Revision History

Document Revisions	F.	-2
--------------------	----	----

Rev 1.3 E-1

Document Revision

The following shows the changes made to this document:

- Engines and devices can now put any non-SIDF data in the area before logical sector zero (pg. 1-6 and pg. 2-6).
- Added case sensitivity notes to the document. Case sensitivity is dependent upon the name space type and must be enforced by the engine where needed.
- Each medium within a media set does not have to be the same (pg. 1-8).
- Changed spanning method to overflow method. The overflowed transfer buffer is now repeated onto the next media (see "Overflowing the Media").
- Changed the following terminology to reflect SIDF's generic view of data:

Changed "data set's directory information" to "data set information."

Changed "data set information" to "data set's data."

- Changed sector address to physical sector address (see "Term Definition").
- Changed the size field of each section in chapter "Section" to reflect the FID's true size.
- Fields section in Chapter 1: Added byte order information
- Added the following document sections:
 - Non-SMS Developers
 - Task and Information Map
 - Compatibility and Extensibility
 - Logical Format
 - Security
 - Database Information
 - Overflowing the Media
 - Sections
 - Example
 - Resynchronization
 - Direct Seeking
 - NULL FID

F-2 Rev 1.3

- Added the following sections:
 - Soft Media Mark
 - Transaction Sets
- Added the following appendices
 - SIDF Example
 - FID Listings
 - Parser and Builder Example
 - Notes For SMS Developers
- Moved the directory information section from the data set level to the transfer buffer level.
- Added descriptions for all FIDs.
- Media Header:

Added five fields: media type, prior media type, alternate media label, media mark type, and media authentication.

Deleted field span sector count.

Media number is now required.

Media Trailer:

Added a Set Mark

Changed media trailer from "optional" to "required if session overflows the medium."

Deleted field span sector count.

• Session Header:

Session Description is now required. Added a session authentication field.

Session Index:

This is now required and is now encapsulated in transfer buffers to simplify spanning the index onto next medium.

Added field fully qualified path.

Deleted field target name type ver

Changed media buffer offset to transfer buffer offset.

Media Index:

This index is now required and is now encapsulated in transfer buffers to simplify spanning the index onto next medium.

Rev 1.3 E-3

• Transfer Buffer Header:

Added transfer buffer crc field.

• Directory Header:

Added a backup option field.

• File Header:

Added the following fields:

Data Stream Type

Data Stream Compression Type

Data Stream Number

Backup Option

• Sparse Data Stream Header:

Deleted. This section is replaced by the data stream header.

• Full Paths:

Added "Path Is Fully Qualified" field.

• Data Set Characteristics:

Added the following characteristics:

Archiver name

Modifier name

Owner name

• Data Stream Header:

Added the following fields:

Data stream type

Data stream number

Data stream compressed size

Data stream expanded size

• Data Set Information

Changed key info size from a UNIT16 to a UINT8

F-4 Rev 1.3

Glossary

Rev 1.3 GL-1

Data Set A data set is a generic term meaning a collection of related

data. For example, each directory or file on a file server is a

data set.

Data Set Data Contains the data set's data, path information, attributes, etc.

This is the data formatted at the data set level.

Data Set Information Information needed for a user information display. For

instance, this information can be the data set's name, creation date, etc. An engine can use this to display the data set that

is being serviced.

Device A device capable of mounting, reading or writing to media.

Emancipate To release the device or media.

Empty Media Media with no media header.

End of Recorded Data

The end of the last session on the medium.

FID Field IDentifier. A data format that allows the identification

of data sets.

Fully Qualified Data Set Name A complete path (primary resource, parent(s), and an optional

node terminal name). For example, in NetWare v3.11 this

could be "volume:dirName/dirName/fileName" or

"volume:dirName/dirName/." This name may or may not have

been verified.

Internetwork Comprises all LANs of an organization or groups of

organizations.

Media This may refer to the smallest object that can physically be

managed by a device. Managing the media consists of mounting, moving, or accessing as a unit. A single medium includes a single tape (even if the tape is partitioned) for sequential devices, a single disk for Magneto-Optical (MO) and Write Once Read Many (WORM) devices, and a single partition on hard disk devices. The media handle returned by SDI refers to this object. This document uses the word media to suggest either a single medium or many media, unless

there is a need to clarify which is which.

Media Handle See Media.

Media Label See Media Set.

Media Set One logical object consisting of one or more sequentially

numbered media. Each medium in the media set has the same name and a sequence number. The sequence number

GL-2 Rev 1.3

establishes the medium's uniqueness in the media set. These are called the media label. A media set is treated a one

logical group.

Medium The singular of media.

Session Physical Sector Address Addresses that are relative to a session. That is, the first

sector following a session header is physical sector one. This also holds true for session interleaving. Physical sector addresses for session one are relative to session header one and physical sector addresses for session two are relative to session header 2. Physical sector zero is the first addressable

sector within the SIDF space.

Primary Resources Main objects on a target. For example, in NetWare v3.11

these are the bindery and volumes; on a workstation these are

the drives (A:, B:, etc.).

Resource A data set on the target. For example, in DOS resources are

drives, directories, and files.

SD API Storage Device API

SDI Storage Device Interface

Storage Management Refers to the back/ng up, archiving, restoring, and scanning of

data found on a target service.

Subjugate To assign to an engine.

Rev 1.3 GL-3

GL-4 Rev 1.3

Index

Rev 1.3 Index-1

0xA55A 1-31

A55A 1-31

Access date B-8

Bit data B-8

Bit format B-5

Byte order, data 1-29

Byte order, data size 1-29

Byte order, FID 1-29

Case sensitivity 1-14, 2-40

Characteristics B-5, B-9

Characteristics Section B-4, B-7

Compiler flags D-2

crc 2-2

CRC polynomial 1-17

Creation date and time B-5, B-8

Data byte order 1-29

Data size byte order 1-29

Data size format 3 B-5, B-8

Data stream header B-10

Data Stream Header Section B-9

Data stream size B-10

Data stream trailer B-10

Data Stream Trailer Section B-10

Data, bit B-8

Directory B-5

Directory header B-3

Directory Header Section B-3

Directory trailer B-6

Directory Trailer Section B-5

Endian, little 1-29

FID 1-17

FID byte order 1-29

FID, NULL 1-28

FID, short developer fixed B-5

FID, short developer variable B-5

FID, short fixed developer B-8

FID, short variable developer B-9

FID, small fixed standard B-5, B-8

FID, small variable standard B-5

FIDs 1-18

Field functions E-4

Field, parsing E-4

File header B-6

File Header Section B-6

File trailer B-11

File Trailer Section B-10

Format 3 B-5, B-8

Formatting a path 2-13

Full paths B-4, B-7

Full Paths Section B-3, B-6

Index-2 Rev 1.3

Functions, field E-4

Inherited rights mask B-5, B-8

Little endian 1-29

Low-high byte order 1-18, 1-29

Media set 1-8

Media trailer 1-9

Media type within a media set 2-7

Medium consistency within media set 1-8

Modifier id B-9

Modify date and time B-8

Name positions B-4, B-7

Name space numbers 2-24, 2-27

Needs archive B-8

NULL FID 1-28

NWSMGetNextField E-4

NWSMPutNextField E-4

offset to end 2-2, B-4, B-6, B-8

Owner id B-5, B-9

Parsing fields E-4

Parsing resynchronization 1-31

Path name B-4, B-7

Path name space type B-3, B-6

Path, formatting 2-13

Resynchronization 1-31, 2-2

Routines E-4

Sections, def 1-17

Sector size consistency within media set 1-8

Separator positions B-4, B-7

Session, defined 1-6

Short developer fixed FID B-5

Short developer variable FID B-5

Short fixed developer FID B-8

Short variable developer FID B-9

Size format 3 B-5

Size of the Data 1-28

Small fixed standard FID B-5, B-8

Small variable standard FID B-5

Transfer buffer 1-3

Rev 1.3 Index-3

Index-4 Rev 1.3