NAME

TIFFGetField, TIFFVGetField − get the value(s) of a tag in an open TIFF file

SYNOPSIS

#include <tiffio.h>

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

#include <stdarg.h>

int TIFFVGetField(TIFF ****tif*, ttag_t** *tag***, va_list** *ap***)**
int TIFFGetFieldDefaulted(TIFF ****tif*, ttag_t** *tag***, ...)**
int TIFFVGetFieldDefaulted(TIFF ****tif*, ttag_t** *tag***, va_list** *ap***)**

DESCRIPTION

TIFFGetField returns the value of a tag or pseudo-tag associated with the the current directory of the opened 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.) The file must have been previously opened with *TIFFOpen*(3TIFF). The tag is identified by *tag*, one of the values defined in the include file **tiff.h** (see also the table below). The type and number of values returned is dependent on the tag being requested. The programming interface uses a variable argument list as prescribed by the *stdarg*(3) interface. The returned values should only be interpreted if *TIFFGetField* returns 1.

TIFFVGetField is functionally equivalent to *TIFFGetField* except that it takes a pointer to a variable argument list. *TIFFVGetField* is useful for layering interfaces on top of the functionality provided by *TIFFGetField*.

TIFFGetFieldDefaulted and *TIFFVGetFieldDefaulted* are identical to *TIFFGetField* and *TIFFVGetField*, except that if a tag is not defined in the current directory and it has a default value, then the default value is returned.

The tags understood by *libtiff(3TIFF),* the number of parameter values, and the types for the returned values are shown below. The data types are specified as in C and correspond to the types used to specify tag values to *TIFFSetField*(3TIFF). Remember that *TIFFGetField* returns parameter values, so all the listed data types are pointers to storage where values should be returned. Consult the TIFF specification (or relevant industry specification) for information on the meaning of each tag and their possible values.

Tag Name	*Count*	*Types*	*Notes*
TIFFTAG_ARTIST	1	char**	
TIFFTAG_BADFAXLINES	1	uint32*	
TIFFTAG_BITSPERSAMPLE	1	uint16*	
TIFFTAG_CLEANFAXDATA	1	uint16*	
TIFFTAG_COLORMAP	3	uint16**	1<<BitsPerSample arrays
TIFFTAG_COMPRESSION	1	uint16*	
TIFFTAG_CONSECUTIVEBADFAXLINES	1	uint32*	
TIFFTAG_COPYRIGHT	1	char**	
TIFFTAG_DATATYPE	1	uint16*	
TIFFTAG_DATETIME	1	char**	
TIFFTAG_DOCUMENTNAME	1	char**	
TIFFTAG_DOTRANGE	2	uint16*	
TIFFTAG_EXTRASAMPLES	2	uint16*,uint16**	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*	
TIFFTAG_GROUP3OPTIONS	1	uint32*	
TIFFTAG_GROUP4OPTIONS	1	uint32*	
TIFFTAG_HALFTONEHINTS	2	uint16*	
TIFFTAG_HOSTCOMPUTER	1	char**	

TIFFTAG_ICCPROFILE	2	uint32*,void**	count, profile data
TIFFTAG_IMAGEDEPTH	1	uint32*	
TIFFTAG_IMAGEDESCRIPTION	1	char**	
TIFFTAG_IMAGELENGTH	1	uint32*	
TIFFTAG_IMAGEWIDTH	1	uint32*	
TIFFTAG_INKNAMES	1	char**	
TIFFTAG_INKSET	1	uint16*	
TIFFTAG_JPEGCOLORMODE	1	int*	JPEG pseudo-tag
TIFFTAG_JPEGQUALITY	1	int*	JPEG pseudo-tag
TIFFTAG_JPEGTABLES	2	uint32*,void**	count & tables
TIFFTAG_JPEGTABLESMODE	1	int*	JPEG pseudo-tag
TIFFTAG_MAKE	1	char**	
TIFFTAG_MATTEING	1	uint16*	
TIFFTAG_MAXSAMPLEVALUE	1	uint16*	
TIFFTAG_MINSAMPLEVALUE	1	uint16*	
TIFFTAG_MODEL	1	char**	
TIFFTAG_ORIENTATION	1	uint16*	
TIFFTAG_PAGENAME	1	char**	
TIFFTAG_PAGENUMBER	2	uint16*	
TIFFTAG_PHOTOMETRIC	1	uint16*	
TIFFTAG_PHOTOSHOP	2	uint32*,void**	count, data
TIFFTAG_PLANARCONFIG	1	uint16*	
TIFFTAG_PREDICTOR	1	uint16*	
TIFFTAG_PRIMARYCHROMATICITIES	1	float**	6-entry array
TIFFTAG_REFERENCEBLACKWHITE	1	float**	6-entry array
TIFFTAG_RESOLUTIONUNIT	1	uint16*	
TIFFTAG_RICHTIFFIPTC	2	uint32*,void**	count, data
TIFFTAG_ROWSPERSTRIP	1	uint32*	
TIFFTAG_SAMPLEFORMAT	1	uint16*	
TIFFTAG_SAMPLESPERPIXEL	1	uint16*	
TIFFTAG_SMAXSAMPLEVALUE	1	double*	
TIFFTAG_SMINSAMPLEVALUE	1	double*	
TIFFTAG_SOFTWARE	1	char**	
TIFFTAG_STONITS	1	double**	
TIFFTAG_STRIPBYTECOUNTS	1	uint32**	
TIFFTAG_STRIPOFFSETS	1	uint32**	
TIFFTAG_SUBFILETYPE	1	uint32*	
TIFFTAG_SUBIFD	2	uint16*,uint64**	count & offsets array
TIFFTAG_TARGETPRINTER	1	char**	
TIFFTAG_THRESHHOLDING	1	uint16*	
TIFFTAG_TILEBYTECOUNTS	1	uint32**	
TIFFTAG_TILEDEPTH	1	uint32*	
TIFFTAG_TILELENGTH	1	uint32*	
TIFFTAG_TILEOFFSETS	1	uint32**	
TIFFTAG_TILEWIDTH	1	uint32*	
TIFFTAG_TRANSFERFUNCTION	1 or 3†	uint16**1<<BitsPerSample entry arrays	
TIFFTAG_WHITEPOINT	1	float**	2-entry array
TIFFTAG_XMLPACKET	2	uint32*,void**	count, data
TIFFTAG_XPOSITION	1	float*	
TIFFTAG_XRESOLUTION	1	float*	
TIFFTAG_YCBCRCOEFFICIENTS	1	float**	3-entry array
TIFFTAG_YCBCRPOSITIONING	1	uint16*	
TIFFTAG_YCBCRSUBSAMPLING	2	uint16*	
TIFFTAG_YPOSITION	1	float*	

TIFFTAG_YRESOLUTION 1 float*‡

† If *SamplesPerPixel* is one, then a single array is returned; otherwise three arrays are returned.

‡ 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.

AUTOREGISTERED TAGS

If you can't find the tag in the table above that means this is an unsupported tag and is not directly supported by **libtiff(3TIFF)** library. You will still be able to read it's value if you know the data type of that tag. For example, if you want to read the LONG value from the tag 33424 and ASCII string from the tag 36867 you can use the following code:

```
uint32  count;
void    *data;

TIFFGetField(tiff, 33424, &count, &data);
printf("Tag %d: %d, count %d\n", 33424, *(uint32 *)data, count);
TIFFGetField(tiff, 36867, &count, &data);
printf("Tag %d: %s, count %d\n", 36867, (char *)data, count);
```

RETURN VALUES

1 is returned if the tag is defined in the current directory; otherwise a 0 is returned.

DIAGNOSTICS

All error messages are directed to the **TIFFError**(3TIFF) routine.

Unknown field, tag 0x%x. An unknown tag was supplied.

SEE ALSO

TIFFOpen(3TIFF), **TIFFSetField**(3TIFF), **TIFFSetDirectory**(3TIFF), **TIFFReadDirectory**(3TIFF), **TIFFWriteDirectory**(3TIFF) **libtiff**(3TIFF),

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