NAME

TIFFSetField - set the value(s) of a tag in a TIFF file open for writing

SYNOPSIS

```
#include <tiffio.h>
#include <stdarg.h>"
```

int TIFFSetField(TIFF *tif, ttag_t tag, ...)

int TIFFVSetField(TIFF *tif, ttag_t tag, va_list ap)

int TIFFUnsetField(TIFF *tif, uint32_t tag)

DESCRIPTION

TIFFSetField() sets the value of a field or pseudo-tag in the current directory associated with the open TIFF file *tif*. (A *pseudo-tag* is a parameter that is used to control the operation of the TIFF library but whose value is not read or written to the underlying file.) To set the value of a field the file must have been previously opened for writing with *TIFFOpen()*. Pseudo-tags can be set whether the file was opened for reading or writing. The field is identified by *tag*, one of the values defined in the include file **tiff.h** (see also the table below). The actual value is specified using a variable argument list, as prescribed by the **stdarg.h** interface.

TIFFVSetField() is functionally equivalent to *TIFFSetField()* except that it takes a pointer to a variable argument list. *TIFFVSetField()* is useful for writing routines that are layered on top of the functionality provided by *TIFFSetField()*.

TIFFUnsetField() clears the contents of the field in the internal structure. If it is a custom field, it is removed from the list of known tags.

The tags understood by **libtiff**, the number of parameter values, and the expected types for the parameter values are shown below. The data types are:

TAG DATA TYPES

Type	Description
char*	a null-terminated string corresponding to the **ASCII** data

		type	
uint16_t	an unsigned 16-bit	
		value	
uint32_t	an unsigned 32-bit	
		value;	
uint16_t*	an array of unsigned 16-bit	
		values.	
void*	an array of data values of	
		unspecified type.	

Consult the TIFF specification for information on the meaning of each tag.

TAG PROPERTIES

Tag name	Count	Types	Notes
TIFFTAG_ARTIST	1	char*	
TIFFTAG_BADFAXLINES	1	uint32_t	
TIFFTAG_BITSPERSAMPLE	1	uint16_t	<*>
TIFFTAG_CLEANFAXDATA	1	uint16_t	
TIFFTAG_COLORMAP	3	uint16_t*	1 << BitsPerSample arrays
TIFFTAG_COMPRESSION	1	uint16_t	<*>
TIFFTAG_CONSECUTIVEBADFAXLINES	1	uint32_t	
TIFFTAG_COPYRIGHT	1	char*	

TIFFTAG_DATETIME	1	char*	
TIFFTAG_DOCUMENTNAME	1	char*	
TIFFTAG_DOTRANGE	2	uint16_t	
TIFFTAG_EXTRASAMPLES	2	uint16_t, uint16_t*	<*> count, types array
TIFFTAG_FAXFILLFUNC	1	TIFFFaxFillFunc	G3/G4 compression pseudo-tag
TIFFTAG_FAXMODE	1	int	<*> G3/G4 compression pseudo-tag
TIFFTAG_FILLORDER	1	uint16_t	<*>
TIFFTAG_GROUP3OPTIONS	1	uint32_t	<*>
TIFFTAG_GROUP4OPTIONS	1	uint32_t	<*>
TIFFTAG_HALFTONEHINTS	2	uint16_t	
TIFFTAG_HOSTCOMPUTER	1	char*	
TIFFTAG_ICCPROFILE	2	uint32_t, void*	count, profile data*
TIFFTAG_IMAGEDEPTH	1	uint32_t	<*>
TIFFTAG_IMAGEDESCRIPTION	1	char*	
TIFFTAG_IMAGELENGTH	1	uint32_t	
TIFFTAG_IMAGEWIDTH	1	uint32_t	<*>
TIFFTAG_INKNAMES	2	uint16_t,	

		char*		
TIFFTAG_INKSET	1	uint16_t	<*>	
TIFFTAG_JPEGCOLORMODE	1	int	<*> JPEG pseudo-tag	
TIFFTAG_JPEGQUALITY	1	int	JPEG pseudo-tag	
TIFFTAG_JPEGTABLES	2	uint32_t*, void*	<*> count, tables	
TIFFTAG_JPEGTABLESMODE	1	int	<*> JPEG pseudo-tag	
TIFFTAG_MAKE	1	char*		
TIFFTAG_MATTEING	1	uint16_t	<*>	
TIFFTAG_MAXSAMPLEVALUE	1	uint16_t		
TIFFTAG_MINSAMPLEVALUE	1	uint16_t		
TIFFTAG_MODEL	1	char*		
TIFFTAG_ORIENTATION	1	uint16_t		
TIFFTAG_PAGENAME	1	char*		
TIFFTAG_PAGENUMBER	2	uint16_t		
TIFFTAG_PHOTOMETRIC	1	uint16_t		
TIFFTAG_PHOTOSHOP	?	uint32_t, void*	count, data	
TIFFTAG_PLANARCONFIG	1	uint16_t	<*>	
TIFFTAG_PREDICTOR	1	uint16_t	<*>	

TIFFTAG_PRIMARYCHROMATICITIES	1	float*	6-entry array
TIFFTAG_REFERENCEBLACKWHITE	1	float*	<*> 6-entry array
TIFFTAG_RESOLUTIONUNIT	1	uint16_t	
TIFFTAG_RICHTIFFIPTC	2	uint32_t, void*	count, data
TIFFTAG_ROWSPERSTRIP	1	uint32_t	<*> must be > 0
TIFFTAG_SAMPLEFORMAT	1	uint16_t	<*>
TIFFTAG_SAMPLESPERPIXEL	1	uint16_t	<*> value must be <= 4
TIFFTAG_SMAXSAMPLEVALUE	1	double	
TIFFTAG_SMINSAMPLEVALUE	1	double	
TIFFTAG_SOFTWARE	1	char*	
TIFFTAG_STONITS	1	double	<*>
TIFFTAG_SUBFILETYPE	1	uint32_t	
TIFFTAG_SUBIFD	2	uint16_t, uint64_t*	count, offsets array
TIFFTAG_TARGETPRINTER	1	char*	
TIFFTAG_THRESHHOLDING	1	uint16_t	
TIFFTAG_TILEDEPTH	1	uint32_t	<*>
TIFFTAG_TILELENGTH	1	uint32_t	<*> must be a

			multiple of 8
TIFFTAG_TILEWIDTH	1	uint32_t	<*> must be a multiple of 8
TIFFTAG_TRANSFERFUNCTION	1 or 3<**>	uint16_t*	1 << BitsPerSample entry arrays
TIFFTAG_WHITEPOINT	1	float*	2-entry array
TIFFTAG_XMLPACKET	2	uint32_t, void*	count, data
TIFFTAG_XPOSITION	1	float	
TIFFTAG_XRESOLUTION	1	float	
TIFFTAG_YCBCRCOEFFICIENTS	1	float*	<*> 3-entry array
TIFFTAG_YCBCRPOSITIONING	1	uint16_t	<*>
TIFFTAG_YCBCRSAMPLING	2	uint16_t	<*>
TIFFTAG_YPOSITION	1	float	
TIFFTAG_YRESOLUTION	1	float	

<*>:
Tag may not have its values changed once data is written.

<**>:
If **SamplesPerPixel** is one, then a single array is passed; otherwise three arrays should be passed.

***:** The contents of this field are quite complex. See "The ICC Profile Format Specification", Annex B.3 "Embedding ICC Profiles in TIFF Files" (available at *http://www.color.org*) for an explanation.

RETURN VALUES

1 is returned if the operation was successful. Otherwise, 0 is returned if an error was detected.

DIAGNOSTICS

All error messages are directed to the *TIFFErrorExtR()* routine.

%s: Cannot modify tag "%s" while writing:
Data has already been written to the file, so the specified tag's value can not be changed. This restriction is applied to all tags that affect the format of written data.

%d: Bad value for "%s":
An invalid value was supplied for the named tag.

SEE ALSO

TIFFOpen (3tiff), *TIFFGetField* (3tiff), *TIFFSetDirectory* (3tiff), *TIFFWriteDirectory* (3tiff), *TIFFReadDirectory* (3tiff), *libtiff* (3tiff)

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