

# IMAGE\_DEBUG\_DIRECTORY structure (winnt.h)

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Represents the debug directory format.

## Syntax

C++

```
typedef struct _IMAGE_DEBUG_DIRECTORY {
    DWORD Characteristics;
    DWORD TimeDateStamp;
    WORD MajorVersion;
    WORD MinorVersion;
    DWORD Type;
    DWORD SizeOfData;
    DWORD AddressOfRawData;
    DWORD PointerToRawData;
} IMAGE_DEBUG_DIRECTORY, *PIMAGE_DEBUG_DIRECTORY;
```

## Members

Characteristics

Reserved.

TimeDateStamp

The time and date the debugging information was created.

MajorVersion

The major version number of the debugging information format.

MinorVersion

The minor version number of the debugging information format.

Type



The format of the debugging information. This member can be one of the following values.

 **Expand table**

Constant	Meaning
<b>IMAGE_DEBUG_TYPE_UNKNOWN</b> 0	Unknown value, ignored by all tools.
<b>IMAGE_DEBUG_TYPE_COFF</b> 1	COFF debugging information (line numbers, symbol table, and string table). This type of debugging information is also pointed to by fields in the file headers.
<b>IMAGE_DEBUG_TYPE_CODEVIEW</b> 2	CodeView debugging information. The format of the data block is described by the CodeView 4.0 specification.
<b>IMAGE_DEBUG_TYPE_FPO</b> 3	Frame pointer omission (FPO) information. This information tells the debugger how to interpret nonstandard stack frames, which use the EBP register for a purpose other than as a frame pointer.
<b>IMAGE_DEBUG_TYPE_MISC</b> 4	Miscellaneous information.
<b>IMAGE_DEBUG_TYPE_EXCEPTION</b> 5	Exception information.
<b>IMAGE_DEBUG_TYPE_FIXUP</b> 6	Fixup information.
<b>IMAGE_DEBUG_TYPE_BORLAND</b> 9	Borland debugging information.

**SizeOfData**

The size of the debugging information, in bytes. This value does not include the debug directory itself.

**AddressOfRawData**


The address of the debugging information when the image is loaded, relative to the image base.

**PointerToRawData**

A file pointer to the debugging information.



# Requirements

 Expand table

Requirement	Value
Minimum supported client	Windows XP [desktop apps only]
Minimum supported server	Windows Server 2003 [desktop apps only]
Header	winnt.h (include Windows.h)

## See also

[ImageHlp Structures](#)

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