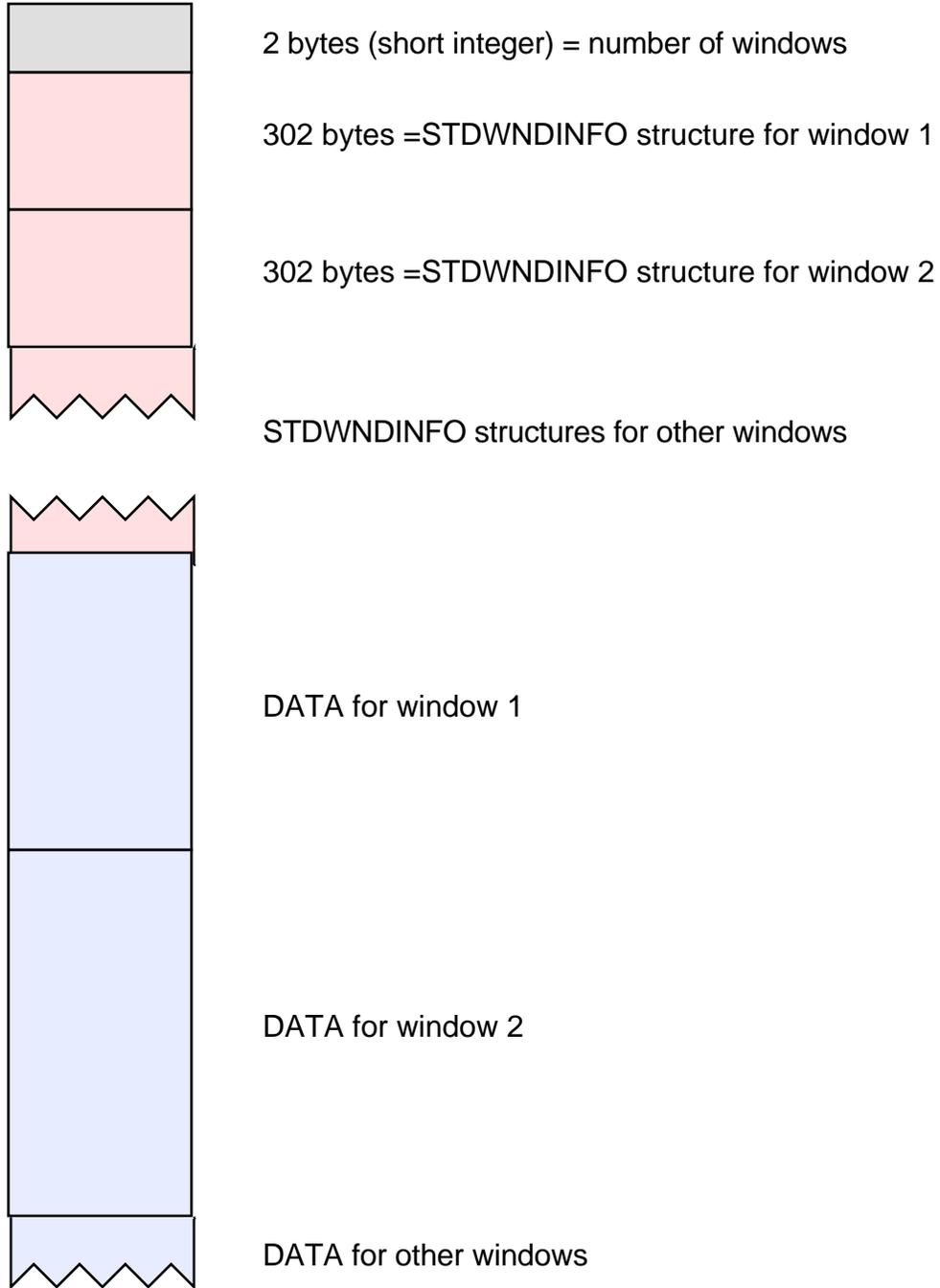


The ALOHA SPY Format (Windows version)

This document contains:

- (1) A simple picture version of the format.
- (2) Text description of the format.
- (3) The steps for getting the Text Summary text from the SPY file.

A simple picture version of the format:



Text description of the format:

The .SPY files are mixed binary and ASCII text.

The first 2 bytes of the file are binary, a short integer giving the number of windows archived in the file. Call this number n.

The next part of the file contains a series of STDWNDINFO structures, one for each window.

A STDWNDINFO structure is 302 bytes long and has the following format:

8 bytes	RECT	boundsRect;
256 bytes	char	title[256]; // NULL terminated cString
2 byte	short	goAwayFlag; // (BOOL)
4 bytes	OSType	type; // (see comment below)
2 bytes	short	hasVScroll; // (BOOL)
2 bytes	short	hasHScroll; // (BOOL)
4 bytes	long	offset;
4 bytes	long	length;
4 bytes	long	refCon;
2 bytes	short	extra;
4 bytes	long	extra1;
4 bytes	long	printHeaderTextLength;
2 bytes	short	showas;
2 bytes	short	screenFont;
2 bytes	short	printFont;

NOTE: The OSType field is 4 chars containing one of the following:
"TXET" "TCIP" or "SCIP"
(which are "TEXT" "PICT" or "PICS" backwards)

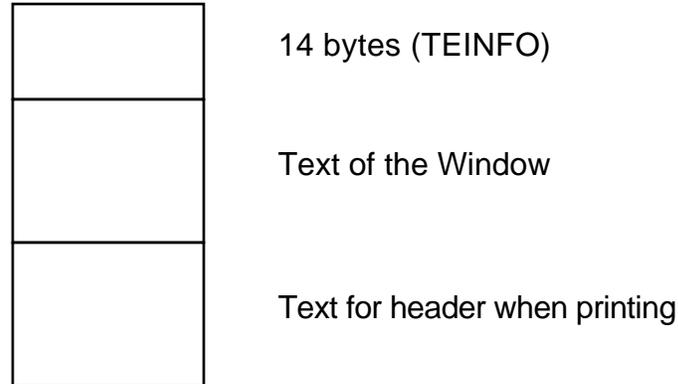
Following the STDWNDINFO records, there is a series of chunks of data, one chunk for each window. What is in each chunk depends on the type of window (each window's type is specified in the type field of the STDWNDINFO record.) You can use the offset and length fields of the STDWNDINFO record to access the data for a given window.

There are two basic types of windows. Picture windows and text windows. The text windows are the Text Summary window, the Raw Sam Data window and the Processed Sam window. The rest of the ALOHA windows are picture windows.

The Data Block of a Text Window

The text windows are of type "TXET"
(which is "TEXT" backwards)

The text windows have three parts to their data chunk. The total length of the data in bytes is specified in the length field of the windows STDWNDINFO structure.



The first part is a 14 byte TEINFO struct.

```
( 2 bytes)  short  lineHeight;  
( 2 bytes)  short  txFont;  
( 2 bytes)  short  txFace;  
( 2 bytes)  short  txMode;  
( 2 bytes)  short  txSize;  
( 4 bytes)  long   refCon;
```

The second part is the text for the window.

The length of the second part can be found by the formula

$$\text{middleLen} = \text{length} - \text{sizeof}(\text{TEINFO}) - \text{printHeaderTextLength}$$

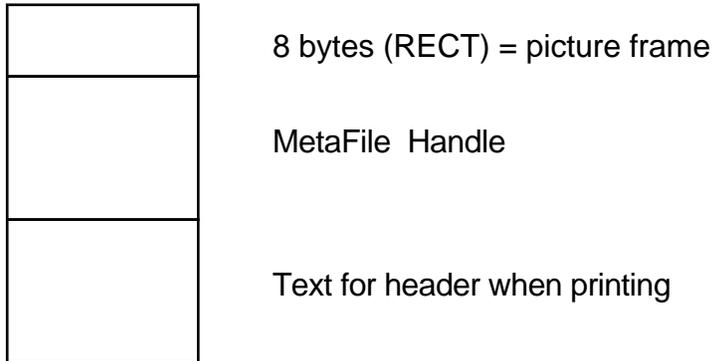
The third part of is the text that ALOHA uses as the header when printing the window. The length of this text is specified in the printHeaderTextLength field of the windows STDWNDINFO structure.

Note that for text windows, this is just a repeat of the text in the middle data block.

The Data Block of a Picture Window

The picture windows are of type "TCIP" or "SCIP"
(which are ""PICT" or "PICS" backwards)

They have 3 parts to their data chunk. The total length of the data in bytes is specified in the length field of the windows STDWNDINFO structure.



The first part is an 8 byte RECT structure specifying the rectangle frame of the meta file.

The second part is the binary meta file handle (The handle created by CreateMetaFile)
The length of the second part can be found by the formula

$$\text{middleLen} = \text{length} - \text{sizeof}(\text{RECT}) - \text{printHeaderTextLength}$$

The third part of is the text that ALOHA uses as the header when printing the window.
The length of this text is specified in the printHeaderTextLength field of the windows STDWNDINFO structure.

The steps for getting the Text Summary text from the SPY file

(1) read the first two bytes to determine the number of windows in the file

(2) read all of the STDWNDINFO blocks and locate the one for the Text Summary window. This one has "Text Summary" in the title.

(3) Set your file position to be after the Text summary windows TEINFO block. I.e., set your file position to offset + 14.

Now read length - (14 + printHeaderTextLength) characters.

Congratulations. You are done !!!