

# SIDF Example

Directory Header Section .....	B-3
Full Paths Section .....	B-3
Characteristics Section .....	B-4
Directory Trailer Section .....	B-5
File Header Section .....	B-6
Full Paths Section .....	B-6
Characteristics Section .....	B-7
Data Stream Header Section .....	B-9
Data Stream Trailer Section .....	B-10
File Trailer Section .....	B-10

This appendix contains an example of a formatted DOS data set. Each enclosed rectangle in the hex dump below represents one field and is explained below.

**Note:** The index may help you to locate a particular section, field, FID, or data size format in this appendix.

0C 02 A5 5A	0C 00	10 02 A5 5A	01 08 1A 00 00 00	...Z.....Z.....		
00 00 00 00	11 01 00	27 04 00 00 04 00	28 04 03	.....'.....(..		
00 08 00	12 09 53 59 53 3A 54 41 50 45 2F	10 00		.....SYS:TAPE/..		
13 02 A5 5A	01 08 21 00 00 00 00 00 00 00	62 64		...Z...!.....bd		
6F 73 18	14 C1	81 52 FF 01 00 00	81 37 11 01 00	os....R.....7...		
00 00 01 00 53 55 50 45 52 56 49 53 4F 52 00	13			....SUPERVISOR..		
00	0D 02 A5 5A	0D 00	0E 02 A5 5A	0E 00	10 02 A5	...Z.....Z.....
5A	01 08 11 00 00 00 00 00 00 00	11 01 00	27 00	Z.....'..		
28 00	12 08 44 41 54 41 5F 46 4D 54	10 00	13 02	(...DATA_FMT....		
A5 5A	01 08 3D 00 00 00 00 00 00 00	62 8C 81 74		.Z..=.....b..t		
18	41 74 18	72 60 81 74 18	16 C1	81 52 FF FF 00	.At.r`.t....R...	
00	81 38 11 01 00 00 00 01 00 53 55 50 45 52 56			..8.....SUPERV		
49 53 4F 52 00	81 37 11 01 00 00 00 01 00 53 55			ISOR..7.....SU		
50 45 52 56 49 53 4F 52 00	13 00	1D 02 A5 5A	2C	PERVISOR.....Z,		
01 00	2B 01 00	20 01 7C	1D 00	54 68 69 73 20 66	..+.. . ..This f	
69 6C 65 20 68 61 73 20 62 65 65 6E 20 62 61 63				ile has been bac		
6B 65 64 20 75 70 20 77 69 74 68 20 73 62 61 63				ked up with sbac		
6B 75 70 20 73 6F 0D 0A 74 68 61 74 20 77 65 20				kup so..that we		
63 61 6E 20 67 65 74 20 61 20 74 72 61 63 65 20				can get a trace		
6F 66 20 74 68 65 20 53 49 44 46 20 20 66 6F 72				of the SIDF for		
20 64 65 6D 6F 6E 0D 0A 73 74 72 61 74 69 6F 6E				a demonstration		
2E 20 20 20 20 20 20 20 20 20 20 20 20 20 20				.		
20 20 20 20 0D 0A	1E 02 A5 5A	1E 00	0F 02 A5 5A	.....z.....Z		
0F 00				..		

## Directory Header Section

The first field marks the beginning of a directory header section. The field contains a directory header FID (0x0C), a data size descriptor that says the data is two bytes long (02), and data (0xA55A). The FID is a small variable standard FID that uses size format 1.

FID	Data Size	Data
0C	02	A5 5A

Directory header field:

This field marks the end of the directory header section. It contains a small variable standard FID that uses data size format 1.

FID	Data Size	Data
0C	00	

## Full Paths Section

This field marks the beginning of the full path section. It contains the path to the directory. It also contains a small variable standard FID that uses data size format 1.

FID	Data Size	Data
10	02	A5 5A

### Offset to end

This field contains the offset to the beginning of the last field in this section. It contains a small variable standard FID that uses data size format 1. The offset is 0x1A.

FID	Data Size	Data
01	08	1A 00 00 00 00 00 00 00

### Path name space type

This field contains the name space type of the directory. The field repeats for each name space that existed on the volume. It contains a small variable standard FID that uses data size format 1.

FID	Data Size	Data
11	01	00

**Name positions**

This field contains an array that has the beginning position of each node in the path. It contains a small variable standard FID that uses data size format 1.

FID	Data	Size	Data
27	04	00 00	04 00

**Separator positions**

This field contains an array that has the beginning position of each node separator (e.g., for DOS this is ":" and "\\"). The field also contains a small variable standard FID that uses data size format 1.

FID	Data	Size	Data
28	04	03 00	08 00

**Path name**

This field contains the path to the directory. It also contains a small variable standard FID that uses data size format 1.

FID	Data	Size	Data
12	09		SYS:TAPE/

**Full paths**

This field marks the end of the full path section. It contains a small variable standard FID that uses data size format 1.

FID	Data	Size	Data
10	00		

**Characteristics Section**

This field marks the beginning of the data set's (SYS:TAPE) characteristics section. It contains a small variable standard FID that uses data size format 1.

FID	Data	Size	Data
13	02	A5	5A

**Offset to end**

This field contains the offset to the beginning of the last field in this section. It also contains a small variable standard FID that uses data size format 1.

FID	Data	Size	Data
01	08	21 00	00 00 00 00 00 00

**Creation date and time**

This field contains a small fixed standard FID whose data size is  $2^2$ .

FID	Data Size	Data
62		64 6F 73 18

**Directory**

This field contains a small variable standard FID that uses data size format 3. The data is 1 bit whose value is 1. The actual value of this field is shown below.

actual field value: 14 C1

FID	Data Size (upper two bits)	Data (lower 6 bits)
14	11	1

**Inherited rights mask**

This field contains a short developer fixed FID whose data size is  $2^2$ .

FID	Data Size	Data
8152		FF 01 00 00

**Owner ID**

This field contains a short developer variable FID that uses data size format 1. The data contains a four-byte ID, a two-byte type, and a null-terminated string.

FID	Data Size	Data
8137	11	01 00 00 00 01 00 SUPERVISOR 00

**Characteristics**

This field marks the end of the data set's characteristic section. It contains a small standard variable FID that uses data size format 1.

FID	Data Size	Data
13	00	

**Directory Trailer Section**

This field marks the beginning of the directory trailer section. It contains a small standard variable FID that uses data size format 1.

FID	Data Size	Data
0D	02	A5 5A

### Directory trailer

This field marks the end of the directory trailer section. It contains a small variable standard FID that uses data size format 1.

FID	Data Size	Data
0D	00	

## File Header Section

This field marks the beginning of the file header section. The FID is a small variable standard FID that uses size format 1.

FID	Data Size	Data
0E	02	A5 5A

### File header

This file header field marks the end of the file header section. The FID is a small variable standard FID that uses size format 1.

FID	Data Size	Data
0E	00	

## Full Paths Section

The next field indicates the start of the full path section. The field's FID is a small variable standard FID that uses size format 1.

FID	Data Size	Data
10	02	A5 5A

### Offset to end

The next field is the offset to the beginning of the last field of the full paths section. It contains a small variable standard FID that uses data size format 1.

FID	Data Size	Data
01	08	11 00 00 00 00 00 00 00

### Path name space type

The next field indicates the data set's name space type. Here, the data set is a DOS file (data = 00). It contains a small variable standard FID that uses data size format 1. Since there is only one name space on the target, DOS, there is only one name space entry in this section.

FID	Data Size	Data
11	01	00

**Name positions**

The next field is the name position array. This array contains the beginning position of each node in the path name field (shown later). In this case, the path has only one node (DATA\_FAT), the terminal node name (the file name). For more information about constructing the name position array, please see *Target Service API*. The field contains a small variable standard FID that uses data size format 1.

```
FID  Data Size Data
27   00
```

**Separator positions**

The next field has an array that contains the position of each separator in the path name. A separator is a delimiter that separates nodes in the path name. For more information about constructing the separator positions array, see *Target Service API*. The field contains a small variable standard FID that uses data size format 1.

```
FID  Data Size Data
28   00
```

**Path name**

This field contains the path to the data set. Here, only the file name is DATA\_FAT. The field contains a small variable standard FID that uses data size format 1.

```
FID  Data Size Data
12   08      DATA_FAT
```

**Full paths**

This field marks the end of the full paths section. It contains a small variable standard FID that uses data size format 1.

```
FID  Data Size Data
10   00
```

**Characteristics Section**

The next field marks the beginning of the data set's characteristics section. It contains a small variable standard FID that uses data size format 1.

```
FID  Data Size Data
13   02      A5 5A
```

**Offset to end**

The next field is the offset to the beginning of the last field of the data set characteristics section. It contains a small variable standard FID that uses data size format 1.

FID	Data Size	Data
01	08	3D 00 00 00 00 00 00 00

Following the offset to field is a list of the data set's characteristics:

**Creation date and time**

The field contains a small fixed standard FID whose data size is 2<sup>2</sup>.

FID	Data Size	Data
62		8C 81 74 18

**Access date**

The field contains a small fixed standard FID whose data size is 2<sup>1</sup>.

FID	Data Size	Data
41		74 18

**Modify date and time**

The field contains a small fixed standard FID whose data size is 2<sup>2</sup>.

FID	Data Size	Data
72		60 81 74 18

**Needs archive**

The field contains a small variable standard FID that uses data size format 3. The data is 1 bit whose value is 1. The actual field bytes are:

actual byte values: 16 C1

FID	Data Size (upper two bits)	Data (lower 6 bits)
16	11	1

**Inherited rights mask**

The field contains a short fixed developer FID whose data size is 2<sup>2</sup>.

FID	Data Size	Data
8152		FF FF 00 00



**Modifier ID**

The field contains a short variable developer FID that uses data size format 1. The data contains a four-byte ID, a two-byte type, and a null-terminated string.

FID	Data Size	Data
8138	11	01 00 00 00 01 00 SUPERVISOR 00

**Owner ID**

The field contains is a short variable developer FID that uses data size format 1. The data contains a four-byte ID, a two-byte type, and a null-terminated string.

FID	Data Size	Data
8137	11	01 00 00 00 01 00 SUPERVISOR 00

**Characteristics**

This field marks the end of the data set characteristic section. It contains a small standard FID that uses data size format 1.

FID	Data Size	Data
13	00	

**Data Stream Header Section**

This field marks the beginning of the data stream header section. It contains a small variable standard FID that uses data size format 1.

FID	Data Size	Data
1D	02	A5 5A

**Data Stream Type**

This field contains a small variable standard FID that uses data size format 1. The type is clear data.

FID	Data Size	Data
2C	01	00

**Data Stream Number**

This is a small variable standard FID that uses data size format 1. The stream number is DOS.

FID	Data Size	Data
2B	01	00

### **Data stream size**

This field describes the size of the data set's data (the data follows the end of the section). It contains a small variable standard FID that uses data size format 1.

FID	Data Size	Data
20	01	7C

### **Data stream header**

This field marks the end of the data stream section (the data follows this section). It contains a small variable standard FID that uses data size format 1.

FID	Data Size	Data
1D	00	

### **Data Stream**

The data stream (file data) follows the data stream header (the data is shown below):

```
This file has been backed up with SBackup so..
that we can get a trace of the SIDF for a
demonstration.
```

## **Data Stream Trailer Section**

This field marks the beginning of the data stream trailer and marks the end of the data stream. It contains a small variable standard FID that uses data size format 1.

FID	Data Size	Data
1E	02	A5 5A

### **Data stream trailer**

This field marks the end of the data stream trailer section. It contains a small variable standard FID that uses data size format 1.

FID	Data Size	Data
1E	00	

## **File Trailer Section**

This field marks the beginning of the file trailer section and the end of file DATA\_FAT. It contains a small variable standard FID that uses data size format 1.

FID	Data Size	Data
0F	02	A5 5A

**File trailer**

This field marks the end of the file trailer section. It contains a small variable standard FID that uses data size format 1.

FID	Data Size	Data
0F	00	

