

CA-IDMS[®]

Glossary
15.0



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How to use this manual

What this manual is about

This glossary presents all terms that are used in the CA-IDMS system software environment. The terms are either:

- Terms that are unique to CA-IDMS products
- Standard terms that have a specific meaning in the CA-IDMS environment

The glossary includes terms for the following products and facilities:

- CA-ADS
- CA-ADS/Batch
- CA-CULPRIT
- CA-EDP Auditor
- CA-Endevor/DB
- CA-ICMS
- CA-IDMS/ADS Alive
- CA-IDMS/ADS Trace
- CA-IDMS/Database Extractor
- CA-IDMS/DB
- CA-IDMS/DB Analyzer
- CA-IDMS/DB Audit
- CA-IDMS/DB Reorg
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- CA-IDMS/Dictionary Query Facility
- CA-IDMS/DML Online
- CA-IDMS/Enforcer
- CA-IDMS/Extended Architecture (SQL Option)
- CA-IDMS/Journal Analyzer
- CA-IDMS/Log Analyzer
- CA-IDMS/Masterkey
- CA-IDMS/Online Log Display

- CA-IDMS/Performance Monitor
- CA-IDMS/Presspack
- CA-IDMS/SASO
- CA-IDMS/Schema Mapper
- CA-IDMS Server
- CA-IDMS/Task Analyzer
- CA-IDMS Transparency products
 - CA-IDMS/DBOMP Transparency
 - CA-IDMS/DLI Transparency
 - CA-IDMS/TOTAL Transparency
 - CA-IDMS/VSAM Transparency
- CA-IDMS/UCF (the Universal Communications Facility)
- CA-IDMS facilities and tools:
 - Automatic System Facility (ASF)
 - Command Facility
 - IDD
 - Logical Record Facility (LRF)
 - Mapping Facility
 - Online Debugger
- CA-IDMS Visual DBA

How to find a term

- The terms are alphabetized in a letter-by-letter manner, discounting all special characters such as hyphens, slashes, and blanks; for example:

data area
database-key format
database name
data characteristic table

- Numbers within a term follow letters:

local mode
local 3270 mode

- Lower-case terms are listed before upper-case terms having identical names; for example:

archive
ARCHIVE

- Terms that begin with a number appear after all the letter categories. For example, **3270 simulation facility** follows entries that begin with a letter.

Glossary

abend code. A 4-character alphanumeric code issued by DC/UCF system components to indicate the termination status of an operation.

above the line. Under systems that support extended addressing, using storage addresses greater than 16 megabytes. Program, reentrant, storage, and buffer pools can reside above the line. *See also* below the line.

ABRT checkpoint. In a journal file, the checkpoint that marks the abnormal completion of a transaction and the termination of a recovery unit. The ABRT checkpoint is created when a CA-IDMS/DB application program issues a ROLLBACK or ROLLBACK WORK statement. Under the central version, an ABRT checkpoint is also created when an abended transaction is recovered automatically.

ACB. *See* application control block (ACB).

ACCEPT. 1) The database access command that retrieves information pertaining to the status of the database. 2) The DC/UCF function that retrieves task-related information.

access. Retrieval and/or update of data.

access mode. *See* area ready mode.

access module. A load module that contains the executable form of the SQL statements that a program issues. You create the access module from one or more RCMs. When you create the access module, the SQL optimizer determines the most efficient database access strategy for each SQL statement contained in the access module. It also validates table and column references in the statements against the dictionary definition. *See also* default access module.

access path. In CA-ICMS, the identification of a catalog entity through its relationship with other entities.

access privilege. Under centralized security, a type of privilege that allows a user to access specified resources at runtime. There are three types of access privileges: execution privilege allows a user to execute an access module, activity, or category; table access privileges allow a user to perform select, insert, update, and delete operations on a table; special access privileges allow a user to signon to a DC/UCF system or to execute utilities against a database area. *See also* administration privilege, definition privilege.

access restriction. The security options that protect the database from unauthorized or untimely access by application programs. Access restrictions for areas, sets, and record types are defined in the subschema. *See also* passkey.

activity. Under centralized security, an application function defined as a resource to CA-IDMS security. You assign activity names and activity numbers to application functions with the CREATE RESOURCE statement. You can define up to 255 discrete activities for an application.

adaptive query management. A feature of the SQL option that automatically recompiles access modules in response to changes in a database definition or application program.

ADB. *See* application definition block (ADB).

ad hoc query. A one-time request for information as opposed to a report that is run repeatedly.

administration privilege. Under centralized security, a type of privilege that allows a user to grant and revoke all privileges, DC/UCF system privileges, or database privileges. *See also* definition privilege, access privilege.

ADSA. *See* CA-ADS application compiler (ADSA).

ADS/Batch. *See* CA-ADS/Batch.

ADSC. *See* CA-ADS dialog compiler (ADSC).

ADSL. The task code that invokes the facility to display checkout status for the ADSA, ADSC, and MAPC compilers. *See also* checkout, ADSM.

ADSM. The task code that invokes the facility to modify or cancel checkout status for the ADSA, ADSC, and MAPC compilers. *See also* checkout, ADSL.

ADSO-APPLICATION-GLOBAL-RECORD. In CA-ADS, the system record used to pass information between functions and the runtime system. Fields defined in this record are addressable and can be modified by dialogs and user programs. *See also* global record.

ADSO-APPLICATION-MENU-RECORD. The CA-ADS system menu record that is included in all menu functions (defined in the application compiler). When the

map for a menu function is to be mapped out, the runtime system moves values into the fields of this record.

ADSOBCOM. In CA-ADS, the batch dialog compiler. ADSOBCOM is the batch alternative to the online dialog compiler. *See also* CA-ADS dialog compiler (ADSC).

ADSOBPLG. In CA-ADS/Batch, the batch utility that allows users to format and print the contents of CA-ADS/Batch application log files.

ADSOBSYS. In CA-ADS, the batch utility that supplies system-generation and execution parameters for use when running both ADSOBCOM and CA-ADS/Batch applications. ADSOBSYS builds a load module (ADSOOPTI) to contain the parameters.

ADSOBTAT. In CA-ADS, the batch utility that adds, modifies, and deletes entries in the task application table (TAT). For example, ADSOBTAT can be used to update the TAT for a dictionary when an application is migrated to that dictionary. *See also* task application table (TAT).

ADSOCDRV. In CA-ADS, the runtime program that initializes and updates the ADSO-APPLICATION-GLOBAL-RECORD, performs system functions (for example, TOP, POPTOP), processes responses entered on the HELP screen, and selects the value for the AGR-CURRENT-RESPONSE field of the system global record.

ADSOOPTI. In CA-ADS, the load module that ADSOBSYS creates. ADSOOPTI supplies CA-ADS system-generation parameters and CA-ADS/Batch environment information for use during batch operations. ADSOBCOM and the CA-ADS/Batch runtime system use information specified in the ADSOOPTI module.

ADSORPTS. In CA-ADS, the dialog and application reporter used to request batch reports about dialogs and applications.

ADSORUN1. In CA-ADS, the runtime program that loads the task activity table (TAT), creates an online terminal block extension (OTBX), and loads the application definition block (ADB) for the application being executed.

ADSORUN2. In CA-ADS, the runtime program that allocates space for application global records in the record buffer block (RBB), builds menu records prior to mapping out application menus, and builds and maps out the runtime HELP screen.

ADSO-STAT-DEF-REC. In CA-ADS, the system-supplied status definition record for use in testing the outcome of database operations. This record defines level-88-condition elements that identify the most commonly tested CA-IDMS/DB error-status codes.

ADSOTATU. In CA-ADS, the online utility that adds, modifies, and deletes entries in the task application table (TAT). For example, ADSOTATU can be used to update the TAT for a dictionary when an application is migrated to that dictionary. *See also* task application table (TAT).

after image. *See* AFTR journal record entry.

AFTR journal record entry. The journal entry that contains the image of a database record after the record has been updated.

agent technology. *See* Unicenter TNG Agent Technology.

aggregate function. In SQL programming, a function whose argument includes one or more columns and which operates on one or more rows. The result of an aggregate function is a single value. This value is derived from the sets of values in the columns named in the argument. Types of aggregate functions include AVG, MIN, MAX, SUM, and COUNT.

AGMT command. A system defined command to display the status of the Event Monitor and Status Monitor subtasks of the Unicenter TNG CA-IDMS Agent and to stop and restart them.

alternate picture. In IDD, an alternate format for an element. For example, the primary format is packed decimal and an alternate format is zoned decimal.

alternate protect key. One of two storage protect keys (provided by the operating system) that DC/UCF uses to implement storage protection. When a program executes in user mode, DC/UCF sets all storage and nonreentrant pool pages used by the program to the alternate protect key. This allows the program to modify only those pages set to the alternate key. *See also* primary protect key.

alternative map. In the mapping facility, an alternative copy of a map displayed to selected users based on an alternative map table. For example, French-language alternative maps can be generated for French users of an international application.

alternative map table. In the mapping facility, a table that associates standard application maps with corresponding alternative maps. Alternative map tables

are generated and associated with users at DC/UCF system-generation time. *See also* alternative map.

animation. An online view of actual CA-ADS source execution which allows you to test and debug CA-ADS dialogs using CA-IDMS/ADS Alive.

Animation Mode. In CA-IDMS/ADS Alive, one of two major animation modes: Interruptable Mode and Non-Interruptable Mode. Within the Interruptable Mode, there are two additional modes: STEP Mode and SKIP Mode.

Animation Runtime Session. The CA-IDMS/ADS Alive animation subsession during which the actual online dialog code compile takes place.

Animation Setup Session. The CA-IDMS/ADS Alive animation subsession during which you define animation stop (interrupt) points and specify various CA-IDMS/ADS Alive operating options.

Animation Stop Points. A point in dialog source at which you tell CA-IDMS/ADS Alive to interrupt (or stop) the dialog animation.

application. 1) In CA-ADS, a named set of functions or dialogs used to accomplish a specific business task (for example, general ledger, shop floor control, inventory control, payroll). An application is analogous to a program. 2) In ASF, the screen formats (maps) and program logic (dialogs) automatically generated to process a data table.

application activity. *See* activity.

application components. The application functions and application responses defined by using the application compiler. *See also* dialog components.

application control block (ACB). In CA-ADS, a data area maintained by the runtime system to provide information on the executing dialog's map and database access activities. An application can include process code to test certain fields in the ACB.

application definition block (ADB). In CA-ADS, the application load module generated by the application compiler for use by the runtime system. The ADB contains the application information supplied on the definition screens during an ADSA session.

application dictionary. An optional dictionary that contains information specific to a particular application, group of applications, or development groups. It contains

application development objects, such as maps and dialogs; it may also contain non-SQL schemas and subschemas, and in its catalog component, SQL-defined entities.

application function. The basic structural component of an application defined using the application compiler. Each function represents a unit of work to be performed by the application. Functions can be defined as dialog, menu, menu/dialog, program, or system functions.

application levels. In CA-ADS, the runtime, hierarchical structure of an application. Levels, implemented by dialog control commands, are used in the maintenance of currencies and record buffers.

application mode. In CA-ADS, the runtime, hierarchical structure of an application. Levels, implemented by dialog control commands, are used in the maintenance of currencies and record buffers.

application monitor. The part of the CA-IDMS Performance Monitor that captures resource usage information about individual programs, tasks, and dialogs. The application monitor has both an online and a batch component.

application response. 1) In CA-ADS, the action taken by the user when pressing a key or entering a response code while the runtime system is executing an application. 2) The response that can initiate an application function or a dialog's response process. An application response is associated with a function during an application compiler session.

application thread. In CA-ADS, the sequence of operative dialogs in an application. The CA-ADS runtime system uses the application thread to manage the flow of control through functions at runtime. *See also* menu stack, operative status.

archive. To store data offline.

ARCHIVE. In CA-ICMS, a user entity that is part of the catalog foundation. This entity is used to identify data tables that are to be stored offline.

archive journal file. A journal file that has been offloaded from disk to tape. *See also* journal file.

ARCHIVE JOURNAL utility statement. The archive journal utility. ARCHIVE JOURNAL offloads, to one or more archive journal files, the entries in one or more disk journal files.

ARCHIVE LOG utility statement. The archive log utility. ARCHIVE LOG offloads, to an archive file, the contents of the DC/UCF system log.

area. A logical subdivision of the database. An area consists of a range of contiguous database pages. Areas are stored in operating system files; each page corresponding to one or more direct access blocks.

AREA journal entry. The journal entry that marks the readying of an area. This record is written to the journal file when an application program readies the database either explicitly with a DML READY command or automatically by CA-IDMS/DB.

area-file mapping. 1) The process by which the logical structure of a database, as defined in areas, is related to the physical structure of the files in which the database resides. 2) The resulting relationship of the process.

area in-use lock. *See* physical area lock.

area ready mode. The mode in which a database area is readied by a transaction. Update mode allows the readying transaction to both update and retrieve data within the area. Retrieval mode does not allow the readying transaction to update data in the area. Each area ready mode can be qualified with a shared, protected, or exclusive option to control access to the area by concurrently executing transactions.

area sweep. A process that consecutively retrieves every record in an area. A *selective* area sweep retrieves every occurrence of a given record type in an area.

AREPORTs. In CA-ADS, reports that provide information about dialogs (and their components) stored in the data dictionary.

ASF. *See* Automatic System Facility (ASF).

ASF dictionary. A dictionary used by ASF to establish, maintain, and monitor database and catalog definitions. It contains the ASF-DDLDML and ASF-DDLDCLOUD areas.

association. In CA-ICMS, the general relationship between users and groups as well as between objects and folders in the catalog.

attribute. 1) In IDD, an entity type used to define characteristics that can then be assigned to other entities. Attribute entities are grouped into classes. For example, COBOL is an attribute of a program and can be grouped into a class called LANGUAGE. *See also* class. 2) In

online processing, a characteristic of a map field. For example, the BRIGHT attribute is assigned to fields that should be displayed at brighter than normal intensity. 3) In logical database design, the smallest unit of data that describes an entity or a relationship. Synonyms for attributes are: data item, data element, field, and column. 4) In profile definitions, a keyword and value associated with a user or system profile.

attribute byte. In maps, a single-character, nondisplayable byte that begins each map field at runtime. The contents of the attribute byte determine the characteristics of the field (such as protection or intensity).

authority. The ability to access a resource in a particular way. Within centralized security, authority is classified as access, definition, and administration privileges. runtime, definition, and administration.

authorization identifier. Under CA-IDMS centralized security, an ID that represents a user or group which you can authorize to access resources.

automatic editing and error handling. Optional features in maps and applications that can be used to perform editing and error-handling services for a dialog or program at runtime. When used, these features can compare input/output data with internal and external pictures, validate data against edit tables, and encode/decode data through code tables.

automatic file converter. A program that accepts COBOL file descriptions as input and produces CA-Culprit REC and INPUT parameters.

AUTOMATIC membership. A membership option that determines how member record occurrences are connected to the set. When a record has automatic membership in a set, the STORE function automatically connects occurrences of that record.

automatic program definition. The automatic definition of a subschema, map, edit table, code table, or CA-ADS dialog to DC/UCF. You enable automatic program definition by allocating null program definition elements (PDEs) during system generation. *See also* null PDE.

automatic rollback. A rollback performed automatically by CA-IDMS/DB when a transaction fails or an application requests recovery by means of the ROLLBACK command. CA-IDMS/DB writes an ABRT checkpoint for the transaction and automatically rolls out the changes made to the database by the transaction. The

recovery occurs while the system continues to process requests by other concurrently active transactions.

Automatic System Facility (ASF). An online facility of CA-IDMS/DB and CA-ICMS used to create and manipulate non-SQL data tables. ASF is used by end users and data processing professionals to create standalone applications, and by database administrators to generate logical records automatically.

autostatus facility. A runtime facility that checks for errors generated by database, logical-record, or queue and scratch record processing.

autotask. 1) At system startup or shutdown, a task that is initiated automatically by DC/UCF. 2) A task that is initiated automatically when a user signs on to a logical terminal.

back end. Under UCF, the portion of the system that performs DC/UCF tasks. The back end receives control and data from the UCF front end, which can be IDMS-DC or any of the other supported TP monitors. The back end then invokes the specified task and, when the task is finished, returns control and passes data back to the UCF front end.

backup. A database maintenance task that produces a copy of the database, that can be used to restore lost data.

BACKUP utility statement. The backup utility. BACKUP copies one or more areas or files in a database to a backup file, which can be used later as input for a restore operation.

base table. A data table which is not derived from other tables. *See also* data table, view.

basic mode. 1) In CA-ADS, the mode of operation when the runtime system is executing an application not created with the application compiler. The movement between dialogs is determined solely by the inter-dialog commands that have been coded in the dialog premap and response process modules. 2) In DML programming, the mode of operation in which data and device control characters are transferred by the application program according to the type of terminal in use. *See also* application mode.

Batch Command Facility (IDMSBCF). The CA-IDMS tool you use to submit Command Facility statements as part of a batch job stream. *See also* Command Facility.

batch control event. In CA-ADS/Batch, batch conditions, such as EOF and I/O error condition, that can

occur at runtime during file input operations. To cause special processing to occur based on one of these events, either associate a dialog response process with the events or test for the event in dialog process statements.

batch Mapping Facility (RHDCMAP1). The batch component of the Mapping Facility. Use this component to define, generate, modify, and delete maps in a batch environment.

batch program. A program that executes in its own region or partition. A CA-IDMS/DB batch application program can run either in local mode or under the central version. *See also* online program.

batch simulation. The simulation of the DC/UCF 3270 input and output in batch mode. This capability allows you to simulate either single or multiple terminal DC/UCF configurations in a single batch simulator job.

before image. *See* BFOR journal record entry.

below the line. Under systems that support extended addressing, using storage addresses lower than 16 megabytes. DC/UCF program, reentrant, and storage pools can reside either below or above the line. *See also* above the line.

BFOR journal record entry. The journal entry that contains the image of a database record before it has been updated.

BGIN checkpoint. The checkpoint that marks the start of a transaction and of a recovery unit. This checkpoint is automatically written to the journal file when an application initiates a non-SQL database transaction if JOURNAL RETRIEVAL is specified, or when the first update occurs, if NOJOURNAL RETRIEVAL is specified at system generation.

bill-of-materials structure. A many-to-many relationship among record occurrences of the same type. A bill-of-materials structure in the database enables explosion and implosion of the occurrence relationships for that record. *See also* nested structure, self-referencing relationship.

BIND. 1) The database access function that signs on a non-SQL transaction to the database management system and notifies the DBMS that the user will be requesting runtime services. The BIND function establishes addressability in variable storage to the IDMS communications block, to the record types, and optionally to procedure control information. 2) A DML command that establishes addressability in variable storage to the

map request block (MRB) and to the record types used by the map.

block. 1) In a general database environment, a physical unit of storage in a file. A block corresponds to a VSAM control interval. 2) In a DDS environment, a physical unit of data that can be transmitted from one DDS node to another.

boolean selection criteria. *See* selection criteria.

breakpoint. A temporary program interruption set by the online debugger. When a breakpoint is reached, control is passed from DC/UCF to the programmer.

border. Under CA-IDMS/SCHEMA MAPPER, the number of character spaces around the perimeter of each record block in the data structure diagram. A minimum border of two character spaces is needed for set connections and arrows; the maximum is 50 character spaces. A two-character border puts at least four character spaces between any two record blocks.

buffer. A location in memory that is allocated at runtime for database and journal buffers. Buffers compensate for speed differences between the CPU and I/O devices. You define database and journal buffers in the DMCL module by using physical DDL statements. *See also* database buffer, journal buffer, record buffer.

buffer utilization ratio. The ratio of pages requested to pages read by CA-IDMS/DB. The ratio measures the effectiveness of buffer-pool size and the database design.

BUILD utility statement. For an SQL-defined database, the utility that builds indexes and referential constraints linked through an index on tables that are being loaded with a phased or stepped load

builder code. In IDD, a single-character code that is stored with an entity occurrence. This code indicates the CA-IDMS component that created or owns the entity-occurrence definition.

built-in function. In CA-ADS and CA-OLQ, a routine that performs one of a variety of predefined string, arithmetic, date conversion, and trigonometric operations. You can use built-in functions when coding expressions in process code, selection criteria, and column computations.

built-in table. For maps, an edit or code table that is defined in and only available to a specific element in the data dictionary. *See also* standalone table.

bulk external request unit. An external request unit that does not use a 3270-type device for input; rather it uses bulk data transfer. *See also* external request unit (ERU).

bulk fetch. In SQL programming, a FETCH statement that retrieves multiple rows from a cursor into a host variable array.

bulk insert. In SQL programming, an INSERT statement that adds multiple rows in a host variable array to a table in the database.

bulk processing. A CA-IDMS/DB extension to ANSI-standard SQL that allows the program to select, fetch, or insert a group of rows using a host variable array.

bulk PTERM. In a DC/UCF system definition, a physical terminal device type that designates bulk data transfer. You define a bulk PTERM on the UCFLINE statement for each external application that will concurrently request data services from the DC/UCF system.

bulk select. In SQL programming, a SELECT statement that retrieves multiple rows from table(s) in the database into a host variable array.

CA-ADS. A general term that encompasses both CA-ADS and CA-ADS/Batch. CA-ADS is a programming productivity tool (including a fourth-generation language) for applications. CA-ADS enables application developers to develop and execute applications that can query and update a CA-IDMS/DB database. CA-ADS uses the same concepts and facilities as CA-ADS/Batch.

CA-ADS application compiler (ADSA). A flexible design and prototyping tool. The CA-supplied task code for the online application compiler is ADSA. ADSA supplies definition screens that prompt the developer for names of functions, responses, records, task codes, and security and menu specifications. This information is stored in the data dictionary as a load module and is used at runtime to direct the flow of control in an executing application.

CA-ADS/Batch. A programming productivity tool (including a fourth-generation language) for batch applications. CA-ADS/Batch enables application developers to develop and execute batch applications that can query and update a CA-IDMS/DB database. CA-ADS/Batch uses the same concepts and facilities as CA-ADS.

CA-ADS dialog compiler (ADSC). In CA-ADS, the online development tool used to define dialogs. The CA-supplied task code for the dialog compiler is ADSC. ADSC definition screens prompt the developer for dialog, map, subschema, and process-module specifications. ADSC stores this information in the data dictionary and generates load modules that are used by the runtime system. *See also* ADSOBCOM, dialog.

CA-ADS reports. *See* AREPORTs.

CA-Culprit. A batch retrieval product designed to generate reports from CA-IDMS/DB databases as well as from other databases and conventional files. CA-Culprit can also be used to create, load, modify, and delete data tables.

CA-EDP-AUDITOR. A tool for EDP auditors that includes a library of CA-Culprit routines which provide algorithms and reports for confirmations, statistics sampling, statistics sample analysis, and summary and graphical analysis.

CA-Endevor/DB. CA-Endevor/DB is a full-featured management facility that controls and monitors change processing within the OS/390 CA-IDMS/DC environment. CA-Endevor/DB provides automated facilities for performing change identification and management, and promotion or migration of the data dictionary in the CA-IDMS/DB environment. It also includes security management, information management, and the CA-Endevor OS/390-DB Bridge.

CA-ICMS (Information Center Management System). A corporate information server that distributes and manages information between the corporate mainframe, departmental minicomputers, and personal computers.

CA-IDMS/ADS Alive. A source-level testing and debugging tool for CA-ADS applications.

CA-IDMS/ADS Trace. The CA-IDMS product that allows tracing during execution of a CA-ADS dialog. CA-IDMS/ADS Trace produces an online trace that can be replayed as often as necessary. By using this trace utility, programmers and application developers can pinpoint the causes of dialog errors right at their terminals.

CA-IDMS Agent. *See* Unicenter TNG CA-IDMS Agent.

CA-IDMS/Database Extractor. An online tool used to specify and generate test databases.

CA-IDMS/DB. A high-performance DBMS for the IBM mainframe and compatible environments. CA-IDMS/DB includes the DBMS itself and IDD, which stores information about data and applications in a dictionary.

CA-IDMS/DB Analyzer. A utility product that analyzes the physical organization of a database and produces reports that are useful for database planning and tuning.

CA-IDMS/DB Audit. A software tool that examines the physical integrity of a CA-IDMS database, suggests corrective action, and fixes errors as directed. For example, this tool detects fragmented records and disconnected sets as well as other maintenance problems.

CA-IDMS/DB precompiler. *See* DML precompiler.

CA-IDMS/DB Reorg. A software tool for physically reorganizing a CA-IDMS database.

CA-IDMS/DB trace facility. The CA-IDMS/DB debugging tool that you use to trace database calls in batch programs, utilities, compilers, and reports.

CA-IDMS/DBOMP Transparency. A program interface product that enables DBOMP database applications to access a CA-IDMS/DB database. Use of DBOMP Transparency requires little or no revision to these application programs.

CA-IDMS/DC. The CA-IDMS teleprocessing monitor. CA-IDMS/DC controls the concurrent execution of online applications and provides support facilities for the use of sophisticated terminals. CA-IDMS/DC is fully integrated with CA-IDMS/DB.

CA-IDMS/DC Sort. An online sort utility for CICS and CA-IDMS/DC environments that can sort information online regardless of the file structure or original sequence.

CA-IDMS/DDS. A communication method that allows DC/UCF systems that are located on different mainframes to communicate with each other.

CA-IDMS/Dictionary Loader. A CA-IDMS software product used in conjunction with IDD. The Dictionary Loader reads COBOL source programs to convert file, record, and element descriptions into the DDDL source statements used to populate the data dictionary.

CA-IDMS/Dictionary Migrator. A software product that automates the migration of entities from one dictionary to another.

CA-IDMS/Dictionary Module Editor. An online tool that simulates an ISPF editor for editing IDD source modules.

CA-IDMS/Dictionary Query Facility. The CA-IDMS product that gives you quick and easy online access to the contents of CA-IDMS dictionaries. The menu structure of CA-IDMS/DQF allows you to find whatever information you need, without using complicated syntax. Cross-references are listed on the menus, eliminating a need for knowledge of dictionary structure.

CA-IDMS/DLI Transparency. A program interface product that enables DLI applications to access a CA-IDMS/DB database. Use of DLI Transparency requires little or no revision to these application programs.

CA-IDMS/DML Online. A utility product that executes DML commands interactively.

CA-IDMS/Enforcer. A utility product that is implemented as a user exit to the DDDL compiler to enforce naming standards on all attempts to add entities to the dictionary.

CA-IDMS/Extended Architecture. Also known as the CA-IDMS/SQL Option, this product produces SQL support for CA-IDMS. *See* SQL Database Access.

CA-IDMS interface module (IDMS). The module that initially receives all requests for CA-IDMS services from batch and DC/UCF application programs. CICS application programs use IDMSCINT as an interface module.

CA-IDMS/Journal Analyzer. A data analysis facility that produces journal reports on database activity, journal displays, and audit reports.

CA-IDMS/Log Analyzer. A tool that produces reports on DC/UCF system and database performance from information contained in the log file. These reports reflect task-level activity.

CA-IDMS/Masterkey. A task initiation control facility product for CA-IDMS/DC. For example, you can use this product to assign task initiation streams to a PF keys.

CA-IDMS/Online Log Display. The CA-IDMS product that gives CA-IDMS/DC and CA-IDMS/UCF users online access to a full-screen display of run-time events recorded in the CA-IDMS log (DDLDCLOG).

CA-IDMS/Performance Monitor. A diagnostic tool that provides comprehensive statistical, performance, and application data for DC/UCF systems. *See also* application monitor, interval monitor, realtime monitor.

CA-IDMS/Presspack. The compression tool that optimizes database record or table compression and decompression by using a data characteristic table (DCT) and Huffman compression techniques. *See also* IDMSCOMP, IDMSDCOM.

CA-IDMS/SASO (Standards Administration System Online). An online, full-screen editor that enables access to and maintenance of documents that reside on the database.

CA-IDMS/Schema Mapper. A batch utility product that produces database structure diagrams from schema and subschema information stored in a CA-IDMS/DB dictionary.

CA-IDMS Server. The CA-IDMS Server product provides client/server connectivity to CA-IDMS databases by implementing Microsoft's Open Database Connectivity (ODBC) protocol and Sun's JDBC protocol. ODBC access is provided for Windows client platforms. JDBC access is provided for Windows client platforms and OS/390 Unix System Services.

CA-IDMS/SQL option. The CA-IDMS product that allows use of the Structured Query Language (SQL) against a CA-IDMS/DB database either programmatically or through the CA-IDMS Command Facility.

CA-IDMS SQL Quick Bridge. A graphical user interface tool for generating COBOL table procedures for SQL access to non-SQL defined databases.

CA-IDMS SVC. The routine or module through which programs running in other regions/partitions pass central version database requests to DC/UCF. DC/UCF returns confirmations or database information through the same SVC.

CA-IDMS/Task Analyzer. A CA-IDMS/DC task report utility product that gathers program, dialog, task, and other statistics which it write to log and from which it generates reports.

CA-IDMS/TOTAL Transparency. A program interface product that enables TOTAL database applications to access a CA-IDMS/DB database. Use of TOTAL Transparency requires little or no revision to these application programs.

CA-IDMS/UCF. The software product that offers TP-monitor independence to users of CA-IDMS online products. This facility enables CA-IDMS/DB-based applications to run without modification under teleprocessing monitors other than IDMS-DC. Additionally, the distributed applications feature of UCF provides the capability of passing data between two systems. *See also* back end, front end.

CA-IDMS Visual DBA. This tool provides a graphical user interface-based facility for the CA-IDMS Database Administrator (DBA). Creation and maintenance of all CA-IDMS object definitions are possible from this single Windows-based tool. This tool is a component of the CA-IDMS Server product.

CA-IDMS/VSAM Transparency. A program interface product that enables applications that use VSAM file structures to access a CA-IDMS/DB database. Use of VSAM Transparency requires little or no revision to these application programs.

CAISAG. The CA Specify and Generate program is an installation utility used in the OS/390 and MSP/EX environments to create site-specific installation job control for CA-IDMS, CA-IDMS Tools and CA-Endevor/DB.

CA-OLQ. A product used by application developers and end users to view and report on the contents of a CA-IDMS/DB database through either an English-like query language or SQL.

CALC key. A record element, or series of concatenated elements, designated as the symbolic key by which a record occurrence is stored in and retrieved from the database.

CALC location mode. A method of determining the target page for storage of a record in the database. The target page is calculated by means of a randomizing routine executed against the CALC key in the record.

CALC overflow. *See* overflow.

CALC set. A system-owned internal set used by CA-IDMS/DB to keep track of all records with a location mode of CALC.

calculated storage. *See* CALC location mode.

CALC utility. *See* IDMSCALC utility.

catalog. The component of the dictionary that contains the SQL SYSTEM tables, physical database definitions, and access module, database name table, and DMCL load

modules. The catalog component consists of the DDLCAT, DDLCATX, and DDLCATL0D areas. *See also* user catalog. 2) The directory of all information stored in CA-ICMS and of the users who can access that information. The catalog is implemented in the data dictionary and is shared with CA-IDMS/DB when both CA-ICMS and CA-IDMS/DB are installed.

catalog access passkey. In CA-ICMS, a passkey that allows access to catalog entities, permitting users to access or manipulate the catalog structure. *See also* data access passkey.

catalog foundation. In CA-ICMS, the core structure of the catalog, generated at installation time and when a new dictionary is created. The foundation establishes a fully functional catalog.

catalog reports. Eight standard reports that describe the contents of the CA-ICMS catalog. *See also* DREPORTs.

category. Under centralized security, resources that you group for efficiency in granting privileges. For example, you can categorize all load modules, tasks, and queues associated with a particular application and treat them as a single category for the purpose of assigning privileges.

CA-UNIPACK/Analyzer For CA-IDMS/DB. A software package for evaluating DC/UCF system performance using the following tools: CA-IDMS/Performance, Task, Log, and Journal Analyzer.

CA-UNIPACK/DBA For CA-IDMS/DB. A software package that provides the following tools to manage, control, tune, and monitor the CA-IDMS environment: CA-IDMS/DML Online, CA-IDMS/DB Reorg, CA-IDMS/DB Audit, CA-IDMS/DB Analyzer, CA-IDMS/Schema Mapper, CA-IDMS/Masterkey, and CA-IDMS Presspack.

CA-UNIPACK/DEVELOPER For CA-IDMS/DB. A software package that facilitates CA-IDMS/DB applications development and includes: CA-IDMS/Database Extractor, CA-IDMS/Dictionary Migrator, CA-IDMS/Dictionary Module Editor, CA-IDMS/DC Sort, and CA-IDMS/ADS Alive.

CA-UNIPACK/IDMS. A software package that provides tools necessary for database management, application development, and end-user query and reports. It includes: CA-IDMS/DB, CA-IDMS/DC, CA-ADS, CA-OLQ, CA-IDMS/VSAM Transparency, and CA-Culprit.

CCDB. *See* Change Control Database (CCDB).

CCI. A CA Common Service communications facility, the Common Communications Interface, CAICCI, that enables communications between CA solutions. DC/UCF systems use CCI to enable communications between DC/UCF systems located on different mainframes in a communications network. CAICCI is also used by CA-IDMS Server for communication to the mainframe from the PC.

CCI line. A communication line that, when paired with a PTERM, defines a port through which the DDS node passes request and response packets to another DDS node.

CDMSLIB. The ddname (OS/390), filename (VSE/ESA), or linkname (BS2000/OSD) that identifies the CA-IDMS/DB load (core-image) library in the DC/UCF system startup JCL.

centralized security administration. An approach to security that protects CA-IDMS resources whether or not an external security system is available, without using user exits to administer or enforce security. If your site uses CA-ACF2, CA-Top Secret, or RACF, centralized security interfaces with these external security packages for the protection of all securable CA-IDMS resources.

central version. In CA-IDMS/DB, a mode of operation that allows a batch program to use the database services of a DC/UCF system. This enables multiple applications to access and update the same database concurrently. *See also* local mode.

central version runtime components. The components needed for a central version runtime environment. These are a system dictionary, application dictionaries, user databases, and the following runtime areas: DDLDCLOG, DDLDCRUN, DDLDCSCR, SYMSMSG.DDLDCMSG, and DDLSEC.

chained set. A linked list structure where each record contains a pointer for locating the next record in logical sequence. Optionally, each record can contain a pointer to the prior record in the chain and a pointer to the owner of the set.

Change Control Database (CCDB). The Change Control Database is a facility of CA-Endevor/DB used to maintain a complete log of changes made to data dictionary entities as well as information about users, entities, projects, workflow status, migration activity and security. CA-Endevor/DB supports any number of data dictionaries, and a single CCDB can be viewed as a logical extension of a particular dictionary.

change only. The method of CA-IDMS/Dictionary Migrator execution which limits selection to changed entities only.

check constraint. A type of domain constraint that restricts the values of a table's column to a range that satisfies a search condition.

checkout. In ADSA, ADSC, and MAPC, the process that controls concurrent access to an application, dialog, or map by multiple users, so that two users do not modify the same entity at the same time. *See also* explicit checkout, implicit checkout.

checkpoint. An entry in the journal file that describes the status of transactions accessing the database.

check-user task. A subtask started by DC/UCF to detect abnormally terminated batch external request units running under the central version.

child. A logical database design term that refers to a referencing table in SQL database design and a member record in non-SQL database design. *See also* parent, member record, referencing table.

CKPT checkpoint. A journal checkpoint written to a journal each time one or more transactions are committed. This record is used to coordinate the commit of several transactions at the same time.

class. In IDD, an entity type used to document categories of attributes. *See also* attribute.

CLEANUP utility statement. The utility that physically erases logically deleted records from all or some areas in a database segment.

CLIST. A system task that invokes a command list module. *See also* command list.

cloned system. A cloned Central Version uses an existing system definition for a CA-IDMS system. It does not exist as another generated system definition in the dictionary. A cloned CV is created by CA-IDMS when a CV is started that has been identified as one that can be cloned, using a CV number reserved for cloning.

close cursor. The act of closing a cursor; that is, making the cursor unavailable to the program until it is reopened. *See also* open cursor.

clustering. In CA-IDMS/DB, the storage mode by which a record occurrence is stored as close as possible to another record occurrence to which it is logically

related. The purpose of clustering is to minimize I/O by grouping record occurrences that are likely to be accessed together. Clustering can be accomplished through: a relationship, an index, the CALC location mode.

cluster overflow. *See* overflow.

code table. A table used at runtime to translate internal codes in a record-to-screen display format and vice versa. Code tables are defined through the DDDL compiler.

collection. In CA-ICMS, the function served by folders and groups in the catalog.

column. A named collection of occurrences of a single data element (field). *See also* attribute, row, table.

column header. A page with an easily-recognized format that you use as a reference to burst and align pages for wallpapering the CA-IDMS/Schema Mapper data structure diagram. Column headers separate each column of the diagram when it is printed out on successive pages.

Command Facility. A CA-IDMS tool that you use to submit several types of CA-IDMS statements, such as physical DDL, SQL, and utility statements. *See also* Online Command Facility (OCF), Batch Command Facility (IDMSBCF)

command list. A module that contains a series of task statements. You can define command lists to automate frequently used routines. You use IDD to define a command list. You execute the command list by using the CLIST system task. *See also* CLIST.

COMMIT statement. The database access function that writes a COMT checkpoint to the journal file and releases record locks if they are being maintained. A COMT checkpoint marks the ending of one recovery unit and the beginning of another. *See also* COMT checkpoint.

common system area (CSA). The part of the DC/UCF nucleus that defines system-wide data values.

common work area (CWA). The shared system storage, acquired during DC/UCF system startup, that has a storage id of CWA. Any task running in the DC/UCF system can access this storage. The common work area is used to store system-wide data that must be available to all tasks.

compiler-directive statements. Statements coded in a program to instruct a compiler to perform a service (such

as to copy a source module from the data dictionary into the program). Compiler-directive statements in a program are ignored at runtime when the program is actually executed.

compiler options. Entries that can be included in the source input submitted to CA-IDMS compilers or precompilers. These options are used to control the operation of a given compiler.

complete access path. In CA-ICMS, a path that includes the owner name of the entity to be accessed, the names of all folders associated with the entity, and the entity name.

compression. The process of removing repeating characters in data. Compression reduces the amount of data stored in the database and improves data transport efficiency between machines.

1) In CA-IDMS Presspack, the DCT optimizes record compression by using Huffman coding techniques. 2) In IDBCOMM, data transmitted between mainframes, departmental computers, and microcomputers is compressed. 3) In CA-IDMS/DB, the IDMSCOMP database procedure is used to shrink a record by replacing repeating characters (most often, blanks and binary zeros) with codes.

See also decompression.

COMT checkpoint. The checkpoint used to mark the end of a recovery unit within a transaction. This checkpoint is written to the journal file when an application executes a COMMIT or COMMIT WORK CONTINUE statement. *See also* COMMIT statement.

concatenated key. A key composed of multiple elements (that are not necessarily contiguous). These elements are used together to form a single key.

condensed segment. The portion of a CA-IDMS/DB disk journal file that contains only before images for active recovery units. Condensed segments are created by the ARCHIVE JOURNAL utility statement.

conditional expression. *See* selection criteria.

CONNECT. 1) The Command Facility or SQL statement that establishes a logical connection to the named dictionary. 2) The navigational database access function that establishes a record occurrence as a member of a set occurrence. The object record must be defined as an optional automatic, optional manual, or mandatory manual member of the set.

connection. The linking of two DDS nodes so that data can be passed between the nodes. DDS uses CA-90s Common Communication Interface, CAICCI.

constraint. A restriction placed on data values within a database. *See also* check constraint, referential constraint, and unique constraint.

control block. A logical collection of specific parameter data used internally by CA-IDMS products at runtime; the piece of storage defined by a DSECT.

control break. In CA-Culprit and CA-OLQ, an automatic procedure that provides intermediate summary information, such as subtotals, when the sort-key field changes.

control commands. In CA-ADS, the CONTINUE, DISPLAY, EXECUTE NEXT FUNCTION, TRANSFER, INVOKE, RETURN, LINK, and LEAVE process commands that instruct the runtime system to pass control from one dialog to another or to a user program during the execution of an application.

control key. A program function (PF) key or program attention (PA) key defined to activate a response or process at runtime. [Enter] and [Clear] are also considered control keys. *See also* program attention (PA) key, program function (PF) key.

control length. That portion of a record up to and including the symbolic key (CALC, sort, or index key). When the symbolic key consists of two or more concatenated fields, the control length extends through the end of the last concatenated field.

CONVERT PAGE. The Convert Page Utility changes the page range for an area or the maximum number of records that can be stored on a page of an area.

coordinate position. In CA-IDMS/Schema Mapper, a combination of two numbers, which appears in the Cross-Reference Report, that is used to find the exact location of a record block in a CA-IDMS/Schema Mapper Diagram. The numbers refer to the position of the upper left corner of each record block in the diagram. The position is numbered in units of character spaces, with the upper left corner of the diagram being the origin (0,0). The first number tells how many character spaces the record block is from the left side of the diagram. The second number tells how many character spaces the record block is from the top of the diagram.

CORP. In CA-ICMS, the name of the catalog. CORP also serves as the catalog entity that represents the

corporation as a whole. *See also* corporate catalog, private catalog.

corporate catalog. In CA-ICMS, the portion of the catalog that contains data controlled by the corporation (as opposed to data controlled by individual users). *See also* CORP, private catalog.

corporate property. All objects and folders in CA-ICMS owned by the corporation (that is, stored in the corporate catalog).

CREPORTs. Reports that provide information on DC/UCF systems and their associated entities, as defined in the data dictionary.

cross-reference processor. A component of the Dictionary Loader that analyzes the output of the program processor to track all references to data elements throughout a system of programs. The cross-reference processor outputs cross-reference information about the system of programs being analyzed.

Cross-Reference Report. A report that contains the descriptions of sets, the name of each record, and location (coordinate position and page identifier) of each record block in the CA-IDMS/Schema Mapper data structure diagram. The report includes the name and unique set number of each set and index in the diagram. It also contains the names and locations, in the diagram, of the owner and member records of each set.

CSA. *See* common system area (CSA).

CTABGEN macro. A macro you use to assign activity numbers to DCMT commands for the purpose of securing DCMT commands.

currency. A technique that maintains the database keys of the most recently accessed records to indicate run-unit positioning in the database.

currency block. The control block that maintains currency information on all database records used by an application program. In CA-ADS, a currency block is created for each application level that accesses the database.

current of area. The most recently accessed record occurrence in a given database area. The DBMS maintains current of area for each area accessed by the application program.

current of record. The most recently accessed record occurrence of a given record type. The DBMS maintains

current of record for each record type accessed by the application program.

current of run unit. The record occurrence most recently accessed by the application program. The DBMS maintains a current of run unit for each transaction.

current of set. The most recently accessed record occurrence in a given set. The DBMS maintains current of set for each set accessed by the application program.

current schema. The SQL schema used in an SQL session. You can explicitly specify a schema in the SET SESSION statement or use the default schema established by the user profile, system profile, or a DCUF command.

cursor. An SQL-programming construct that is used to process data in a result table. The cursor defines the result table, and the program can retrieve each row of the result table one at a time with a FETCH statement. *See also* global cursor, external cursor, shared cursor, updatable cursor.

cursor position. The cursor row whose values are available to the program.

CURSOR STABILITY isolation level. The isolation level of an SQL transaction that guarantees read integrity. That is, all data accessed by the transaction is in a committed state and the most-recently accessed row of an updatable cursor is protected from update by other transactions while it remains current. *See also* TRANSIENT READ isolation level, isolation level.

CV. *See* central version.

CVNUMBER. A parameter of the DC/UCF system-generation SYSTEM statement. CVNUMBER allows you to specify a number that identifies the DC/UCF system to the CA-IDMS SVC.

CWA. *See* common work area (CWA).

data. Facts and numbers that can be collected and processed. The processing of data yields information that is meaningful to an organization.

data access passkey. In CA-ICMS, a passkey that allows access to objects. *See also* catalog access passkey.

data area. *See* table data area.

database. A storage facility in which all data is centralized and arranged independently of applications; a named collection of data tables.

database administrator (DBA). The individual and/or staff responsible for implementing and maintaining the database.

database analysis utility. *See* IDMSDBAN utility.

database buffer. The storage space in memory that holds database pages while CA-IDMS/DB accesses information on those pages. You define a buffer as part of the DMCL. Each buffer is associated with one or more database files. *See also* buffer, journal buffer, record buffer.

database function. Services requested by application programs and performed by the DBMS to access and maintain the database.

database I/O. The input/output operations performed by the DBMS on the physical database.

database key (db-key). A unique identifier assigned by CA-IDMS/DB to each record occurrence when it is stored in the database. The database key consists of the record's database page number and line index.

database-key format. The structure of the database keys that identifies the records in a given database. A database can have only one database-key format. A database key is a 32-bit field that contains two values: the record's page number and its line index. The page number can occupy 20 through 30 bits of the database key. The line index can occupy 2 through 12 bits of the database key. A synonym for database-key format is radix.

database management system (DBMS). The software component that performs the physical database access, handling all database input/output and space management functions.

database name. An entity that identifies the segments to be accessed as part of the logical database. One or more database names comprise a database name table.

database name table. An entity associated with a DMCL that is used at runtime to map the logical database definition to one or more segments in the DMCL. The definition of a database name table includes one or more database names.

database node. In a DC/UCF communications network, the logical name of the DC/UCF system that controls the database being accessed.

database page. *See* page.

database procedure. In CA-IDMS/DB, a special-purpose subroutine designed to perform predefined programming functions, such as data compression or data validation. A program invokes a database procedure according to a record's schema definition.

database record. A group of related data fields defined in a non-SQL schema and stored in a CA-IDMS/DB database. Database records function as the building blocks of logical records.

database resource. Within centralized security, an entry associated with the definition or access to a database. *See also* global resource, system resource.

database status code. A 4-digit code indicating the result of a non-SQL DML request. The first two digits represent a major code; the last two digits represent a minor code.

database transaction. A recoverable unit of work to CA-IDMS/DB. *See also* transaction, system run unit, run unit, and SQL transaction

data characteristic table (DCT). In CA-IDMS Presspack, a table that contains either customized or generic information on data. The table is used to optimize record and table compression and decompression.

data communications administrator (DCA). The individual and/or staff responsible for implementing and maintaining the DC/UCF system.

Data Description Language (DDL). The statements that define the logical and physical components of a CA-IDMS/DB database definition (that is, the SQL schema or non-SQL schema, DMCL, subschema, and database name table).

data dictionary. *See* dictionary.

data dictionary administrator (DDA). The individual and/or staff responsible for implementing and maintaining the data dictionary.

Data Dictionary Definition Language (DDDL). The IDD statements used to define the contents of the data dictionary.

data dictionary network. The schema (IDMSNTWK) that describes the data dictionary database.

data dictionary reports utility. *See* IDMSRPTS utility.

data field. In the Mapping Facility, a map field that displays the value (if any) of a record element associated with the map field and, optionally, allows the terminal operator to input data.

data flow diagram (DFD). A diagram that shows the flow of data to and from a particular function or set of functions. Data flow diagrams are used during the logical phase of database design.

data item. *See* attribute, element.

Data Manipulation Language (DML). Statements by which application programs access and manipulate the contents of a CA-IDMS/DB database. DML statements can be coded in COBOL, PL/I, Assembler, FORTRAN, and RPG II application programs. *See also* path-DML commands, navigational DML, SQL DML.

data model. The theoretical basis of a database system.

data security. The protection of data against accidental or intentional disclosure to unauthorized persons, unauthorized modifications, or destruction.

data services interface (DSI). An interface between an application requesting CA-IDMS services and the component providing the services. If necessary the DSI layer will use the data communications architecture for forwarding requests to a separate address space or remote node.

data sharing. The CA-IDMS feature that allows multiple CA-IDMS central versions to share update access to the same database areas. This feature requires the IBM Parallel Sysplex environment.

Data Sharing Group. A named collection of CA-IDMS systems in an IBM parallel sysplex environment. CA-IDMS systems that participate in a Data Sharing Group may share update access to a database, broadcast commands to all members of the group, share queues and enqueue common resources, and monitor and report on all members of the Data Sharing Group.

data structure diagram. A graphic representation that illustrates the components and relationships within a database, including records, sets, and areas. *See also* record-type diagram.

data table. Presentation of data as a series of rows and columns. A data table can be manipulated with the three relational operations: select, project, and join. In CA-IDMS/DB, a data table can be physically stored in the database or it can be a view of other tables in the database. *See also* table, view.

data transfer services (DTS). A component of the CA-IDMS database communications architecture that calls the name server table to determine the location of the target resource and, if necessary, forwards the request to the distributed node services (DNS) component for routing.

data type. A set of values that share processing characteristics. For example, the set of all integers is a data type.

DBA. *See* database administrator (DBA).

DBA group. In CA-ICMS, a catalog-foundation group entity whose members share administrative authority over the catalog.

DBCS. *See* double-byte character set (DBCS).

DBGROUP. A collection of CA-IDMS Central Versions that are eligible to be back-end systems when using the Dynamic Database Session Routing feature.

db-key. *See* database key (db-key).

DBMS. *See* database management system (DBMS).

DBNAME. *See* database name.

DBNODE. *See* database node.

DCA. *See* data communications administrator (DCA).

DCE. *See* dispatch control element (DCE).

DCMT command. A system-defined command that invokes a DC master terminal (DCMT) function. DCMT functions are used to monitor and control various aspects of the DC/UCF system at runtime.

DCPARM macro. A macro that describes the DC/UCF system to be started. It defines the version number of the DC/UCF system, associates the system with the DMCL module, and provides other setup information for the system.

DCPROFIL command. The DCPROFIL task displays system information such as some installation options,

system resource usage, the system exits used, the ADSO and OLQ configurations, and the optional APARs currently applied.

DC system. A database/data communications system that includes CA-IDMS/DB and CA-IDMS/DC.

DCSYSTEM. The name that, when combined with a version number, uniquely identifies an occurrence of a system added to the data dictionary through the system-generation compiler.

DCT. *See* data characteristic table (DCT).

DC/UCF nucleus. *See* nucleus.

DC/UCF system. A general term for a system that is either a CA-IDMS/DC system or a CA-IDMS/UCF system. A DC/UCF system provides both database and data communications services.

DC/UCF system reports. *See* CREPORTs.

DCUF command. A system-defined command that invokes a DC/UCF user function. User functions perform support services for the terminal user at runtime.

DDA. *See* data dictionary administrator (DDA).

DDDL. *See* Data Dictionary Definition Language (DDDL).

DDDL compiler. An IDD-supplied program that stores DDDL descriptions in the data dictionary.

DDL. *See* Data Description Language (DDL).

DDL CAT dictionary area. A dictionary area that contains definitions of physical databases (segments, DMCLs, and database name tables); at sites with the SQL option, contains definitions of SQL entities (tables, constraints, indexes, and so on).

DDL CAT LOD dictionary area. A dictionary area that contains DMCL load modules, database name table load modules, and access modules at sites with the SQL option.

DDL CAT X dictionary area. A dictionary area that contains indexes defined on entities stored in the DDL CAT area.

DDL D CLOD area. A dictionary area that contains load modules associated with entities contained in the DDL DML area; for example map load modules,

subschema load modules, and dialog load modules. *See also* load area.

DDLDCLOG area. The log runtime area. The log area contains central version log records when the log file for the central version is assigned to the database. *See also* log, log file.

DDLDCMSG area. The message area of the data dictionary. The DDLDCMSG area contains message text identified by a message id. The area contains messages loaded at installation as well as user messages added through the DDDL compiler.

DDLDCRUN area. The queue runtime area. The DDLDCRUN area contains the queue work records used by CA-supplied tools and online user programs.

DDLDCSCR area. The central version scratch runtime area. The DDLDCSCR area contains scratch work records used for temporary storage of data that can be accessed by CA-supplied tools and online user programs.

DDLDMML area. The area of the dictionary that contains definitions of DC/UCF systems, non-SQL schemas and subschemas, maps, dialogs, source modules, records and elements, IDD users, and classes and attributes.

DDLOCSCR area. The local mode scratch area that contains runtime scratch records used by load mode CA-supplied tools and user programs issuing SQL requests.

DDLSEC area. The runtime area that contains user and group information.

DDS line. *See* CCI line.

DDS network. Multiple DDS nodes connected by any combination of CA-IDMS SVCs, CTCAs, or telecommunication lines using the CA Common Service communications facility, the Common Communication Interface, CAICCI.

DDS node. A DC/UCF system that participates in a Distributed Database System (DDS) network. *See also* host node, target node, local node, node.

deadlock. An unresolved contention for the use of a resource.

deadlock prevention element (DPE). Under DC/UCF, the control block used to detect deadlock situations.

debugger. The online facility used to detect, trace, and resolve programming errors in programs that operate in a DC/UCF environment.

debug local block (DLB). The control block used in a debugging session.

declaration module. In the CA-ADS dialog compiler, a module used under the SQL option to declare cursors and to issue global WHENEVER statements. The statements in a declaration module are *not* executed. They are compiler directives used by the CA-ADS dialog compiler at dialog compilation.

decompression. The process of expanding a compressed record or table. To decompress a record, you use CA-IDMS Presspack or the IDMSDCOM database procedure. *See also* compression.

default. A preset value for a given option. A default value is used automatically unless an overriding value is explicitly specified.

default access module. The access module associated with the application program issuing the first SQL statement executed within the SQL session. *See also* access module.

default dictionary. The dictionary accessed by CA-IDMS tools if you don't specify a dictionary by other means such as using a DCUF SET DICTNAME command or CONNECT statement. To define a default dictionary to the runtime environment, include a subschema mapping in the database name table associated with the runtime DMCL for the IDMSNWK subschemas.

default ready mode. A default ready mode for an area specified in a subschema definition. The default mode determines the mode in which the area is to be readied for programs using that subschema. Therefore, the programs do *not* need to issue a READY command for the area. However, if the program issues a READY command for one area, it must issue a READY command for all areas to be accessed.

definition area. *See* table definition area.

definition privilege. Under centralized security, a privilege that allows a user to manipulate the definition of certain resources. *See also* access privilege, administration privilege.

DELETE statement. An SQL database access statement that deletes one or more rows from a table.

derivation. The process of creating a view of data tables in the database. *See also* data table, view.

described statement. A dynamically-compiled SQL statement for which the SQLDA contains information.

destination. An IDD entity type used to document groups of users or logical terminals as a single logical destination within a teleprocessing system.

detail area. The portion of a pageable map that is located across the middle of the screen. The fields in the detail area define the detail occurrences for that map.

detail occurrence. On a pageable map, each occurrence of the set of map fields defined in the detail area. The runtime system determines how many detail occurrences of this set of fields can fit in the detail area of each page.

development center. An organizational structure, typically within an MIS department, geared toward the development of high-speed, high-volume production applications.

DFD. *See* data flow diagram (DFD).

DBTBGEN macro. A macro used by online debugger to assign activity numbers to online debugger functions.

dialog. In CA-ADS, an executable module that performs a unit of work in an application. A dialog is constructed from other modules, such as subschema map, and process module definitions. A dialog typically handles all processing associated with a given online transaction. This includes accessing and updating the database and handling mapout and mapin operations.

dialog components. The premap process module, response process modules, map, and subschema that make up a dialog. Components are associated with the dialog during an dialog compiler session.

dialog function. In CA-ADS, an application function associated with a dialog. The dialog performs the processing work required by the function. For example, the dialog for an employee update function retrieves and updates employee records in the database.

Most functions in a typical CA-ADS application are dialog functions. *See also* application function, dialog.

dialog response process. *See* response.

dialog work record. Dictionary records that are directly associated with a CA-ADS or CA-ADS/Batch dialog.

Dialog work records can be used as working storage during processing. *See also* map work record.

dictionary. The central repository used by CA-IDMS products for data definitions, modules, documentation, and runtime information. The dictionary itself is a CA-IDMS/DB database. *See also* ASF dictionary, default dictionary, session default dictionary, system dictionary.

dictionary name. The name of the dictionary being accessed.

dictionary node. In your DC/UCF communications network, the logical name of the DC/UCF system that controls the data dictionary being used.

DICTNAME. *See* dictionary name.

DICTNODE. *See* dictionary node.

DIRECT location mode. In CA-IDMS/DB, the location mode that permits the user to suggest the actual database page on which a record will be placed.

directory load utility. *See* IDMSDIRL utility.

DISCONNECT. The database access function that removes a member record occurrence from a set but does not delete the record from the database. DISCONNECT can only be issued for a record that is defined as an optional member of a particular set.

dispatch control element (DCE). The DC/UCF control block that is used to manage the dispatching of tasks.

displacement. In CA-IDMS/DB, a storage method in which records are clustered a specified distance away from their owner records. Displacement can be used for both VIA set member records and bottom-level index (SR8) records.

Distributed Database System (DDS). The CA-IDMS software product that controls communication between nodes in a distributed data processing network. Each node in the network is a DC/UCF system.

distributed node services (DNS). A component of the CA-IDMS communications architecture that manages communications for remote data access.

DLB. *See* debug local block (DLB).

DMCL module. The module that relates the logical structure of the database to the physical files on which it resides. The DMCL describes a CA-IDMS runtime

environment. It includes segment, journal, and buffer definitions and identifies the database name table that CA-IDMS/DB uses at runtime to map a schema definition of the database to specific segments.

DMCL Syntax Generator. A program, IDMSDMCC, that generates Release 12.0 physical database definitions from validated Release 10.2 DMCL and schema definitions.

DML. *See* Data Manipulation Language (DML).

DMLA. The DML precompiler for Assembler programs.

DMLC. The DML precompiler for COBOL programs.

DMLF. The DML precompiler for FORTRAN programs.

DMLP. The DML precompiler for PL/I programs.

DML precompiler. A compiler that converts DML statements in the source program to host language statements, producing a source file that serves as input to the host language compiler. For example, a COBOL program with embedded navigational or SQL DML statements is submitted first to the DMLC precompiler and then to the ANSI COBOL compiler.

DMLR. The DML precompiler for RPG II programs.

DNT. *See* database name table.

domain. In CA-IDMS/DB, the possible values for a particular column in a table; for example, the 50 2-character state codes). *See also* security domain.

domain constraint. A constraint that restricts column values. A column's data type restricts values to the data type of the column. A check constraint restricts column values to a range of values that satisfies a search condition.

domain integrity. In CA-IDMS/DB, the data integrity rule that enables users to define a set of valid values for a particular column in a data table.

double-byte character set (DBCS). A 16-bit (double-byte) character set that allows representation of a large set of graphic characters on the appropriate hardware. With DBCS, it is possible to build applications for Japanese, Chinese, and Korean users.

download. The transfer of data from CA-ICMS to a personal computer or minicomputer.

DPE. *See* deadlock prevention element (DPE).

DREPORTs. Reports that provide information on entities stored in the DDLDDL area of the dictionary.

duplicate names. Identical names assigned to two or more catalog entities.

duplicates options. In a non-SQL schema, the options that determine how record occurrences with duplicate key values are stored.

duration. In the SQL option, a value that represents a time interval. These can be: labeled durations, which represent a specific unit of time (for example, 10 MINUTES represents 10 minutes); date duration, which denotes an interval of years, months, and days; and time duration, which represents an interval of hours, minutes, and seconds.

dynamic database session routing. The dynamic database session routing feature allows the dynamic selection of the node to which database requests are to be sent. The selection is made by determining which CV in the DBGROUP has the CPU cycles available to service the request. This feature requires the IBM Parallel Sysplex environment. This feature must be used in conjunction with the Data Sharing feature in order to dynamically route update requests.

dynamic program definition. The process of defining a program to DC/UCF at runtime through a DCMT VARY DYNAMIC PROGRAM command. The definition exists only for the current execution of the system.

dynamic SQL. An SQL statement that is not known to the program at precompile time and therefore is compiled dynamically when the program executes.

dynamic system monitor. An online facility that allows you to examine DC/UCF system activity based on a time interval. The dynamic system monitor is invoked by the task code OPER.

dynamic task definition. The process of defining a task to the DC/UCF system at runtime by means of the DCMT VARY DYNAMIC TASK command. The definition exists only for the current execution of the system.

ECB. *See* event control block (ECB).

edit table. A list of single values or ranges of values that are valid for a data field. Edit tables are defined

through the DDDL compiler and are used during automatic editing of maps.

element. 1) The smallest meaningful unit of data within an organization. Elements are also known as fields or data items. 2) An IDD entity type used to define group or elementary data elements. Elements can participate in records built by the DDDL compiler, by the CA-IDMS/DB schema compiler, or in maps built by the DC/UCF mapping compiler. They can also exist independently in the data dictionary. 3) The database records that participate in a logical record. *See also* record element.

ELEMENT selector. In LRF, a SELECT clause descriptor that associates a logical-record element with a particular path. At runtime, the path is selected when a program WHERE clause requests any field in the named element.

emulated APPC. CA-IDMS emulating software for the PC and mainframe that allows CA-ADS dialogs executing on a PC with a 3270 emulator card to emulate advanced-program-to-program communication (APPC) with the DC/UCF system.

ENDJ checkpoint. The checkpoint that marks the normal termination of a transaction. This checkpoint is written automatically to the journal file when an application program executes a FINISH or COMMIT WORK statement.

entity. 1) A particular category or type of item in the data dictionary (such as a record, user, program, map, or dialog). 2) An item or idea from an application environment that is represented in the database by a record type.

entity occurrence. A collection of data that conforms to the template provided by an entity type. For example, user WXE is an occurrence of the USER entity type.

entity-relationship (E-R) diagram. A graphical description of two or more entities in a database that share a relationship.

entity type. An IDD-defined category of information in the data dictionary that provides a template for similar data. Examples of entity types are PROGRAMS, RECORDS, and USERS.

entity integrity. In CA-IDMS/DB, the data integrity rule used to ensure that each row of a data table has a unique primary key value that is not binary zeros or spaces.

entry point. 1) An IDD entity type that describes program entry points. 2) The entity that serves as a gateway for CA-IDMS/Dictionary Migrator to the entities that are to be extracted from the source dictionary. You specify the entry point in the EXTRACT statement.

entry sequencing. In CA-IDMS/DB, a method for storing rows in sequential order in the database, based on an index.

E-R diagram. *See* entity-relationship (E-R) diagram.

ERASE. The navigational database access function that deletes a record occurrence from the database and, where appropriate, deletes records subordinate to it.

ERASE logical record. The LRF database access function that deletes a logical-record occurrence from the database.

ERASE path group. A collection of paths (predefined in a logical-record subschema) designed to service application programs that request an ERASE logical-record function.

ERE. *See* external request element (ERE).

error-status code. *See* status code.

ERU. *See* external request unit (ERU).

EUR date/time format. A date/time format that complies with the IBM European standard: DATE as *dd.mm.yyyy* and TIME as *hh.mm.ss*.

EVALUATE command. In LRF, a command that determines whether an expression is true or false. Based on the result, you can direct LRF to perform specific path logic.

event control block (ECB). A control block used to control the sequencing of events within the DC/UCF system. At runtime, DC/UCF associates an internal ECB with each resource in use by a task. The ECB is used when one task requests a resource in use by another task. The requesting task must wait until the using task posts the ECB to indicate that the resource has been freed. An external ECB is posted by the operating system.

event monitor. The Unicenter TNG CA-IDMS Agent Event Monitor watches the CA-IDMS log for messages indicating significant events. It also monitors database status codes for serious errors. When an event is detected an SNMP trap is issued, and a message is sent indicating the cause of the error. These messages can be viewed

using a number of Unicenter TNG interfaces including the Agent View. Users can customize the errors detected by the Event Monitor by adding application specific events.

exclusive lock mode. A logical lock mode placed on both areas and record occurrences to protect transactions from accessing data that is being updated by the issuing transaction. An exclusive lock placed on an area implies an exclusive lock on all records in the area. *See also* share lock mode, null-lock mode.

EXIT. The debugger command that leaves the debugger control blocks intact when returning control to DC/UCF.

EXPAND PAGE utility statement. The utility that increases the page size of an area by transferring a database file to a new file with an expanded block size.

explain. The act of describing the strategy used to access data in an SQL table by issuing an EXPLAIN SQL statement against an access module.

explicit checkout. In ADSA, ADSC, and MAPC, a checkout that allows the application developer to control an entity across repeated definition and compilation sessions. The checkout is not released until this action is explicitly taken by the developer. *See also* checkout, implicit checkout.

explicit record locks. Record locks set by an application program to preserve a lock that would otherwise be released following a change in currency. *See also* record lock.

exploded structure. The expansion of a bill-of-materials structure that traces all records under a given record.

export. An IDMSRADM utility function that moves data from the database to a sequential file.

extended run unit. In CA-ADS, a run unit that is kept open (in certain cases) when a dialog passes control to another dialog or to a user program. *See also* run unit.

external cursor. A global cursor declared in one program that is shared by another program, where both programs are included in the same access module. You define an external cursor using the DECLARE EXTERNAL CURSOR statement. *See also* cursor, global cursor, shared cursor, updatable cursor.

external picture. The format of data as displayed on the terminal screen or in printed output. An external picture can be defined in a record element through the DDDL

compiler, or defined dynamically through CA-OLQ or MAPC. Among other places, external pictures are used during automatic editing of maps.

external request element (ERE). In a DC/UCF system, a control block used to handle processing requests that initiate from outside the DC/UCF region/partition. EREs are used by external request units, the UCF front-end program, and nodes that communicate with the system through a CA-IDMS SVC.

external request unit (ERU). A request for DC/UCF system services that originates outside the DC/UCF address space and uses the SVC to communicate between the application and the DC/UCF system. External request units are initiated for: CA-IDMS batch and CICS programs requesting database services, programs requesting DC/UCF services using UCF front end modules, and DC applications requesting services from a different address space within the same mainframe (DC-to-DC communication). *See also* bulk external request unit.

external security. In CA-IDMS centralized security, an external security system, such as CA-ACF2 and CA-Top Secret, to which you can route a request for a security check. *See also* internal security.

external user session. A logical connection between a DC/UCF system and an application executing outside that DC/UCF system. An external user session is initiated when the application initiates the first request for services within the DC/UCF system and is terminated when the last service initiated by the application is terminated. An external user session can use the following communication methods: external request units, DDS, or LU 6.2.

external wait time. The amount of time the DC/UCF system waits for an external user session to issue a request before assuming that the application has terminated.

extract file. 1) In CA-ICMS, data selected from a non-CA-IDMS/DB or non-CA-ICMS file. 2) The file used by CA-Culprit to store data selected for the report(s) in a given run.

Extract Journal utility statement. The utility that extracts the most recent AFTR image for each dbkey recorded on an archived journal file and writes it to an extract file. The extract file can later be used as input to a ROLLFORWARD command for a "quick" recovery of a database area or file.

extract path. The route CA-IDMS/Dictionary Migrator follows through the dictionary's set connections from the entity specified in the EXTRACT statement to all of its related components.

factotum task. A task started by the DC/UCF system to perform a system service for a user task. Examples are tasks that handle map paging sessions and tasks that handle line I/O sessions.

FASTLOAD utility statement. In a non-SQL defined database, the utility that loads data.

fastload. A service performed by the FASTLOAD utility statement. FASTLOAD loads user records into the database according to specifications of a user-written program.

FAST mode. An optional mode of execution in ADSC, ADSA, MAPC, and user-written applications in which control is passed directly to the next sequential screen when a transaction is successful. *See also* STEP mode.

fast mode threshold. The point at which the CA-ADS runtime system writes record buffer blocks (RBBs) and statistics control blocks to the scratch (DDLDCSCR) area across a pseudo-converse. The runtime system invokes this feature only when the number of bytes used by these control blocks exceeds the specified threshold. *See also* relocatable storage, relocatable threshold.

FDB. *See* fixed dialog block (FDB).

FETCH statement. An SQL database access statement that retrieves values from the result table associated with a cursor and places them in host variables or a bulk buffer.

field. *See* attribute, element.

field level help. Help text associated with a data field by means of the online or batch map compilers, and which is displayed when the help key defined for the map is pressed either with the cursor positioned in a data field. *See also* help facility, map level help.

field mark. The default special character used on 3270-type terminals to define the beginning of a map field.

file. 1) In CA-IDMS/DB, a logical unit of database storage that has a one-to-one relationship with a direct-access storage device. The relationship is established with the ASSIGN TO clause of the schema

DDL definition. 2) In IDD, an entity type that represents card, tape, and other nondatabase files.

file organization. A method of ordering records within a file. CA-Culprit handles input from physical-sequential, indexed-sequential, card, and virtual storage file types.

FIND. The navigational database access function that locates a record occurrence in the database. Once the record occurrence is found, the application program can initiate a GET function to copy the contents of the record occurrence from the database to variable storage. *See also* GET.

FINISH. The navigational database access function that releases all resources, completes the transaction, and causes an ENDJ checkpoint to be written to the journal file. FINISH is performed automatically by the runtime system of CA-ADS.

first functional call. The first database access request passed by a transaction to CA-IDMS/DB at program execution time.

FIX ARCHIVE utility statement. The utility that rewrites a tape journal file; for example, to make the tape journal file in use at the time of an abnormal system shutdown usable by the ROLLBACK utility.

fixed dialog block (FDB). In CA-ADS, the dialog load module generated in the dialog compiler for use by the runtime system when a dialog is executed.

fixed-length compressed record. A record of fixed length that is compressed through a specified compression routine. Although the length of the record is fixed from the point of view of user programs, compression makes it internally variable.

FIX PAGE utility statement. The utility that verifies, and optionally modifies, the contents of a database page.

flow of control. In CA-ADS, the way control is passed from one application function or dialog to another at runtime. Runtime flow of control is determined by user requests or runtime events, based on specifications made at definition time.

folder. In CA-ICMS, a catalog entity used to represent a collection of related information. Folders can include objects and other folders.

footer. The final entry on each page of the database. The footer is 16 bytes long and contains the page number and other information about a given page.

footer area. The portion of a pageable map that is located across the bottom of the screen. Fields in the footer area are displayed whenever the map is displayed.

foreign key. In logical database design, an attribute of an entity or relationship that is also used as the primary key of another entity. A foreign key is used to relate two data entities. For example, to relate the DEPARTMENT and EMPLOYEE entities, you might define the DEPT ID attribute, which is the primary key of the DEPARTMENT entity, as the foreign key of the EMPLOYEE entity. *See also* primary key, secondary key.

forked set. *See* multiple-member set.

format. The textual content and textual organization of record block, set, and index information in the Cross-Reference Report or in the CA-IDMS/Schema Mapper data structure diagram. Also, the graphic components of the diagram, such as the characters used to draw record blocks, set connections, and arrows. You can control the format with the optional OPTIONS, CHARDEF, DRECLINE, XRECLINE, DSETLINE, and XSETLINE statements; or CA-IDMS/Schema Mapper's default format specifications can determine all or part of the format.

formatting. The action of initializing database or disk journal files into database pages or blocks according to information provided by the DMCL. Use the FORMAT utility to format database and disk journal files.

FORMAT utility statement. The utility that prepares a database file, area, segment, or a disk journal file for use by CA-IDMS/DB.

fragment. The portion of a variable-length record that is stored on a separate page from the root segment.

fragment chain. In CA-IDMS/DB, the fragments of a variable-length record. Each fragment is stored on a separate page. Each fragment contains a pointer to the next fragment and a 4-byte variable-length indicator that contains the length of the data portion of the entire record.

fragment interval. The frequency with which the DC/UCF system writes dummy segment (DSEG) records to the journal file. If the system crashes, DC/UCF uses these dummy records to determine the appropriate place for warmstart processing.

free-form data. In CA-ICMS, data (in an object) that is not formatted as a data table. Free-form data is produced

through the use of personal computers and includes text, graphs, and procedures.

free-form object. In CA-ICMS, an object that contains free-form data (as opposed to a data table). A free-form object is also known as an unstructured object.

front end. Under UCF, the host TP monitor. The UCF front end establishes the connection to the UCF back end; passes data to the back end as necessary; and transfers control to the back-end system. When back-end processing is finished, it returns control and any necessary data to the UCF front end.

function. *See* application function, built-in function, database function.

function code. *See* major code.

generation. 1) The process that creates and stores a load module in the DDLDCLOD or DDLCATLOD areas of the dictionary. Load modules can be generated by the application compiler, the dialog compiler, the OCF compiler (DMCL, database name table, and access module load modules), the DDDL compiler (edit and code tables), the mapping facility (the map load module), and the subschema compiler (the subschema load module). 2) In ASF, the process that automatically creates one subschema definition, syntax module, and load module per subschema. A subschema is automatically created for each table that is defined and generated. 3) In system generation, the process of validating the system definition and updating the definition to make the system executable.

generic key. A partial symbolic key. A generic key is typically used to identify a group of related record occurrences. For example, given a symbolic key based on a customer name field, an appropriate generic key might consist of only the first letter of this field; the generic key could be used to access record occurrences for all customers whose names begin with a certain letter.

GET. The navigational database access function that retrieves a located record (that is, the record that is current of run unit) by copying its contents from the database to variable storage. Before issuing GET, an application program typically issues the FIND function to locate the appropriate record occurrence in the database. *See also* FIND.

global cursor. A cursor that can be used by other application programs sharing the access module that contains the cursor definition. You define a global cursor by including the GLOBAL keyword in the DECLARE

CURSOR statement. *See also* cursor, external cursor, shared cursor, updatable cursor.

global DMCL. A DMCL module that defines all database areas accessed by all transactions executing under the CA-IDMS/DB central version. *See also* DMCL module.

global locking. The use of a lock structure in the Coupling Facility in the IBM parallel sysplex environment for recording and managing global locks. CA-IDMS/DB uses global locks to control Data Sharing group inter-member access to shared resources.

global record. In CA-ADS, a record that is available to all functions of an ADSA-defined application. A global record remains in the record buffer for the duration of the application, unaffected by dialog control commands. Global records for a given application are named on the Global Records screen in the application compiler. *See also* ADSO-APPLICATION-GLOBAL-RECORD.

global resource. Within centralized security, an entity that is defined in the user catalog and that is shared by all systems in the CA-IDMS security domain. Types of global resources are user, group, and user profile. *See also* user profile, system resource, database resource.

global response. In the CA-ADS application compiler, an application response that is automatically valid for all application functions when the application is being defined or modified.

The application developer can selectively disable a global response from specific functions at definition time. At runtime, the response is available from all functions except for those functions from which it is deselected. The opposite of a global response is a local response.

graphics literal. A double-byte character set string interpreted without shiftin and shiftout characters.

group. In CA-ICMS and in centralized security, a collection of related users. Groups can include users and other groups.

grouped view. A view that includes a GROUP BY or HAVING parameter in the query specification.

group element. In IDD, an element that contains subordinate elements. For example, the DATE element is a group element that contains elements MONTH, DAY, and YEAR.

header. The first entry on each page of the database. The header is 16 to 28 bytes long and contains the page number and other information about a given page.

header area. The portion of a pageable map that is located across the top of the screen. Fields in the header area are displayed whenever the map is displayed.

help facility. The facility of the DC/UCF online Mapping Facility that allows field and map level help to be associated with a map. For maps with this system-defined help, help text is displayed when the help key defined for the map is pressed, transparent to the application program or dialog displaying the map.

help load module. In the online mapping facility of DC/UCF, a load module created by MAPC or RHDCMPUT that includes the text of help messages to be displayed when the help key defined for the map is pressed by the user. *See also* help facility, field level help, map level help.

home page. The first page on which CA-IDMS/DB stores an entire record or the root portion of a variable-length record.

host node. In a DC/UCF communications network, the DC/UCF system from which you issue a database request (that is, where "terminal" I/O is performed). *See also* server node, target node.

host variable. A program variable that is referenced in an SQL statement. Host variables are used to receive data retrieved from the database and to supply data to be added to the database.

host variable array. An array of host variables for use in bulk processing.

hot backup. The process of backing up the database while the database area(s) are being updated.

host teleprocessing monitor. The teleprocessing (TP) monitor that serves as the UCF front end. The UCF front-end program executes as an application under the host TP monitor.

IDB. *See* Information Database (IDB).

IDB Communications. The component of CA-ICMS that links personal and departmental computers to the IBM mainframe.

IDB Mail Facility. The component of CA-ICMS that controls the exchange of electronic mail among personal computer users.

IDB Manager. The component of CA-ICMS that is used to perform catalog administrative functions.

IDBSYSTEM. In CA-ICMS, a user entity in the catalog foundation. This entity represents the overall system as the owner of system folders and objects.

IDD. The CA-IDMS software product used to control and report on information stored centrally in the data dictionary. IDD uses the DDDL compiler to populate and maintain the dictionary.

IDMS. *See* CA-IDMS/DB.

IDMS access mode. In CA-OLQ, an access mode that you use to access SQL defined tables. *See also* OLQ access mode.

IDMSBCF program. *See* Batch Command Facility (IDMSBCF).

IDMSBSVC module. In BS2000/OSD systems, the module that performs CA-IDMS SVC services. *See also* CA-IDMS SVC.

IDMSCALC utility. The CALC utility. IDMSCALC returns to a calling program a suggested page number for storage of a CALC record.

IDMSCOMP. In CA-IDMS/DB, a database procedure that compresses records to decrease the amount of data stored in the database. IDMSCOMP replaces repeating characters, such as blanks, with codes. IDMSCOMP is invoked by navigational DML statements in application programs according to specifications in the CALL or PROCEDURE clauses of the schema AREA and RECORD statements. *See also* IDMSDCOM, CA-IDMS Presspack.

IDMSDBAN utility. The database analysis utility. IDMSDBAN examines and reports on areas, pages, line indexes, records, and sets.

IDMS communications block. A communications block through which the DBMS communicates with a program requesting database services. The data description of the IDMS communications block is named SUBSCHEMA-CTRL.

IDMSDBIO module. The module that performs all CA-IDMS/DB database and journal input/output (I/O).

IDMSDBMS module. The module that controls all CA-IDMS/DB database access. IDMSDBMS controls access both to your databases and to the data dictionary.

IDMS-DC communications block. The control block through which DC/UCF communicates with a program that requests database and data communication services. The data description of the control block is named SUBSCHEMA-CTRL.

IDMSDCOM. In CA-IDMS/DB, a database procedure that restores a compressed record to its uncompressed form for use by an application program. IDMSDCOM is invoked by DML statements in an application program according to specifications in the CALL or PROCEDURE clauses of the schema RECORD statement. *See also* IDMSCOMP, CA-IDMS Presspack.

IDMSDIRL utility. The directory load utility. IDMSDIRL loads into the dictionary the components required to describe the dictionary itself as well as the components that describe the security information stored in the dictionary.

IDMSIDDC syntax converter. A program that reads a COBOL source program and/or one or more COBOL copy books and converts FILE SECTION 01 and subsequent level statements to DDDL ADD RECORD statements.

IDMSIDDP syntax converter. A program that reads one or more PL/I copy books and converts the data structures in the DECLARE statements to DDDL ADD ELEMENT and ADD RECORD statements.

IDMSLBLS procedure. A procedure provided during CA-IDMS installation at a VSE/ESA site. It contains the file definitions for: dictionaries, sample databases, disk journal files, the SYSIDMS parameter file.

IDMSLOOK utility. The load module print utility. IDMSLOOK reports on the contents of selected load modules.

IDMS module. *See* CA-IDMS/DB.

IDMSNTWK. The schema that describes the dictionary database. The IDMSNTWK schema is provided at installation; unlike user schemas, it is not compiled through the schema compiler, but is loaded by IDMSDIRL.

IDMSNWKA subschema. A dictionary subschema. IDMSNWKA is added to the data dictionary, along with the IDMSNTWK schema, by the IDMSDIRL utility.

IDMSOPTI module. A module that supplies database-related information to the batch interface. At runtime, the batch interface or TP-monitor interface module (for non-UCF programs) reads parameters from the IDMSOPTI module. These parameters determine whether the application can use central version database services and, if it can, the DC/UCF system the application can access.

IDMSPASS utility. In CA-IDMS Presspack, the utility that collects statistics on the characteristics of your data and builds a custom data characteristic table for use in data compression and decompression.

IDMSR-AREA. The ASF table definition area that is provided with the installation of CA-IDMS/DB or CA-ICMS. ASF uses this area to store definitions of data tables.

IDMSR-AREA2. The default name for the ASF data table area provided with the installation of CA-IDMS/DB or CA-ICMS. ASF uses this area to store data associated with ASF data tables.

IDMSRPTS utility. The data dictionary reports utility. IDMSRPTS produces reports on the contents of the data dictionary (such as schema-related information).

IDMSR schema. The schema that describes the database areas used by ASF. The IDMSR schema is provided with the installation of CA-IDMS/DB or CA-ICMS. This schema is stored in the ASF dictionary.

IDMSRSTC utility. The schema compare utility. IDMSRSTC generates IDMSRSTT macro statements that describe the changes to be made when restructuring a database.

IDMSSCON utility program. A utility program that converts Release 10.0 subschema load modules to Release 12.0 subschema load modules.

IDMS-STATUS routine. An error-checking routine contained in the data dictionary and copied into the program by the DML compiler to abend the program if a nonzero value is present in the ERROR-STATUS field.

IDMSUNPS utility. In CA-IDMS Presspack, the utility that decompresses journal images of records that were compressed with CA-IDMS Presspack.

IJMP. An abbreviation for the CAIJMP program. This program is used to generate the JCL needed to install CA-IDMS system software products under OS/390, VSE/ESA, and BS2000/OSD.

implicit checkout. In ADSA, ADSC, and MAPC, a checkout that is implied by an application developer beginning work on an entity, and which terminates when the entity is successfully compiled. *See also* checkout, explicit checkout.

imploded structure. The expansion of a bill-of-materials structure that traces all records above a given record.

import. In CA-ICMS, the function that moves object definitions and data from a sequential file to the database and data dictionary. The import function is implemented through the IDMSRADM utility.

inactive interval. The amount of time the DC/UCF system permits an online task to wait for a resource before abending.

incremental lock acquisition mode. A lock acquisition mode for SQL transactions that directs CA-IDMS/DB to delay placing a lock on an area until the first statement in the transaction that requires access to the area is executed. *See also* preclaim lock acquisition mode.

index entry. In CA-IDMS/DB integrated indexing, the portion of an SR8 system record that consists of an index pointer for a record occurrence (for an unsorted set) or of an index pointer either for a record occurrence or for another SR8 system record (for a sorted set). The index pointer is the db-key of a member record occurrence.

indexed relationship. An index structure that points each occurrence of a parent entity to the associated child entity occurrences.

indexed set. A database structure that can be used to physically link related record occurrences together or to provide alternate access to a record. An indexed set, a pointer array associated with each owner occurrence contains the db-keys of all related member record occurrences. *See also* user-owned indexed set, system-owned indexed set.

indexing. A technique that uses a list of keys and pointers to determine the location of a record in the database. Indexes allow for quick access by exact-key or generic-key search. In CA-IDMS/DB, indexes can be defined as either system-owned indexes or as indexed sets.

index key. A symbolic key defined for an indexed set in the database and used to sort the member occurrences of the set.

indicator variable. A host variable that is used to manipulate null values.

information center. An organizational structure geared toward the management and support of end-user computing. An information center serves as a focal point for using, maintaining, and distributing information throughout the corporation.

Information Database (IDB). The component of CA-ICMS that links computers to the IBM mainframe and creates the information center environment. The Information Database is composed of IDB Communications, IDB Manager, and the IDB Mail facility.

initialize utility. *See* FORMAT utility statement.

INSERT statement. An SQL database access statement that adds one or more rows to a table.

installation code. A code that you can use to establish DC/UCF runtime security. You can assign installation codes to users within a profile. Then, you can access these codes at runtime to determine a user's authority to access various software components.

INSTALL STAMPS utility statement. In an SQL-defined database, the utility that stores synchronization stamps in an area of an SQL-defined database that was reformatted by file.

integrity. The accuracy of data. *See also* recovery, referential integrity.

intent-exclusive lock. A logical lock placed on an area that allows exclusive locks to be placed on records within the area. *See also* intent lock, intent-share lock, update-intent-exclusive lock.

intent lock. A logical lock mode placed on an area that allows certain types of logical locks to be placed on records within the area. *See also* intent-share lock, intent-exclusive lock, update-intent-exclusive lock.

intent-share lock. A logical lock placed on an area that allows share locks to be placed on records within the area. *See also* intent lock, intent-exclusive lock, update-intent-exclusive lock.

inter-CV-interest. A state in which an area is being shared by at least one Data Sharing Group member with a status of UPDATE and more than one Data Sharing Group member with a status of RETRIEVAL or UPDATE.

inter-dialog commands. In CA-ADS, the control commands (TRANSFER, INVOKE, RETURN, and LINK) that instruct the runtime system to pass control from one dialog to another, or to a user program, during the execution of an application.

interface program specification block (IPSB). The CA-IDMS/DLI Transparency component that contains user-supplied control information compiled by the IPSB compiler. The resulting module, loaded by the DLI Transparency interface, describes the correspondence between the CA-IDMS/DB database structure and the simulated IMS database structure seen by the application program. There can be one IPSB for each DLI program, or several programs can use a single IPSB.

internal picture. The format of data as stored in variable storage or in the database. Internal pictures are defined for elements through the DDDL compiler.

internal response. In the CA-ADS application compiler, a response that does not invoke a function. An internal response is assumed to initiate a response process of a dialog.

internal security. In CA-IDMS centralized security, a system that allows privileges to be granted only to those users and groups that have been defined to the user catalog. *See also* external security.

internal wait. The period of time that an external request unit will wait for a database resource (such as a locked area) or a system resource (such as storage space) before abending.

interval monitor. The part of the CA-IDMS Performance Monitor that provides system-wide wait statistics on each type of wait by interval. The interval monitor has both an online and a batch component.

Interruptable Mode. The Animation Mode in which you specify animation stop (interrupt) points. *See also* Non-Interruptable Mode.

IPSB. *See* interface program specification block (IPSB).

IPSB generator. In CA-IDMS/DLI Transparency, the interface program specification block (IPSB) generator that produces all of the source statements necessary to

define one IPSB. The IPSB that is generated is based on the contents of existing DL/I control blocks.

ISO date/time format. A date/time format that complies with the standard of the International Standards Organization: DATE as *yyyy-mm-dd* and TIME as *hh.mm.ss*.

isolation level. An attribute of an SQL transaction that determines read integrity. An isolation level of CURSOR STABILITY guarantees read integrity. An isolation level of TRANSIENT READ does not. *See also* CURSOR STABILITY isolation level, TRANSIENT READ isolation level.

iteration. *See* path iteration.

iterative command. A path-DML command that LRF recognizes as a potential point at which to begin path iteration.

JIS date/time format. A date/time format that complies with the standard of the Japanese Industrial Standard Christian Era: DATE as *yyyy-mm-dd* and TIME as *hh:mm:ss*.

join. The generic relational operation that yields a result table comprised of columns from two or more tables. Tables are joined based on columns that the tables have in common. *See also* outer join.

journal buffer. The storage space in memory that holds the journal pages being written to a journal file. Each DMCL contains one and only one journal buffer. *See also* buffer, database buffer, record buffer.

journal file. A file on which database processing is automatically recorded. The information recorded includes checkpoints and before and after images of database records updated during processing. Journal files allow recovery of the database in the event of a program or system failure. *See also* archive journal file.

journal fix utility. *See* FIX ARCHIVE utility statement, PRINT JOURNAL utility statement.

journaling. In CA-IDMS/DB, the process of writing journal buffer information to the journal file.

journal record entry. An entry written to a journal file by CA-IDMS/DB to document changes to a record in the database.

journal reporter. A reporting facility that enables users to analyze the contents of the CA-IDMS/DB archive

journal file. The journal reporter is implemented through CA-Culprit. *See also* JREPORTS.

JREPORTS. Reports that provide information on the contents of an archive journal file. *See also* journal reporter.

junction record. In CA-IDMS/DB, a member record representing the relationship between records that own it. Junction records permit many-to-many relationships between record types.

KEEP. The navigational database access function that locks a record occurrence against access or update by another transaction.

kept storage. Storage that remains allocated by DC/UCF after a task ends. DC/UCF associates kept storage with the logical terminal from which it was requested. *See also* shared storage, user storage.

key. *See* CALC key, concatenated key, database key (db-key), foreign key, generic key, primary key, symbolic key.

keys table. For each CA-IDMS online tool, a table (defined at system generation) that describes the terminal control keys and the functions they perform.

keyword. A word used in the command syntax of a CA-IDMS product. Keywords are recognized by the system and must be typed exactly as shown in command syntax, which uses upper case to display required characters and lower case to display optional characters.

layout. The arrangement of record blocks, sets, and indexes in a CA-IDMS/Schema Mapper data structure diagram.

line. 1) A DC/UCF system component that defines the method of communication for physical terminals that use the same access method. 2) An IDD entity type used to document a method of communication.

line drivers. The software components that communicate with the access methods in use to move data between main storage and teleprocessing I/O devices.

line index. The item that identifies the location of a record occurrence on a database page. A database page contains one line index for every record occurrence on that page.

line mode. In DC/UCF programs, line-by-line transfer of data to and from a program.

link. In IDMS-DB/DC programming, the process of loading a program or dialog and passing control to it.

linkage options. In CA-IDMS/DB, options that allow the user to specify the types of pointers (next, prior, and/or owner) to be used in relating member and owner occurrences of a set.

linked constraint. A referential constraint in which CA-IDMS/DB maintains a physical linkage between the rows in the referenced and referencing tables. *See also* unlinked constraint.

linked relationship. A relationship in which related entity occurrences are linked to one another through embedded pointers. Types of linked relationships are: chained or indexed. *See also* unlinked relationship.

literal field. In the Mapping Facility, a map field that displays a predefined literal string to be displayed.

LKG. *See* lock grant control block (LKG)

LKS. *See* lock session block (LKS).

LKW. *See* lock wait block (LKW).

load area. The DDLDCLOD or DDLCATLOD areas of the data dictionary in which load modules are stored. *See also* DDLDCLOD area, DDLCATLOD area, load module.

load list. A path used by the DC/UCF system when searching for programs to load. A load list can include both load libraries and data dictionaries. You define load lists during DC/UCF system generation.

load module. 1) A program unit in executable code that can be loaded into main storage for execution. CA-IDMS products use load modules stored in the load areas (DDLDCLOD or DDLCATLOD) of the dictionary or in a load library. 2) An IDD entity type used to define a load module. *See also* load area.

LOAD utility statement. For an SQL-defined database, the utility that loads data.

local mode. A CA-IDMS/DB mode of operation in which a batch program uses a dedicated copy of the DBMS to access the database. In local mode, only one application program can update the database at any given time. *See also* central version.

local node. In a DC/UCF communications network, the DC/UCF system that controls the terminal you are using.

In batch mode, the local node is the DC/UCF system with which your program first establishes communication. This term is a synonym for host node.

local response. In CA-ADS, the type of response that is valid only when specifically associated with a function. The concept of a local response applies specifically at application definition time. The opposite of a local response is a global response.

local task. In a DC/UCF communications network, a DC/UCF task that is requested and executed at the host node. The resulting database I/O can be performed by either the host node or target node.

location mode. The manner in which a record occurrence is physically located in an area of the database. The three available location modes are CALC, DIRECT, and VIA.

lock acquisition mode. For SQL transactions, the mode that determines when area locks are acquired. Preclaim mode directs CA-IDMS/DB to place locks on all areas in an SQL transaction that specify PRECLAIM as soon as the first statement that requires access to the database is executed. Incremental mode directs CA-IDMS/DB to delay placing a lock on an area until the first statement in the transaction that requires access to the area is executed.

lock grant control block (LKG). The control block that identifies each resource in use by a task. All LKGs for the same resource are chained together so that all tasks sharing the resource can be identified.

locking. In CA-IDMS/DB, a facility that maintains the integrity of the database by restricting access by a transaction to records or areas that are currently in use by another transaction.

lock mode. A mode associated with each logical lock that determines whether the lock conflicts with other locks already held on the resource and with locks subsequently requested by other transactions. *See also* share lock mode, exclusive lock mode, null-lock mode, intent lock.

LOCKMON command. A system-defined task which you can use to display and react to locks being held for an area or by a terminal. You can also use Lock Monitor to free locks so that you can change states for an area.

lock session block (LKS). The control block that associates locks managed by the lock manager with the user session requesting those locks. The LKS for a task

that is waiting on a lock managed by the lock manager is chained to the LKW created to represent the wait.

lock wait block (LKW). The control block that indicates a task is waiting for a database resource. All LKWs for the same resource are chained together so that all tasks waiting on the resource can be identified.

log. The runtime repository for DC/UCF system messages, snap dumps, trace information, and statistics. The log can be assigned either to the DDLDCLOG area or to a sequential disk or tape file. *See also* DDLDCLOG area, log file.

log area. *See* DDLDCLOG area.

log file. A sequential disk or tape file defined for use as the DC/UCF system log. DC/UCF writes the system log to a sequential file or to the DDLDCLOG area, depending on the system-generation specification. CA-OLQ/Batch and CA-ADS/Batch users can specify their own sequential log files for use at execution time. *See also* log.

logical area lock. A lock used by the central version to control concurrent access to areas by database transactions running under the central version. Logical area locks are derived from the mode in which an area is readied. *See also* physical area lock.

logical database design. *See* logical model.

logically deleted record. A record flagged for deletion but not yet physically deleted from the database. CA-IDMS/DB physically deletes the record only after it has been disconnected from all sets of which it is a member.

logically deleted user/group. In centralized security, a user or group flagged for deletion but not yet physically deleted from the user catalog. The security facility physically deletes the user or group when you execute the SDEL task in each system of the security domain and against each dictionary in the system that contains the security definitions.

logical model. A logical mapping of data and data relationships, together with integrity rules, that represents the inherent structure of the data relative to a given set of business functions. Typically, the logical model is documented with the aid of data flow diagrams representing the known set of all corporate functions. The logical model is not application dependent; it represents all data entities and their relationships.

logical network. A combination of databases and application program that handle an organization's information and processing requirements. *See also* physical network.

logical operators. The operators AND, OR, and NOT. These operators can be used in selection criteria to help specify the rows to be accessed from a data table.

logical record. One or more database records presented to the application program as a single record. Logical records provide access to multiple database records by a single request. The use of logical records is supported through the Logical Record Facility.

logical-record element. A database record that forms part of a logical record.

Logical Record Facility (LRF). The software component that simplifies application programming by allowing the database administrator to predefine logical records and the processing sequences necessary to access them.

logical-record occurrence. The data returned in response to a logical-record request. A logical-record occurrence is composed of one occurrence of each database record that makes up the logical record.

logical-record request. A database access function issued by an application program to request LRF services. The four logical-record functions are OBTAIN, MODIFY, STORE, and ERASE.

logical-record request control (LRC) block. The control block through which LRF communicates with the program requesting logical-record services.

logical terminal. 1) DC/UCF's view of the events associated with a particular physical terminal. The logical terminal is used by DC/UCF to communicate with the physical terminal. At runtime, the terminal operator's signon information (for example, password, security codes), the executing task, and resources are associated with the logical terminal. A logical terminal is defined by the LTERM statement at system generation. 2) An IDD entity type used to document the logical terminals in an online environment.

logical terminal element (LTE). The control block used by DC/UCF to manage and maintain the resources associated with a particular logical terminal.

log service driver. The DC/UCF task that writes records to the IDMS-DC log area. Log service drivers also open

the log area, initialize the IDMS-DC log work area, and acquire log buffers at system startup.

longterm lock. A shared or exclusive record lock that is maintained across transactions. *See also* locking, notify lock, record lock.

LOOK command. LOOK is a system-defined task that allows you to look at the contents of selected load modules. *See also* IDMSLOOK.

LRC block. *See* logical-record request control (LRC) block.

LRF. *See* Logical Record Facility (LRF).

LTE. *See* logical terminal element (LTE).

LTERM. *See* logical terminal.

mail facility. *See* IDB Mail Facility.

mainline dialog. In CA-ADS, a dialog that is designated as an entry point to an application thread. A dialog is specified as mainline through the dialog compiler.

MAINTAIN INDEX utility statement. For a non-SQL defined database, the utility that builds, rebuilds, or deletes one or more indexes.

major code. The first part of the two-part value returned to the ERROR-STATUS field of the IDMS and IDMS-DC communications blocks upon completion of a non-SQL DML function. The major code, a two-byte value, identifies the DML function performed:

- The value 00 applies to all DML functions.
- Values in the range 01 through 20 identify IDMS-DB functions, both online and batch.
- Values in the range 30 through 51 identify IDMS-DC online and DC-BATCH functions.

See also minor code.

MANDATORY membership. A membership option that determines how member record occurrences are disconnected from the set. When a record has mandatory membership in a set, occurrences of that record are disconnected from the set with the ERASE function.

MANUAL membership. A membership option that determines how member record occurrences are connected to the set. When a record has manual membership in a set, occurrences of that record are connected to the set with the CONNECT function.

map. 1) A formatted layout of a terminal screen. A map names the literal and variable fields on the screen, identifies the location of each field on the screen, names the record element associated with each variable field, assigns display characteristics (attributes), and defines editing criteria. Maps are created through the DC/UCF mapping facility. 2) An IDD entity type that documents the maps (or tables) used by teleprocessing monitors.

MAPB. The task code for the online map compiler for creating batch file maps that are used by ADS/Batch. *See also* RHDCMAP1, RHDCMPUT.

MAPC. The task code for the online map compiler for creating online maps. *See also* RHDCMAP1 RHDCMPUT.

mapin. The mapping operation in which values entered by the terminal operator into variable map fields are moved into program variable storage. In CA-ADS, each mapin operation begins a new task.

map level help. Help text associated with a map by means of the online or batch map compilers, and which is displayed when the help key defined for the map is pressed either with the cursor positioned in a data field for which no field-specific help is defined or outside of any data field. *See also* help facility, field level help.

map load module. The load module generated by the DC/UCF Mapping Facility. Programs and dialogs execute map load modules to display and receive data.

mapout. The mapping operation in which a map is displayed at the terminal. Literal fields are moved to their assigned positions, and the contents of the associated data areas in variable storage are moved to the map's data fields.

mapping. The method used by CA-IDMS online facilities to transfer a complete screen of data between application programs and a terminal.

mapping compilers. Batch and online mapping tools:

- The batch compiler (RHDCMAP1) and batch utility (RHDCMPUT) allow you to define, generate, decompile, report on, and delete maps in batch mode.
- The online mapping compiler (also known as MAPC) allows you to define, generate, and delete maps in online mode.

Mapping Facility. A tool that you use to define the layout of maps.

mapping mode. In IDMS-DC terminal management functions, the mode in which an entire screen of data is transferred, field by field. Mapping mode can be used with 3270-type terminals and also with glass TTYs that have associated device independence tables.

map request block (MRB). The control block used to perform mapping operations.

map work record. A record associated directly with a map. The record is automatically available to a dialog or program that uses the map. Map work records can be schema records or records built using IDD. *See also* dialog work record.

master terminal function. *See* DCMT command.

MDT. *See* modified data tag.

member record. A database record type defined as subordinate to an owner record type in a one-to-many relationship. For example, in a relationship defined between a DEPT owner and an EMPLOYEE member, each department can contain several employees.

membership. In CA-ICMS, the relationship between an entity and the folder or group in which that entity is included. (Both objects and folders can be members of folders; both users and groups can be members of groups.)

membership options. In a non-SQL schema, the specifications that indicate how a member record occurrence is connected to or disconnected from a set occurrence. For a given record in a set, the schema can specify one of the following membership options: MANDATORY AUTOMATIC, MANDATORY MANUAL, OPTIONAL AUTOMATIC, or OPTIONAL MANUAL.

menu. *See* menu map.

menu/dialog function. In CA-ADS, an application function defined as a menu function and also associated with a dialog. Like a menu function, the menu/dialog function uses system-supplied menu processing facilities. However, the menu/dialog function can also perform any processing defined in the associated dialog. *See also* application function, menu function, menu map.

menu function. In CA-ADS, an application function that displays a system-defined menu map and performs standard system-supplied menu processing activities at runtime. *See also* application function.

menu map. A map containing a list of valid responses the user can select. In CA-ADS, menu maps are automatically built for an application defined by using the application compiler. A menu map must be defined to coordinate with system-supplied menu processing facilities. CA-ADS provides three system-defined menu maps for use in CA-ADS applications. Users can also define their own menu maps. *See also* map, menu function.

menu mode. The menu-driven version of the online debugger, CA-OLQ, and IDD.

menu stack. In CA-ADS, the sequence of menus and menu/dialogs that the user has executed but through which the user has not yet returned. The CA-ADS runtime system uses the menu stack to manage the flow of control through menus at runtime.

Merge Archive utility statement. The utility that is used to merge the archived journal files of Data Sharing group members that are sharing update access to data. It can also be used to merge archive and local mode journal files to simplify a subsequent recovery operation.

message. An IDD entity type that documents informational messages to be used in DC/UCF applications.

message area. *See* DDLDCMSG area.

message field. In the Mapping Facility, a map field that displays messages generated by an application program or by the automatic error-handling facility.

migration. 1) The process of moving components from one system to another. 2) The process of moving an application from a test system to a production system. 3) The conversion of a software system from one type of hardware to another or from one type of software architecture to another. 4) The process of upgrading an installed product to a new release of that product. 5) The process of moving source and/or load modules from one data dictionary to another.

minimum fragment. The smallest portion of a variable-length record to be stored on a page other than the record's home page. The minimum fragment specification, provided in the non-SQL defined schema, is used when a record's home page is too full to store the complete record.

minimum path. In CA-ICMS, the shortest path that uniquely identifies an entity in the catalog.

minimum root. The smallest portion of a variable-length record to be stored on the record's home page. The minimum root specification, provided in the schema, is used when a record's home page is too full to store the complete record.

minor code. The second part of the two-part value returned to the ERROR-STATUS field of the IDMS and IDMS-DC communications blocks upon completion of a non-SQL DML function. The minor code, a two-byte value, describes the status of the function identified by the major code. *See also* major code.

Mixed Page Group Feature. The Mixed Page Group Binds Allowed Feature provides the ability to access data from different page groups within a single CA-IDMS run unit. This feature also permits a single run unit to access a database whose segments have been defined with a different maximum for the number of records that can be stored on a page. You can specify a different maximum for each page group.

model dialog. In ASF, the default dialog used to generate dialogs for data tables. The model dialog is stored as a source module in the DDLML area of the ASF dictionary.

model map. In ASF, the default map used to generate screen displays for data tables. The model map is stored in the DDLML area of the ASF dictionary.

model subschema. In ASF, the default subschema used to generate subschemas for data tables. The model subschema is stored as a source module in the DDLML area of the ASF dictionary.

modified data tag. For a variable field on a map, the internal tag that keeps track of whether or not the value in that field has been changed by the terminal operator.

MODIFY. The navigational database access function that replaces the contents of a database-record occurrence with the values in its corresponding variable storage.

MODIFY logical record. The LRF database access function that replaces the contents of a logical-record occurrence with the values in its corresponding variable storage.

MODIFY path group. A collection of paths (predefined in a logical-record subschema) designed to service application programs that request a MODIFY logical-record function.

module. An IDD entity type used to define source code for processes, qfiles, edit tables, code tables, reports, and transactions.

MPMODE. *See* multiprocessing mode.

MRB. *See* map request block (MRB).

multilevel hierarchy. A relationship formed when a member of a set is the owner of another set.

multiple-member relationship. A single relationship maintained for more than one child entity type.

multiple-member set. A set in which two or more record types participate as members.

multiple membership. The relationship formed when a given record type is owned by more than one record type and, thus, is a member in more than one set type.

multiple selectors. In LRF, two or more ELEMENT, FIELDNAME, FIELDNAME-EQ, or KEYWORD selectors specified in a single SELECT clause. Only a program request whose WHERE clause references *all* of the named selectors can be matched to this path.

multiple-set ownership. A relationship formed when one record type owns more than one set.

multiple sets. The relationship formed when one record type is related to a second record type in more than one way.

multiprocessing mode. The code lock that DC/UCF uses to enforce task serialization in a multitasking environment. Multiprocessing modes divide DC/UCF tasks into families. By dividing similar tasks into families, DC/UCF prevents tasks from corrupting system storage.

multiprogramming. Under DC/UCF, the ability to execute several different tasks concurrently. Multiprogramming enables a system to run large-volume online and batch programs simultaneously.

multitasking. In the DC/UCF environment, the ability to run multiple operating-system subtasks at the same time. DC/UCF supports multitasking in a uniprocessing and multiprocessing environment.

multithreading. Under DC/UCF, the ability of two or more different tasks to execute a reentrant program concurrently. Multithreading conserves storage and reduces CPU overhead.

name server. A component of the CA-IDMS database communications architecture that identifies the location of resources within the network.

native VSAM support. The ability to use CA-IDMS/DB to access data from a file defined to VSAM and containing VSAM records. The VSAM files must be defined to CA-IDMS/DB by including specific statements in the schema and DMCL DDL. Once defined to CA-IDMS/DB, the VSAM files appear to the DBMS as CA-IDMS/DB files and can be accessed by CA-IDMS/DB applications.

natural collating sequence. A collating sequence in which negative numeric values are sorted lower than positive values. *See also* standard collating sequence.

navigation. The process of searching the sets stored in a database and of following the member record pointers (next, prior, or owner) to locate specific record occurrences.

navigational database access. A database access method that requires knowledge of the physical structure of the database. Navigational database access allows programmers precise control of the database. *See also* SQL database access.

navigational DML. A data manipulation language that obtains and updates the database one record at a time, using currency and error checking to assure correct results.

nested structure. Any data processing structure in which one component exists as a sublevel of another component. *See also* bill-of-materials structure.

next linkage. In CA-IDMS/DB, the type of set linkage in which the owner and members of a set occurrence are linked by next pointers. Next pointers cause the owner to point to the first member, the first member to point to the second member, and so on; the last member points to the owner.

node. A system defined to a DC/UCF communications network.

Non-Interruptable Mode. The Animation Mode in which you do not specify animation stop (interrupt) points. CA-IDMS/ADS Alive steps through dialog animation one line of code at a time, pausing for a specified length of time. The Non-Interruptable Mode causes all CA-IDMS/ADS Alive Animation Runtime Session commands to be inoperative. *See also* Interruptable Mode.

nonoperative status. In CA-ADS, the status of a dialog when control has passed from that dialog to another dialog with the TRANSFER or RETURN command (that is, when the dialog is no longer part of the application thread).

non-SQL defined schema. A schema defined with non-SQL DDL statements.

nonterminal task. A task that is not initiated from a terminal. For example, a task that DC/UCF initiates automatically at startup or shutdown.

non-terminating task data transfer. A means of data transfer between program storage and a terminal that allows a front-end application (for example, a CICS user task) to wait for information from a UCF back end without terminating. *See also* terminating task data transfer.

NOREADY. In CA-ADS, an option of the READY AREA compiler directive that indicates that a dialog will not use the area and that the CA-ADS runtime system should not ready it when a database transaction begins.

normalization. The analysis of data structures based on a set of rules. The rules eliminate redundancy and ensure unique identifiers. Under this approach, data can be normalized to varying degrees (first normal form, second normal form, third normal form). Third normal form is typically used to design stable data structures. Normalization is part of the database design process.

notify lock. A special form of the longterm lock established by using the LONGTERM NOTIFY option of the KEEP DML command. Notify locks monitor database activity for the record that is current of record type, set, or area. *See also* locking, longterm lock, record lock.

nucleus. The group of modules that perform DC/UCF system functions, such as program loading and storage management. Nucleus modules are stored in the appropriate program and reentrant pools.

nucleus map. A table listing the name and address of each module in the DC/UCF nucleus.

null-lock mode. A special type of logical lock which is placed on a record to signify a notify lock and on an area to signify transient retrieval access. Null-locks provide no protection against concurrent access. *See also* share lock mode, exclusive lock mode.

null PDE. A generic program definition element that is set aside during system startup for later use. You allocate null PDEs to a system when you want DC/UCF to define programs automatically. Null PDEs are defined during system generation. *See also* automatic program definition.

null SELECT clause. In LRF, a SELECT clause without any path descriptors. This clause identifies a path that LRF can match with any logical-record request.

null value. A construct that denotes the absence of a value and is not the same as spaces or numeric zeros, which are actual values. In an SQL-defined database, a column, regardless of data type, can contain a null value unless the column definition specifically disallows them.

object. The logical unit in which CA-ICMS maintains information. An object can be formatted as a data table (the equivalent of an CA-IDMS/DB data table) or can be stored in a free-form format (to hold such information as text, spreadsheets, and graphs).

object dictionary. In CA-IDMS/Dictionary Migrator, a dictionary that acts as the destination for entities that are moved during the migration process. Your object dictionary is populated by entities that are copied from your source dictionary(s). Only one object dictionary can be used during each migration. *See also* source dictionary.

object record. 1) A record occurrence that is the target of a database access request. 2) At system generation, the dictionary record representing an entity that participates in a DC/UCF system. Object records associate source records with DC/UCF systems. Only object records are used when a DC/UCF system executes. *See also* source record.

OBTAIN. The navigational database access function that combines the FIND and GET operations to retrieve a record occurrence.

OBTAIN logical record. The LRF database access function that retrieves a logical-record occurrence.

OBTAIN path group. A collection of paths (predefined in a logical-record subschema) designed to service application programs that request a MODIFY logical-record function.

occurrence, logical-record. *See* logical-record occurrence.

occurrence, override. A specification in the Security Resource Type Table (SRTT) for an occurrence of a

resource that overrides the SRTT specification for the resource type.

occurrence, record. *See* record occurrence.

OCF. *See* Online Command Facility (OCF)

OCFX task. An online task that executes OCF-language modules; that is, modules containing Command Facility statements.

offline area status. The status for an area defined to the runtime DMCL in which database transactions executing under the central version can neither retrieve nor update data in the area.

offload. The process of moving the contents of a disk file to tape.

OLM. The online mapping facility of DC/UCF. Note that this term no longer refers to the online map compiler (MAPC and MAPB).

OLP. *See* online PLOG.

OLQ access mode. In CA-OLQ, an access mode that you use to access non-SQL defined (that is, ASF) tables and records. *See also* IDMS access mode.

ON clause commands, path-DML. In LRF, commands that specify path branching, path iteration, or return control to the program in response to a specific error-status value returned by the DBMS.

ON clause, program request. A clause that can be coded in an application program, following a logical-record request, to test for a specific path status returned by LRF.

one-of-a-kind record. *See* OOAK record.

Online Command Facility (OCF). The CA-IDMS tool you use to submit Command Facility statements interactively and see the resulting output on a display screen. *See also* Command Facility.

online debugger. A facility to detect, trace, and eliminate errors in programs running under the control of a DC/UCF system.

online mapping (MAPC and MAPB). The online version of the facility for defining and generating maps for online use (MAPC) or batch (MAPB).

online PLOG. The online version of the PRINT LOG utility that displays the current contents of the DDLDCLOG area of the data dictionary. *See also* PRINT LOG utility statement

online program. A program that executes in a DC/UCF program pool. *See also* batch program, TP-monitor program.

online task. A task defined to the DC/UCF system either during system generation by means of the TASK statement, or at runtime by means of the DCMT VARY DYNAMIC TASK command.

online terminal block (OTB). In CA-ADS, the control block used by the runtime system. Associated with a logical terminal, this block exists across tasks, anchoring all other control blocks. The OTB contains the name of the current dialog and the addresses of the current variable dialog block (VDB) and the fixed dialog block (FDB).

online terminal block extension (OTBX). In CA-ADS, an extension of the online terminal block (OTB) that is created when the runtime system executes an application generated by the application compiler. The OTBX contains pointers to the task application table (TAT) and to the record buffer block (RBB) and application definition block (ADB) for the currently executing application.

online work area (OWA). In CA-ADS, the work area that exists for the life of a task. The OWA contains fields for communication between ADSORUN2 and ADSOCDRV, the subschema control block, a pointer to the current map request block (MRB), and an internal stack.

OOAK record. A one-of-a-kind record type in the database. An OOAK record is created when only one occurrence will exist for a record type.

open cursor. The act of opening a cursor; that is, making the cursor available to the program to fetch cursor rows. *See also* close cursor.

OPER. The system-supplied task code that invokes the DC/UCF dynamic system monitor. *See also* dynamic system monitor.

operating mode. *See* protocol.

operative status. In CA-ADS, the status of a dialog that is still an active part of an application thread. *See also* application thread.

optimizer. A component of the SQL option that validates table and column references against the dictionary and selects the most efficient database access strategy for an SQL statement.

OPTI module. *See* IDMSOPTI module.

OPTIONAL membership. The membership option that determines how member record occurrences are disconnected from the set. When a record has optional membership in a set, occurrences of that record can be disconnected from the set without being erased.

OPTF. *See* RHDCOPTF

order option. In a non-SQL schema, the specification that indicates the logical order in which member record occurrences are connected within a set occurrence. The following order options are available: FIRST, LAST, NEXT, PRIOR, and SORTED.

orphan count. A count maintained by CA-IDMS/DB when adding members to an unsorted indexed set. The orphan count indicates the number of index entries that have been relocated when an SR8 record is split to accommodate new members.

OTB. *See* online terminal block (OTB).

OTBX. *See* online terminal block extension (OTBX).

outer join. A SELECT statement operation that joins complete tables; that is, it includes the rows that have no match in another table. The result of an outer join is a result table with all the rows from one of tables in the join operation. *See also* join.

overflow. In CA-IDMS/DB, a condition occurring when records must contend for storage space in the database. The two types of overflow are CALC overflow and clustered (or VIA) overflow. A CALC overflow condition occurs when the randomized page for a CALC record is too full to accommodate the record; the record is stored on the next page. A clustered (VIA) overflow condition occurs if the page size for the database area is too small to hold all occurrences of a clustered relationship.

overflow run unit. A system run unit that is initiated by DC/UCF when all predefined system run units are in use. DC/UCF terminates overflow run units when they are no longer needed.

OWA. *See* online work area (OWA).

owner linkage. The type of set linkage in which the owner and members of a set are linked by owner pointers. Owner pointers cause each member to point to the owner.

owner record. The record type to which all other records in a set are subordinate.

ownership. 1) An attribute of an SQL schema. The user who issues the CREATE SCHEMA statements owns the schema and implicitly holds all access and definitions privileges on the tables, views, and access modules associated with the schema. Ownership can be transferred from one user to another. 2) In CA-ICMS, the relationship between a user (or the catalog) and an entity owned by that user. A user can own objects and folders; the catalog can own objects, folders, users, and groups.

packet-data-movement buffer. The CSA (OS/390), the SVA (VSE/ESA version 2.1 or later), or the area in a storage pool that DC/UCF uses to communicate with external request units.

page. A logical division of the database that corresponds to a physical block in a file. An area is made up of a range of contiguous pages. All pages within an area have the same size, but page size can vary from one area to another.

pageable map. In CA-ADS, a map that can contain unlimited occurrences of a set of map fields. A pageable map can contain more detail occurrences than can fit on the terminal screen at one time; the terminal operator can move from page to page to view all the detail occurrences.

page field. In the Mapping Facility, a pageable-map field that displays the current page number and permits the operator to select another page for display.

page group. An attribute of a segment that uniquely identifies a collection of page ranges. In a multiple-database environment, a segment can be associated with only one page group, while a page group can be associated with more than one segment; that is, page groups allow a page range to occur more than once.

page identifier. A unique two-character (alphabetic) identifier that specifies the position of a (paper) page in a CA-IDMS/Schema Mapper data structure diagram. The first character identifies the page's column (which runs down the length of the diagram), and the second character identifies the page's row (which runs across the width of the diagram).

page lock. A logical lock used by CA-IDMS/DB to protect the contents of a database page while it resides in a Data Sharing group member's buffer pool.

page number. A unique, system-assigned number for a database page.

page range. 1) The range of pages, from beginning to end, in a database area. 2) A subgroup of pages in a database area.

page reserve. The specified number of bytes per page designated specifically for expansion of variable-length records. Page reserves minimize fragmentation of variable-length records during update functions. The designation of a page reserve does not affect the physical structure of the database.

PA key. See program attention (PA) key.

panel. An IDD entity type that associates documentary entries and users with maps used in the 3270-type terminal environment. In IDD, the terms *panel* and *screen* are synonymous.

parent. A logical database design term that refers to a referenced table in SQL database design and an owner record in non-SQL database design. See also child, owner record, referenced table.

passkey. In CA-ICMS, a catalog entity that represents permission for users to access information or to perform administrative tasks. See also catalog access passkey, data access passkey.

path. 1) In CA-IDMS/DB, a route through the application database that is used to access and update data. 2) In LRF, the subschema component that contains path-DML commands. These commands perform the data manipulation necessary to fill a program's logical-record request.

PATH. In CA-Culprit, the parameter that indicates the access path through the database.

path-DML commands. In LRF, the DML statements in a logical-record path (defined in a subschema) that perform the database navigation and functions necessary to fulfill a program's request for a logical record. See also Data Manipulation Language (DML).

path group. In LRF, a collection of paths (defined in a subschema) designed to fulfill program requests for specific logical records and specific database access

functions. Up to four path groups can be defined for each logical record (that is, OBTAIN, ERASE, STORE, and MODIFY).

path iteration. In LRF, the reexecution of all or part of a logical-record path to access all occurrences that meet the selection criteria specified in a program request or in a path WHERE clause. Path iteration is implemented through FIND/OBTAIN EACH path-DML commands.

path selectors. The descriptors in a subschema SELECT clause that LRF compares with the contents of a program request's WHERE clause.

path status. A literal provided by either LRF or the DBA to indicate the outcome of a logical-record program request.

permission. In CA-ICMS, authority given to a user through passkeys. Users can be given permission to manipulate information in CA-ICMS as well as to manipulate catalog entities.

PF key. *See* program function (PF) key.

physical area lock. A lock set and examined by CA-IDMS/DB whenever an area is opened in an update mode. Physical area locks prevent concurrent updates by multiple local database transactions, multiple central versions, or both. Physical area locks also prevent update access to an area that requires rollback of database transactions. *See also* logical area lock.

physical database. A collection of data that resides in operating system files; CA-IDMS/DB uses information provided at runtime to determine how to map the logical representation of the database to one of perhaps many physical implementations of the database. *See also* segment.

physical database definition. The part of the database definition that describes the physical structure of the database, including segments, the DMCL, and a database name table.

physical database design. The process of tailoring the logical model to specific application performance requirements, the best use of computer resources, and efficient data access.

physical DDL. The database definition language submitted to the Command Facility that define a physical database. Physical DDL statements define DMCLs, database name tables, segments, and the components associated with these entities.

physical network. A combination of interconnected equipment (hardware) and programs (telecommunications access methods) used to transmit data between physical locations. *See also* logical network.

physical terminal. 1) A physical device, such as a CRT (3270-type), TTY, or printer, that exists within a teleprocessing system. In the DC/UCF environment, a physical terminal is associated with a logical terminal; physical terminals are defined with the PTERM statement at system generation. 2) An IDD entity type that documents the physical CRT, TTY, and printer devices in a teleprocessing system.

PLOG. *See* online PLOG.

pointer. A database key stored in the prefix of a record occurrence that indicates the physical location in the database of another related record occurrence. When a set is defined between related database record types, CA-IDMS/DB stores pointers to represent their relationship.

populate. To load a database with actual data values. A database can be populated only after it has been defined.

port. In DDS, an access point through which the node passes request and response packets to another node. A port is defined at system generation time by the resource name table (IDMSCSTB).

positioned delete. Using SQL DML, deleting the row where the cursor is positioned in the result table associated with an updatable cursor. A positioned delete requires the WHERE CURRENT OF clause in the DELETE statement. *See also* searched delete.

positioned update. Using SQL DML, modifying one or more column values in a row where the cursor is positioned in the result table associated with an updatable cursor. A positioned update requires the WHERE CURRENT OF clause in the UPDATE statement. *See also* searched update.

Post-Abort Browse Facility. In the event of an animation/execution abort, CA-IDMS/ADS Alive displays the Post-Abort Browse Session screen showing the process containing the error. The line of source which caused the abort is preceded by the associated error message.

POSTMASTER. In CA-ICMS, a group entity whose members share authority over the mail facility.

POST OFFICE. In CA-ICMS, a user entity that controls the distribution of letters through the mail facility.

preclaim lock acquisition mode. A lock acquisition mode for SQL transactions that directs CA-IDMS/DB to place locks on all areas in an SQL transaction that specify PRECLAIM as soon as the first statement that requires access to the database is executed.

predefined run unit. A system run unit initiated at DC/UCF system startup and maintained for the duration of system execution. *See also* system run unit.

predicate. An operand of a search condition. It expresses or implies a comparison operation. For example, the BETWEEN predicate searches for all values within a range of values.

prefetch. A CA-IDMS/DB feature for OS/390 that provides the capability for CA-IDMS/DB to do full track reads. I/O requests are bundled so that there is only one scheduling action for multiple physical I/O's.

prefix. *See* pointer, record prefix.

premap process. An optional component of a CA-ADS dialog. A premap process is executed before the dialog's map is displayed, unless ENTRY POINT IS MAP is specified. The premap process performs any special processing required by the map. A given dialog can have only one premap process.

A premap process is defined as a standalone process module in the data dictionary. You make a process module the premap process for a dialog by using the dialog compiler. *See also* process module, response process.

prepared statement. A CA-IDMS/DB extension of ANSI-standard SQL that allows a program to compile certain SQL statements at runtime.

primary key. 1) The element or elements in a record that uniquely identify each occurrence of that record type. 2) The column or columns in a table that define a unique constraint and which are not null. The primary key uniquely identifies each row and prevents duplicate rows from being stored. *See also* foreign key, secondary key.

primary protect key. One of two storage protect keys, provided by the operating system, that DC/UCF uses to implement storage protection. When the system nucleus has control of the DC/UCF region/partition, all storage pages in the region/partition are set to the primary protect

key. This allows the system nucleus to modify any page in the region/partition. *See also* alternate protect key.

primary storage pool. Storage pools 0 and 255 in a DC/UCF system. The primary (system) storage pool contains system storage and, optionally, user storage. Storage pool 0 must be defined in order for the DC/UCF system to start up. Storage pool 255 is the primary (system) pool located in 31-bit address space.

PRINT INDEX utility statement. The utility that reports on the structure of system-owned indexes and indexed sets.

PRINT JOURNAL utility statement. The utility that reports on transaction checkpoints in an archive journal file.

PRINT LOG utility statement. The utility that prints all or selected portions of the DC/UCF system log or an archive log file created by the ARCHIVE LOG utility statement.

PRINT PAGE utility statement. The utility that prints the contents of one or more database pages in display (decimal) and/or hexadecimal format.

PRINT SPACE utility statement. The utility that reports on space utilization in one or more areas or segments.

prior linkage. The type of set linkage in which the owner and members of a set occurrence are linked by prior pointers. Prior pointers cause the owner to point to the last member, the last member to point to the next-to-the-last member, and so on; the first member points to the owner.

privacy lock. *See* access restriction.

private catalog. In CA-ICMS, a portion of the catalog that contains data controlled by an individual user (as opposed to data controlled by the corporation). *See also* CORP, corporate catalog.

private property. All objects and folders in CA-ICMS that are owned by a particular user (that is, stored in a private catalog).

privilege. Under CA-IDMS internal security, the right to access a particular resource and perform a particular operation on that resource. Types of privileges are: definition privileges, access privileges, or administration privileges.

process. An IDD entity type used to define source code for CA-ADS process modules.

process command. In CA-ADS, a command provided for use in coding process modules for dialogs. Process commands are English-like statements that are fully integrated with DC/UCF and CA-IDMS/DB facilities. *See also* process module.

process module. In CA-ADS, a module of process commands defined for use in dialogs. A process module performs one or more processing options for the dialog. For example, a process module might obtain and update employee records in the database.

You define a process module in the data dictionary by using the DDDL compiler. You add a process module to a dialog by using the dialog compiler. When used by a dialog, a process module is either a premap process or a response process. *See also* premap process, response process.

product code. The unique system-supplied name that identifies a DC/UCF development tool or online compiler to the transfer control facility (TCF). For example, IDD is the product code for online IDD; SSC is the product code for the online subschema compiler.

profile. A set of attributes and options associated with users in a CA-IDMS environment. Profiles used to set initial values for environmental variables in the user session are processed at signon time. *See also* user profile, system profile.

program. 1) An IDD entity type used to document user application programs. 2) Under DC/UCF, an executable entity that is stored and executed as a program; (for example, a subschema, map, dialog, edit/code table, or DML program).

program attention (PA) key. A predefined control key that serves as an alternative to typing a certain instruction. When a PA key (PA1, PA2, or PA3) is pressed, no data is transmitted from the screen to the record buffer. *See also* control key, program function (PF) key.

program definition element (PDE). The DC/UCF control block that specifies general program characteristics. The number of PDEs used in a DC/UCF system is controlled by system-generation specifications.

program directory list. An internal table of programs defined to the DC/UCF system. The program directory

list is built either at system startup or as programs are loaded during system execution.

program function. In CA-ADS, an application function associated with a site-written program. This site-written COBOL, PL/I, or Assembler program performs the processing activities required by the function. For example, the program might perform specialized data cross-validation routines. *See also* application function.

program function (PF) key. A predefined control key that serves as an alternative to typing a certain instruction. When a PF key (PF1 through PF24) is pressed, data is transmitted from the screen to the record buffer. *See also* control key, program attention (PA) key.

program pool. The storage space in memory into which resident and nonresident programs are loaded for execution. Typically program pools hold CA-ADS applications, dialogs, subschemas, maps, database procedures, edit/code tables, access modules, relational command modules, and user programs. Program pool specifications are part of a system's definition.

program processor. A component of the Dictionary Loader that analyzes a single COBOL program and outputs information about how the program uses data.

program registration. The CA-IDMS/DB security feature that enables you to associate programs with subschemas. Using program registration, you can control compilation of DML programs that use a particular subschema.

project. The generic relational operation through which only specific columns of a data table are accessed.

prompt mode. The line-oriented method of communicating with the debugger.

propagation. In CA-ICMS, an ambiguous association that can occur when duplicate names are used.

protected retrieval ready mode. A retrieval ready mode in which other transactions executing concurrently under the central version can ready the area only in shared retrieval or protected retrieval modes.

protected update ready mode. An update ready mode in which other transactions executing concurrently under the central version can ready the area in shared retrieval mode only.

protocol. In CA-IDMS/DB, a generalized source-calling sequence that the DML compilers use to convert DML

statements into calls for DBMS services. A protocol is stored as a module in the data dictionary.

prototype. In CA-ADS, an early version of an application used to test and demonstrate the functions, responses, and maps of the application. The production application can be developed directly from the prototype.

proxy lock. A global lock used to represent a lock on each record within a given database page. Proxy locks are acquired only in a Data Sharing environment.

pseudoconversational programming. An online programming technique that frees resources being used by a task while the system waits for completion of data entry by the operator. For example, the runtime system of CA-ADS is pseudo-conversational.

pseudo-converse. The interval between mapout and mapin, during which the system resources for a task are freed.

PTERM. *See* physical terminal.

public access. In IDD, the ability of unregistered users to access data dictionary entity occurrences.

PUNCH. When using CA-IDMS compilers in batch mode, the function that directs information to the file defined for punched output.

PUNCH utility statement. The utility that retrieves the DMCL or database name table load module from the dictionary, and writes them, in object module form, into the file defined for punched output.

qfile. 1) A module, stored in the data dictionary, that contains a sequence of CA-OLQ commands. When a qfile is executed, all of the commands contained in it are performed. Qfiles can be created automatically through CA-OLQ or manually through IDD. 2) An IDD entity type used to define source code for CA-OLQ qfiles.

QREPORTs. Reports that provide information on SQL-related entities stored in the DDLCAT, DDLCATX, and DDLCATLOD dictionary areas.

quasi-reentrant program. A COBOL program that does not modify its own code, other than working storage.

queue. 1) A work area containing queue records shared by tasks on all DC/UCF terminals and by batch programs. Queue records allow a task or application to pass data to another task or application, or to transfer data from one

terminal to another. The records in a queue are preserved across system shutdowns for a user-specified number of days. 2) An IDD entity type that documents the manner in which a teleprocessing system groups similar requests. *See also* queue record.

queue area. *See* DDLDSCRUN area.

queue record. A record stored in the DDLDSCRUN area. Queue records, once stored, are available to any task in a system. Queue records are maintained until explicitly deleted or until a retention period elapses.

quiesce point. A quiesce point is a point in time at which no transactions are accessing a database area in update mode.

radix. *See* database-key format.

RBB. *See* record buffer block (RBB).

RCE. *See* resource control element (RCE).

RCM module. A module that contains the SQL statements embedded in an application program. You create an RCM by precompiling the program that contains the embedded SQL statements. *See also* access module

READY. The database access function that tells CA-IDMS/DB which areas of the database the application program will access and in which ready mode.

ready mode. *See* area ready mode, default ready mode.

realtime monitor. The component of the CA-IDMS Performance Monitor that captures and displays information describing the use of specific system resources at the time of the request.

record. 1) An IDD entity type used to document records, reports, and transactions. Typically, records are collections of related elements. Reports are hard-copy records. Transactions are collections of functions or processes. 2) A synonym for record type and for record occurrence. 3) The internal implementation of an SQL table.

record block. A representation of an CA-IDMS record in a CA-IDMS/Schema Mapper data structure diagram. Record block descriptions can also be listed in the Cross-Reference Report. A record block contains various record fields.

record buffer. The space in memory that is allocated at runtime to hold the data values of a record. The size and

layout of a buffer correspond to the definition of that record in the data dictionary. *See also* buffer, database buffer, journal buffer.

record buffer block (RBB). In CA-ADS, the storage block dynamically allocated by the runtime system for subschema, database, work, and map records used by a dialog. An application can have one primary RBB and as many secondary RBBs as needed. The size of the RBB is specified by the PRIMARY POOL and SECONDARY POOL parameters of the ADSO system generation statement.

record element. 1) A logical subdivision of a record, also called an element or a field. 2) In IDD, the entity used to associate an element with a record. *See also* element.

record ID. A number that uniquely identifies each record type in the database. Record IDs are assigned explicitly by the DBA or automatically by the schema compiler.

record lock. Under the central version, a lock placed on a record occurrence to prevent access to and/or update of that record occurrence. Record locks are used to protect the integrity of database records (for example, preventing concurrent updating of an occurrence by two or more transactions). Record locks are never maintained for transactions operating in local mode since concurrent update is prevented by physical area locks. *See also* locking.

record occurrence. A collection of related data element values accessible as a unit through CA-IDMS/DB. A record occurrence corresponds to a row in a data table.

record package. A package, generated by IDMSADA, that contains the ADA constructs necessary to represent a CA-IDMS/DB subschema record or logical record.

record prefix. The part of a record occurrence that describes the set relationships for the record. The prefix contains pointers to the next, prior (if applicable), and owner (if applicable) records in all sets in which the record participates.

record type. In CA-IDMS/DB, a defined category of information in the database, representing a group of similar record occurrences. (For example, the DEPT record type provides a template for data about all departments within the organization.)

record-type diagram. A graphic representation used to define the characteristics of a record type in the database.

A record-type diagram contains such information as record name, id number, and length. Record-type diagrams are used within a data structure diagram to define the entire database. *See also* data structure diagram.

recovery. The process of restoring the contents of the database when an error occurs that corrupts the database or disk journal file. Recovery procedures restore altered areas to their original state.

recovery unit. The part of a transaction that falls between two checkpoints.

reentrant pool. The storage space in memory into which reentrant programs and tables are loaded for execution. Reentrant pool specifications are part of a system's definition.

reentrant program. A program that dynamically acquires all variable storage and does not modify its own code.

referenced table. The table in a referential constraint that contains the primary key. To assure referential integrity between two tables, a row in the referenced table cannot be deleted or have its primary key altered if the primary key value exists as a foreign key in the referencing table.

referencing table. The table in a referential constraint that contains the foreign key. To assure referential integrity between two tables, a row can be inserted in the referencing table only if the value of its foreign key exists as a value in the primary key of the referenced table.

referential constraint. A constraint that defines a relationship between two tables. A referential constraint identifies a foreign key in the referencing table whose value must exist as a value in the primary key of the referenced table.

referential integrity. In CA-IDMS/DB, the data integrity rule that guarantees consistency between tables that share a common column value. For instance, referential integrity would ensure that customer order information is not added to the database unless the customer has already been added. *See also* integrity, recovery.

reflexive join. A generic relational operation that yields a result table comprised of columns from different rows of the same table. Reflexive joins are used to implement bill-of-materials structures.

registered user. A user who is permitted to access and/or update an entity occurrence in the data dictionary.

relational DBMS. A database management system based on the relational model. *See also* relational model.

relational key. In IDD, a user-defined keyword that relates entities of the same type. User-defined nests are implemented through relational keys.

relational model. A data model in which data is represented in data tables consisting of rows and columns. Data tables can be manipulated with the three relational operations: select, project, and join. *See also* relational DBMS.

relational table. *See* data table.

RELOAD utility statement. Reloads the database using input created by the UNLOAD utility statement.

relocatable storage. Storage within the DC/UCF region/partition that is eligible to be written to scratch across a pseudo-converse. In CA-ADS, storage used for currency blocks, CA-ADS control blocks (OTBs), OTB extensions, and variable dialog blocks (VDBs) can be designated as relocatable. Relocating storage makes more efficient use of the storage pool but increases I/O to the scratch area. *See also* fast mode threshold, relocatable threshold.

relocatable threshold. The point at which DC/UCF transfers CA-ADS relocatable storage to the scratch (DDLDCSCR) area across a pseudo-converse. The relocatable threshold is expressed as a percentage. For example, if the relocatable threshold is 75, DC/UCF only transfers inactive storage from the storage pool to the scratch area when the storage pool is more than 75% full. *See also* fast mode threshold, relocatable storage.

relocated record. In CA-IDMS/DB, a record that is moved from its home page to another page by the RESTRUCTURE SEGMENT utility statement, the migration utility (RHDCMIG1 and RHDCMIG2), or as a result of processing an SQL DDL statement. A relocated record is considered an SR3 system record and the line index created for the record on the new page contains a record id of 3. When CA-IDMS/DB accesses the record, it can return the record to its home page if there is space available. *See also* SRn system record.

remote task. In a DC/UCF communications network, a task that uses UCF to execute at a target node rather than at the host node. The host node performs terminal I/O operations. The target node executes the program and

either performs database I/O or routes the request through DDS to yet another node. In this case, both the UCF front end and the UCF back end are DC/UCF systems.

requestor lock table (RLT). In CA-IDMS/DB, the lock table created for each transaction with longterm locks.

required field. A field for which the terminal operator must supply input data.

reserved word. A keyword in command syntax that cannot be used for any other purpose. For instance, a reserved word cannot be used where the syntax calls for a user-supplied value.

resident program. A program that is loaded at DC/UCF system startup and remains in the system region/partition for as long as the system is running. Resident programs are loaded into the appropriate program or reentrant pool. You designate resident programs by using the system-generation PROGRAM statement.

resource. 1) A component component or service used by the DC/UCF system at runtime. Resources include CPU time, program pools, storage pools, tasks, queues, buffers, journals, RLEs, RCEs, DPEs, EREs, database-key locks, the log, the loader, and system service calls. 2) Within the security facility, entities in your environment to which you control access. *See also* global resource, system resource, database resource.

resource control element (RCE). The control block created when a task acquires a resource. The RCE contains pointers to the task identifier and to the resource being used.

resource link element (RLE). The control block that links all resources being used by a task.

resource name table. A table created by CA-IDMS from the RESOURCE TABLE system generation statement. The resource name table identifies the nodes on which resources in your DC/UCF communications network are located. DC/UCF uses the resource name table at runtime to identify the location of resources required to satisfy database requests.

resource, securable. A CA-IDMS/DB entity to which you control access. For example, securable resources are users and system profiles.

resource timeout interval. The amount of time the DC/UCF system permits a terminal to be inactive before it invokes a resource timeout program. Terminal activity occurs when the user presses a control key (such as

ENTER or PF1) that passes data to the system. *See also* resource timeout program.

resource timeout program. The program invoked by the DC/UCF system when the resource timeout interval expires. *See also* resource timeout interval.

resource type. Within the security facility, entities in your environment to which you control access. *See also* global resource, system resource, database resource.

response. *See* application response, global response, internal response, local response, valid response.

response field. The special 1- to 32-character map field in which terminal operators can enter a response field value (for a response process or application response) to select the next processing to be performed. The \$RESPONSE map field or the AGR-MAP-RESPONSE field of the ADSO-APPLICATION-GLOBAL-RECORD can be used as the response field.

response field value. In a dialog, the field value associated with a specific response process in the dialog. At runtime, the user can enter the response field value in the map's response field to execute that response process.

response process. An optional component of a CA-ADS dialog. A response process is executed after the end user presses a control key (such as PF1 or ENTER) in response to the dialog's map. A given dialog can have any number of response processes.

A response process is defined as a standalone process module in the data dictionary. You make a process module a response process for a dialog by using the dialog compiler.

RESTORE utility statement. The utility that restores one or more areas in a database by copying back the contents of a file created by the BACKUP utility statement.

restructure. The process of reorganizing the structure (records, sets, areas) of an existing non-SQL defined database. Restructuring is usually performed to improve database efficiency or to meet changing data management requirements. *See also* RESTRUCTURE CONNECT utility statement.

RESTRUCTURE CONNECT utility statement. The utility that connects new prior and owner pointers in existing sets.

restructure schema compare utility. *See* IDMSRSTC utility.

RESTRUCTURE SEGMENT utility statement. The utility that modifies record occurrences to match new schema specifications.

retrieval path. The logical-record path (defined in a subschema) that carries out the OBTAIN logical-record function requested by an application program. *See also* OBTAIN path group.

retrieval area status. The status of an area defined to the runtime DMCL in which database transactions executing under the central version can retrieve but not update data in the area; a local mode transaction or another central version can update the area.

retrieval ready mode. An area ready mode in which the readying transaction can retrieve, but not update, data in the area.

RHDCMAP1. A batch component of the Mapping Facility. *See also* RHDCMPUT.

RHDCMIG1 and RHDCMIG2 utility programs. Utility programs that convert the DDLML area of Release 10.0 dictionaries to the DDLML area of a Release 12.0 dictionary.

RHDCMPUT. A batch component of the Mapping Facility. *See also* RHDCMAP1.

RHDCOPTF. A module loaded at CA-IDMS startup that identifies the optional functionality activated for the system. This load module is created by assembling and linking the source version of the RHDCOPTF module. The specific optional functionality to be activated is set by using the #DEFOPT macro.

RHDCSMIG utility program. A utility program that converts user, task, and program security definitions from a Release 10.2 dictionary to preliminary Release 12.0 security definitions and authorizations.

RLE. *See* resource link element (RLE).

RLT. *See* requestor lock table (RLT).

role. In a subschema, an identifier used when a database record occurs more than once in a single logical-record definition. Roles are typically used to process bill-of-materials structures.

rollback. The process, following transaction failure or execution of the ROLLBACK function, that restores the database to an earlier state. The rollback process restores the database by using before images from a journal file. *See also* ROLLBACK utility statement, recovery, ROLLBACK.

ROLLBACK. The database access function that requests recovery of the run unit back to the start of the last recovery unit. *See also* rollback.

ROLLBACK utility statement. The utility that restores all or part of a database to a previous state by applying before images from the journal file.

rollforward. The process of restoring the database by using after images from a journal file (in contrast to rollback, which uses before images). The rollforward process is performed with the ROLLFORWARD utility.

ROLLFORWARD utility statement. The utility that restores a backup copy of all or part of a database to a subsequent condition by applying after images from the journal file.

root. The portion of a variable-length record placed on the home page.

root page. *See* home page.

root segment. *See* fragment.

row. A horizontal row of data in a table.

row-level security. The ability to control access to table rows depending on the data they contain. In ASF, row-level security acts in conjunction with passkey security, which controls access to entire tables. *See also* passkey.

RTSV checkpoint. A checkpoint written automatically to the journal file each time CA-IDMS/DB encounters an error while executing an SQL or physical DDL statement that updated the database. During recovery, CA-IDMS/DB rolls back to the journal record designated by the RTSV checkpoint record.

RUAL. An abbreviation for the DC/UCF nucleus module RHDCRUAL. RUAL allocates and deallocates system run units for executing tasks.

runaway interval. The amount of time the DC/UCF system permits a task to execute without returning control

to the system. A task returns control to the system for each system service call and each database operation.

runtime phase. The portion of the debugging process that takes place during the execution of a program.

runtime system. 1) A teleprocessing system that defines the operating environment for CA-IDMS/DB. The runtime system provides both central version services and teleprocessing services. 2) The DC/UCF task used to execute an CA-ADS or CA-ADS/Batch application.

run unit. That portion of non-SQL program processing that begins with a BIND RUN-UNIT statement and ends with a FINISH statement. It can consist of any number of database requests, and a single program can consist of several consecutive run units. *See also* extended run unit, system run unit, predefined run unit, database transaction.

scalar function. In SQL programming, a function whose argument includes at least one value expression on which the function operates. The result of a scalar function is a single value. This value is derived from the expression or expressions in the named argument. For example, the scalar function DATE obtains the date from the a specified value expression.

schema. The part of the database definition that describes the logical structure of the database, including the names and descriptions of all tables, elements, records, sets, and areas. One schema exists per database.

schema compiler. A CA-IDMS/DB-supplied program that converts source non-SQL schema DDL statements into description of a database and stores this description in the data dictionary.

schema Data Description Language. The DDL that defines a non-SQL schema.

schema DDL. *See* schema Data Description Language.

schema-owned record. A database record defined through the schema compiler or copied into the schema.

scratch area. *See* DDLDCSCR area, DDLOCSCR area.

scratch record. A record stored in the DDLDCSCR or DDLOCSCR area. Scratch records, once stored, are available to any task running on the same logical terminal. Scratch records are maintained until system crash or shutdown.

screen. *See* panel.

SDEL task. In CA-IDMS centralized security, a DC/UCF system task that deletes all privileges associated with each logical-deleted group.

search condition. A boolean expression that yields a truth value. The operands of a search condition are predicates, and the operators are the logical operators AND, OR, and NOT.

searched delete. Using SQL DML, removing rows in a table by deleting each row in the table that meets the search criteria specified in the WHERE clause of the DELETE statement. *See also* positioned delete.

searched update. Using SQL DML, modifying data in a table for any row that meets the search criteria specified in the WHERE clause of the UPDATE statement.

secondary key. An attribute in a data entity that is used by certain business functions to access occurrences of that entity. For example, an EMP-NAME might be the secondary key and EMP-ID might be the primary key for the entity EMPLOYEE. *See also* primary key, foreign key.

secondary storage pool. A DC/UCF storage pool other than pool 0 or 255. Secondary storage pools are numbered from 1 through 254. DC/UCF uses secondary storage pools for user-type storage (rather than system storage). Secondary storage pools are optional.

security domain. Under centralized security, the set of DC/UCF systems and local mode jobs that share a set of user definitions.

segment. A grouping of areas and files that contain the data in the database. A segment represents a physical database usually defined by a single schema. For CA-IDMS/DB to access a segment at runtime, it must be included in the definition of a DMCL.

select. The generic relational operation through which only specific rows of a data table are accessed.

SELECT clause. In LRF, the section in a PATH-GROUP clause that delimits a path and, optionally, contains path selectors.

SELECT statement. An SQL database access statement that retrieves values from one or more tables and views and returns the values in the form of a result table.

selection criteria. An expression that specifies which rows of a data table are to be selected for processing.

Selection criteria can include both arithmetic and logical operations.

selectors, path. *See* path selectors.

self-referencing relationship. A relationship that allows users to combine information from different occurrences of the same entity. For example, to relate different employees in a company, an application might combine data from different occurrences of the EMPLOYEE entity. *See also* bill-of-materials structure.

server node. In a DC/UCF communications network, the DC/UCF system that actually services the database request initiated by the host node. *See also* host node, target node.

service driver. *See* log service driver.

session default dictionary. The dictionary that will be accessed within a user session if none other is explicitly identified. The session default dictionary can be established through profile attributes, DCUF statements, SYSIDMS parameters, or the system default dictionary.

set. A group of record blocks that represent an CA-IDMS set and are connected to one another with set connection lines in the CA-IDMS/Schema Mapper data structure diagram. Each set is numbered in the diagram with a unique set number. Sets are also listed, with their descriptions, in the Cross-Reference Report.

set connection. A physical line or series of lines, each with an arrow at the end that points toward a member of a set in the CA-IDMS/Schema Mapper data structure diagram. Set connections connect an owner of a set and its members.

set junction character. Under the CA-IDMS/Schema Mapper, an uppercase letter O used at a junction where a multi-member set connection line splits into more than one line.

set membership options. *See* membership options.

set number. A unique number assigned by CA-IDMS/Schema Mapper to identify each set and index in a schema or subschema. Set numbers appear in the CA-IDMS/Schema Mapper data structure diagram as part of set connection lines and index lines. For multi-member sets, the set number appears in the diagram next to the owner and each member. Set numbers are cross-referenced in the Cross-Reference Report.

set occurrence. An owner record occurrence and all of its member record occurrences.

SET OPTIONS. The function that defines default processing options for the current session of a CA-IDMS compiler.

set order options. *See* order option.

set type. A structure representing a relationship between two or more record types, where one record type is the owner and the others are members.

setup phase. The preliminary part of the debugging process when, typically, programs are identified to the debugger.

shared cache. The Shared Cache feature allows multiple CA-IDMS Central Versions to share database buffers for one or more files through the use of the IBM Parallel Sysplex Coupling Facility.

shared cursor. A cursor that is declared and opened in one program and accessed in another program, where both programs are included in the same access module. *See also* cursor, updatable cursor, global cursor, external cursor.

shared retrieval ready mode. A retrieval ready mode in which other transactions executing concurrently under the central version can ready the area in shared update, shared retrieval, protected retrieval, or protected update modes.

shared storage. Storage in a DC/UCF storage pool that, once allocated, is available to all tasks in the DC/UCF system. *See also* kept storage, user storage.

shared update ready mode. An update area ready mode in which other transactions executing concurrently under the central version can ready the area in shared update or shared retrieval ready modes.

share lock mode. A logical lock mode placed on areas and records that guarantees that no updates are made to data while a transaction is accessing it. A share lock placed on an area implies a share lock on each record within the area. *See also* exclusive lock mode, null-lock mode.

shiftn character. A hardware-dependent character that indicates the beginning of a double-byte character set string. A shiftn character can occupy from 1 to 3 bytes.

shiftout character. A hardware-dependent character that indicates the end of a double-byte character set string. A shiftout character can occupy from 1 to 3 bytes.

shutdown. The process of stopping DC/UCF system execution.

signoff function. In CA-ADS, a system function used in conjunction with signon security. When selected at runtime, the SIGNOFF function signs the user off the application, then redisplay the screen from which the function was selected.

signon function. In CA-ADS, a system function that validates a user's id and password when the user invokes an application.

signon processing. Under centralized security, processing that identifies and validates the user requesting CA-IDMS services. It also processes user-related information such as the list of groups to which a user belongs and profile information.

signon profile. 1) A command list (CLIST) module associated with a particular user (through a system or user profile attribute) and executed automatically when that user signs on to DC/UCF. 2) In CA-OLQ, a series of CA-OLQ commands saved as a qfile that is executed automatically when a user signs on to CA-OLQ. A signon profile can be associated with a particular user to tailor the user's CA-OLQ session.

SKIP Mode. An Animation Mode that you specify during an Animation Runtime Session in Interruptable Mode. CA-IDMS/ADS Alive responds by changing the Animation Mode to STEP Mode and a specified number of statements are bypassed before dialog animation is stopped again. *See also* STEP Mode.

SME. *See* space management entry (SME).

SMI. *See* space management interval (SMI).

SMP. *See* space management page (SMP).

sorted set. In CA-IDMS/DB, an indexed set in which the member record occurrences can be retrieved in order by database key, symbolic key, or generic key.

source dictionary. In CA-IDMS/Dictionary Migrator, the dictionary which acts as a reservoir for entities that are available for migration into another (object) dictionary. Your source dictionary is not changed during the migration process. Multiple source dictionaries can be used during each migration. You can also use your

object dictionary as a source dictionary. *See also* object dictionary.

source record. At DC/UCF system generation, the data dictionary record that represents an independent entity. *See also* object record.

space available count. The number of bytes of free space on a database page.

space management entry (SME). In CA-IDMS/DB, a 2-byte item on the space management page of an area in the database. There is a one-to-one correspondence between the number of space management entries and the number of pages in the area. The SMEs indicate the amount of available storage on the page.

space management interval (SMI). The number of pages controlled by one space management page (SMP).

space management page (SMP). A page in an area reserved by CA-IDMS/DB to keep track of available space on each page in that area. A space management page contains space management entries.

spanned record. 1) A database record whose occurrences span VSAM control intervals. 2) A journal record that spans journal blocks.

spawning. The process by which the DBMS creates a new index level to accommodate new members added to a sorted indexed set.

special register. A system-supplied variable defined by CA-IDMS/DB for use in an SQL session. You use special registers in place of literals primarily in SQL DML statements. For example, the special register, CURRENT DATE, can be used in WHERE clause selection criteria.

splitting. The process of creating a new system index record (SR8) on the same level as the original system index record.

SQLCODE. A field in the SQLCA structure that contains a return code indicating information about the execution of an SQL statement.

SQL Communication Area (SQLCA). A data structure to which the DBMS returns information about the execution of an SQL statement.

SQL database access. A database access method that uses SQL DML to access data and that does *not* require

knowledge of the physical structure of the database. *See also* navigational database access.

SQL DDL. A data definition language that defines SQL entities such as tables and views.

SQL Descriptor Area (SQLDA). A data structure to which the DBMS returns information about a prepared SQL statement. The SQLDA values describe the result of the prepared statement.

SQL DML. A data manipulation language that obtains and updates the database by selecting, updating, inserting, and deleting rows in data tables.

SQL schema. A named collection of tables, views, and access modules. You create an SQL schema with the CREATE SCHEMA statement.

SQL session. A logical connection between the executing application and the DBMS. It begins when the application connects to a dictionary and ends when the application disconnects from the dictionary. The dictionary must contain the definition of the data to be accessed.

SQL trace facility. A facility activated by the SQLTRACE SYSIDMS parameter that you can use to trace the execution of SQL statements in a batch program.

SQL transaction. A database transaction (a unit of recovery) within an SQL session.

SREPORTs. Statistics reports that summarize data contained in the archived system log file.

SR. In CA-IDMS/DB, one of seven system record types used for space management:

- **SR1** Owner of the system-owned CALC set. An SR1 record occurs once for each page in an area as bytes 5 through 16 in the page header.
- **SR2** A record that replaces records relocated by the RESTRUCTURE SEGMENT utility statement, the migration utility (RHDCMIG1 and RHDCMIG2), and SQL processing following the addition of a column to a table.
- **SR3** A record that identifies a relocated record.
- **SR4** A record that identifies fragments of variable-length records.
- **SR6** A dummy record that appears in the subschema tables as a place holder for excluded

owner or member record definitions in set relationships.

- **SR7** Owner record in an index. An SR7 record is stored CALC under the name of the indexed set and occurs once for each indexed set in the database that does not have a user-defined owner record.
- **SR8** A record that contains index entries that point to lower level SR8 records or to an indexed set's member record occurrences.

stack. The area at the end of a task control element (TCE) that is used by DC/UCF during task execution as a temporary work area and as a place to save registers.

standalone CA-ICMS. A CA-ICMS environment in which CA-IDMS/DB is not also installed.

standalone record. A database record that is not related to any other record through a set.

standalone table. For maps, an edit or code table defined independently in the data dictionary (by using the TABLE statement). A standalone table can be used by any record element that is associated with a map. *See also* built-in table.

standard collating sequence. A collating sequence based on the EBCDIC value of the data. *See also* natural collating sequence.

starting point. Under CA-IDMS/Dictionary Migrator, this entity and all of its related entities are copied into the object dictionary. You determine what the starting point is by specifying the entry point and whatever option you choose to include in the LEVEL parameter.

startup routine. The module that is executed to begin the DC/UCF startup process. The startup process begins the execution of a DC/UCF system.

statistics reports. *See* SREPORTs.

status code. A 4-digit code returned by the system to an application program to describe the completion status of a manipulation function or a database access.

status definition record. *See* ADSO-STAT-DEF-REC.

status monitor. The Unicenter TNG CA-IDMS Agent Status Monitor collects overall performance related statistics which are represented as groups in the MIB.

STEP mode. A mode of application execution in which the current screen is redisplayed with messages describing

the results of the transaction before control is passed to the next sequential screen. STEP mode is the default in ADSA, ADSC, MAPC, and user-written applications. *See also* FAST mode.

STEP Mode. An Animation Mode that you specify during an Animation Runtime Session in Interruptable Mode. CA-IDMS/ADS Alive stops at every line of code for the current process. *See also* SKIP Mode.

storage cushion. Space reserved in a DC/UCF storage pool for use by tasks that are already executing.

storage mode. The characteristic of database records that indicates whether the length of a stored record is fixed (F), variable (V), fixed compressed (FC), or variable compressed (VC). *See also* location mode.

storage pool. The storage space in memory that is allocated for work areas and control blocks required by DC/UCF system and by programs executing under the DC/UCF system. Typically storage pools hold: program variable storage, COBOL working storage, variable portions of CA-ADS dialogs, subschema tables, and access modules, currency blocks, database lock tables, buffer pools, user trace buffers, and secondary allocations of null PDEs. Storage pool specifications are part of a system's definition. *See also* primary storage pool.

storage protection. A measure that protects pages in the system region/partition from being overwritten.

STORE. The navigational database access function that adds a record occurrence to the database.

STORE logical record. The LRF database access function that adds a logical-record occurrence to the database.

STORE path group. A collection of paths (predefined in a logical-record subschema) designed to service application programs that request a STORE logical-record function.

subarea. A subdivision of an area's page range.

subprogram. An Ada DML or DML logical record program that represents a CA-IDMS/DB DML statement.

subschemata. A program view of a non-SQL defined database used at runtime, consisting of all or a subset of the data elements, record types, set types, and areas defined in the schema. Logical-record components are also defined in the subschemata.

subschema compiler. A CA-IDMS/DB-supplied program that converts source subschema DDL into subschema descriptions. The subschema compiler stores source descriptions in the data dictionary and stores load modules in the DDLCLD area.

SUBSCHEMA-CTRL. Names the IDMS communications block through which an application program and the DBMS communicate.

subschema Data Description Language. The DDL that defines a subschema.

subschema DDL. *See* subschema Data Description Language.

SUBSCHEMA-LR-CTRL. Names the logical-record request control (LRC) block through which an application program and LRF communicate.

subschema usage mode. The type of database access permitted to programs that use a particular subschema: logical records only, database records only, or mixed (both logical records and database records).

subsystem. An IDD entity type used to document automated or manual data processing systems. *See also* system.

suspense file. In CA-ADS/Batch, a file defined to store input records found to contain edit errors at runtime.

SVC. *See* CA-IDMS SVC.

sweep the database. *See* area sweep.

symbolic key. One or more user-defined record elements used to store or retrieve data, as determined by application requirements. The key can be a primary key, foreign key, or some other meaningful element in the record. Under CA-IDMS/DB, keys are used to store data through the CALC location mode and/or to sort data in indexed and chained sets. Database keys (db-keys) are not symbolic keys.

symbolic parameter. A parameter that connects a generic logical definition of a subarea, displacement, or index to a specific definition in the physical database definition. With symbolic parameters, multiple physical databases can use the same schema definition.

symbol table. A dialog generation option used to specify whether or not a symbol table is created for a dialog. The symbol table facilitates the use of element names and process line numbers by the online debugger.

synchronization stamp. An attribute of an SQL-defined segment that is used to make sure that the logical database definition in the access module corresponds to the current logical database definition in the dictionary.

synonym. An alternative name that is defined for an entity in the data dictionary. Synonyms are defined in DDDL statements or in the schema.

syntax converter. In IDD, the facility that captures COBOL or PL/I record and element definitions and adds them to the data dictionary.

syntax files. Under CA-IDMS/Dictionary Migrator, a collection of files that contain source statements used as input to the CA-IDMS utilities and compilers. The syntax files permit completion of the movement of entities and entity components from one or more source dictionaries to the object dictionary.

SYSCA schema (SQL). At sites with the SQL option, the schema that contains the CA-supplied views of the SYSTEM tables and records in the IDMSNWK schema. These views restrict access to table definition information based on a user's SELECT authority. *See also* SYSTEM schema (SQL).

SYSCTL file. The system control file in a system used with a program that executes in a different region from DC/UCF. The SYSCTL file contains parameters that define the DC/UCF system, CA-IDMS SVC, node, and database the program will use.

sysgen. An abbreviation for system generation. *See also* system generation.

SYSIDMS parameter file. A parameter file added to the JCL stream of batch jobs running in local mode or under the central version. It specifies: physical requirements of the environment, such as the DMCL and database to use at runtime; runtime directives that assist in application execution; operating system-dependent file information.

system. 1) A DC/UCF system. 2) An IDD entity type used to document automated or manual data processing systems. *See also* subsystem.

system dictionary. The dictionary that includes all information required to establish, maintain, and control the processing environment. It contains the DC/UCF system definition and physical database definitions. Each runtime environment must have a system dictionary named SYSTEM which contains the following areas:

DDLDMML, DDLDCLOD, DDLDCMSG, DDLDCAT, DDLDCATX, and DDLDCATLOD.

system function. 1) In CA-ADS, a predefined function available to ADSA-generated applications. The system functions are POP, POPTOP, TOP, RETURN, HELP, QUIT, ESCAPE, SIGNON, SIGNOFF, FORWARD, and BACKWARD. A system function is incorporated into an application when that function has been associated with a valid response. 2) A DC/UCF system task (such as SIGNON, DCMT, and DCUF).

system generation. The process of using the system-generation compiler to populate the data dictionary with the definition of a DC/UCF system.

system-generation compiler. A CA-IDMS/DB-supplied program that accepts source statements defining a DC/UCF system and stores the definition in the data dictionary.

system index. A standalone index structure providing alternate access to entity occurrences. The root (or top index entity) is an SR7 entity occurrence. There is an internal record type with a location mode of CALC.

system log. *See* log.

system mode. The execution mode in which a program can access all storage pages in the DC/UCF region/partition.

system-owned indexed set. An indexed set in which the owner record is a system-defined SR7 record. The location mode of an SR7 record is CALC on the set name for non-SQL defined indexes or on an internally-generated name for SQL-defined indexes. There is at most one occurrence of an SR7 record for each system-owned index. *See also* user-owned indexed set.

system photo. The information at the beginning of a system or task snap that shows all currently executing tasks and the resources allocated to each task.

system profile. A profile that includes attributes that apply to users of a specific DC/UCF system. For example, a system profile might identify the name of a dictionary a user can access. *See also* user profile.

system record. In CA-IDMS/DB, one of the nine system record types (for example, SR1 and K0). System records are used internally by CA-IDMS/DB to perform space management functions.

system reports. *See* CREPORTS.

system resource. Within centralized security, an entity shared system-wide by CA-IDMS processing under the central version. *See also* global resource, database resource.

system run unit. A database transaction initiated by the DC/UCF system as part of providing a standard service such as writing a message. You can predefine system run units. *See also* predefined run unit.

SYSTEM schema (SQL). At sites with the SQL option, the schema associated with the tables that comprise the catalog component of the dictionary. *See also* SYSCA schema (SQL).

system storage pool. *See* primary storage pool.

system task. A CA-IDMS supplied task that performs one of a variety of DC/UCF system support services at runtime. System tasks include the DCMT, DCUF, SIGNON, and SIGNOFF tasks.

system trace. The DC/UCF debugging tool that records the system service modules used in processing a DC/UCF request. System trace, which is enabled at system generation, stores the service module record in a trace table. When a program issues a SNAP request, DC/UCF writes the trace table to the log.

system 90. The executable demonstration system generated at installation time. This system provides the batch simulator system used to run demonstration jobs. Later in the installation procedure, system 90 can optionally be generated as an online system with one terminal (the console) and any number of specified users.

system 99. A DC/UCF system that is generated at installation time. System 99 provides a sample system configuration. This base system can be used to generate other DC/UCF systems.

table. 1) An IDD entity type used to define edit and code tables. Edit and code tables are used during automatic editing to validate and encode/decode data values in map data fields. 2) A CA-IDMS/DB data table. *See also* data table. 3) Any collection of data in tabular form.

table data area. In ASF, the area in which table data is stored, as opposed to the table definition area in which table definitions are stored. Table definitions and data should not be stored in the same area. *See also* area, IDMSR-AREA2.

table definition area. In ASF, the area of a CA-IDMS/DB database used to store definitions of data tables, as opposed to the table data area in which table data is stored. Table definitions and data should not be stored in the same area. *See also* IDMSR-AREA.

table definition record. In ASF, a record, stored in the table definition area of the database, that contains the definition of a data table. The definition record is stored separately from the actual data for that data table.

table ID. A generic term that represents either an SQL base table defined in the dictionary or a temporary table defined during the current transaction.

table procedure. A program written in either Assembler, COBOL, or PL/I that gets invoked by the DBMS engine when an SQL request is executed that references the table procedure name.

tabular data. *See* data table.

tailored diagram. A data structure diagram as it appears after you have used at least one optional CA-IDMS/Schema Mapper parameter statement to modify the layout or format of the diagram that is generated by default (use of the PROCESS statement only).

target node. In a DC/UCF communications network, the DC/UCF system that is identified to service a database request by the host node. *See also* host node, server node.

target page. The database page that the DBMS uses when trying to store or access a particular record.

task. 1) The basic unit of work under DC/UCF that consists of the execution of one or more programs. A task is identified to the system by its task code (such as MAPC). 2) An IDD entity type used to document teleprocessing system tasks.

task application table (TAT). In CA-ADS, the table that contains a list of all task codes and the applications they activate. The TAT is updated in the data dictionary by the application compiler and is used at runtime. The TAT can be built and migrated by using the ADSOTATU utility. *See also* ADSOBTAT, ADSOTATU.

task code. The unique name that identifies a task to DC/UCF. The user types the task code in response to the DC/UCF system prompt. Task codes are defined at system generation or by using a DCMT VARY DYNAMIC TASK command.

task control element (TCE). The control block that ties together all of the resources of a task, indicates the status of the task, and provides a stack of system working storage and user registers.

task definition element (TDE). The DC/UCF control block that specifies general task characteristics. Task definition elements are assigned either at system generation or by using the DCMT VARY DYNAMIC TASK statement.

task identifier. The unique identifier (numeric) assigned to the execution of a task or a task thread.

task thread. A particular execution of a task.

TAT. *See* task application table (TAT).

TCE. *See* task control element (TCE).

TCF. *See* transfer control facility (TCF).

temporary table. A table that exists only for the duration of the SQL transaction in which it is created. The table can be populated and that table data can be manipulated within the transaction.

terminal I/O. The input/output operations between main storage and a user terminal. Terminal I/O is controlled by a teleprocessing monitor.

terminating task data transfer. A means of data transfer from program storage to a terminal or device using UCF to pass the data and control *serially* between a UCF front end and back end. The front end initiates a task on the back end system and waits until the task is complete to return the requested information. *See also* non-terminating task data transfer.

test mode. The mode of DC/UCF that you use to execute test versions of programs. You specify test modes by using the DCUF TEST command. For CA-ADS/Batch applications, you specify test modes by including the test control parameters in the job stream.

With test mode in effect, DC/UCF first searches for programs whose version number matches that specified by the DCUF TEST command. You can specify version numbers for dictionary load modules. Additionally, OS/390 and BS2000/OSD users can specify test load libraries in the startup JCL by using *Vnnnn* DD statements, where *nnnn* corresponds to the test version number.

third normal form. *See* normalization.

threshold task. A task to be invoked when a queue contains a certain number of entries (records). When the specified number of entries is reached, the system initiates the task, which processes the records in the queue.

ticker interval. The frequency with which the DC/UCF system checks for time-related events (such as runaway tasks).

TIME checkpoint record. The checkpoint that marks the initialization of the journal buffer. The date and time values for this checkpoint are supplied when the journal buffer is written to the journal file.

TP-monitor program. A program that executes under a teleprocessing (TP) monitor other than IDMS-DC. TP-monitor programs use central version operations to access CA-IDMS/DB databases.

trace. Under CA-IDMS/Dictionary Migrator, to identify an entity, its related entities, its related components, and all of the connections among these entities and components.

trace facility. Any debugging tool used to record a sequence of runtime commands, programs, or modules. CA-IDMS/DB provides the following trace facilities: user trace facility, system trace facility, CA-IDMS/DB trace facility, and ADS trace facility.

transaction. 1) The series of tasks that perform one logical activity. For example, a transaction typically includes all tasks that display, retrieve, and process data on a single map. Note, this type of transaction is different than a database transaction, which CA-IDMS/DB uses to manage resources and control recovery. *See also* database transaction. 2) An IDD entity type used to document collections of functions or processes.

transaction lock. A lock set and examined by CA-IDMS/DB in order to control access to individual records and areas. *See* locking.

transaction state. The state in which an SQL transaction can access data. READ ONLY means the transaction can read, but not update, data. READ WRITE means the transaction can read and update data.

transaction statistics. Statistics collected by DC/UCF for a transaction.

transfer control facility (TCF). The CA-IDMS software tool that enables the terminal user to transfer from one CA-IDMS online tool to another without having to return first to DC/UCF.

Transfer File. An output file that reflects the layout and format of a CA-IDMS/Schema Mapper data structure diagram. The Transfer file contains parameter statements. You can use it as a time-saving device, as input, when recreating or modifying a CA-IDMS/Schema Mapper data structure diagram.

TRANSIENT READ isolation level. An isolation level in which CA-IDMS/DB places no locks on rows accessed by the transaction, allows the transaction to retrieve locked rows, and prevents the transaction from performing updates. This isolation level provides no protection from the effects of concurrent database transactions; that is, it allows a transaction to read uncommitted data and allows other transactions to update the data. *See also* CURSOR STABILITY isolation level, isolation level.

transient retrieval area status. The status of an area defined to the runtime DMCL in which database transactions executing under the central version can retrieve, using no record locks, data in the area. A local mode transaction or another central version can update the area.

transient retrieval ready mode. A retrieval ready mode set automatically by a transaction if the area has a transient retrieval status or the isolation level of the SQL transaction is transient read. Under this ready mode, other transactions executing concurrently under the central version can ready the area in any mode.

transparency. In IDBCOMM, a process of data transmission that prevents data from being mistaken for control characters and from being converted improperly during transmission.

When transparency is not requested, data tables are sent as is and binary data is sent in 4-bit format. Data is grouped into 4-bit chunks during the conversion process.

When transparency is requested and the type not specified, the default is 6-bit format. Data is grouped into 6-bit chunks during the conversion process.

TUNE INDEX. The Tune Index Utility walks a sorted index in order to cause the adoption of orphaned indexed records. An orphaned indexed record is a record whose index pointer does not point back to the index record (SR8) which contains the record's index entry.

UCF system. A database/data communications system that includes CA-IDMS/DB and UCF. A UCF system does not include IDMS-DC.

UDAS. The CA-IDMS UCF Distributed Application Support Feature. With this feature, an application may be distributed between the front-end system and the back-end system in an environment that consists of one of two CA-IDMS/DC systems or a CA-IDMS/DC back end and a front end on a system using one of the TP-monitors supported by CA-IDMS/DC.

Unicenter TNG Agent Technology. The Unicenter TNG Agent Technology infrastructure enables the use of the CA-IDMS Agent and manager to monitor and report the status of CA-IDMS systems.

Unicenter TNG CA-IDMS Agent. The Unicenter TNG CA-IDMS Agent is a software product that executes as a task in the CA-IDMS region on the mainframe. It detects events that occur in the CA-IDMS system and relays them to the Unicenter TNG console administrator using the Simple Network Management Protocol (SNMP).

unique constraint. A constraint that requires each row of a table be unique with respect to the value of a column or combination of columns. A unique constraint is defined when an index or CALC key is defined with the UNIQUE parameter. *See also* referential constraint.

unique key. In logical database design, an attribute or combination of attributes whose value(s) uniquely identifies an occurrence of an entity or relationship.

unlinked constraint. A referential constraint for which CA-IDMS/DB does *not* maintain a physical linkage between the rows in the referenced and referencing tables. Instead, the referencing table must have a CALC key or index key defined on the foreign key and the order of the columns in the primary key must match the order of columns of the foreign key.

unlinked index. A system-owned index in which there are no index pointers in the member records.

unlinked relationship. A relationship in which no embedded pointers are used to link related entity occurrences. *See also* linked relationship.

unload/reload. The process of unloading and reloading a database or portion of a database. The unload/reload process is performed with the CA-IDMS/DB utility statement UNLOAD and RELOAD, and is sometimes required when restructuring a database.

UNLOAD utility statement. The utility that unloads records from one or more areas of the database in preparation for reloading.

UNLOCK utility statement. The utility that removes the external lock on an area.

unsorted set. A set in which the member records are not maintained in sequence by a symbolic key value.

unstructured object. *See* free-form object.

updatable cursor. A cursor that allows the program to update or delete the row on which the cursor is positioned. *See also* cursor, global cursor, shared cursor, external cursor.

updatable view. A view derived from a single table or view through which you can update, insert, and delete rows.

update area status. The status of an area defined to the runtime DMCL in which a database transaction executing under the central version can retrieve and update data within the area; local mode transactions and other central versions can retrieve from, but not update, the area.

update-intent-exclusive lock. A logical lock placed on an area that allows exclusive locks to be placed on records within the area by the issuing transaction, but not by other transactions. *See also* intent lock, intent-share lock, intent-exclusive lock.

update path. The logical-record path (defined in a subschema) that carries out the ERASE, MODIFY, or STORE logical-record function requested by an application program.

update ready mode. An area ready mode in which the readying transaction can both update and retrieve data within the area.

UPDATE statement. An SQL database access statement that modifies the values in one or more rows of a table.

UPDATE STATISTICS utility statement. For an SQL-defined database, the utility that updates statistical information maintained in the dictionary for one or more tables.

upload. The transfer of data from a personal computer or minicomputer to CA-ICMS.

USA date/time format. A date/time format that complies with the IBM USA standard: DATE as *mm/dd/yyyy* and TIME as *hh:mm AM* and *hh:mm PM*.

user. Under centralized security, an entity created with the CREATE USER statement that defines a user in the user catalog.

user catalog. Under centralized security, the repository that contains the definition of all authorization IDs within the CA-IDMS security domain, definitions of user profiles, and privileges held by users and groups on global resources. *See also* global resource.

user-defined edit module. In the DC/UCF mapping facility, an Assembler program that can be coded to supplement or replace automatic editing and error handling on mapin and/or mapout. *See also* automatic editing and error handling.

user-defined entity. An IDD entity type used to document information that does not conform to any of the standard entity types.

user-defined nest. A relationship between occurrences of a single entity type expressed in terms that are meaningful to IDD users.

user exit. A predefined entry point in a DC/UCF system. User exits let you receive control at specific times during system execution. You can use these exits to implement various types of site-specific processing, including statistics collection and security checks.

user function. *See* DCUF command.

user mode. The execution mode in which a program can access only storage pages that it owns.

user-owned indexed set. An indexed set in which the owner of the set is a user-defined record. *See also* system-owned indexed set.

user profile. A profile that includes attributes for a user session on any DC/UCF system in the security domain. For example, system-independent information such as the user's employee number. *See also* system profile.

user program function. *See* program function.

user response. In CA-ADS, the combination of a control key and response field value (if any) that a runtime user enters on mapin. In an application, the user response must be a valid application response.

user storage. Storage in a DC/UCF storage pool that, once allocated, is available for use by the requesting task. *See also* kept storage, shared storage.

user trace facility. The DC/UCF debugging tool that saves information related to programs executing from a logical terminal. The user trace facility is controlled by the DCUF SET USERTRACE command. The facility captures the program name, request type, and system registers for each program executed from a logical terminal.

user-written edit module. *See* user-defined edit module.

validate. In system generation, the process used to verify and cross-reference relationships among all components of the system definition.

VALIDATE utility statement. The utility that checks referential constraints for a referencing table, making sure that referenced rows exist and contain the appropriate column values.

valid response. In CA-ADS, a global or local response that is defined as valid for a particular application function. More than one response can be valid for a single function.

value. In logical database design, a single occurrence of an attribute.

variable dialog block (VDB). In CA-ADS, a nonreentrant table used by the runtime system to obtain user-specified information about a particular dialog. The VDB is dynamically created for each dialog when the dialog is initiated. It resides in the storage pool and contains header information, the map request block (MRB) for the dialog (if any), and a variable record element (VRE) for each record used in the dialog.

variable field. In the Mapping Facility, any map field whose value can be changed during map execution. The following types of fields are variable: data fields, message fields, page fields, and response fields.

variable-length record. In CA-IDMS/DB, a record whose length depends on a variable field (that is, a record defined with an OCCURS DEPENDING ON clause).

variable record element (VRE). In CA-ADS, a control block that contains variable runtime information on a record used in a dialog. One VRE is established for each record in a dialog. Internally, CA-IDMS/DB also treats fixed-length compressed records as variable-length records.

VDB. *See* variable dialog block (VDB).

VECT. The DC/UCF symbol used to designate the debugger's vector table.

VIA location mode. The location mode that clusters member records in the same physical location for efficient database access. Optionally, VIA can cluster member records with their owners.

VIA overflow. *See* overflow.

view. 1) A table that is not physically stored in the database but instead derives data from one or more other tables each time the view is requested. 2) A subset of a record definition that, through the subschema, restricts the elements of the record that a given program can access. A subschema view for a record is defined through the DDDL or subschema compiler. *See also* table, base table, updatable view.

Visual DBA. *See* CA-IDMS Visual DBA.

VM/ESA option. In CA-IDMS/DB installations, an option that allows a DC/UCF system to run in a VM/ESA virtual machine. The VM/ESA option also makes communication possible from one virtual machine to another in a VM/ESA environment.

Vnnnn. The generic term for the ddname or linkname of a test load library. *Nnnn* indicates the DC/UCF test version under which load modules from this library are used. For example, if a user specifies DCUF TEST 6, DC/UCF searches V0006 before searching the current loadlist. Test load libraries are available under OS/390, VM/ESA, and BS2000/OSD.

VRE. *See* variable record element (VRE).

walking a set. A retrieval process in which a program using navigational DML or CA-IDMS/DB, in response to an SQL request, can access all of the members of a set starting with the owner record occurrence and accessing each member occurrence in the set until the program reaches the owner record again.

wallpapering. The process of bursting and assembling a CA-IDMS/Schema Mapper data structure diagram and (probably) hanging it on a wall for viewing.

warmstart. A method of automatic database recovery that occurs when CA-IDMS/DB recognizes a system failure when it restarts the system. It uses the journal files to rollback all transactions that were active when the system failed. To do this, it identifies the disk journal

file active at the time of failure, locates the last journal record written before the system failed, and rolls back and writes ABRT checkpoints for all incomplete transactions.

WCC. *See* write control character (WCC).

weak entity. An entity in the database that is identified only by its relationship with another entity. Typically a weak entity has a primary key that contains only one foreign key.

weight factor. A number assigned by the user to a port and used by DDS to determine path selection between two DDS nodes when more than one path is available.

WHERE clause, path-DML. In LRF, the clause in a path-DML command that specifies selection criteria to identify the desired database-record occurrences.

WHERE clause, program request. In LRF, the clause in a logical-record program request that specifies selection criteria to identify the desired logical-record occurrences.

WHERE clause, SQL. In SQL, the clause in an SQL DML statement (for example, SELECT and UPDATE) that specifies selection criteria to identify the desired table rows.

wildcard. A single character that represents one or more characters in a string. An entity name with a wildcard character identifies all the entities whose names match the pattern established by the wildcarded name.

window. In CA-IDMS Performance Monitor, the portion of a screen that contains data for a specific statistic or help topic. CA-IDMS Performance Monitor windows allow you to control rows and columns of data that exceed the width and depth of the terminal screen.

work record. *See* dialog work record, map work record.

write control character (WCC). In a map, the internal character that holds various mapout specifications for the display of that map.

XCTL. Part of the version of the Assembler DML transfer statement that requests DC/UCF to pass control to a program, but not to return control to the program issuing the transfer statement.

3270 simulation facility. The DC/UCF tool that you use to simulate 3270-type terminal operations at non-3270-type terminals or in batch mode. *See also* batch simulation.

