StorHouse®

Glossary

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FileTek

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Welcome

StorHouse® is FileTek's enterprise-wide software solution for managing the capture, storage, movement, and access of gigabytes to petabytes of relational and non-relational, atomic-level data. StorHouse technology combines industry-leading, scalable storage devices and Open Systems processors with FileTek's specialized storage management and relational database management system (RDBMS) software components.

StorHouse/SM, FileTek's storage management component, controls a hierarchy of storage devices comprised of cache, RAID disks, erasable and write-once-read-many (WORM) optical disk jukeboxes, and automated tape libraries. StorHouse/SM is also responsible for automating critical system management tasks like data migration, backup, and recovery.

StorHouse/RM, FileTek's RDBMS component, works in conjunction with StorHouse/SM to specifically administer the storage, access, and movement of relational data. For more information on the StorHouse/RM product, refer to the StorHouse/RM User Document Set. The StorHouse/RM User Document Set contains a separate glossary—the StorHouse/RM Glossary.

The *StorHouse Glossary* defines terms and acronyms used throughout the StorHouse/SM User Document Set. You can use the *StorHouse Glossary* as a stand-alone reference manual or as a companion to the StorHouse/SM User Document Set.

Intended Audience

This document is intended for all StorHouse users including programmers, system administrators, engineers, and operators.

Cross-Reference Terms

The following cross-reference terms are used in this document:

- *See* - Refer to this term for the definition.
- *See also* - Refer to this term for additional information.
- *Compare* - Refer to this term for a similar meaning.
- *Contrast* - Refer to this term for an opposite meaning.

Related Documentation

StorHouse documents that provide additional information about the terms in the *StorHouse Glossary* are as follows:

- The *Command Language Reference Manual*, publication number 900005, is a general reference for StorHouse Command Language, the standard command interface between StorHouse and all host computers. This document contains descriptions of commands and related concepts and is intended for all StorHouse users.

- The *System Administrator's Guide*, publication number 900007, describes system recovery, account administration, and storage management procedures and concepts for StorHouse. The guide is intended for the system administrator.

- The *System Operator's Guide*, publication number 900008, contains basic operating instructions for the StorHouse hardware and software. It is intended for the system operator.

- The *StorHouse Concepts and Facilities Manual*, publication number 900026, defines basic StorHouse concepts, structures, and functions. It is intended as a reference for all StorHouse users.

- The *Callable Interface Programmer's Guide*, publication numbers 900013 (IBM®) and 900046 (Generic), is a reference for programmers who write applications that use the Callable Interface. It explains the functions of the Callable Interface and contains a sample program.

List of Terms

$$BUFFER The file set name assigned to the performance buffer.

3X media Triple-density, 5.25-inch, Hitachi-compatible, optical media containing 1.0 GB of data per side.

4X media Quadruple-density, 5.25-inch, Hitachi-compatible, optical media containing 1.3 GB of data per side.

8X media Octal-density, 5.25-inch, Hitachi-compatible, optical media containing 2.6 GB of data per side.

absolute revision number *See* revision number.

absolute time A format for expressing time in Command Language commands. Absolute time is a StorHouse calendar and clock time.

Format: day-month-year:hour:minute:second
Example: 12-FEB-2001:03:00:00

absolute version number *See* version number.

access group *See* file access group.

access mode One of four modes you use to open a file:

- READ – Enables you to read records in SEQUENTIAL, RECORD, KEYED, and KEYSEQUENTIAL files.
- WRITE – Enables you to write records to a SEQUENTIAL file.
- APPEND – Enables you to write new records to RECORD, KEYED, and KEYSEQUENTIAL files.

- UPDATE – Enables you to read, change, and delete records in RECORD, KEYED, and KEYSEQUENTIAL files.

access privileges The privileges that enable a StorHouse account to bypass various security checks and to perform specific StorHouse functions.

Access Time Factor (ATF) A file attribute (1, 2, or 3) that indicates the importance of access time for migrating files. StorHouse migrates files with higher ATF values from the performance buffer to their destination file sets before files with lower ATF values.

accessor The component of a robotic arm that holds optical disk or tape cartridges. Also called *picker* and *gripper*.

account A collection of administrative data used to monitor and control the use of StorHouse. Each account has its own set of access and command privileges. One account can be dedicated to one user or shared by multiple users. For example, a system administrator can have one account; system operators can share another account.

account identification code (aid) A 1- to 12-character identifier assigned to an account.

administration log A system-generated log containing hardware status, error information, and general data used by a FileTek® customer support representative to analyze system operations.

aid *See* account identification code.

Alternative to Microfiche/Microfilm Online (AMMO-II)® The FileTek software solution for replacing microfiche and microfilm. AMMO-II is a menu-driven, online viewing package that enables you to access reports residing on host DASD and on StorHouse.

AMMO-II® *See* Alternative to Microfiche/Microfilm Online.

API *See* application program interface.

application program interface (API) A programming language interface between a system control program or licensed program and the user's program. Also called *application programming interface*. The StorHouse Callable Interface is an example of an application program interface.

archive To copy files from a primary volume set to an archive volume set, typically in preparation for exporting. The primary copy remains intact. The Command Language ARCHIVE command enables your system administrator to create an archive copy on an archive volume set.

archive copy A copy of the primary file. Archive copies are stored on one or more archive volume sets.

archive directory The directory that contains information about archive copies of primary files.

ATF *See* Access Time Factor.

back up To copy all new file extents from the performance buffer to their primary file sets. The Command Language BACKUP command enables your system administrator to back up new file extents. *See also* write-back.

backup/nobackup attribute The file attribute that indicates whether you can back up and archive a file. The system parameter BACKUP is the default for new files. The Command Language SET FILE command enables you to change this attribute for file versions.

backup copy A copy of the primary file. You can use a backup copy to recover a corrupt or destroyed primary copy. Backup copies are stored on one or more backup volume sets.

backup directory The directory that contains information about backup copies of primary files.

bar code label An external label on a tape cartridge.

bar code reader A tape library device, mounted on the robotic arm, that automatically reads bar code labels on tape volumes. Bar code readers enable the system to identify a tape volume without having to load it into a drive.

bin *See* slot.

blank volume An uninitialized volume, meaning StorHouse has not written a volume label on the volume. (Note that blank tape volumes are prelabeled with an external bar code.) StorHouse requests the operator to load a blank volume into the exchange station when the number of volumes in any free pool volume set falls below its minimum value. *Compare* empty volume.

byte The representation of a character.

cache A high-speed buffer storage that contains frequently accessed instructions and data. Its purpose is to reduce access time.

Callable Interface The StorHouse application program interface (API) that enables user application programs to access StorHouse. Through the Callable Interface, you can perform file functions, transfer data, use selected Command Language commands, and receive StorHouse responses.

Call Home An error reporting procedure that automatically identifies error conditions at customer sites, reports them to the FileTek Support Center at headquarters, and notifies FileTek customer support personnel, as appropriate.

cartridge *See* optical disk cartridge or tape cartridge.

catalog
To add file and file set information for uncataloged volumes on a volume set. The Command Language CATALOG VSET command enables your system administrator to catalog volume sets. *Contrast* uncatalog.

checkpoint
An Interactive Interface function that takes a snapshot of the system files and saves them to a StorHouse volume set on optical disk or magnetic tape. Your system administrator can initiate this function by issuing the Command Language CHECKPOINT command. In the unlikely event that one or more system files becomes corrupted such that they cannot be recovered from shadowed copies, they can be recovered from checkpointed copies.

Also, a Callable Interface file function that allows you to create restart points during VRAM™ append operations. If an abort prevents the successful completion of a full append, you can restart the append at a previous checkpoint location by specifying the desired checkpoint number when reopening the file.

cleaning cartridge (tape)
A special cartridge used to clean drive heads in a tape library device.

client-server
A type of network architecture. A client is an agent, typically an operating system or software, that enables authorized users to access services and associated resources on the network. A server provides a specific service to users. Examples of servers are archive servers, file servers, print servers, and fax servers.

Command Language
See StorHouse Command Language.

command privileges
The privileges that determine which Command Language commands and parameters and Callable Interface functions an account can use.

console
See master console terminal.

contiguous allocation
A user-assigned file set storage allocation attribute that instructs StorHouse to allocate storage on one entire volume side or entire volume sides with any remaining allocation placed on one volume side. *Contrast* noncontiguous allocation.

Control Center
The FileTek Windows®-based network computing system for providing administrative control of the StorHouse family of products. Control Center works with StorHouse/SM Release 4.2 and higher and consists of one or more Control Center servers that communicate with Control Center clients over a TCP/IP network.

control panel
The set of indicator lights and switches (for example, READY, SLOT FULL, DOOR LOCKED, INPUT ERROR, and RESET) located on the front of a StorHouse library device. The operator uses the control panel to monitor the status of library device activity.

cycle time The time period, specified in number of days, that controls which side of a volume StorHouse uses to allocate file space. When the specified number of days has elapsed since the last (most recent) file space was allocated on side A, StorHouse deactivates side A and activates side B. *See also* deactivation time.

damaged file A file that is missing one or more extents; that is, a truncated or partial file.

DASD *See* direct access storage device.

data loader *See* FileTek Data Loader.

data read/write device (DRD) A device that reads and writes data on removable media. An optical disk drive is an example of a DRD.

DEACTIVATED state A state indicating that additional storage allocations are not allowed on the volume side. StorHouse can read files on a deactivated volume side, however.

deactivated volume A volume with both sides classified as deactivated.

deactivation time The time period, specified in number of days, that controls when StorHouse deactivates a volume side. StorHouse deactivates the volume side when the specified number of days has elapsed since the first file space allocation.

dedicated device A disk or tape drive that supports only one file read or write operation at a time.

default environment The default values associated with a StorHouse account and activated at StorHouse signon. Defaults include access group name, volume set name, file set name, and access rights.

deferred dynamic system parameter A StorHouse system parameter that your system administrator can change while the system is operating, but changes do not take effect until the system is restarted. CHKP_ACCOUNT is an example of a deferred dynamic system parameter. *See also* dynamic system parameter and static system parameter.

delete To mark files as deleted in the primary, backup, or archive directories. You can "undelete" files that have not yet been removed. The Command Language DELETE command enables you to mark files as deleted. *See also* remove.

delete directory The directory that contains information about files that are marked for deletion. The delete directory holds an entry for a file marked for deletion until you remove the file.

deleted space The bytes used by files that have been deleted and removed from a file set or from a file set partition.

delta time A format for expressing time in Command Language commands. Delta time indicates the time before or after an event.

Format: Ddays-hours:minutes:seconds
Example: D1-3:20:01

descriptor flags

A subset of information recorded by StorHouse for a file version. Descriptor flags indicate whether the file version:

- Was archived
- Was backed up
- Is being cataloged
- Is named
- Has a copy/transfer pending
- Has NOBACKUP attribute value
- Is hardware disabled
- Is software disabled.

The Command Language SHOW FILE /FULL command enables you to display the values of descriptor flags.

destination file set

The file set you specify when transferring a file to StorHouse. Also called *primary file set*. StorHouse uses your account's default file set if you do not specify one. The destination file set contains the primary copy of the file.

destination volume set

The volume set you specify when transferring a file to StorHouse. Also called *primary volume set*. StorHouse uses your account's default volume set if you do not specify one. The destination volume set contains the file set with the primary copy of the file.

device

A component of StorHouse identified by a device identification code. Devices consist of the following:

- Units – magnetic disk drives, library devices, and shelf storage
- Subunits – accessors, drives, exchange station, and slots.

device identification code (did)

A code that identifies a device. The format of the did is as follows:

{level} {unit number} {subunit type} {subunit number}

Example: L00D01, where L is the level (library device), 00 is the unit number (first library device), D is the subunit type (optical disk or tape drive), and 01 is the subunit number (the second optical disk or tape drive).

did

See device identification code.

direct access storage device (DASD)

A device that provides immediate access to stored data.

direct connectivity/ direct connect

A means of directly attaching a host to StorHouse using bus and tag cables. *Contrast* network connectivity.

directory

A catalog that identifies, locates, and maintains statistics for files stored in StorHouse. StorHouse has four directories: primary, backup, archive, and delete.

directory extraction The process of copying information from the StorHouse PRIMARY, BACKUP, and ARCHIVE directories to directory extraction files. The EXTRACT DIRECTORY command extracts StorHouse directory information from the directories and stores the information in directory extraction files. This information can be used to restore StorHouse directories should the need arise. *See also* directory extraction files.

directory extraction files The files that are created by the EXTRACT DIRECTORY command. One extraction control file and multiple extraction VTOC files are created each time the command is issued. *See* extraction control file and extraction VTOC file.

directory recovery A type of extended recovery procedure used to recover one or more directory files. This type of recovery is used in the unlikely event that shadowed recovery cannot restore corrupted directory files. There are two types of directory recovery: directory recovery from extraction files and directory recovery from physical volumes. *See* directory recovery from extraction files and directory recovery from physical volumes.

directory recovery from extraction files A type of extended recovery that uses special files containing information extracted periodically from the directories of one or more StorHouse systems to recover the directories of those systems.

directory recovery from physical volumes A type of extended recovery that uses the volume table of contents (VTOCs) on the removable volumes in the system to recover StorHouse directory information.

disabled file version A file version that StorHouse cannot read. StorHouse will not attempt to read a disabled file version until you issue the Command Language ENABLE command.

DISABLED state A state indicating that a volume side is missing, physically damaged, or has excessive I/O errors.

disabled volume A volume with both sides classified as disabled.

Disk File Transfer Interface The FileTek StorHouse interface that provides file transfer functions for user files on host storage devices.

DRD *See* data read/write device.

drive *See* optical disk drive or tape drive.

duplex A feature that allows StorHouse to read the backup or archive (duplex) copy of a file extent when the primary copy is unavailable or for load balancing. *See also* load balancing.

dynamic system parameter A StorHouse system parameter that your system administrator can change while the system is operating and changes take effect immediately. The system changes some dynamic parameters automatically to reflect the current system status. Access Time Factor (ATF) is an example of a dynamic system parameter. *See also* deferred dynamic system parameter and static system parameter.

EDC *See* Error Detection Code.

empty volume An initialized volume that does not contain file data or file labels. *Compare* blank volume.

enabled volume A volume with at least one side enabled.

entry/exit slot *See* exchange station.

EO *See* erasable optical.

erasable optical (EO) A type of rewritable optical media. *Contrast* write-once-read-many.

Error Detection Code (EDC) The method used to detect data transfer, software, and system file errors. The host generates and stores error detection codes at the end of each data frame prior to transferring that data frame to StorHouse. The host checks the error detection codes of each data frame during transfer from StorHouse.

ESCON Enterprise System Connection. IBM's fiber optic-based channel connection technology. When connecting to an MVS®/ESA™ host, StorHouse can be defined as an ESCON channel-to-channel adapter (SCTC).

exabyte A unit of measurement equivalent to approximately 1,000,000 terabytes or 1,000 petabytes.

exchange station The entry and exit point for volumes in a library device. Also called *mail slot* and *entry/exit slot.* The operator loads and unloads removable optical or tape volumes at the exchange station.

expiration time The number of days that must elapse after the last (most recent) file space was allocated on a volume side before StorHouse marks the side as deactivated and expired.

EXPIRED state A state indicating that a volume side is expired and the files on that side are ready to be removed from the system. Additional storage allocations are not allowed on an expired volume side. However, StorHouse can read data on an expired volume side.

expired volume A volume with both sides classified as expired.

explicit lock A lock you place on a file version to prevent other account users from reading, writing, and deleting the file version until you unlock it. An explicit lock locks a file version in the specified directory (primary, archive, or backup). *Contrast* implicit lock.

export To remove an uncataloged volume, volumes, or volume set from a StorHouse system. StorHouse does not manage exported volumes and volume sets. The Command Language EXPORT command enables your system administrator to export uncataloged volumes and volume sets. *Contrast* import.

extended recovery

The restoration of a StorHouse system to normal operation in the unlikely event of a failure. For example, the loss of directory information on magnetic disk would require extended recovery if both the primary and shadowed copies are corrupted. *See also* directory recovery.

extent

A collection of file data that StorHouse treats as a unit. StorHouse adds extents to a file when you create, write, checkpoint, or update a file version. Each extent has an extent sequence number and must fit on a single volume side. The types of extents are as follows:

- Data – contains user data records. There is one data section per revision or checkpoint.
- Definitions – contains information that defines a revision of a file version and maps relative record numbers to specific extents containing user data records. There is one definitions section per revision or checkpoint.
- Change – contains updated user data records for one or more file data sections. A change section contains only those records updated for a single revision.
- Key Data Base – contains access key indexes that map key values to relative record numbers.
- Update – contains all updated user data records for a data section for all revisions of a file.

extent sequence number

The identification number assigned to each file extent when that extent is added to a file version. StorHouse assigns sequence number zero to the first extent of a file version and increments the sequence number by one for each extent that is added.

extent set

In append operations (mode=APPEND), an extent set consists of a data extent, a DF extent, and for KEYED files, a K extent. Each extent set of a file must be no larger than 2 GB or a single volume side, whichever is smaller.

external key

A named data field, located in a special key record, that is associated with a separate data record. You use external keys to locate and read specific data records in a KEYED file. *Contrast* internal key.

extraction control file

A file created by the EXTRACT DIRECTORY command that identifies groups, volume sets, file sets, volumes, and all extraction VTOC files associated with a StorHouse directory extraction. Each directory extraction creates one extraction control file.

extraction VTOC file

A file created by the EXTRACT DIRECTORY command for each volume side for which file information is extracted. The information on an extraction VTOC file is similar to the information in a volume table of contents (VTOC) on a volume. Each directory extraction can generate multiple VTOC files.

fid — *See* file identifier.

file — The named collection of logically related data. StorHouse manages files in the performance buffer, in library devices, and on shelves. Different file versions with the same file name are considered different files. *See also* file version.

FileTek Data Loader — A FileTek utility that allows you to bulk load data from your host computer (the client) into StorHouse/RM user tables on the StorHouse server. FileTek offers two data loaders: one for MVS and one for FTP.

FileTek Extensions to RMDS — The FileTek software product that provides an interface between the IBM Report Management and Distribution System (RMDS™) and StorHouse.

FileTek OpticalVSAM™ — The FileTek software component that provides VSAM-based MVS applications transparent access to data stored on StorHouse optical disks.

FileTek OVSAM™ — *See* FileTek OpticalVSAM.

file access group — A set of named files. Each file in a StorHouse system is a member of one file access group. A named file is uniquely identified by a file access group name, a file name, and a version number.

file access group name — A 1- to 8-character name assigned to a file access group. The file access group name is unique within a StorHouse system.

file extent — *See* extent.

file identifier (fid) — A unique identifier assigned to each file when it is created. A file identifier consists of two numbers: a system identifier (sid) and a file number (fno). All files created in StorHouse have the same system identifier. The file number makes the file identifier unique within a StorHouse system.

File Information Display Utility (LSMFI) — Three StorHouse Callable Interface functions that retrieve information about StorHouse user files. You can use the information to produce quantitative reports of file usage and to determine which files you can export or take offline. The information retrieved by the File Information Display Utility is similar to the information displayed by the Command Language SHOW FILE command.

file label — An identifier containing StorHouse directory information for a file and pointers to the file's data extent on the volume.

file LIMIT — The attribute that sets the number of file versions that StorHouse will retain. The maximum number of primary file versions StorHouse can retain is 32,768.

file migration — The removal of files from the performance buffer or the movement of files from one volume set to another. StorHouse automatically migrates file extents off the performance buffer based on extent access history, extent size, and Access Time Factor (ATF). Your system administrator can manually migrate files from one volume set to another by issuing the StorHouse Command Language MIGRATE /BY_VSET command.

file name A 1- to 56-character name assigned to a file. File names are unique within a file access group.

file number (fno) One of two numbers that make up a file identifier (fid). Because all files created in a single StorHouse system have the same system identifier, the file number makes the file identifier unique within that system.

file organization The manner in which records are stored in a file. File organization can be SEQUENTIAL, RECORD, KEYED, KEYSEQUENTIAL, and STORHOUSE.

file revision The result of a file version when you create, update, and append to it. You update the contents of a file version by opening it; changing, deleting, or adding records; and closing it. Thus, a file version can have multiple revisions. The maximum number of file revisions that a file version can have is 65,535. *See also* file version, revision number, and version number.

file set A collection of files within a volume set. Files are stored on file sets.

file set LIMIT The attribute that sets the maximum size of a file set. The LIMIT must be greater than or equal to the total size (in other words, the storage capacity) of all volumes or the volume set, and it must be an integer multiple of the physical volume's maximum size. StorHouse will not extend the size of a file set beyond its LIMIT.

file set name A 1- to 8-character name that identifies a file set. A file set name is unique within a volume set.

file set partition *See* partition.

file version A new copy of a file that you can revise and manage independently of the original version. A file version is identified by a file access group name, file name, and relative version number. You create a new file version each time you transfer a file from a host to StorHouse. StorHouse can maintain a maximum of 32,768 versions of a file for one file name in a given file access group. *See also* file revision, revision number, and version number.

fno *See* file number.

frame A unit of data or control information that can be transferred between processors and storage devices without reformatting. A frame must be contained entirely within a single file extent.

free pool volume set The volume set of empty volumes (per recording type) in a library device. Volumes in the free pool volume set are used for future allocation to volume sets. *See also* empty volume.

FSET *See* file set.

GB *See* gigabyte.

general space The storage space that StorHouse allocates to SEQUENTIAL files and to the sections of VRAM files that are not associated with updates.

gigabyte (GB) A unit of measurement equivalent to approximately 1,000 megabytes.

gripper *See* accessor.

group *See* file access group.

hexadecimal character (hexit) A member of the character set A-F, 0-9, and a-f. These are the valid characters for writing base-16 (hexadecimal) values.

hold/nohold attribute An attribute for volumes and volume sets that helps determine the order in which volumes are migrated from a library device to shelf storage. The attribute can have a value of HOLD or NOHOLD. For any library device, StorHouse migrates volumes with a HOLD value of HOLD before migrating volumes with a HOLD value of NOHOLD.

host The computer that contains your application programs. Host computers are often mainframe computers.

host interface types The software interfaces that enable a host to access StorHouse; for example, Callable, Interactive, and Disk File Transfer.

implicit lock A temporary lock that StorHouse places on a file during update, append, copy, or various directory operations. StorHouse unlocks the file after the operation has completed. *Contrast* explicit lock.

import To add a previously uncataloged volume or volume set to a StorHouse system. The Command Language IMPORT command enables your system administrator to import volumes and volume sets. *Contrast* export.

INITIALIZED state A state indicating that a volume label record has been written on the volume side.

initialized volume A volume that contains a volume label record (on both sides of a two-sided volume). *See also* volume label.

Interactive Interface The StorHouse host interface that enables you to enter Command Language commands and to receive StorHouse responses.

interface The hardware or software that links systems, programs, and devices.

internal key A named data field, located within a data record, that you use to locate and read specific data records in a KEYED file. *Contrast* external key.

jukebox *See* library device.

key A named data field used to access records in KEYED and KEYSEQUENTIAL files.

KEYED file organization

A RECORD file organization that enables you to access records by key values. You can define up to 31 keys for a KEYED file. *See also* RECORD file organization.

Keyed Record Access (KRA)

The StorHouse Virtual Record Access Manager (VRAM) software that enables you to access records by key values. KRA supports KEYED and KEYSEQUENTIAL files. *Compare* Relative Record Access (RRA).

KEYSEQUENTIAL file organization

A KEYED file organization with the following restrictions:

- You can define only one key.
- You cannot change the key value when updating a record.
- You cannot enter duplicate key values.
- You must write the records to the file in ascending key value order.
- StorHouse does not create a key database extent for the file.

See also KEYED file organization.

KRA

See Keyed Record Access.

LAN

See local area network.

LAN-AMMO™

A FileTek, Microsoft® Windows™-based, document viewing package that lets you view, annotate, print, and fax your organization's documents from workstations on a local area network (LAN). LAN-AMMO™ works in conjunction with FileTek's AMMO-II, Release 3.0 (or higher) mainframe reports-viewing software to provide access to documents downloaded to servers on the LAN, or temporarily retrieved from Host DASD or StorHouse. *See also* Alternative to Microfiche/Microfilm Online (AMMO-II).

layer

A hierarchy of storage within a storage level. For example, storage level L (library device) can contain a layer of write-once-read-many (WORM) media, a layer of erasable optical media, and a layer of tape media.

LD

See library device.

level

See storage level.

library device (LD)

A StorHouse device that uses robotics to transfer optical disk or tape cartridges between the drives, slots, and exchange station. A single StorHouse system can support multiple library devices. A library device contains the following components:

- Two or more *drives*
- Multiple *slots* for storing cartridges
- A transport mechanism, or *robotic arm*, that moves cartridges between the slots, drives, and exchange station. The part of the robotic arm that holds a cartridge is called an *accessor*. Library devices have one or two accessors.

Tape library devices may also have *bar code readers* mounted on the robotic arm. Bar code readers automatically read bar code labels on tape volumes.

- An *exchange station* for loading and unloading cartridges
- A microprocessor-based *controller* that manages the robotic arm and drives.

library device attribute The attribute assigned to each volume set that indicates the device identification code of the library device to use when a free pool volume is required. When a volume set requires more storage space for files, StorHouse takes a volume from the specified device's free pool and allocates it to the volume set. Some library devices support multiple recording types and have a free pool for each recording type.

LIMIT attribute *See* file LIMIT, file set LIMIT, or volume set LIMIT.

load balancing A duplex feature that can improve your system performance. Your system administrator must have the duplex capability turned on to perform load balancing, and your primary and backup or archive (duplex) user file copies must reside in different on-line library devices. During load balancing, StorHouse automatically determines when to access the duplex file copy instead of the primary copy for better overall system performance. The system administrator can select the degree of similarity between the primary and duplex media to be used in load balancing operations. *See also* duplex.

local area network (LAN) A single physical communications link that connects multiple workstations, enabling them to share hardware, software, and data.

logical volume The portion of a physical volume (such as a volume side) that can be accessed while it is mounted in a drive and is treated as a mountable unit of storage.

LSMFI *See* File Information Display Utility.

MAGDISK The name of the volume set that contains the performance buffer.

magnetic disk drives The drives located in the magnetic disk unit chassis in the StorHouse processor cabinet. Magnetic disk drives write and read data on fixed, magnetic disk volumes.

magnetic disk unit (MDU) chassis The chassis that holds the magnetic disk drives in the StorHouse processor cabinet.

mail slot *See* exchange station.

master console terminal The monitor that sits on top of a StorHouse processor cabinet. You use the master console terminal to start up and shut down the StorHouse system, enter Command Language commands, and display StorHouse messages.

MDU *See* magnetic disk unit chassis.

media life span The estimated time period that media can be used. Also called *shelf life*. For example, erasable optical media has an estimated life span in excess of 20 years.

media type The first two characters of the StorHouse volume identification code. Media type identifies the type of drive on which the volume can be formatted and processed. Examples:

- MA – magnetic disk
- OA – non-erasable optical disk cartridge, 12-inch (one side is accessed at a time)
- OC - non-erasable optical disk cartridge, 12-inch (both sides are accessed simultaneously)
- OE – erasable or non-erasable optical disk cartridge, 5.25-inch
- TD – high-performance, magnetic tape cartridge.

medium A type of storage volume, such as optical disk cartridge.

megabyte A unit of measurement equivalent to approximately 1,000,000 bytes.

memo Volume or volume set information that an authorized user can include in the StorHouse system files. For example, a user can note a volume's contents or location by using the /MEMO parameter modifier in the MOVE VOLUME, MOVE VSET, SET VOLUME, or SET VSET commands. The SHOW VOLUME and SHOW VSET commands display the /MEMO comment.

MF *See* migration factor.

migration The process of moving data from one storage level to another or between library devices within storage level L. For example, data can be migrated from storage level F (magnetic disk) to storage level L (library device). *See also* file migration and volume migration.

migration factor (MF) A 32-bit integer that is derived from a file's Access Time Factor (ATF), size, and access history. StorHouse maintains a migration factor for each extent in the performance buffer. Extents with the lowest migration factor values are migrated off the performance buffer first.

mode *See* access mode.

modifier The part of a Command Language command line that limits or enhances the scope of a command or parameter. You specify a modifier after the command or parameter it modifies, and you precede the modifier with a slash (/). Using MONITOR /ALL as an example, MONITOR is the Command Language command and /ALL is the command modifier.

mount count The number of times a removable volume has been used (mounted and dismounted).

mount limit The maximum number of mounts, recommended by the media manufacturer and initially set at installation, for each media type and recording type combination configured in the system.

NEEDS_CLEANING state A state indicating that the volume side should be cleaned.

network connectivity A means of attaching multiple hosts or workstations to the StorHouse system through a network. *Contrast* direct connectivity/direct connect.

noncontiguous allocation A user-assigned file set storage allocation attribute that instructs StorHouse to allocate the first available free space to the file set to obtain the desired size. This space may be on one or more volumes. *Contrast* contiguous allocation.

ODLD Optical Disk Library Device. *See* library device.

offline volume The volumes you manage manually. StorHouse does not manage offline volumes. An exported volume is an example of an offline volume. *Contrast* online volume.

online volume The volumes managed by StorHouse. Online volumes are located in storage levels F (magnetic), L (library device), and S (shelf). *Contrast* offline volume.

optical disk cartridge A type of removable optical media used to store data. Also called *platter* and *volume*. Optical disk cartridges contain an optically sensitive metallic layer between two glass or plastic disks. StorHouse supports 12-inch and 5.25-inch optical disk cartridges.

optical disk drive A subunit of a library device that reads and writes data on removable optical disk cartridges. Each library device has at least two optical disk drives.

optical disk volume *See* optical disk cartridge.

overhead space The unusable space in a StorHouse volume set that is not allocated to file sets.

parameter *See* system parameter.

partial file A file version that is missing one or more extents before the last extent.

partition The part of a file set on a specific volume side.

password A unique set of alphanumeric characters used to protect systems and files from unauthorized use. You enter passwords to sign on to StorHouse, use an account, access a file access group, and access a file.

performance buffer The portion of storage level F (magnetic disk) that contains performance copies of files waiting to be backed up to their primary file sets. The performance buffer is a file set named $$BUFFER in the volume set named MAGDISK.

performance copy A file or part of a file that is stored temporarily in the performance buffer.

Performance Monitor The FileTek software product that displays StorHouse performance data in graphical format on an IBM PC or compatible computer running under the Microsoft Windows environment.

PERM_LOCKED state A state indicating that the volume side is locked due to the condition of the media. StorHouse can read data on a perm_locked volume side.

perm_locked volume A volume with both sides classified as perm_locked.

petabyte A unit of measurement equivalent to approximately 1,000,000 gigabytes or 1,000 terabytes.

picker *See* accessor.

platter *See* optical disk cartridge.

primary copy The copy of a file that is available to an account user for normal access. Primary copies are stored on primary file sets.

primary directory The directory that contains information about primary copies of files.

primary file set The file set that contains the primary copy of a file. Also called *destination file set*. Primary file sets are located on primary volume sets.

primary volume set The volume set that contains primary file sets. Also called *destination volume set*.

privileges *See* command privileges.

processor cabinet The StorHouse hardware component that typically contains the StorHouse operating system, a modem, power switches, and the magnetic disk unit chassis and/or RAID units. The master console terminal sits on the processor cabinet.

RAID (Redundant Arrays of Independent Disks) Arrays of magnetic disks in the StorHouse system in which part of the storage capacity is used to store redundant information about data stored in the remainder of the storage area. This redundancy enhances data availability and reliability for the data on the magnetic disks.

read-only optical device An optical drive that StorHouse places in a read-only state due to a failure. A system operator can manually place an optical drive into a read-only state using the SET DEVICE command.

record A unit of user data or file control information.

RECORD file organization A file organization in which records are stored in the order they are written and updated records are stored separately from the initial record. You can read and update records in sequential or random order, and you can append new records to the end of a RECORD file. You cannot insert records between existing records.

record segment The part of a record contained in a single frame. Each record segment has a header that defines the segment.

recording type

The part of the volume identification code that identifies the mode of recording used to format a volume. Examples:

- A – single-sided, single-density, sector reusable (magnetic)
- B – double-sided, single-density, non-erasable (optical)
- C – single-sided, double-density, sector reusable (magnetic)
- D – double-sided, quadruple-density, erasable (optical).

Relative Record Access (RRA)

The StorHouse Virtual Record Access Manager (VRAM) software that enables you to access records by relative record number. RRA supports RECORD files. *Compare* Keyed Record Access.

relative record number

A number assigned to records in RECORD files. StorHouse assigns relative record number 1 to the first record written, 2 to the second record written, and so on. StorHouse assigns the same relative record number to the update record.

relative revision number

See revision number.

relative version number

See version number.

removable medium or volume

A volume that can be dismounted from its drive. Examples of removable volumes are optical disk cartridges and magnetic tapes.

remove

To remove files from the delete directory. The Command Language REMOVE FILE command enables your system administrator to remove files that are marked for deletion. You cannot access files that have been removed from the delete directory. *See also* delete.

residence, file version

The location (volume set and file set) of a file version in a StorHouse system.

residence, volume

The location (storage level F, L, or S) of a volume in a StorHouse system.

residence, volume set

The location of all member volumes in a volume set. Removable volumes can be on different storage levels and different devices; thus, a volume set can reside on more than one storage level and device at the same time.

RETIRE state

A state indicating that the volume side should no longer be used in the system due to the condition of the media. Additional storage allocations are not allowed on a retired volume side. StorHouse may not be able to read data on a retired volume side.

retired volume

A volume with both sides classified in the RETIRE state.

return code

A four-digit numeric value associated with a symbolic name for a StorHouse message. The return code indicates the success or failure of a specific function.

revision number The number assigned to a file revision. The system assigns revision number 1 to a file *version* when it is created in StorHouse and increments the number by one each time the contents of the file version are changed. Revision numbers can be relative (0 through -65,534) or absolute (1 through 65,535). The most recent file revision has relative revision number 0, and the previous file revisions have relative revision numbers -1, -2, -3, up to -65,534. *See also* file revision, file version, and version number.

robotic arm The transport mechanism in a library device. The robotic arm moves optical disk or tape cartridges among the slots, drives, and exchange station. The part of the robotic arm that holds the cartridge is called the *accessor*. A robotic arm can have one or two accessors depending on the type and model of the library device. Some tape library devices have *bar code readers* mounted on the robotic arm.

RRA *See* Relative Record Access.

SEQUENTIAL file organization A file organization in which records are stored in the order they are written. You cannot randomly access records in a SEQUENTIAL file; you must access records from the beginning of the file to the end.

session The period of time or the interaction that begins when you sign on to StorHouse and ends when you sign off from StorHouse.

set To change attributes, parameters, passwords, and so on for the system, accounts, files, file sets, file access groups, volumes, volume sets, and user IDs. The Command Language SET commands enable you to change these items (if you have the proper privilege).

severity code A code that identifies the severity level of operator messages. StorHouse severity codes include: A (Action), E (Error), F (Fatal error), I (Information), S (Success), and W (Warning).

shadowing The process of maintaining a duplicate copy of critical system files, such as directory files, on an alternate magnetic disk.

shared device A drive that can support multiple file reads and one write concurrently.

shelf life *See* media life span.

shelf storage The managed storage of optical or tape volumes located on shelves or in storage outside of the StorHouse system. Shelf storage is storage level S.

sid *See* system identifier.

side *See* volume side.

sign off To end a StorHouse session and disconnect from the StorHouse system.

sign on To connect to the StorHouse system and start a StorHouse session.

site identifier A 1- to 14-character code assigned to the site during installation. The system parameter SITE_ID contains the value of the site identifier.

slot The area within a library device where volumes are stored or "parked" when not in use. Also called *bin*.

software disabled The state of a VRAM file version when you open it in APPEND or UPDATE mode. After you successfully close the file version, StorHouse marks it as software enabled. StorHouse leaves an open file in the software disabled state whenever:

- You close the file with the abort flag set.
- The application program terminates.
- The network disconnects.
- The host crashes.
- StorHouse crashes.
- StorHouse forces the file to close as a result of an internal error.

stage The act of queuing a transfer of a specified file (extent) to the performance buffer.

staging attribute The file attribute that indicates whether you can stage (copy) a file from Level L storage to the performance buffer for faster access. The Command Language CREATE FSET and SET FSET commands enable you to change this attribute for files.

static system parameter A system parameter that cannot be changed while the system is operating. LOG_MAX (which indicates the number of user logs to maintain) is an example of a static system parameter. *See also* deferred dynamic system parameter and dynamic system parameter.

storage level One of three types of storage managed by StorHouse:

- Level F – fixed storage of unremovable volumes (magnetic disk)
- Level L – library storage with robotic access to removable volumes (library device)
- Level S – shelf storage of removable volumes (shelves).

StorHouse® FileTek's enterprise-wide software solution for managing the capture, storage, movement, and access of gigabytes to petabytes of relational and non-relational detail data. *See also* StorHouse/RM and StorHouse/SM.

StorHouse Command Language The set of commands that make up the StorHouse Interactive Interface. You issue Command Language commands to communicate with, monitor, and control StorHouse. For example, you use Command Language to create, modify, delete, and show information for files; transfer files between a host and StorHouse; migrate files between StorHouse storage levels; back up files; and so on.

STORHOUSE file organization A file organization created and used exclusively by StorHouse/RM to support relational database capabilities on the StorHouse system. STORHOUSE files have standard frame and record structures, but users cannot access STORHOUSE files directly. Users must submit Structured Query Language (SQL) statements to StorHouse/RM to load and access database data. The StorHouse/RM software determines the contents of STORHOUSE files and file records.

StorHouse/RM FileTek's specialized relational database management software component for managing the storage, access, and movement of relational data across the enterprise.

StorHouse/SM StorHouse/SM, FileTek's storage management component, controls a hierarchy of storage devices containing cache, RAID, erasable and write-once-read-many (WORM) optical disk jukeboxes, and automated tape libraries. StorHouse/SM is also responsible for automating critical system management tasks like data migration, backup, and recovery.

StorHouse subsystem A standard IBM MVS subsystem that transfers data, control information, and status between your application programs and StorHouse. The StorHouse subsystem must be active before you can request StorHouse services from the subsystem's host computer.

subunit A device within a unit. For example, a library device is a unit and the accessors, drives, exchange station, and slots are subunits within the library device.

surface *See* volume side.

surface partition *See* partition.

surface set The file set partitions that reside on the same volume side.

system administrator The person responsible for the security, operation, and tuning of the StorHouse system.

system file A Storage Manager internal file that resides on magnetic disk and contains programs, directories, account data, or other data used to control the system.

system identifier (sid) A unique 1- to 6-character code assigned by FileTek to each StorHouse system. The system parameter SYSTEM_ID contains the value of the system identifier. The system identifier is part of the file identifier. All files within a StorHouse system have the same system identifier.

system parameter The information that influences how StorHouse manages its resources. Your system administrator uses system parameters in Command Language command lines to set specified system-wide defaults. *See also* deferred dynamic system parameter, dynamic system parameter, and static system parameter.

tape cartridge A type of removable media used to store data. StorHouse supports DLT magnetic tape cartridges and cleaning cartridges.

tape drive A subunit of a library device that reads and writes data on removable tape cartridges.

tape volume *See* tape cartridge.

terabyte A unit of measurement equivalent to approximately 1,000,000 megabytes or 1,000 gigabytes.

transport mechanism *See* robotic arm.

truncated file A file whose last known extent does not have the last extent flag. The Command Language SHOW FILE /EXTENT command enables you to display the last extent flag as an extent_status value. *See also* extent.

UF *See* usage factor.

uid *See* user identification code.

uncatalog To remove directory information for files on volumes and volume sets stored on storage levels L (library device) and S (shelves). The Command Language UNCATALOG VOLUME and UNCATALOG VSET commands enable your system administrator to uncatalog volumes and volume sets. *Contrast* catalog.

usage factor (UF) The portion of the migration factor that indicates the number of times a file has been accessed, when those accesses occurred, and the size of the file.

user file A file you transfer from a host to the StorHouse system.

user identification code (uid) A number (0-9999) used by StorHouse to identify a session.

user log A user-accessible StorHouse log file that contains statistical information to help you manage the system. Statistical information includes startup time, shutdown time, signons, function counts, security violations, and file operations.

version *See* file version.

version number A number assigned to a file version. The system assigns version number 1 to a file when it is created in StorHouse and increments the number by one each time a version is added or deleted. Version numbers can be relative (0 through -32,767) or absolute (1 through 32,768). The most recent file version has relative version number 0, and the previous file versions have relative version numbers –1, -2, -3, up to -32,767. *See also* file revision, file version, and revision number.

vid *See* volume identification code.

Virtual Record Access Manager (VRAM™) The FileTek software component that controls access to data at the record level, updates files logically, ensures index integrity, and manages all file versions.

volume A unit of media on which data can be recorded and read. Optical volumes are also called *platters* and *optical disk cartridges*. Tape volumes are also called *tape cartridges*.

volume identification code (vid) A code that identifies a volume by media type, recording type, volume label, and volume side.

volume label A code assigned by StorHouse to a volume during initialization. Labels for optical volumes contain 1 to 16 characters. Labels for tape volumes contain 1 to 6 characters. The volume label is part of the volume identification code, making each volume identification code unique for a media type and recording type.

A system administrator can define the method StorHouse uses to generate volume labels. If desired, the administrator can set up StorHouse to generate custom volume labels.

volume migration The movement of volumes from one storage level to another or between library devices within storage level L, and the automatic movement of a blank volume into a library device.

Your operator can manually migrate a volume or volume set using the Command Language MOVE VOLUME and MOVE VSET commands. Your system administrator can manually migrate a blank volume into a library device using the Command Language MIGRATE command. *See also* blank volume and file migration.

volume set A collection of one or more physical volumes that StorHouse treats as a unit. Every removable volume in a StorHouse system is a member of a volume set.

volume set LIMIT The attribute that sets the maximum size of a volume set. The LIMIT must be an integer multiple of a physical volume's maximum size. StorHouse will not extend the size of a volume set beyond the LIMIT.

volume side The physical surface (A or B) of a volume.

Volume Storage Allocation and Control (VSAC™) The StorHouse software components that manage storage allocation according to attributes that you define.

volume surface *See* volume side.

volume table of contents (VTOC) A directory of the files stored on a volume. The VTOC contains the file labels for each file extent on a volume. Each volume has a VTOC.

VRAM *See* Virtual Record Access Manager.

VSAC *See* Volume Storage Allocation and Control.

VSET *See* volume set.

VTF *See* Vulnerability Time Factor.

VTOC *See* volume table of contents.

Vulnerability Time Factor (VTF) The file attribute that indicates when StorHouse should copy new extents of a file version from the performance buffer to their primary file set. VTFs are as follows:

- DIRECT – Bypass the performance buffer and write the file version directly to the primary file set.
- NEXT – Write the file version to the performance buffer and then copy it to the primary file set the next time the system performs the Command Language BACKUP command.
- NOW – Write the file version to the performance buffer and then copy it to the primary file set immediately.

wild card character An asterisk (or user-defined character) used in place of data fields or partial data fields in some Command Language commands to indicate that all values or any matching values can be substituted for the wild card.

The Command Language SET USER /WILDCARD command enables you to change the wild card character.

WORM *See* write-once-read-many.

write-back An operation that copies new file extents from the performance buffer to their primary file sets. Write-back ensures that the primary copy of a new or revised file version is complete. Write-back occurs when your system administrator or the MIGRATE command issues the Command Language BACKUP command.

WRITELOCKED state A state indicating that additional storage allocations are not allowed unless the volume side is unwritelocked. StorHouse can read file extents that reside on a writelocked volume side.

writelocked volume A volume with both sides classified as writelocked.

write-once-read-many (WORM) A type of optical media to which data can be read from many times but written to only once. *Contrast* erasable optical.

VROM™ FileTek client/server software for accessing StorHouse data from Windows applications.

Web-AMMO™ FileTek's report retrieval and viewing software that lets customer service representatives and business customers access report data through the Internet and Intranet. Web-AMMO provides World Wide Web access to information archived to AMMO-II.