OS/390 **VSE** An entity you maintain in the Directory Utilities Component Description category. It provides execution options for the DBA utilities component.

utility

A program designed to perform a specific task, usually a housekeeping or maintenance task, in support of a larger function, such as managing system resources.

validation table

A list or pool of acceptable values for a domain.

Validity Status Indicator (VSI)

An indicator reflecting the overall validity of a logical record.

RDM The symbol RDM returns to DBAID or an application program reflecting the overall validity of the attribute values in a row from an RDM view.

VALMOD (validation module)

OS/390 **VSE** The load module that connects the generated bootstrap schemas and bootstrap environment descriptions. It is produced by the Create VALMOD bootstrap generator. The PDM uses it at initialization to verify the bootstrap combination named in the CSIPARM file. See [VAXcluster](#).

VAXcluster

VMS A set of VAX machines linked to share CPU resources, queues and disk storage, and which can behave like a single node VAX/VMS system. An indicator reflecting the overall validity of a logical record. See also [heterogeneous VAXcluster](#) and [homogeneous VAXcluster](#).

version 1 utilities

OS/390 **VSE** The Load, Unload, and Insert Linkpath utilities that do not use UCL and are not part of the DBA utilities functions.

view

RDM The column and access definition statements that comprise an RDM view. In OS/390 and VSE you maintain these statements together in a Directory Access Set category entity.

view definition

The combination of a column definition and an access definition that together specify the operation of a view. See also [access definition](#) and [column definition](#).

view-to-view support

RDM The feature that uses base-view information to build a derived view. The access is to the base views instead of to the physical data files.

VSAM control interval size

A parameter describing a VSAM-file control-interval-byte length to IDCAMS. You use this size in Modify Schema or Directory Maintenance when describing a KSDS or ESDS VSAM PDM file.

VSAM file access

A method of retrieving and maintaining data on VSAM files. SUPRA supports VSAM native files and VSAM files defined as PDM primary or related files.

VSAM table

An SQL table that corresponds to a VSAM KSDS, which has been prepared for definition.

VSI

See [Validity Status Indicator \(VSI\)](#).

Warm start

A startup of the PDM after a failure which uses the task log file from the failed execution of the PDM to recover any tasks which had been signed on to the most recent commit or reset. The files are opened or closed with their most recent committed mode. See [automatic restart](#).

wild card character

A symbol, or symbols, used to represent unknown characters or partial key values in search criteria. The results of the search will substitute the actual values. Wild card characters can represent one or more characters, depending on the character and component.

Workspace file

OS/390 **VSE** A file in CICS FCT that stores multiple user files providing a dynamic file management capability for the inter-active components of DRDM.

XPCC support

VSE Cross-partition communication software support for the VSE operating system using a PDM in central mode.