GetTempFileName function (winbase.h)

Creates a name for a temporary file. If a unique file name is generated, an empty file is created and the handle to it is released; otherwise, only a file name is generated.

Syntax

C++

```
UINT GetTempFileName(
  [in]  LPCTSTR lpPathName,
  [in]  LPCTSTR lpPrefixString,
  [in]  UINT    uUnique,
  [out] LPTSTR  lpTempFileName
);
```

Parameters

`[in] lpPathName`

The directory path for the file name. Applications typically specify a period (.) for the current directory or the result of the GetTempPath2 function. The string cannot be longer than **MAX_PATH**–14 characters or **GetTempFileName** will fail. If this parameter is **NULL**, the function fails.

`[in] lpPrefixString`

The null-terminated prefix string. The function uses up to the first three characters of this string as the prefix of the file name. This string must consist of characters in the OEM-defined character set.

`[in] uUnique`

An unsigned integer to be used in creating the temporary file name. For more information, see Remarks.

If *uUnique* is zero, the function attempts to form a unique file name using the current system time. If the file already exists, the number is increased by one and the functions tests if this file

already exists. This continues until a unique filename is found; the function creates a file by that name and closes it. Note that the function does not attempt to verify the uniqueness of the file name when *uUnique* is nonzero.

`[out] lpTempFileName`

A pointer to the buffer that receives the temporary file name. This buffer should be **MAX_PATH** characters to accommodate the path plus the terminating null character.

Return value

If the function succeeds, the return value specifies the unique numeric value used in the temporary file name. If the *uUnique* parameter is nonzero, the return value specifies that same number.

If the function fails, the return value is zero. To get extended error information, call GetLastError.

The following is a possible return value.

Expand table

Return value	Description
ERROR_BUFFER_OVERFLOW	The length of the string pointed to by the *lpPathName* parameter is more than **MAX_PATH**–14 characters.

Remarks

The **GetTempFileName** function creates a temporary file name of the following form:

*<path>**<pre>**<uuuu>*.TMP

The following table describes the file name syntax.

Expand table

Component	Meaning
<path>	Path specified by the *lpPathName* parameter
<pre>	First three letters of the *lpPrefixString* string

<uuuu>	Hexadecimal value of *uUnique*

If *uUnique* is zero, **GetTempFileName** creates an empty file and closes it. If *uUnique* is not zero, you must create the file yourself. Only a file name is created, because **GetTempFileName** is not able to guarantee that the file name is unique.

Only the lower 16 bits of the *uUnique* parameter are used. This limits **GetTempFileName** to a maximum of 65,535 unique file names if the *lpPathName* and *lpPrefixString* parameters remain the same.

Due to the algorithm used to generate file names, **GetTempFileName** can perform poorly when creating a large number of files with the same prefix. In such cases, it is recommended that you construct unique file names based on **GUID**s.

Temporary files whose names have been created by this function are not automatically deleted. To delete these files call DeleteFile.

To avoid problems resulting when converting an ANSI string, an application should call the CreateFile function to create a temporary file.

In Windows 8 and Windows Server 2012, this function is supported by the following technologies.

Expand table

Technology	Supported
Server Message Block (SMB) 3.0 protocol	Yes
SMB 3.0 Transparent Failover (TFO)	Yes
SMB 3.0 with Scale-out File Shares (SO)	Yes
Cluster Shared Volume File System (CsvFS)	Yes
Resilient File System (ReFS)	Yes

Examples

For an example, see Creating and Using a Temporary File.

Requirements

Expand table

Requirement	Value
Minimum supported client	Windows XP [desktop apps | UWP apps]
Minimum supported server	Windows Server 2003 [desktop apps | UWP apps]
Target Platform	Windows
Header	winbase.h (include Windows.h)
Library	Kernel32.lib
DLL	Kernel32.dll

See also

CreateFile

DeleteFile

File Management Functions

GetTempPath2

Naming Files, Paths, and Namespaces

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