IMS

Master Index and Glossary

Version 9

IMS

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Version 9

Note

Before using this information and the product it supports, be sure to read the general information under “Notices” on page 353.

Quality Partnership Program (QPP) Edition (June 2004) (Softcopy Only)

This QPP edition replaces or makes obsolete the previous edition, ZES1-2351-01. This edition is available in softcopy format only. The technical changes for this version are summarized under “Summary of Changes” on page vii.

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About This Book

This information is available only in PDF format. To get the most current version of the PDF format, go to the IMS Library page at www.ibm.com/software/data/ims/library.html.

Summary of Contents

This book contains:

1. The glossary of terms for the IMS library
2. All the index entries from each of the books in the IMS library

Glossary

This is a glossary of IMS terminology. The entries are in alphabetic order.

If a term has an abbreviation or acronym, it is shown in parentheses after the spelled-out term.

Master Index

This master index lists topics alphabetically and refers to publications in which these topics are discussed. Along with the publication indication is the page number where the subject can be found.

If an index entry appears in several publications, the master index entry may refer to all or some of the publications; the subentries refer to the individual publication. For example:

```
/TRACE  command
        description      CR—  479
        starting  TM  trace     DGR—261
```

In the above example, the description of the /TRACE command is in the *Command Reference* on page 479. The discussion of starting a TM trace using the /TRACE command is in the *Diagnosis Guide and Reference*.

The master index is a compilation of the indexes of the books in the IMS library. The individual books may refer to the same topic in slightly different ways, and these differences are reflected in the master index. For example, entries may be both singular (“message”) and plural (“messages”), and in the master index these entries may be separated by other entries (such as “message format” and “message queues”). Also, different entries may refer to the same topic in both abbreviated and unabbreviated form: thus “HDAM” and “Hierarchical Direct Access Method” are referenced here.

The IMS Version 9 book abbreviations used in this *Master Index and Glossary* (MIG) are as follows:

ADB *Administration Guide: Database Manager*
AS *Administration Guide: System*
ATM *Administration Guide: Transaction Manager*
APDB *Application Programming: Database Manager*
APDG *Application Programming: Design Guide*
APCICS *Application Programming: EXEC DLI Commands for CICS and IMS*
APTM *Application Programming: Transaction Manager*
BPE *Base Primitive Environment Guide and Reference*
CG *Customization Guide*
CQS *Common Queue Server and Base Primitive Environment Guide and Reference*
CR *Command Reference*
CSL *Common Service Layer Guide and Reference*
DBRC *DBRC Guide and Reference*

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DGR *Diagnosis Guide and Reference*
IIV *Installation Volume 1: Installation Verification*
INTRO
An Introduction to IMS
ISDT *Installation Volume 2: System Definition and Tailoring*
JGR *IMS Java Guide and Reference*
OLR *HALDB Online Reorganization Guide and Reference*
OTMA *Open Transaction Manager Access Guide and Reference*
OG *Operations Guide*
RPG *Release Planning Guide*
URDBTM
Utilities Reference: Database and Transaction Manager
URS *Utilities Reference: System*

How to Use This Book

In addition to being an index for the entire IMS library, each index entry is a hyperlink to the actual information in the target book. Just click on the index entry and the target book opens to that page. To enable this feature, you must have all the IMS book PDFs in the same subdirectory.

Recommendation: To be most useful, we recommend that you have your Adobe Acrobat Reader preferences set to open the cross-document link in a different window. With this setting, after you are done reading in the target book (and then close that book), the MIG will remain open.

To enable this setting in your Adobe Acrobat Reader 5.0:

1. Open the Adobe Acrobat Reader
2. Click **Edit-→ Preferences-→ General-→Options** and make sure that “Open Cross-Doc Links in Same Window” is not selected.

How to Send Your Comments

Your feedback is important in helping us provide the most accurate and highest quality information. If you have any comments about this or any other IMS information, you can do one of the following:

- Go to the IMS Library page at www.ibm.com/software/data/ims/library.html and click the Library Feedback link, where you can enter and submit comments.
- Send your comments by e-mail to imspubs@us.ibm.com. Be sure to include the title, the part number of the title, the version of IMS, and, if applicable, the specific location of the text you are commenting on (for example, a page number in the PDF or a heading in the Information Center).

Summary of Changes

Changes to This Edition of This Book for IMS Version 9

This edition contains new technical information for IMS Version 9, as well as editorial changes.

Changes to This Book for IMS Version 9

This edition is a draft version of this book intended for use during the Quality Partnership Program (QPP). Contents of this book are preliminary and under development.

This book contains new technical information for IMS Version 9, as well as editorial changes.

Terms for the following enhancements have been added or changed:

- Fast Path Multiple Areas Shared VSO Structures
- HALDB Online Reorganization Support
- IMS Enhanced Command Environment

Library Changes for IMS Version 9

Changes to the IMS Library for IMS Version 9 include the addition of new titles, the change of one title, and a major terminology change. Changes are indicated by a vertical bar (|) to the left of the changed text.

New and Revised Titles

The following list details the major changes to the IMS Version 9 library:

- *IMS Version 9: HALDB Online Reorganization Guide*

  The library includes new information: *IMS Version 9: HALDB Online Reorganization Guide*. This information is available only in PDF and BookManager formats.
- *IMS Version 9: An Introduction to IMS*

  The library includes new information: *IMS Version 9: An Introduction to IMS*.
- The information formerly titled *IMS Version 8: IMS Java User's Guide* is now titled *IMS Version 9: IMS Java Guide and Reference*.
- The library includes new information: *IMS Version 9: IMS Connect Guide and Reference*. This information is available only in PDF and BookManager formats.

Terminology Changes

IMS Version 9 introduces new terminology for IMS commands:

type-1 command
: A command, generally preceded by a leading slash character, that can be entered from any valid IMS command source. In IMS Version 8, these commands were called *classic* commands.

type-2 command
: A command that is entered only through the OM API. Type-2 commands are more flexible and can have a broader scope than type-1 commands. In IMS Version 8, these commands were called *IMSplex* commands or *enhanced* commands.

Accessibility Enhancements

Accessibility features help a user who has a physical disability, such as restricted mobility or limited vision, to use software products. The major accessibility features in z/OS products, including IMS, enable users to:

- Use assistive technologies such as screen readers and screen magnifier software

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- Operate specific or equivalent features using only the keyboard
- Customize display attributes such as color, contrast, and font size

User Assistive Technologies

Assistive technology products, such as screen readers, function with the IMS user interfaces. Consult the documentation of the assistive technology products for specific information when you use assistive technology to access these interfaces.

Accessible Information

Online information for IMS Version 9 is available in BookManager format, which is an accessible format. All BookManager functions can be accessed by using a keyboard or keyboard shortcut keys. BookManager also allows you to use screen readers and other assistive technologies. The BookManager READ/MVS product is included with the z/OS base product, and the BookManager Softcopy Reader (for workstations) is available on the IMS Licensed Product Kit (CD), which you can download from the Web at www.ibm.com.

Keyboard Navigation of the User Interface

Users can access IMS user interfaces using TSO/E or ISPF. Refer to the *z/OS V1R1.0 TSO/E Primer*, the *z/OS V1R1.0 TSO/E User's Guide*, and the *z/OS V1R1.0 ISPF User's Guide, Volume 1*. These guides describe how to navigate each interface, including the use of keyboard shortcuts or function keys (PF keys). Each guide includes the default settings for the PF keys and explains how to modify their functions.

Glossary

A

ACB. *See* application control block.

ACBGEN. *See* application control block generation.

access intent. What tells DBRC how the IMS™ requesting access to the database plans to use the database. During system definition, you declare one of four levels of access intent for each application program. *See also* exclusive access, update access, read access, read-only access.

active IMS. (1) In an RSR environment, an IMS that runs at an active site, performs production work, and is monitored by the tracking IMS. *See also* tracking IMS. (2) In an XRF environment, an IMS that performs production work and is monitored by the alternate IMS. *See also* alternate IMS. (3) In an FDBR environment, the IMS that performs production work. The active IMS is monitored by a separate Fast Database Recovery IMS control region. *See also* Fast Database Recovery (FDBR) region.

active IRLM. The IRLM supporting the active IMS in an XRF complex. *See also* alternate IRLM.

active libraries. The libraries from which IMS draws its execution information when online change is used.

active site. In an RSR environment, the data-processing center containing active IMSs.

active subsystem. *See* active IMS.

ADS. *See* area data set.

advanced program-to-program communication (APPC)/IMS. A part of IMS TM, using the CPI communications interface, that allows IMS application programs to communicate with other programs using LU 6.2.

affinity. *See* VGR affinity and RM affinity.

AGN. *See* application group name (AGN).

alternate IMS. In an XRF environment, the IMS that monitors the active IMS and takes over production work when the active IMS fails.

alternate IRLM. The IRLM supporting the alternate IMS in an XRF complex. *See also* active IRLM.

alternate program communication block (alternate PCB). A TP PCB, defined by the user, that can be used to describe output message destinations other than the terminal that originated the input message. Where SAMETRM=YES is not implicitly or explicitly specified, an alternate PCB's destination can be either a logical terminal or an input transaction queue. *See also* modifiable alternate PCB, express alternate PCB, and alternate response PCB.

alternate response PCB. A PCB that defines a logical terminal and can be used instead of the I/O PCB when required to direct a response to a terminal in response mode, conversational mode, or exclusive mode.

AO. *See* automated operator.

AOI. *See* automated operator interface.

APPC/IMS. *See* advanced program-to-program communication (APPC)/IMS..

application control block generation (ACBGEN). The process by which the application control blocks are generated.

application control block (ACB). A control block created from the output of DBDGEN and PSBGEN and placed in the ACB library for use during online and DBB region type execution of IMS.

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Application Development Facility (ADF). An IBM® licensed program that is an aid for reducing the time, cost and risk in developing and maintaining IMS applications. Running as an application program under IMS, ADF interprets specifications and executes applications, making it possible for many IMS applications to be developed and put into production without conventional programming.

application group name (AGN). A name that represents a defined group of IMS resources (PSBs, transaction names, and logical terminal names). Application group names are used by the Security Maintenance utility.

application group name (AGN) security. Security implemented by the Security Maintenance utility to limit the access to MS resources from application programs and utilities executing in dependent regions.

application load balancing. An optional facility that enables an application program to be scheduled into more than one message or batch message region at the same time.

application program checkpoint. A commit point that occurs when an application program issues a checkpoint call. IMS then releases segments it has enqueued for the program since the last commit point; makes permanent the program's changes to the database; and, if the program processes messages, sends output messages to their destinations.

application program output limits. An option that allows users to limit the size and number of output segments produced by an application program. This option is intended to minimize the impact of erroneous application program operations.

APPLID name. The name by which VTAM® knows an IMS system for establishing sessions. The name is specified in a VTAM APPL definition statement and in the APPLID keyword of the IMS COMM system definition macro.

archiving logs. The process of copying records or logs of IMS activity from the online log data set, which is temporarily recorded on DASD, to the system log data set, which is stored on DASD, tape, or mass storage.

area. A subset of a DEDB that is defined as a VSAM ESDS data set. Each area in a DEDB consists of a root-addressable part, an independent-overflow part, and a sequential-dependent part. Areas contain the entire logical structure for a set of root segments and their dependent segments.

area data set (ADS). A data set that contains a DEDB area. IMS can maintain up to seven copies of this data set. *See also* multiple area data sets.

area-level sharing. *See* level one.

associated printing. The determination of a destination print queue from the user queue. The destination print queue is specified at logon or signon time, and is created during signon of the user who created the input transaction.

attribute simulation. An MFS option that allows an application program to simulate display (video) attributes such as high intensity on printer devices.

autologon. The option of IMS to automatically create a VTAM session for a non-signed on user to which output has been made available.

automated operator program (AOP). An application program that can issue a subset of IMS operator commands and receive status information on the execution of the commands.

Automated Operator Interface. An IMS interface that allows installations to monitor and control IMS activities. The interface enables (1) an application program, using DL/I calls, to issue a subset of IMS operator commands and receive command responses, (2) a user exit routine to monitor activities and take appropriate action, and (3) operator commands, responses, and asynchronous output destined for the IMS master terminal to be logged to the secondary master terminal.

availability manager. The component of z/OS™ that performs XRF processing. Specifically, it performs I/O prevention during takeover.

B

back-end system. An IMS in an MSC network that accepts transactions from the front-end system, calls application programs for transaction processing, and routes replies back to the front-end system for response to the terminal. A back-end system may also perform front-end processing. A back-end system can be another IMS connected by an MSC link or can be part of the same IMSplex as the front-end system. *See also* front-end system.

backout. The process of removing all the database updates performed by an application program that has terminated abnormally. *See also* dynamic backout.

balanced system. An IMS in an MSC network in which some terminals are handled, some messages are routed to other IMSs for processing, and messages are accepted from other IMSs for processing.

Base Primitive Environment (BPE). A system-service-layer component of IMS that provides a common set of system services (such as storage management, tracing, and dispatching) to various components such as CQS and CSL.

basic edit. A facility that performs general editing functions for terminal input and output messages.

batch checkpoint/restart. The facility that enables batch processing programs to synchronize checkpoints and to be restarted at a user-specified checkpoint.

batch image copy. A copy of a database or area that reflects the state of the data at a moment in time when no updates were being made. The Database Image Copy utility (DFSUDMP0) produces batch image copies, which IMS utilities use when recovering from failures.

batch IMS. *See* batch processing program.

batch message processing (BMP) program. An IMS batch processing program that has access to online databases and message queues. BMPs run online, but like programs in a batch environment, they are started with job control language (JCL). *See also* mixed-mode BMP.

batch-oriented BMP program. A BMP program that has access to online databases and message queues while performing batch-type processing. A batch-oriented BMP does not access the IMS message queues for input or output. It can access online databases, GSAM databases, and z/OS files for both input and output. *See also* transaction-oriented BMP.

batch processing program. An application program that has access to databases and z/OS data management facilities but does not have access to the IMS control region or its message queues. *See also* batch message processing program and message processing program.

block-level sharing. A method of sharing data among IMSs so that multiple application programs can access and update data concurrently between multiple IMSs.

BMP program. *See* batch message processing program.

BPE. *See* Base Primitive Environment.

buffer. A section of main storage to which IMS writes an image of the physical block of a database data set that an application wants to access.

buffer handler. The part of an IMS that manages its buffers. The buffer handler maintains pools of buffers.

buffer invalidation. To prevent application programs from using invalid data in a sysplex data-sharing environment, IMS marks all copies of data in IMS buffers invalid once a sharing IMS has updated that data.

buffer lookaside. For shared VSO DEDB areas, an option that tells IMS to check the private buffer pools for requested data before retrieving data from the coupling facility.

buffer pool. A set of buffers that contains buffers of the same length.

C

CA. *See* change accumulation.

CACHE structure. One of the separate sections of the coupling facility storage. The coupling facility storage is divided, under installation control, into distinct sections called structures.

callable services. Services provided by IMS for use by IMS exit routines. These services provide clearly defined interfaces that allow exit routines to request various functions, such as acquiring storage or finding an IMS control block.

catch-up processing. In an RSR environment, the process by which tracked log data is used to bring all recoverable resources (for example, shadow databases) to currency with those resources on the active IMS.

CCB. *See* conversation control block.

CCTL. *See* coordinator controller.

CF. *See* coupling facility.

change accumulation (CA). The process of creating a compacted version of one or more IMS log data sets by eliminating records not related to recovery, and by merging multiple changes to a single segment into a single change. Also, the compacted log created by the process.

checkpoint. A point at which IMS automatically records its internal status—system control information with a unique checkpoint ID—and writes it to the restart data set (RDS). This information allows IMS to reconstruct its condition if later recovery is necessary. A system checkpoint is taken automatically by IMS at selected intervals; a synchronization point is taken whenever an application program requests one. System checkpoints can also be requested by the master terminal operator.

checkpoint data set. A local data set that contains CQS system checkpoint information about a group of shared queues.

child segment. In a database, any segment that is dependent on another segment above it (its parent) in the hierarchy.

CI. *See* control interval.

CIC. *See* Concurrent Image Copy.

CID. The VTAM/NCP communication ID. This value is given to IMS and used by VTAM and IMS to identify a session between IMS and a VTAM logical unit.

class. An attribute related to a transaction code and a message region that is used to determine scheduling. *See also* message class and region class.

classic command. *See* type-1 command.

class–1 terminal. Terminal for which the alternate IMS preopens backup sessions for the primary sessions the active IMS opens; NCP switches sessions from primary to backup at takeover.

class–2 terminal. Terminal for which IMS in the alternate reestablishes service at takeover.

class–3 terminal. Terminal that communicates with XRF IMS but whose sessions are not automatically reestablished at takeover.

CLB. *See* Communication Line Block.

cloned IMSplex. A group of IMSs in a sysplex that share databases, queues, or both, and have identical resource definitions.

CNT. *See* Communication Name Table.

cold queue. A CQS private queue type that contains indoubt data objects for a client that cold started or a CQS that cold started.

cold start. The starting of IMS when it is initialized for the first time or when some error condition prevents a warm or emergency restart. *See also* emergency restart and normal restart.

Command Center. A component of the Control Center that is used to easily issue IMS commands from a workstation to multiple IMS systems.

command code. The portion of the segment search argument that enables an application program to access a database segment based on some variation in either the call function, the segment qualification, or the setting of parentage.

command master. In an IMSplex, the IMS that OM designates to process a command when a command is issued through the OM API. Commands are routed to all IMS systems that are registered for the command and, if the command requires only one IMS to process it, the command master processes the command.

command-processing client. An entity that can process commands or do other work when directed to do so by an OM. In an IMSplex, an IMS control region is a command-processing client.

command significant status. Command significant status relates to the command status associated with a resource. For example, the status of `STOP`, `TRACE`, and `MFSTEST` commands. If a resource structure is defined, the recovery of command significant status is always global, regardless of how end-user significant status is maintained.

commit. To make changes permanent for a resource in order to establish a new consistent state.

commit point. The point at which an application program commits that a section of work is done and that the data it has modified or created is consistent and complete. The application program's output, which has been held up to that time, is sent to its destinations, its input is removed from the message queues, and its database updates are confirmed and made available to other applications. A commit point occurs when a program terminates normally or when it issues a checkpoint call or command. If a program processes messages, a commit point may also occur when it retrieves a new message.

commit processing. The processing that IMS performs at a commit point.

Common Queue Server (CQS). The address space that manages the shared queues (data objects that are stored in a coupling-facility list structure) for its clients (IMS).

Common Service Layer (CSL). The combination of one or more RM, OM, or SCI that provides services to an IMSplex.

Communication Line Block (CLB). An IMS control block representing a VTAM node or a BTAM line. Each VTAM node or BTAM line has a single CLB. For VTAM, it is one of several blocks that are part of the VTCB control block. The CLB represents the TM task in the IMS system for the line or node, and also contains many other fields pertaining to the line or node.

Communication Name Table (CNT). An IMS control block that represents a logical terminal.

complete status message (CSM). For IMS Connect, a message that IMS Connect appends to all successful output data messages that it sends to a client application. *See also* request status message (RSM).

concatenated key. The key constructed to access a particular segment. It consists of the key fields, including that of the root segment and successive children, down to the accessed segment.

Concurrent Image Copy (CIC). A batch utility program that allows you to make a copy of OSAM data sets and VSAM entry-sequenced DBDSs whether or not IMS is running and the database is online.

Connect. *See* IMS Connect.

Control Center. *See* IMS Control Center.

control interval (CI). A fixed-length area of direct access storage in which VSAM stores records and creates distributed free space. Also, in a key-sequenced data set or file, the set of records pointed to by an entry in the sequence-set index record. The control interval is the unit of information that VSAM transmits to or from direct access storage. A control interval always comprises an integral number of physical records.

control interval update sequence number (CUSN). An indicator used in a data-sharing environment to determine which sharing partner last read a CI. IMS compares the value of the CUSN for each CI to determine whether a CI should be updated during area restart or recovery.

control program (IMS). The IMS program that initiates and controls the major IMS facilities, such as IMS database, telecommunications, and message scheduling.

control region. The z/OS main storage region that contains the IMS control program.

conversation. A dialog between a terminal and a message processing program using IMS conversational processing facilities. Also, a dialog between an LU 6.2 program and an IMS application program. A conversation between a terminal and a message processing program is significant status that is kept in RM, if RM is used. Status for a held conversation is not kept in RM. The IMS conversation is represented by a CCB. *See also* conversational processing.

conversational processing. An optional facility allowing a user's application program to accumulate information acquired through multiple interchanges with a terminal, even though the program terminates between interchanges. Conversation information for the active and held conversations is significant status that can optionally be kept in RM if a status recovery mode of GLOBAL was selected.

conversation control block (CCB). An IMS control block that represents a conversation between a terminal and an application program.

coordinator controller (CCTL). A subsystem consisting of the database resource adapter (DRA) and a transaction management subsystem, such as CICS®. A CCTL provides communications and transaction management services for a DBCTL environment, which has no transaction management facilities of its own.

coordinated online change. *See* global online change.

coupling facility (CF). A special logical partition that provides high-speed caching, list processing, and locking functions in a sysplex. IMS saves global information in the coupling facility, so all the IMSs in the IMSplex have access to the global information.

covered database. A database or area in an RSR environment that is tracked by a tracking IMS. Recovery information is not maintained by the tracking IMS for databases or areas that are not covered.

CPI Communications driven application program. An application program that uses CPI Communications calls to receive an incoming message and to send a reply.

CQS. *See* Common Queue Server.

CQS restart. Process by which CQS starts up: either a cold start or a warm start. During a CQS warm start, the CQS environment is restored to the state it was in when CQS terminated. During a CQS cold start the CQS environment is not restored to a previous state; it is reinitialized.

CSL. *See* Common Service Layer.

CSL component. An IMSplex member type that is part of the CSL: OM, RM, or SCI.

CSM. *See* complete status message (CSM).

current position. In an IMS database, the place immediately preceding the segment occurrence that IMS would retrieve if you immediately issued an unqualified retrieval call.

cursor. During a HALDB online reorganization, a marker in a database partition that separates the copied database records from the records that have not been copied. The cursor indicates the progress of the reorganization through the HALDB partition.

cursor-active status. For HALDB OLR, the status in RECON that tells DBRC that an online reorganization has begun.

D

Database Control (DBCTL). An environment allowing full-function databases and DEDBs to be accessed from one or more transaction management subsystems.

database data set (DBDS). A data set containing all or part of a database.

database description (DBD). The collection of macro parameter statements that define the characteristics of a database, such as the database's organization and access method, the segments and fields in a database record, and the relationship between types of segments.

database description generation (DBDGEN). The process by which a DBD is created.

database integrity. The protection of data items in a database while they are available to any application program. This includes the isolation of effects of concurrent updates to a database by two or more application programs.

database-level sharing. A kind of data sharing that enables application programs in one IMS to read data while another program in another IMS reads from the same database or updates it.

database-level tracker. In an RSR environment, a tracking subsystem that tracks the active subsystem's databases or areas. *See also* recovery-level tracker.

database position. A program's place in the database after a DL/I call. IMS keeps track of the program's position in the database in order to process DL/I calls.

database program communication block (DB PCB). The PCB that describes an application program's interface to a database. One DB PCB is required for each database view used by the application program.

database record. In a database, a collection of segments that contains one occurrence of the root segment type and all of its dependents arranged in a hierarchic sequence. It may be smaller than, equal to, or larger than the access method logical record.

database recovery. The process of restoring a physically or logically damaged DBDS by merging an image copy and logs or change accumulations.

Database Recovery Control (DBRC). A feature of the IMS Database Manager that facilitates easier recovery of IMS databases. DBRC maintains information required for database recoveries, generates recovery control statements, verifies recovery input, maintains a separate change log for database data sets, and supports sharing of IMS databases and areas by multiple IMS subsystems.

database reorganization. The process of unloading and reloading a database to optimize physical segment adjacency or to modify the DBD.

database segment. The unit of access; the smallest amount of data that can be transferred by one IMS operation.

Database Surveyor utility. A utility that scans an IMS database and provides reports that help determine the need for reorganization of that database.

Data Communications Control (DCCTL). A subsystem that allows IMS TM to act as a stand-alone, full-function transaction manager that can connect to DB2 UDB for z/OS® or other external subsystems.

data communication program communication block (DC PCB). Obsolete term. *See* telecommunication-program program communication block.

data element. A unit of storage in a coupling facility list structure that makes up a data entry.

data entry. Part of a coupling facility list structure list entry used to hold user-specified data.

data entry database (DEDB). A direct-access database that consists of one or more areas, with each area containing both root segments and dependent segments. DEDBs use a data structure that allows them to be used for both hierarchic processing and journaling. The database is accessed by using VSAM's Media Manager.

data independence. The concept of separating the definitions of logical and physical data such that application programs do not depend on where or how physical units of data are stored; the reduction of application program modification in data storage structure and access strategy.

Data Language/I (DL/I). The IMS data manipulation language, which is a common high-level interface between a user application and IMS. DL/I calls are invoked from application programs written in languages such as PL/I, COBOL, VS Pascal, C, and Ada. It can also be invoked from assembler language application programs by subroutine calls. IMS lets the user define data structures, relate structures to the application, load structures, and reorganize structures.

data management block (DMB). An IMS control block in main storage that describes and controls a physical database. It is constructed from information obtained from the ACB library or the DBD library.

| **data object.** A piece of client data that is placed on the coupling facility by CQS as a result of a CQSPUT request or
| a CQSUPD request. A data object can contain part or all of an IMS message or information about an IMS resource.

data set group. An operating system data set containing a subset of a database with one or more unique segment types. A database always consists of at least one data set group. *See also* primary data set group and secondary data set group.

Data Set Sequence Number (DSSN). A number, maintained by DBRC in the RECON data set, that counts when an application opens a database for update.

data sharing. The concurrent access of databases by two or more IMSs. The IMSs can be in one operating system image or in separate operating system images. They can share data at two levels: the database level and the block level. *See* block-level sharing and database-level sharing.

data-sharing complex. *See* sharing complex.

data-sharing group. The components involved in sysplex data sharing. Among the components are the sharing IMSs, the IRLMs they use, the lock, OSAM, and VSAM structures in the coupling facility, and a single set of DBRC RECONs.

data transparency. An attribute of a input message that causes ISC edit to route the message to its destination without examination or modification.

DBB (Database Management Batch). One of two batch regions (the other being a DLI batch region). DBB is an execution parameter. DBB Batch jobs contain JCL DD statements for ACBLIB.

DB (database) monitor. *See* IMS Monitor.

DBCS/EBCDIC mixed field. A field which contains both EBCDIC data and DBCS data. The DBCS portions should always be enclosed with SO/SI control characters in both inbound and outbound data. In the case of inbound data, the control characters are automatically created by the terminal.

DBCTL. *See* Database Control

DBCTL environment. A database control environment. This is essentially the IMS DB/DC environment without the message handling and queue management capabilities.

DBD. *See* database description.

DB/DC. Database/data communication

DBDGEN. *See* database description generation (DBDGEN).

DBDS. *See* database data set.

DB PCB. *See* database program communication block.

DBRC. *See* Database Recovery Control.

| **DBRC API.** An assembler macro interface to DBRC that user-written application programs use to obtain services
| from DBRC.

DCCTL. *See* Data Communications Control.

DCPCB. *See* telecommunication-program program communication block (TP PCB).

DEDB. *See* data entry database.

default literal. In MFS, a literal field that MFS inserts into an input message when no data for the field is received from the terminal. *See also* explicit literal and system literal.

default system control area (DSCA). In MFS, part of the DOF that causes, when present, specific terminal functions to be performed if the destination terminal has the required features. *See also* system control area.

default terminal security. The basic system security that prohibits the entry of certain commands from any terminal other than the master terminal.

deferred update. A Fast Path capability that keeps updates to databases in main storage buffers until a synchronization point is reached. Synchronization point processing schedules the VSAM writes and response messages to terminals after physically logging the changed data.

dependent region. An address space, managed by the IMS control region, where IMS application programs run. Dependent region types are MPP, BMP, IFP, JMP, and JBP.

dependent segment. In a database, a segment that relies on a higher level segment for its full hierarchic meaning. A child is a dependent segment of its parent.

dependent service element (DSE). A service element (z/OS, VTAM, or the CPC) in the XRF complex that has an alternate computing system but is unable to initiate a takeover. A DSE depends on IMS to recognize a failure in its processing and request that the alternate take over its operation.

descriptor. A skeleton from which an IMS control block is dynamically built. A user descriptor can provide user options and queue names.

destination. In IMS TM, a destination represents an application program or a logical terminal, or an operator command associated with the control region.

destination name type. A special name type used for destination type resources to provide uniqueness for all names included for that set of resources. The set of resources included are LTERMs, transactions, and MSNAMEs. The name type for these resources is 01.

destination parent. In a database, the physical or logical parent reached by the logical child path.

destination system. In an IMS multisystem environment, the system in which the logical destination resides.

device characteristics table. An MFS table generated for IBM 3270 or SLU type 2 devices with symbolic names. An entry is generated for each symbolic name and its associated screen size and physical terminal features. Different combinations of features for the same symbolic name cause separate entries in the table to be created.

device field (DFLD). In MFS, the smallest area in a device input or output format whose content and structure are defined by the user.

device input format (DIF). The MFS control block that describes the format of the data entered on the device and presented to MFS.

device output format (DOF). The MFS control block that describes the format of the output data to be presented to the device.

device page (DPAGE). In MFS, a user-defined group of device field definitions that comprise one or more physical pages to be presented to or received from the device.

DFLD. *See* device field.

DIF. *See* device input format.

direct dependent segment. In a DEDB, a segment chained off a root segment. A direct dependent segment is stored either in the root addressable or the overflow portion of a DEDB area.

directed routing. In an IMS multisystem environment, the routing of response messages to other than the originating terminal as directed by a link receive routing exit routine.

directory entry name. A means of identifying the directory entry of a named object to the coupling facility. The directory, all of its entries, and all of the objects associated with those entries are contained in a single structure.

distributed presentation management (DPM). An MFS option that allows programs to communicate with device independence by sharing message formatting functions between MFS and a user-written remote program. The user-written remote program performs device-dependent formatting.

distributed recovery. Resource recovery in which the resources and participants reside on multiple systems.

DL/I. *See* Data Language/I.

DL/I address space. An address space used by the online IMS control program to contain most of the DL/I code and control blocks. This option can be selected for the online IMS environment to provide an alternative virtual storage configuration.

DLT. *See* database-level tracker.

DMB. *See* data management block.

DOF. *See* device output format.

DPAGE. *See* device page.

DPM. *See* distributed presentation management.

DRA. Database resource adapter

DSCA. *See* default system control area.

DSE. *See* dependent service element.

DSSN. *See* data set sequence number.

dual logging. An optional facility that produces a duplicate copy of log data.

dynamic allocation/deallocation. A function that removes the requirement to allocate IMS databases, area data sets, and certain system data sets through JCL. A data set is allocated during IMS initialization or when it is first used and is deallocated when it is no longer used (that is, closed or stopped).

dynamic backout. A process that automatically cancels all activities performed by an application program that terminates abnormally.

dynamic directory. *See* MFS dynamic directory.

dynamic node. A VTAM node created dynamically. *See* dynamic terminal.

dynamic terminal. A terminal created through the Extended Terminal Option (ETO). This is a terminal that has not been defined within the IMS system definition, and for which no control blocks exist at IMS initialization time. *See also* static terminal.

dynamic user. A user created dynamically.

E

emergency restart. A restart of IMS following an IMS or z/OS failure.

EMH. *See* expedited message handler.

EMHQ. *See* expedited message handler queues.

end-user significant status. A type of significant status that relates to the work associated with a resource. IMS defines conversations, STSN, and Fast Path as end-user significant status for nodes and users.

end-user terminal. A terminal where an IMS user can issue transactions, some commands (based upon security authorization), and message switches.

entryid. *See* list entry ID.

entrykey. A key value assigned to a coupling facility list structure list entry by the originator. For example, CQS uses the client queue name for queues on a queue structure or the client resource name for resources on a resource structure.

EPST. *See* extended partition specification table.

EQE. *See* error queue element.

error queue element (EQE). Indicates that an I/O error occurred on a data set.

ESAF. *See* External Subsystem Attach Facility.

ESCD. *See* extended system contents directory.

ETO. *See* Extended Terminal Option.

ETO descriptor. A template that contains information about the physical characteristics of terminals, user options and message queue names, and remote LTERMs associated with MSC links. *See also* logon descriptor, MFS device descriptor, MSC descriptor, and user descriptor.

exclusive access. An access intent that establishes the intent of an application to reserve the exclusive use of the database. If a subsystem requests and DBRC grants exclusive access to a subsystem, then no other subsystem may access the database concurrently, regardless of the share level of the database.

exclusive mode. An optional mode of terminal operation in which a terminal may receive no output other than a response to an input. Any output excluded from being sent is held for transmission until the terminal is removed from exclusive mode.

expedited message handler (EMH). The IMS Fast Path facility that processes single-segment input and output messages. It bypasses the normal IMS transaction message queuing and application scheduling and is faster.

expedited message handler queues (EMHQ). The expedited message handler shared queues on a coupling facility list structure.

explicit literal. In MFS, a literal field defined by the user for inclusion in an input or output message. *See also* default literal and system literal.

express alternate PCB. An alternate PCB to which output messages are sent before termination of the application program.

extended checkpoint/restart. The facility that allows batch processing programs to establish database positioning and initiate user-specified areas with a DL/I call in place of an OS CHKPT macro.

extended partition specification table (EPST). For Fast Path, an extension of the PST. It contains information for a dependent region that is unique to Fast Path.

extended pointer set (EPS). In a HALDB, an expanded segment prefix that includes information that allows the use of indirect pointers. An EPS is created for logical child segments and secondary index segments.

Extended Recovery Facility (XRF). A function of IMS that minimizes the impact of IMS failures by having an alternate IMS monitor an active IMS and take over production if the active IMS fails.

extended system contents directory (ESCD). An extension of SCD that is used for Fast Path.

Extended Terminal Option (ETO). A function of IMS TM that improves an IMS's availability by reducing the scheduled outages needed to add or delete ACF/VTAM terminals or message queues (LTERMs).

external subsystem. A subsystem that provides a set of resources to be used by IMS, but not controlled by it.

External Subsystem Attach Facility (ESAF). A facility that allows applications running under IMS to obtain data from external subsystems, such as DB2 UDB for z/OS.

F

Fast Database Recovery (FDBR) region. A separate IMS control region that monitors IMS, detects failure, and recovers any database resources that are locked by the failed IMS, making them available for other IMSs.

Fast Path. IMS functions for applications that require good response characteristics and that may have large transaction volumes. Programs have rapid access to main-storage databases (to the field level), and to direct-access data entry databases. Message processing is grouped for load balancing and synchronized for database integrity and recovery. *See also* MSDB, DEDB, and load balancing group.

Fast Path databases. Two types of databases designed to provide high data availability and fast processing for IMS applications. They can be processed by all types of application programs. *See also* main storage database and data entry database.

Fast Path dependent region. *See* IMS Fast Path region.

Fast Path exclusive transaction. A transaction type whose messages are routed to EMH for processing. *See also* Fast Path potential transaction.

Fast Path potential transaction. A transaction type that can be routed to either EMH or TM processing. *See also* Fast Path exclusive transaction.

FDBR. *See* Fast Database Recovery (FDBR) region.

field. In a database, a portion (as defined during DBDGEN) within a segment that is the smallest unit of the data that can be referred to. *See also* key field.

field-level sensitivity. The ability of an application program to access data at the field level.*See* sensitivity.

field search argument (FSA). For Fast Path, the I/O area that is constructed by an application program to identify a field within a segment that is to be processed with a FLD call.

field tab (FTAB). In MFS, a character defined for operator use in separating input fields if the length of the entered data is less than the defined field length, or there is no data for a field.

fill characters. In MFS, the characters used to pad input message fields or output device fields when the length of the received data is less than the length defined for the field or no data is received for the field.

FINDDEST. *See* Find Destination.

Find Destination (FINDDEST). Find Destination is an internal service in IMS used for finding certain IMS resources (CCB, CVB, SMB, CNT, RCNT, LNB, and QAB), most of which represent IMS destinations. For searches other than CVBs and CCBs, if the block is not found, then if requested, a search for an LU 6.2 descriptor is made. If LU 6.2 is not requested, or the search fails, then if ETO is active and the caller of FINDDEST request creation, a call is made to create a new user structure for the given destination name.

format set. In MFS, a format definition, all message definitions that refer to the format definition, and any table referred to by the format.

front-end system. An IMS in an MSC network in which all terminals are connected, messages are routed to the proper processing IMS, and all replies are routed to the terminals. A front-end system may also perform back-end processing. *See also* back-end system, balanced system, pseudo-front-end system, and transaction processing system.

FSA. *See* field search argument.

FTAB. *See* field tab.

full-function database. Hierarchic database that is accessed through Data Language I (DL/I) call language and can be processed by all six types of application programs: IFP, MPP, BMP, JMP, JBP, and batch. Full-function databases include HDAM, PHDAM, HIDAM, PHIDAM, HSAM, HISAM, SHSAM, and SHISAM.

G

gap. Active-site log data that is not available to the tracking IMS. The log data might be missing either because it was not sent or because an I/O error occurred at the tracking site.

Generalized Sequential Access Method (GSAM). A database access method providing accessing support for simple physical sequential data sets, such as tape files, SYSIN, SYSOUT, and other files that are not hierarchic in nature. Available only in BMP and Batch.

Generalized Sequential Access Method program communication block (GSAM PCB). The PCB that describes an application program's interface to a GSAM data set. One GSAM PCB is required for each GSAM data set view used by the application program.

generic resource group. A set of IMS systems that have the same generic resource name, enabling VTAM to distribute terminal sessions among them.

generic resource member. An IMS system that belongs to a generic resource group.

global lock. An IRLM lock that interests two IRLMs; both must coordinate to grant it.

global lock management. Lock management that controls access to resources shared among IMS systems participating in block level sharing.

global online change. An IMS function that changes resources online for all IMSs in an IMSplex.

global service group. The collection of all IMS subsystems that can access a particular set of databases. A global service group can span several z/OS systems at more than one geographical location.

group member. The name of an entity that joins an XCF group and communicates with IMS using the OTMA protocol. A member can be either a server (IMS) or a client.

GSAM. *See* Generalized Sequential Access Method.

GSAM PCB. *See* Generalized Sequential Access Method program communication block.

GSG. *See* global service group.

H

HALDB. *See* High Availability Large Database.

HALDB master. A named entity of a High Availability Large Database that represents only the structural definition of data and refers to the entire collection of partitions.

HALDB OLR. *See* HALDB Online Reorganization (HALDB OLR).

HALDB Online Reorganization (HALDB OLR). A function of IMS that allows non-disruptive, online reorganization of PHDAM and PHIDAM partitions.

HALDB partition. A named entity of a High Availability Large Database that represents a partition of a HALDB.

hierarchic direct (HD) organization. The physical storage organization in which database segments that represent a physical database record are related by direct address pointers in the segment's prefix.

Hierarchical Direct Access Method (HDAM). A database access method using algorithmic addressability to records in a hierarchic direct organization. A choice of OSAM or VSAM ESDS is available as a base for HDAM.

Hierarchical Indexed Direct Access Method (HIDAM). A database access method used for indexed access to records in a hierarchic direct organization. It provides indexed access to the root segments and pointer access to subordinate segments.

Hierarchical Indexed Sequential Access Method (HISAM). A database access method used for indexed access to records in a hierarchic sequential organization.

hierarchic sequence. In a database, the sequence of segment occurrences in a database record defined by traversing the tree top to bottom, front to back, and left to right.

hierarchic sequential (HS) organization. The physical storage organization in which database segments that represent a physical database record are related by adjacency.

Hierarchical Sequential Access Method (HSAM). An IMS HS organization that is used for sequential storage and access of segments on tape or direct access storage. BSAM and QSAM are used as the basis for HSAM.

hierarchy. The tree-like arrangement of segments in a database, beginning with the root segment and proceeding down to dependent segments.

High Availability Large Database (HALDB). A partitioned full-function DL/I database. The supported database organizations are PHDAM, PHIDAM, and PSINDEX.

high-speed sequential processing (HSSP). An option, available only to batch message programs, for optimizing the sequential processing of DEDB areas. A simultaneous image copy can also be created.

HSSP. *See* high-speed sequential processing.

I

IC. *See* image copy.

IFP. IMS Fast Path program, a type of program designed to operate with expedited message handling (EMH) in a Fast Path region.

ILDS. *See* indirect list data set.

ILE. *See* indirect list entry.

ILK. *See* indirect list entry key.

ILS. *See* isolated log sender.

image copy. (1) The process of creating a backup of a DBDS. (2) The backup data set created by the image copy process.

immediate checkpoint. The facility that writes simple checkpoint information without requiring termination of MPPs.

IMS. Information Management System. Any of several system environments available with Database Manager and Transaction Manager, capable of managing complex databases and terminal networks.

IMS DB. The IMS Database Manager licensed program, which processes concurrent database calls and offers high performance for a variety of applications.

IMS Command Center. A component of the Control Center that is used to easily issue IMS commands from a workstation to multiple IMS systems.

IMS Connect. A function of IMS that connects IMS, through OTMA, to TCP/IP clients.

IMS Fast Path region. An online environment in which message-driven programs and DEDB online utilities operate.

IMS generic resource name. The name by which IMS systems in a generic resource group are known to VTAM.

IMSID. The 4-byte subsystem identification used by a given IMS job. For the shared-queues and data-sharing environment, the IMSID must be unique; in other cases, the IMSID does not need to be unique.

IMS instance. An active, unique IMS system in an IMSplex.

IMS Java™. A Java library that allows JDBC access to IMS databases from JMP or JBP applications, WebSphere Application Server for z/OS™ EJBs, WebSphere Application Server Enterprise Edition EJBs, CICS JCICS applications , and DB2 UDB for z/OS stored procedures.

IMS Monitor. An optional IMS facility that records the activity of the IMS control region and dependent regions.

IMS partner name. An 8-byte name that uniquely identifies a particular IMS to DBRC and to IRLM.

IMSplex. One or more IMSs that work together as a unit. Typically these IMSs share resources, run in a Parallel Sysplex environment, and include a CSL.

IMSplex command. *See* type-2 command.

IMSplex component. An entity (typically running in its own address space) that manages resources, operations, or facilitates communications between other IMS-defined entities. Examples of IMSplex components are IMS subsystems (DB/DC, DBCTL, DCCTL), the Resource Manager, the Operations Manager, and the Structured Call Interface. A DLIBATCH or DBBBATCH region is considered a IMSplex component even though it does not interact with the Common Service Layer managers.

IMSplex member. Any IMS-defined entity in an IMSplex that typically runs in its own address space and is managed by the IMS Common Service Layer.

IMS subsystem. *See* IMS system.

IMS-supplied exit routine. A required, complete (but modifiable) exit routine that is delivered with IMS. The exit routine always receives control from IMS at a pre-determined user exit. *See also* sample exit routine.

IMS system log. Logically, a single log made up of online data sets (OLDSs) and write-ahead data sets (WADSs).

IMS TM. The IMS Transaction Manager licensed program, a data communication system that provides high-volume, high-performance, high-capacity, low-cost transaction processing for both IMS DB and DB2 UDB for z/OS databases.

IMS system. The IMS control region and its associated separate address spaces (DL/I and DBRC) and dependent regions.

inactive libraries. Those libraries not currently in use by the online IMS system in a system using online change. These libraries may be at a different level than the current or active libraries.

index pointer segment. In a secondary index, the segment that contains the data and pointers used to index the index target segments.

index source segment. In a database, the segment containing the data from which the indexing segment is built. It can be the same as the indexed segment or one of its dependents.

index target segment. In a database, the segment pointed to by a secondary index entry, that is, from an index pointer segment.

indexed segment. In a database, a segment that is located by an index and termed an index target segment.

indexing segment. The segment in an index database that contains a pointer to a segment containing data (the indexed segment), and termed an index pointer segment.

indirect list data set (ILDS). In a HALDB, an IMS system index data set. The ILDS is a repository for the indirect pointers used for PHDAM and PHIDAM databases. There is one ILDS per partition in PHDAM or PHIDAM databases.

indirect list entry (ILE). In a HALDB, an entry in an indirect list data set.

indirect list entry key (ILK). In a HALDB, a unique token that is assigned to a segment in PHDAM and PHIDAM databases when the segment is created. Eight bytes in length and stored in the prefix of the segment, the ILK uniquely identifies every segment in PHDAM and PHIDAM databases.

indirect pointer. In a HALDB, a pointer stored in the indirect list data set and used to eliminate the need to update pointers throughout other database records when a single partition is reorganized. Indirect pointers are stored in an Indirect List Data Set.

in-doubt unit of work. A transaction or database update that has been prepared for commit, but is not yet committed. If a failure occurs before the in-doubt unit of work is committed, IMS must resolve all the work whose status is in doubt.

in-flight. The state of a resource or unit of recovery that has not yet completed the prepare phase of the commit process.

input message. Any valid command, transaction, or message switch.

input mode. In MFS, the way in which input fields from certain devices are defined by the user to be scanned by MFS. *See also* record mode and stream mode.

input/output program communication block (I/O PCB). A TP PCB provided automatically by IMS to an application program that executes in a communication system with TM. The I/O PCB is the mechanism by which a program obtains an input message from a terminal and returns a reply to the terminal that originated the input message. *See also* alternate program communication block.

input system. In an MSC network, the system to which the input terminal is attached.

input terminal. In an MSC network, the terminal from which a primary request originated.

inquiry logical terminal. A type of logical terminal that is created automatically by IMS and restricted to non-update transactions. Inquiry logical terminals are created for non-VTAM switched lines. *See also* logical terminal.

installation verification procedure (IVP). A procedure integral to the IMS installation process that tests the newly-installed IMS system to verify that the basic facilities of IMS are functioning correctly.

intelligent remote station support (IRSS). The IMS facility that supports the IBM System/3 and IBM System/7.

intent propagation. A condition handled internally by IMS by which processing intent for one segment can propagate to related segments depending on the type of processing and the kind of relationship. It determines the compatibility of scheduling processing applications in parallel or serially.

interactive dump formatter. An enhancement to the IMS offline dump formatter that allows you to format your IMS dumps through a series of interactive menu-driven panels rather than by creating or editing a DFSFRMAT data set.

intermediate system. In an MSC network, a system through which a message passes on its way from the input system to the destination system, or vice-versa, in which no processing other than routing is performed.

Internal Resource Lock Manager (IRLM). A subsystem in an z/OS® environment that provides lock management, used by IMSs to share data.

intersection data. Any user data in a logical child segment that does not include the logical parent's concatenated key.

Intersystem Communication (ISC). A function of IMS that permits the connection of IMS to another IMS subsystem, to CICS®, or to a user-written subsystem, provided both subsystems use the LU 6.1.

I/O PCB. *See* input/output program communication block.

I/O prevention. The z/OS process that, during an XRF takeover, ensures that the failing active IMS cannot change the databases during the takeover.

I/O toleration. The IMS process that, during an XRF takeover, allows transaction processing after a takeover before I/O prevention has completed.

IRLM. *See* internal resource lock manager.

IRLM session. An IRLM may have two kinds of VTAM sessions with another IRLM: a primary session and a secondary session (also called an alternate session).

IRSS. *See* intelligent remote station support.

ISC. *See* Intersystem Communication.

ISC static user. An ISC user defined using the SUBPOOL macro in an IMS system definition.

isolated log sender. In an RSR environment, a component of the Transport Manager Subsystem that sends gap data to the tracking subsystem.

IVP. *See* installation verification procedure.

J

Java message processing (JMP) region. An IMS dependent region with a persistent JVM that allows the scheduling of message-driven Java applications, similar to a MPP.

Java batch processing (JBP) region. An IMS dependent region with a persistent JVM that allows the scheduling of online non-message-driven batch Java applications, similar to a BMP.

K

key. *See* list entry key.

key field. The field in a database segment used to store segment occurrences in sequential ascending order. A key field is also a search field. *See also* search field.

L

latch. A programming device that provides short-term serialization for IMS tasks running in the online IMS system. Similar in function to a z/OS lock.

LBG. *See* load balancing group.

LEID. *See* list entry ID.

level. In a database, the successive vertical dependencies in a hierarchic structure.

level zero data sharing. Also called exclusive level sharing. The level of data sharing in which DBRC allows only one subsystem (for example, one online IMS) to access the database.

level one data sharing. Also called database level sharing and area level sharing. For DEDB areas, DBRC may authorize only one subsystem to update the database and multiple subsystems that do not need to be protected from incomplete changes made by the updater to read it, or it may authorize multiple subsystems to read the database. For area level sharing, DBRC may authorize the update or read of an area.

level two data sharing. Also called intraprocessor block level sharing. DBRC and one IRLM may concurrently authorize and protect multiple subsystems on the same z/OS system for updating or reading the database.

level three data sharing. A level of data sharing where DBRC and one IRLM and VTAM on each z/OS system may concurrently authorize and protect multiple subsystems on different z/OS systems for updating or reading the database. The IRLMs may reside in one or more z/OS operating system images. Also called interprocessor block level sharing.

limit count. The number that determines whether the normal or limit priority value is assigned to a transaction during the scheduling process. *See also* normal priority and limit priority.

limit priority. The priority to which a transaction is raised when the number of transactions enqueued and waiting to be processed is equal to or greater than the limit count value. *See also* normal priority and limit count.

line response mode. A variation of response mode where all operations on the communication line are suspended while the application program output message is being generated. *See also* response mode and terminal response mode.

link. In an IMS multisystem environment, the connection between two systems. *See also* physical link and logical link.

list entry. An entry on an coupling facility list structure list.

list entry controls. Part of a coupling facility list structure list entry that contains control information associated with the list entry such as the entry key and entry ID.

list entry ID (LEID). A unique identifier permanently assigned to each list entry in a coupling facility list structure by the system.

list header. Anchors the list to a coupling list structure and contains control information associated with the list.

list header number. The number of the list header, which identifies the particular list. The list header number ranges from 0 to the maximum defined by the first connector to the coupling facility list structure. The list header number must be specified on IXL requests that access the list structure, to identify to which list the request is applicable.

list structure. A coupling facility structure that enables multisystem applications in a sysplex to share information organized as a set of lists or queues. A list structure consists of a set of lists and an optional lock table, which can be used for serializing resources in the list structure. Each list consists of a queue of list entries.

literal field. In MFS, a message field or device output field defined to contain specific data. *See also* default literal, explicit literal, and system literal.

LLC/CC. *See* low level code/continuity check.

load balancing. *See* application load balancing and transaction load balancing.

load balancing group (LBG). For Fast Path, the grouping of Fast Path input messages for balanced processing by one or more copies of a Fast Path program. There is one LBG for each unique Fast Path message-driven application program.

local cache. A user-allocated and user-managed storage area on the local system.

local destination. In an IMS multisystem environment, a destination that resides in the local system. *See also* remote destination.

local lock. An IRLM lock that interests the IRLM that grants it only.

local lock management. Lock management that controls access to database records used by application programs in the same online IMS system.

local recovery. Resource recovery in which all resources and participants reside on the same system.

local system. In an IMS multisystem environment, a specific system in the multiple configuration. The local system is often used synonymously with front-end system, or the system where the inputting terminal exists. *See also* remote system.

local transaction (LTRAN). In an MSC network, a transaction that is processed totally by the system in which it is defined. *See also* remote transaction.

local view. A description of the data that a particular business process requires. It includes a list of the data elements, a conceptual data structure that shows how the data elements are grouped according to the entities they describe, and the relationships among the groups of data elements.

lock management. The reservation of a segment by a program. Other programs are kept from using the segment until the program using it is done.

lock sequence number (LSN). A unique number, issued sequentially, given to a database resource to identify that it is in use (locked) by a requestor. A locked resource cannot be used until the current requestor has finished using it.

logical association. In a data-sharing environment, the association IMS makes between a VSO DEDB area and a multi-area structure when an XES connection exists between IMS and the structure.

logical child. In a database, a pointer segment that establishes an access path between its physical parent and its logical parent. It is a physical child of its physical parent; it is a logical child of its logical parent.

logical database. A set of logical database record occurrences. It is composed of one or more physical databases; it represents hierarchic, structured relationships between data segments that can be different from the physical structure in which the segments were loaded.

logical database record. In a database, a set of hierarchically related segments of one or more segment types. As viewed by the application program, the logical database record is always a hierarchic tree structure of segments. All of the segments that exist hierarchically dependent to a given root segment and that root segment.

logical data structure. In a database, a hierarchic structure of segments. Application programs written to use IMS deal only with logical data structures.

logical destination. *See* destination, local destination, and remote destination.

logical link. In an MSC network, the means by which a physical link is related to the transactions and terminals that can use that physical link.

logical link path. In an MSC network, the path between any two systems. One or more logical link paths must be defined for each logical link.

logical logging. The process of moving log records into the log buffers. *See also* physical logging.

logical messages. Input or output messages that are in a queue associated with a logical rather than a physical terminal. The message queue can be moved, independent of an application, from device to device.

logical page (LPAGE). In MFS, a user-defined group of related message segment and field definitions.

logical paging. In MFS, the means by which output message segments are grouped for formatting. *See also* operator logical paging.

logical parent. In a database, it is the segment a logical child points to. It can also be a physical parent. Furthermore, it contains the common reference data. The pointer in the logical child to the logical parent can be symbolic or direct.

logical relationship. In a database, a user-defined path between two independent segments.

logical terminal (LTERM). A message destination logically associated with a physical terminal or user. An LTERM is represented by a CNT control block. *See also* remote logical terminal.

logical terminal pool. A user-defined group of logical terminals to be associated with non-VTAM switched communication lines through the `/IAM` command. Each logical terminal pool consists of one or more logical terminal subpools.

logical terminal subpool. A user-defined group of logical terminals within a logical terminal pool. Each usage of the `/IAM` command from a non-VTAM switched terminal causes one logical terminal subpool to be associated with one physical terminal.

logical twins. In a database, all occurrences of one type of logical child with a common logical parent occurrence. *See also* physical twins.

logical unit of work . The processing a program performs from one sync point to the next.

log initiated checkpoint. *See* simple checkpoint and system scheduled checkpoint.

logoff. The act a terminal user performs in order to end a session with IMS.

logon. The act a terminal user performs in order to establish a session with IMS.

logon descriptor. An ETO descriptor that provides information required by IMS to build terminal-related control blocks.

log record identifier (LRID). A sequence number used to identify a log record and to maintain the order of log records for a subsystem.

log router. In an RSR environment, the component of the tracking subsystem that receives log data from active subsystems, stores the data in tracked log data sets, and routes the log records to tracking components.

log sequence number (LSN). Equivalent to the log record identifier (LRID). *See* log record identifier.

log token. A token that identifies a particular log record in the z/OS log stream. A log token is used to locate a log record.

log write-ahead (LWA). The process of logging records of completed operations to the write-ahead data set before entering them in the online log data set.

looptest mode. The test mode that permits the establishment of an output write loop, whereby continuous attempts are made to transmit a user-entered message to the test terminal.

low-level code/continuity check (LLC/CC). An IMS application support program that can generate and update low-level codes in a database, and thereby ensure the continuity of an iterative parts structure.

LPAGE. *See* logical page.

LRID. *See* log record identifier.

LSN. *See* lock sequence number or log sequence number.

LTERM. *See* logical terminal.

LTRAN. *See* local transaction.

LU 6.2 destination. An LU 6.2 application program defined by an LU (logical unit) name plus a TP (transaction program) name.

M

MADS. *See* multiple area data sets.

main storage database (MSDB). A root-segment database that resides in virtual storage. The data in an MSDB is stored in segments. Each segment can be available to all terminals or assigned to a specific terminal; however, segments cannot be assigned to a terminal that is defined through ETO.

marooned log data. In an RSR environment, the active IMS log data, at the remote site, that follows a gap in the log data. Marooned log data cannot be processed by the tracking IMS until the log data that fills the gap has been received.

master. The client that initiates a process step.

master CQS. The CQS that coordinates a sysplex-wide task. The other CQSs sharing in the task are participants. If the master CQS fails for any reason, another CQS takes over the role of master and either continues or aborts the task.

master database. In an RSR environment, a database at the active site. If a remote takeover occurs, the shadow database becomes the master database.

master terminal. The IMS logical terminal that has complete control of IMS resources during online operations.

master terminal formatting option. An MFS option that provides a format for a 3270 master terminal.

member. *See* group member, IMSplex member, generic resource member.

message. Data transmitted between any two terminals, application programs, and IMS systems. Each message has one or more segments.

message class. A class, assigned to a transaction code, that determines within which message region an application program is to process that transaction. *See also* region class.

Message Control Information. The part of the OTMA message prefix that contains such information as the transaction pipe name and the message type. It is not contiguous with the rest of the message prefix and it must be specified for every OTMA message.

message delete option. An option that may be defined to prevent nonessential messages from being sent to a specific terminal.

message destination. A destination that is a transaction, an LTERM, an MSNAME, or a command.

message-driven program. An application program that is initiated by the scheduling of an input message. The types of message-driven programs are MPP, IFP, and JMP. *See also* non-message-driven program.

message editing. The process by which messages are formatted for presentation to an application program or terminal. Additional message editing routines may be written by the user. *See also* basic edit and Message Format Service.

message field (MFLD). In MFS, the smallest area in a message input or output descriptor whose content and structure are defined by the user.

Message Format Service (MFS). An editing facility that allows application programs to deal with simple logical messages instead of device-dependent data, thus simplifying the application development process.

Message Format Service (MFS) control block. In MFS, the representation of a message or format that is stored in the IMS.FORMAT library and called into the MFS buffer pool as needed for online execution. *See also* intermediate text block, message input descriptor, message output descriptor, device input format, and device output format.

message input descriptor (MID). The MFS control block that describes the format of the data presented to the application program.

message mode. A transaction attribute that describes how the transaction is handled by the application program. *See also* single message mode and multiple message mode.

message output descriptor (MOD). The MFS control block that describes the format of the output data produced by the application program.

message prefix. Each message in IMS contains a message prefix. This is a structured set of areas that define information needed for processing each message. Some parts of the message prefix always exist, while others are only included if the IMS system is defined with a particular function.

message processing program (MPP). An IMS application program that is driven by transactions and has access to online IMS databases and message queues. *See also* batch message processing program and batch processing program.

message queue. The data set in which messages are queued before being processed by an application program or sent to a terminal.

message recovery point. The last inbound message for which IMS returned a definite response or the last outbound message for which IMS requested a definite response.

message resynchronization. A facility that detects and corrects a lost message condition if a network failure occurs.

message segment. The unit of access when referring to a message to or from a terminal.

message switch. A terminal input message directed to another terminal without being processed by a message processing program. *See also* program-to-program message switch.

MFLD. *See* message field.

MFS. *See* Message Format Service.

MFS device descriptor. A descriptor used by ETO to update screen size in the DCT and generate new MFS default formats without system definition.

MFS dynamic directory. A technique used by the online IMS control program when operating under z/OS to manage message format control blocks stored in extended private storage.

MFSTEST. An optional MFS facility that allows MFS control blocks to be created and tested online without disrupting production activity.

MID. *See* message input descriptor.

missing log data. *See* gap.

mixed-mode BMP. An IMS batch messaging program that has access to Fast Path and full-function databases.

MOD. *See* message output descriptor.

modifiable alternate PCB. An alternate PCB for which the destination can be changed by the application program during execution.

modified standard DL/I application program. An application program that uses CPI-C calls to allocate additional LU 6.2 conversations to the same or different LU 6.2 devices, and sends and receives data.

MPP. *See* message processing program.

MSC. *See* Multiple Systems Coupling.

MSC descriptor. A descriptor used by ETO to relate LTERMs to statically defined MSC links.

MSDB. *See* main storage database.

MSNAME. An IMS macro used to define a name that represents remote and local system identifiers (SYSIDs). This name is a destination name for IMS messages sent to remote IMS systems with MSC. The link name on the MSNAME macro, transaction names, and LTERM names must be unique. The MSNAME is represented by the LNB control block.

MTO. *See* master terminal.

multiple area data sets (MADS). Multiple data sets that contain shadow copies of DEDB areas. *See also* area data sets.

multiple-area structure. In a data-sharing environment, a coupling facility structure that contains more than one VSO DEDB area. *See also* single-area structure.

multiple message mode. A processing mode in which synchronization points occur only at DL/I CHKP calls or application termination. *See also* single message mode, synchronization point.

Multiple Systems Coupling (MSC). An IMS facility that permits geographically dispersed IMSs to communicate with one another. *See also* IMSplex.

multisystem environment. Two or more (up to 255) IMS systems that run on any supported systems in one or more CPCs; the environment in which Multiple System Coupling runs.

N

name type. A 1–byte number from 1 to 255 that the client specifies as the first byte of the resource ID. The name type guarantees uniqueness of names for all resources of that name type. This prevents clients from putting more than one resource with the same name and name type out on the resource structure. The resources within the name type may have different data resource types.

node. An IMS resource that represents a physical VTAM terminal. The node is represented by a VTCB control block.

noncloned IMSplex. A group of IMSs in a sysplex sharing databases and or sharing queues, where the resource definitions are not identical. Also known as partitioned IMSplex, or asymmetric IMSplex.

non-ISC static user. A user signed on to a static terminal. The user is represented by a user ID that is defined to an enhanced security product such as RACF®.

non-message-driven program. An application program that is initiated by the submission of a batch job. This program runs in either a BMP region, JBP region, or an IFP utility region. *See also* message-driven program.

nonrecoverable status. Any resource status that cannot be recovered after a terminal logoff, a user signoff, or an IMS restart. Nonrecoverable status only exists while the resource is active and is deleted when that resource becomes inactive.

nonrecoverable transaction. An inquiry transaction that is not recovered in the event of a failure.

non-terminal-related MSDB. A type of MSDB characterized by data that is used or updated frequently and segments that are not owned by specific logical terminals. Direct update of segment fields is allowed but no insertion or deletion of segments is permitted.

normal priority. The priority assigned to a transaction when the number of transactions enqueued and waiting to be processed is less than the limit count value. *See also* limit count, limit priority.

normal restart. The restart of IMS after a termination initiated by a /CHECKPOINT command. *See also* emergency restart.

normal XRF operations. The period of XRF processing when the active IMS is processing the IMS workload and the alternate IMS is tracking the active IMS.

null output message. The message IMS sends to a terminal when no other output is immediately available to satisfy terminal requirements.

O

ODBA. *See* Open Database Access.

OFR. *See* online forward recovery.

OLCSTAT. A shared data set that contains the global online change status.

OLDS. *See* online log data set.

OLIC. *See* online image copy (OLIC).

OLR. *See* HALDB Online Reorganization (HALDB OLR).

OM. *See* Operations Manager.

OM API. The API that enables users to write single points of control that communicate with OM.

online. Applicable in the IMS DB/DC, DBCTL, and DCCTL environments, unless otherwise indicated.

online change. An IMS function that supports the adding, changing, or deleting of IMS resources online such as transactions, database directories, program directories, DMBs, PSBs, and Fast Path routing codes without stopping the system to define them.

online forward recovery. In an RSR environment, the process by which a stopped shadow database or area is brought to currency by the tracking IMS with the database or area on the active IMS.

online image copy (OLIC). (1) The process of creating an image copy while the database is online. Also, the image copy created by the process. (2) The image copy created by the online image copy process.

online log data set (OLDS). A data set on direct access storage that contains the log records written by an online IMS system.

online reorganization. Non-disruptive database reorganization that occurs while IMS is online and making updates to a database. Online reorganization clusters data to improve performance.

Open Database Access (ODBA). A callable interface that can be used by an z/OS application program to issue DL/I calls to an IMS DB system. The application program must use the RRS of z/OS as a sync-point manager.

Open Transaction Manager Access (OTMA). A transaction-based, connectionless client/server protocol. Its implementation is specific to IMS in a sysplex environment. The domain of the protocol is restricted to the domain of the Cross-System Coupling Facility (XCF). OTMA is designed to be a high-performance comprehensive protocol that allows clients (z/OS applications) to submit transactions to IMS or issue IMS commands and receive output from IMS application programs and from IMS itself.

Operations Manager (OM). In an IMSplex, a CSL component that receives commands from AOPs, routes the command to IMSplex members, consolidates commands responses, and sends the responses to the AOP.

operator control function. In MFS, the means by which a terminal operator controls the display of output messages. Specific operator control functions are provided by IMS, but their use must be defined by the user in an operator control table.

operator control table. In MFS, a user-defined table of operator control functions; when a table is used, a specific control function is invoked when the input device data or data length satisfies a predefined condition.

operator logical paging. An MFS facility that allows the device operator to request a specific logical page of an output message.

origin system. ***See*** input system.

OSAM. *See* Overflow Sequential Access Method.

OTMA. *See* Open Transaction Manager Access.

output message. A valid response mode message, a conversational mode message, an exclusive mode message, an IMS system message, an application program message, or a message switch.

output total. The total number of messages sent on a line or terminal, including IMS-generated messages that may not have been queued.

Overflow Sequential Access Method (OSAM). An IMS data management access method that combines selected characteristics of BSAM and BDAM. OSAM is used by the following IMS database access methods: HISAM, HIDAM, and HDAM if VSAM is not used. OSAM is also used by some of the online pool management routines.

overflow structure. A coupling facility list structure that contains shared queues when the primary structure reaches a user-specified overflow threshold. The overflow structure is optional. *See also* primary structure.

overlapped read. A read that is performed concurrently with other I/O operations and CPC processing.

P

parallel DL/I. A facility that permits all database calls to be processed in each message processing region or batch message processing region.

parent segment. In a database, a segment that has one or more dependent segments (its children) hierarchically below it.

partition. Refers to that part of a display used as the viewport, its associated window, and its display data buffer when in partitioned state.

partition descriptor (PD). This represents an entry in the PDB for a partition in a partition set. The entry is created by the MFS Language Utility using the PD statement and is referenced by the DPAGE statement PD operand. It contains all of the information necessary to issue the “CREATE PARTITION” Write Structured Field Command for the partition.

partition descriptor block (PDB). A collection of partition descriptor entries representing a partition set. An intermediate text block (ITB) for the PDB is created by the MFS Language Utility. This PDB ITB is used in creating a part of the DOF.

partition set. All of the partitions that are defined in the partition descriptor block (PDB).

partition specification table (PST). An IMS control block that contains dependent-region information.

partitioned HDAM (PHDAM). A partitioned Hierarchical Direct Access Method database organization, one type of High Availability Large Database (HALDB).

partitioned HIDAM (PHIDAM). A partitioned Hierarchical Indexed Direct Access Method database organization, one type of High Availability Large Database (HALDB).

partitioned secondary index (PSINDEX). A partitioned secondary index database organization, one type of High Availability Large Database (HALDB).

partner LU. A remote LU with which a local LU establishes a session or allocates a conversation.

partner systems. In an IMS multisystem environment, two IMS online systems that are connected by an MSC link.

password security. The use of system definition macros and Security Maintenance utility control statements to restrict the use of IMS resources (databases, application programs, physical and logical terminals, transactions, and commands) to a person or persons who can supply the correct password.

path. (1) In a database, a sequence of segment occurrences from the root to an individual segment. (2) In an online IMS system, the route a message takes from the time it is originated through processing; in an MSC network, the route can include more than one IMS system.

PCB. *See* program communication block (PCB).

PCB mask. A data structure in an application program in which IMS puts the status of the application program's DL/I calls. *See also* status codes.

PD. *See* partition descriptor.

PDB. *See* partition descriptor block.

PHDAM. *See* partitioned HDAM.

PHIDAM. *See* partitioned HIDAM.

physical child. In a database, a segment type that is dependent on a segment type defined at the next higher level in the database hierarchy. All segment types in a database, except the root, are physical children since each is dependent on at least the root.

physical database. An ordered set of physical database records.

physical database record. In databases, a physical set of hierarchically related segments of one or more segment types.

physical database record occurrence. An instance of a root segment and the hierarchical arrangement of all its dependent segment occurrences.

physical data structure. A hierarchy representing segment types and the hierarchic arrangement of those segment types in a physical database.

physical link. In an MSC network, the actual hardware connection between two systems. *See also* logical link.

physical logging. The process of writing log records from the log buffers to the system log. *See also* logical logging.

physical page. In MFS, all or part of a logical page that is defined to be entered (input) or displayed (output) at one time.

physical paging. An MFS facility that permits data from a logical page to be displayed in several physical pages on the device.

physical parent. In a database, a segment type that has a dependent segment type defined at the next lower level in the physical database hierarchy.

physical relationship. In a database, the description of the relationship that exists between two or more physical segments.

physical segment. In a database, the smallest unit of accessible data.

physical terminal (PTERM). A hardware device attached to the computer and supported by the DC feature as a terminal. A physical terminal usually has one or more logical terminals associated with it.

physical twins. In a database, all occurrences of a single physical child segment type that have the same (single occurrence) physical parent segment type. *See also* twin segments and logical twins.

PI. *See* program isolation.

planned remote takeover. In an RSR environment, a remote takeover initiated by the IMS operator as part of shutting down the IMSs at the active site in order to transfer the active IMS workload to the remote site.

planned takeover. An XRF takeover that an operator initiates.

PLEID. *See* programmable LEID.

position. *See* database position.

post-takeover. The XRF phase, immediately following takeover, when the new active IMS system does not have alternate.

preload. To load the root addressable portion and independent overflow portion of a VSO DEDB area into a data space when the area is opened.

preopen. To open a DEDB area after the first checkpoint following IMS control region initialization or during /START AREA command processing. If an area is not preopened, it will be opened during the first read request for the area.

presentation space. The display data buffer associated with a partition. The size of the presentation space is defined as equal to, or larger than, the size of the viewport. When the presentation space is equal to the viewport size, all the data in the presentation space is displayed. When the presentation space is larger than the viewport, the user must move the scrolling window within the presentation space to display the data within the viewport. *See also* viewport.

preset destination mode. An optional mode of terminal operation that allows the destination of terminal input to be fixed as a specific transaction code or logical terminal. It is activated by the /SET command and reset by the /RESET command, the /STOP command, ETO user signoff, static terminal logoff, and an IMS restart.

primary data set group. In a database, the first or only data set group defined. The root segment type always resides in the primary data set group. *See also* secondary data set group.

primary request. In an MSC network, a message entered into a terminal before it is processed. *See also* secondary request and response.

primary session. The session between a class–1 terminal and the active IMS.

primary structure. A coupling facility list structure that contains shared queues or shared resources. *See also* overflow structure.

private buffer pool. An area of local storage, used for VSO DEDB data, that can provide lookaside capability for shared VSO areas.

processing intent. An application program attribute, defined in the PSB, that specifies the program's database access privileges such as, insert, delete, and replace.

processing limit. A transaction attribute that defines how many messages the application program is allowed to process during one program execution.

program communication block (PCB). An IMS control block that describes an application program's interface to and view of an IMS database or, additionally for message processing and batch message processing programs, to the source and destinations of messages. PCBs are defined by the user during PSB generation. *See also* database program communication block (DB PCB) and telecommunication-program program communication block (TP PCB).

program isolation (PI). An IMS facility that separates all the activity of an application program from any other active application program until that application program indicates, using a synchronization point, that the data it has modified or created is consistent and complete.

program isolation (PI) lock manager. The facility that was formerly known as PI enqueue-dequeue. The PI lock manager is used for local locking in systems for which no IRLM has been defined. Otherwise, the IRLM is used for all lock management, including local.

programmable LEID. A list entry ID that the IXLLIST requestor specifies, rather than z/OS assigning the LEID to a list entry.

program specification block (PSB). The control block that describes databases and logical message destinations used by an application program. A PSB consists of one or more PCBs.

program specification block generation (PSBGEN). The process by which a PSB is created.

program-to-program message switch. An IMS output message sent by one application program to another application program.

prompt facility. An optional facility for notifying a terminal operator that a current page of output is the last page of a message.

protected conversation. A communication session that is allocated between two programs processing a transaction, that uses the sync point option, and that uses the two-phase commit and resynchronization protocols.

protected resource. A local or distributed resource for which updates are synchronized and controlled.

PSB. *See* program specification block.

PSBGEN. *See* program specification block generation.

pseudo-front-end system. An IMS in an MSC network in which all terminals are handled and a small number of time-consuming transactions are routed to a transaction processing system. *See also* balanced system, front-end system, and transaction processing system.

PSINDEX. *See* partitioned secondary index.

PST. *See* partition specification table.

PTERM. *See* physical terminal.

Q

Qbuffer. Queue Buffer. An IMS Queue Manager incore buffer that is used to keep the working copy of an IMS message segment.

Qname. Queue Name. The name of a queue on Shared Queues upon which data objects reside. The queue name is 16 bytes long, left justified, padded with blanks. The first byte of the client queue name is the queue type. A client queue name of blanks or zeroes is supported.

QMGR. *See* Queue Manager.

qualified call. A DL/I call that contains at least one segment search argument.

qualified segment search argument (SSA). An SSA that contains, in addition to the segment name, one or more qualification statements. A qualified SSA describes the segment type and occurrence that is to be accessed.

Queue Manager (QMGR). An IMS component that manages IMS messages and the space the messages occupy. The IMS Queue Manager is part of a DB/DC or DCCTL environment.

queue structure. A coupling facility list structure that contains queues.

R

random read. A read of one single block.

RAS. *See* resource access security (RAS).

Rapid Network Reconnect (RNR). A function of IMS that automatically reconnects IMS VTAM terminal sessions across outages (IMS, z/OS or VTAM) and subsequent IMS restarts on the same or different z/OS within a sysplex.

RDS. *See* restart data set.

read access. An access intent that establishes the intent of an application to read the database (without making modifications) and to be protected from an updater's incomplete changes. It allows other applications to share the database. It can also be called *read with integrity*.

readiness level. For an RSR database-level tracker, the level that determines whether a shadow database is ready to apply database changes as they are received from the active IMS. *See also* database-readiness-level database, recovery-readiness-level database.

read-only access. This access intent establishes the intent of an application to read the database without being protected from an updater's incomplete changes. It may also be called *read without integrity*.

read with integrity. *See* read access.

read without integrity. *See* read-only access.

RECON. *See* recovery control data sets.

record mode. In MFS, the default input mode in which fields are defined as occurring within a specific record sent from the device. *See also* stream mode.

recoverable resource. *See* protected resource.

recoverable status. Any resource status that can be recovered after a terminal logoff, a user signoff, or an IMS restart.

recoverable service element (RSE). A service element (IMS) that is backed up and that can initiate a takeover.

recoverable transaction. An IMS transaction that is recovered in the event of a failure.

recovery control (RECON) data set. Data sets in which DBRC stores information about logging activity and events that might affect the recovery of databases.

recovery-level tracker. In an RSR environment, a tracking IMS that does not track the active IMS's databases or areas, but instead saves all database changes on tracked logs on the tracking IMS until recovery or remote takeover is performed. *See also* database-level tracker.

recovery log data set (RLDS). A log data set that contains only the log records that are required for database recovery.

recovery-readiness-level database. In an RSR environment, a database or area to which database changes are not applied as they are received from the active IMS, but instead are saved on tracked logs on the tracking IMS until recovery or remote takeover is performed, or until the database's (or area's) readiness level is changed to database readiness level. *See also* database-readiness-level database.

region class. The class IMS assigns to a message region that indicates the message classes that can be processed within the region. *See also* message class.

remote destination. In an MSC network, a destination that resides in a remote system. *See also* local destination.

remote logical terminal. An IMS queue associated with an MSC logical link to allow routing of asynchronous output messages to the local LTERM in another IMS.

remote site. In an RSR environment, the physically remote location of the tracking IMS and shadows databases. If a remote takeover occurs, it becomes the active site.

Remote Site Recovery (RSR). A feature of IMS that minimizes the impact of active site failures by having a geographically remote IMS track active IMSs. Production work is taken over at the remote site in the event of a disaster or site-wide failure at the active site. *See also* tracking IMS.

remote system. In an MSC network, any IMS other than the local IMS.

remote takeover. In an RSR environment, an action initiated by an IMS operator to transfer the active IMS workload from the active site to the remote site. *See also* planned remote takeover, unplanned remote takeover.

remote terminal. A terminal that is not attached to the host system through an I/O channel.

remote transaction. In a MSC network, a transaction whose total processing is shared between two or more systems. *See also* local transaction.

reply. Synonymous with response in a non-VTAM environment.

request status message (RSM). For IMS Connect, a message that IMS Connect sends to the client application to provide request status.

resource access security (RAS). The use of RACF security classes to protect resources (PSBs, transactions, and output LTERMs) from unauthorized use by a dependent region.

resource class. A category of similar resources that are defined in the RACF class descriptor table (CDT).

resource ID. The PLEID that IMS specifies for a resource to insure name uniqueness. The first byte is the name type, and the remaining 11 bytes are the resource name padded with blanks.

Resource Manager (RM). A CSL component that manages resources and coordinates online change for IMSs in an IMSplex.

resource-processing client. An entity that manages resources and that uses RM to manage global information about these resources.

resource structure. A coupling facility list structure, used by the Resource Manager and managed by CQS, that contains uniquely named resources. This structure is typically used to maintain global resource information when multiple Resource Managers exist in an IMSplex.

response. A message inserted to a logical terminal destination specified by an I/O PCB or an alternate response PCB. When VTAM is used, the term reply is substituted for response because response has a separate meaning in VTAM communications. *See also* primary request, secondary request, and reply.

response alternate PCB. Synonym for alternate response PCB.

response mode. A mode of terminal operation that synchronizes operations between the terminal operator and the application program. When IMS receives an input transaction that causes response mode to be entered, no more input is allowed until the application program response has been transmitted back to the terminal. Response mode is activated when a transaction is entered at a terminal, if either the transaction or the terminal is defined as response mode. Reset by the `/STOP` command, ETO user signoff, static terminal logoff, and an IMS restart. *See also* line response mode and terminal response mode.

restart. *See* emergency restart and normal restart.

restart data set (RDS). The direct-access data set that contains the information necessary to restart IMS.

REXX SPOC API. An API that enables users to write REXX programs that communicate with OM.

RLDS. *See* recovery log data set.

RLT. *See* recovery-level tracker.

RM. *See* Resource Manager.

RM affinity. When RM and a resource structure are used, an association between an IMS and a user or node with LOCAL status recovery mode. If RM indicates that the user or node has RM affinity to an IMS, the user or node cannot log or sign on to another IMS. This affinity occurs because end-user significant status (conversation, STSN, or Fast Path) is being recovered on an IMS.

RNR. *See* Rapid Network Reconnect.

root anchor point (RAP). In an HDAM database or DEDB, a pointer at the beginning of each physical block that points to a root segment that belongs in that block.

root segment. The highest segment in the database hierarchy. The database is normally sequenced on the key of this segment. All other segments depend upon the root segment and reference it as part of their complete identity. *See also* dependent segment.

routing code. For EMH, a user-defined code that allows transactions to be routed to programs within a load balancing group.

routing path. In an MSC network, the route through which IMS passes a message from its origination through processing. One or more systems may be included in a routing path.

RSR. *See* Remote Site Recovery.

S

sample exit routine. A sample of an optional exit routine that is delivered with IMS and that users can modify and use to receive control from IMS at a user exit in IMS processing. *See also* IMS-supplied exit routine.

SB. *See* sequential buffering.

SCA. *See* system control area.

SCD. *See* system contents directory.

Scheduler Message Block (SMB). An IMS control block that represents a transaction.

scheduling intent. An application program attribute defined in the PSB that specifies how the program should be scheduled if multiple programs are contending for scheduling. *See also* exclusive intent, read-only intent, read intent, and update intent.

scheduling priority. A transaction attribute that is used in calculating which transaction is selected for scheduling. *See also* normal priority and limit priority.

SCI. *See* Structured Call Interface.

scratchpad area (SPA). A work area used in conversational processing to retain information from an application program across executions of the program.

scrolling window. The portion of the presentation space that is mapped to the viewport at any given time. The window can be moved vertically within the presentation space by scrolling. *See also* presentation space.

SCS. *See* SNA character string.

SDEP. *See* sequential dependent segment.

search field. In a DL/I call, a field that is referred to by one or more SSAs.

secondary data set group. In a database, the data set group or groups defined in addition to the primary data set. A secondary data set group is normally defined to improve utilization of auxiliary storage. *See also* primary data set group.

secondary index. *See* secondary index database.

secondary index database. An index used to establish accessibility to a physical or logical database by a path different from the one provided by the database definition. It contains an index pointer segment type defined in a secondary index database.

secondary logical unit (SLU). A nonhost port through which the end user gains access to the services of the network. Normally, a nonhost program that resides within a controller or control unit.

secondary processing sequence. In a database, the hierarchic order of segment types in a physical or logical database that results automatically when a database is accessed through a secondary index.

secondary request. In an MSC network, a message inserted to a transaction code destination by an application program. *See also* primary request and response.

security. *See* password security, resource access security, signon verification security, terminal security, and transaction command security.

segment. The unit of access; for the DB system, the smallest amount of data that can be transferred by one IMS operation. For input terminal operations using IMS TM, a segment is defined by the particular terminal type and is obtained by an application program with one call. *See also* segment occurrence and message segment.

segment occurrence. In a database, an instance of a segment type.

segment search argument (SSA). The portion of a DL/I call that identifies a segment or group of segments to be processed. Each SSA contains a segment name and, optionally, one or more command codes, and one or more qualification statements. Multiple SSAs may be required to identify the desired segment.

segment type. In a database, a user-defined category of data. *See also* segment occurrence.

selection priority. *See* scheduling priority.

sensitive segment. A segment type in a database to which an application program is sensitive.

sensitivity (program). An IMS capability that ensures that only data segments or fields predefined as “sensitive” are available for use in a particular application. The sensitivity concept also provides a degree of control over data security, inasmuch as users can be prevented from accessing particular segments or fields by omission of those segments or fields from the logical database. Sensitivity is implemented through the DB PCB.

sequence field. See key field.

sequential buffering (SB). Efficient sequential input buffering techniques that reduce the elapsed time required to sequentially process large IMS OSAM databases.

sequential dependent segment (SDEP). A segment of a data entry database that is chained off the root segment and inserted (last-in first-out) into the last part of a DEDB area. After being inserted by an online program, the SDEP cannot be modified.

sequential read. A set of several consecutive blocks that are read with a single read I/O operation. Sequential reads are issued by the Sequential Buffering (SB) component of IMS in order to reduce the elapsed time required to sequentially process large IMS OSAM databases.

service elements. The discrete hardware and software products that provide a terminal user with processing ability.

service group. In an RSR environment, a collection of all IMSs that access RSR-covered databases at an active or at a remote site, including the RECON data set. A service group usually includes one or more IMSs at a single site, with the databases and RECON data set shared between the IMSs.

session recovery. The XRF process in which IMS switches primary sessions on class 1 terminals to backup sessions or reestablishes service on class 2 terminals during takeover.

set-and-test-sequence-numbers terminal (STSN). A programmable terminal, defined to IMS as Finance (3600), SLU P, or LU 6.1 (ISC).

SG. *See* service group.

shadow database. In an RSR environment, a database maintained at the tracking site as a remote copy of a database at the active site. If a remote takeover occurs, the shadow database becomes the master database.

share levels. When you register a database to the Data Base Recovery Control (DBRC), you assign to the database one of four share levels: level zero, level one, level two, or level three.

shared index database. A secondary index database containing more than one secondary index in the same physical operating system data set.

shared queue. A collection of data objects with the same name that reside on a queue structure. Data objects on a shared queue are available to all CQS clients that have access to the structure. *See also* data object and queue structure.

sharing complex. A group of subsystems using IMS and DBRC that share the same RECON data sets. Also called data sharing complex.

SHISAM. *See* simple HISAM.

SHSAM. *See* simple hierarchic sequential access method (SHSAM).

sibling segment types. Two or more segment *types* having a common parent segment type.

sibling segments. Two or more occurrences of different sibling segment types having a common parent segment occurrence.

significant data. IMS state data that keeps a resource from being deleted in RM when the resource is no longer active on any IMS. This term was introduced by ETO, when deciding whether status was significant enough to prevent the dynamic control block from being deleted when the user signed off or the node logged off. *See also* state data.

significant status. A resource status classified as significant. In addition to being recoverable, if the resource status is specified as significant, the resource cannot be deleted after a terminal logoff, a user signoff, or an IMS restart.

signoff. The act a terminal user performs in order to end an identification of a user to IMS. When the terminal is an ETO terminal, the signoff process usually disconnects the user structure from the terminal structure and deletes the user structure.

signon. The act a terminal user performs in order to identify a user to IMS. When the terminal is an ETO terminal, the signon process also creates a user structure and connects the user structure to the terminal structure.

signon verification. The verification of a user ID that takes place at signon. Signon verification is required before a user can access protected IMS resources.

simple checkpoint. The periodic recording of control information and system status on the system log at user-specified intervals.

simple HISAM. The support for a HISAM database that contains only one segment type.

simple hierarchic sequential access method (SHSAM). A type of HSAM database that contains only root segments, which have no prefixes.

single lock manager. A concept where locks for database resources shared between programs or subsystems are handled by one control point. Either an IRLM or a Program Isolation locking function can be invoked for the subsystem.

single-area structure. In a data-sharing environment, a coupling facility structure that contains only one VSO DEDB area. *See also* multiple-area structure.

single-message mode. A processing mode in which synchronization points occur as each message is read from the queue, as well as at application termination. *See also* multiple message mode and synchronization point.

single point of control (SPOC). The control interface that sends commands to one or more members of an IMSplex and receives command responses.

SLDS. *See* system log data set.

SLU. *See* secondary logical unit.

SMU. Security Maintenance utility.

SMB. *See* Scheduler Message Block.

SNA character string (SCS). A string of control codes (X'00' to X'3F' and X'FF') and graphic characters (X'40' to X'FE').

source segment. A database segment containing the data used to construct the secondary index pointer segment.

SPA. *See* scratchpad area.

SPOC. *See* single point of control.

SPQB. *See* Subpool Queue Block.

SSA. *See* segment search argument.

stage 1 system definition. The first part of the process of defining an IMS system. Stage 1 checks input specifications and generates a series of z/OS job steps that are the input to stage 2.

stage 2 system definition. The second part of the process of defining an IMS system. Stage 2 builds IMS system libraries, execution procedures, and the IMS online control program tailored to support the desired set of IMS functions. Stage 2 then stores these in an IMS library.

staging libraries. Those libraries that are modified by offline functions in a system using online change. Changes are first applied to the staging libraries, which are then copied to the inactive libraries.

state data. IMS state data is information that needs to be kept in RM, so that a user can sign onto another IMS and resume his state.

static node. A VTAM node defined by the IMS system definition.

static terminal. A terminal created through the system definition process.

static user. Non-ISC user or ISC user defined statically through the IMS system definition process.

status code. A two-character code in the PCB mask that indicates the results of a DL/I call. *See also* PCB mask.

status recovery mode. The scope of recovery for a resource, it determines where the resource status can be recovered from. GLOBAL indicates the status is managed by RM, LOCAL indicates the status is managed by IMS in local control blocks and log records, and NONE indicates the status is not recovered.

stream mode. In MFS, the input mode in which fields are defined as a stream of data without record boundaries. *See also* record mode.

structure. A serialized list structure. To CQS, either the primary list structure, the overflow list structure, or the resource structure.

Structured Call Interface (SCI). A CSL component that manages communications between the IMSplex members.

structure pair. A primary queue structure and its associated overflow structure.

structure recovery data set (SRDS). Shared data sets that contain structure checkpoint information for shared queues on a structure pair. There are two SRDS data sets per structure pair.

STSN. *See* set-and-test-sequence-numbers terminal (STSN).

subpool. A collection of logical terminals (LTERMs) that can be allocated to an ISC node and can be used with parallel sessions.

Subpool Queue Block (SPQB). An IMS control block that represents a user.

subsequence field. In a secondary index, a field added to the index segment key data to make the pointer segment key unique.

surveillance mechanism. A way for IMS in the alternate to determine that the active is processing satisfactorily.

Surveyor. *See* Database Surveyor utility.

symbolic pointer. The concatenation of the keys in the sequence fields of all segments that must be retrieved to reach the desired segment including the sequence field key of the desired segment.

synchronization phase. The XRF phase, immediately after initialization, when the alternate IMS builds the IMS control blocks to mirror those in the active IMS.

synchronization point. A point in time from which IMS or an application program can start over if a failure makes recovery necessary. The two types of synchronization points are system checkpoints done by IMS itself, and application program synchronization points (also known as commit points) done on behalf of individual application programs. *See also* commit point, system checkpoint.

sync point. *See* synchronization point.

SYSGEN. *See* system definition.

sysplex data sharing. The ability of multiple IMSs to share data across multiple z/OS images. Sysplex data sharing differs from two-way data sharing in that the latter allows sharing across only two z/OS images.

system checkpoint. A point at which IMS records its internal status—control information, plus a unique checkpoint ID—and writes the checkpoint table to the restart data set (RDS). This information allows IMS to reconstruct its condition if recovery is later necessary. System checkpointing is done automatically each time a user-selected number of records is written to the log.

system contents directory (SCD). A data area whose primary function is to contain major entry pointers for all IMS facilities. Its secondary function is to contain system data and the status of the log functions and commands.

system control area (SCA). In MFS, a message field that allows an application program to control specific terminal features when the features apply to the terminal for which the message is destined. *See also* default system control area.

system definition. An IMS process that describes databases, application programs, terminals, and other resources to IMS.

system definition preprocessor. An optional step in the system definition process that performs resource name checking, thus bypassing that procedure in stage 1.

system identification. In an IMS multisystem environment, the means by which a system that is part of a logical link path is identified.

system literal. In MFS, a literal field provided by MFS and defined by the user for inclusion in an output message.

system log data set (SLDS). The permanent destination data set for IMS log records. The SLDS is usually on tape or MSS. In an IMS batch region, the SLDS is created at execution time. In an IMS online region, the SLDS is created by copying the online log data set to it by means of the Log Archive utility.

system message field. In MFS, an output device field on 3270 display devices that can be defined to receive system messages, thereby preventing unsolicited IMS messages from destroying a screen format.

T

takeover. In an XRF environment, the process by which the failing active IMS is released from its XRF sessions with terminal users and replaced by an alternate IMS.

takeover condition. An event in the active IMS that causes the alternate IMS to request a takeover.

takeover phase. The replacement of the failing active IMS by the alternate IMS.

target segment. In secondary indexing, the segment to be retrieved.

TCO. Time-controlled operations.

telecommunication-program PCB (TP PCB). The PCB that supports communication between an application program and a terminal or other application program. There are two types of TP PCBs: I/O PCB and alternate PCB.

terminal-related MSDB. A type of MSDB in which each segment is assigned to and owned by one logical terminal (LTERM), the owner with terminal security may alter or update that segment, and, a segment may be referenced by other than the owner. Terminal-related MSDBs are) fixed, which allows changes, or dynamic, which permits segment insertion and deletion.

terminal response mode. The type of response mode that suspends all input operations from the terminal until the application program has generated the output message. *See* line response mode.

terminal security. The use of system definition macros and security maintenance utility control statements to authorize a particular logical or physical terminal to issue some or all of the operator commands and to send or receive some or all of the currently defined transactions.

termination phase. The XRF phase in which an IMS shuts down.

test mode. The mode that causes any input message entered into a terminal under test to be returned to the test terminal, with error analysis procedures bypassed.

thread. A link between an IMS subsystem and a DB2 UDB for z/OS subsystem. Resources in the external DB2 UDB for z/OS subsystem are allocated to that link or thread.

TM. The IMS Transaction Manager.

Tmember. The name of a client that connects to an OTMA group.

TMS. *See* Transport Manager Subsystem.

Tpipe. *See* transaction pipe (Tpipe).

TP PCB. *See* telecommunication-program program communication block.

track recovery. An option for recovery from permanent read/write errors on VSAM data sets. Track recovery permits database reconstruction at the track level rather than the data set level.

tracked log. In an RSR environment, the system log data set on the tracking IMS to which the log records received from the active IMS are written.

tracker. See tracking IMS.

tracker's log. In an RSR environment, the online log data set for the tracking IMS's log.

tracking IMS. In an RSR environment, an IMS that tracks the activities of active IMSs to provide disaster recovery support. A tracking IMS is usually geographically remote from the active IMSs. *See also* active IMS.

tracking phase. The XRF phase during which the active IMS processes the IMS workload and the alternate IMS monitors the active IMS activities. The alternate IMS uses surveillance to check the active IMS for signs of failure.

tracking subsystem. See tracking IMS.

transaction. A specific set of input data that triggers the execution of a specific process or job. A transaction is a message destined for an application program.

transaction code. A 1- to 8-character alphameric code that invokes an IMS message processing program.

transaction command security. The use of system definition macros and security maintenance utility control statements to permit specific application programs to issue some of the IMS operator commands.

transaction load balancing. An optional facility that enables a transaction to be scheduled into more than one message, or batch message, region at the same time.

transaction-oriented BMP. A BMP that performs transaction-type processing in a batch environment. A transaction-oriented BMP gets its input from the IMS message queues and may also use the message queues for output. See also batch-oriented BMP.

transaction pipe (Tpipe). A named IMS process management resource. An OTMA client must specify this resource when submitting a transaction to IMS. A Tpipe is analogous to an LTERM.

transaction processing system. An IMS in an MSC network that accepts transactions from the front-end system, calls application programs for transaction processing, and routes all replies back to the front-end system for response to the terminal. *See also* balanced system, front-end system, and pseudo-front-end system.

Transport Manager Subsystem. In an RSR environment, the subsystem that provides communication services to IMS components.

TSO SPOC. Time Share Option (TSO) Single Point of Control (SPOC). An IBM-supplied application from which a user can manage operations of all IMS systems within an IMSplex.

twin segments. In a database, all child segments of the same segment type that have a particular instance of the same parent segment type. Root segments are also considered twins to each other. *See also* sibling segments.

two-phase commit. A two-step process by which recoverable resources in an IMS and an external subsystem are committed. During the first step, the subsystems are polled to ensure that they are ready to commit. If all subsystems respond positively, they are then told to execute commit processing.

type-1 automated operator application program. An application program that can issue a subset of IMS commands by using the CMD call in DB/DC and DCCTL environments.

type-2 automated operator application program. An application program that can issue a subset of IMS commands using the ICMD call in DB/DC, DBCTL, and DCCTL environments.

type-1 command. A command, generally preceded by a leading slash character, that can be entered from any valid IMS command source.

type-2 command. A command that is entered only through the OM API. Type-2 commands are more flexible and can have a broader scope than type-1 commands.

U

UCF. *See* utility control facility.

unit of recovery (UOR). Work done on a protected resource between one sync point and the next.

unit of reorganization. For HALDB OLR, the database records that are reorganized within one commit boundary.

unit of work (UOW). (1) For IMS DB, all of the input and output messages associated with a transaction. (2) For IMS TM, a single IMS message. (3) For CQS, a client-defined grouping of data objects.

unplanned remote takeover. In an RSR environment, a remote takeover initiated by the tracking IMS to transfer the workload from the active IMS to the tracking IMS at the remote site without waiting for an orderly shutdown of the active IMS.

unqualified call. A DL/I call that does not contain an SSA.

unqualified SSA. An SSA that contains only a segment name that specifies the segment type to be accessed.

unrecoverable transaction. *See* nonrecoverable transaction.

UOR. *See* unit of recovery.

UOW. *See* unit of work.

update access. This access intent establishes the intent of an application to modify the database. Other applications may read the database if they do not need to be protected from the updater's incomplete changes.

update-only recovery. A facility that allows the user to define inquiry transactions as unrecoverable.

update transaction. A transaction in the DC feature system with capabilities to update a database. Update transactions are recoverable.

user. Either a person signed onto a terminal or an ISC subpool. A user is represented by a user structure. *See also* user structure.

user descriptor. There are three types of user descriptors: installation-created, DFSUSER, and node user. DFSUSER and node user descriptors are created from system definition options; installation-created descriptors are created in the installation process.

user message table. A table of messages generated by the user and used by certain user written edit routines.

user structure. Represents a user in IMS. The user structure is made up of an SPQB control block and one or more CNT control blocks (one for each LTERM). If a user is in an IMS conversational mode, the user structure could contain one or more CCBs (one per conversation).

utility control facility (UCF). An optional facility that provides a method of performing most database utility and maintenance operations in preparation for recovery and reorganization.

V

version. An eight-byte field in the list entry controls that contains the data's version. RM uses the version to indicate the number of times the resource has been updated. When the resource is created, its version is set to one. When the resource is updated, its version is incremented by one.

VGR. *See* VTAM Generic Resources.

VGR affinity. For VTAM Generic Resources, an association, managed by VTAM or IMS, that a VTAM logical unit has with a specific IMS in a generic resource group.

viewport. That portion of a partition defined for display of data to the operator. The viewport has a predefined size and position on the screen and is related to a presentation space through a specified window.

Virtual Storage Option. An option for DEDB areas that maps an area into a data space or a coupling facility structure when the area is opened. The share level of the database determines which is used. Any VSO area CI or CF structure that has been loaded into a data space is subsequently read from the data space or CF structure rather than from DASD.

VSO. *See* Virtual Storage Option.

VTAM application name. The name an installation gives to an IMS subsystem to identify the IMS to VTAM.

VTAM Generic Resources (VGR). IMS VGR, together with VTAM V4R2, enable VTAM to automatically distribute terminal sessions among a cooperative set of IMS systems known as a generic resource group.

VTAM Terminal Block (VTCB). This IMS control block represents a VTAM terminal, both static and dynamic. The VTCB contains the following IMS control blocks and data areas: CLB, CTB, CRB, CIB, DDM workarea, and CTT.

VTCB. *See* VTAM Terminal Block.

W

warm start. See normal restart.

write-ahead data set (WADS). A data set containing log records that reflect completed operations and are not yet written to an online log data set.

X

XRF. *See* Extended Recovery Facility.

XRF-capable IMS subsystem. An IMS defined so that it can work with an alternate subsystem.

XRF complex. The CPCs and the licensed programs in the active and alternate sites that provide XRF for IMS users.

XRF takeover. *See* takeover.

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