NAME

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

SYNOPSIS

   #include <tiffio.h>

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

   #include <stdarg.h>

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

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*(3TIFF); 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*(3) interface (or, on some machines, the *varargs*(3) 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*.

   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: *char** is null-terminated string and corresponds
   to the ASCII data type; *uint16_t* is an unsigned 16-bit value; *uint32_t* is an unsigned 32-bit value;
   uint16_t* is an array of unsigned 16-bit values. *void** is an array of data values of unspecified type.

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

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-t
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 **TIFFError**(3TIFF) 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)

Libtiff library home page: **http://www.simplesystems.org/libtiff/**