How to generate a temporary file name

QUESTION

I am trying to find a function that will generate a temporary filename. I know that there is the *GetTempFilename* function, but I don't have any examples on how to use it.

Answer 1

```
procedure TForm1.Button1Click(Sender: TObject);
var
  TempFile: array[0..MAX_PATH - 1] of Char;
  TempPath: array[0..MAX_PATH - 1] of Char;
begin
  GetTempPath(MAX_PATH, TempPath);
  if GetTempFileName(TempPath, PChar('abc'), 0, TempFile) = 0 then
    raise Exception.Create(
      'GetTempFileName API failed. ' + SysErrorMessage(GetLastError)
    );
  ShowMessage(TempFile);
end;
```

Note that this would actually create the temp file in the windows temp folder. Check online help for *GetTempFileName*, *uUnique* parameter for details.

Tip by Jack Sudarev

Answer 2

```
function MyGetTempFile(const APrefix: string): string;
var
  MyBuffer, MyFileName: array[0..MAX_PATH] of char;
begin
  FillChar(MyBuffer, MAX_PATH, 0);
  FillChar(MyFileName, MAX_PATH, 0);
  GetTempPath(SizeOf(MyBuffer), MyBuffer);
  GetTempFileName(MyBuffer, APrefix, 0, MyFileName);
  Result := MyFileName;
end;
```

Usage:

```
const
  MyPrefix: String = 'abc';

MyTempFile := MyGetTempFile(MyPrefix);
```

Tip by Andrei Fomine

Answer 3

Pass in the path and filename you want for the first parameter and your extension as the second. If you want the file to always be `myfile1.tmp` rather than `myfile.tmp` leave the last parameter, otherwise set it to *false*. E.g. to create a file like `c:\Tempdir\MyTempFile2000.tmp` do

```
sNewFileName := CreateNewFileName('C:\TempDir\MyTempFile','.tmp');
```

```
function CreateNewFileName(BaseFileName: String; Ext: String;
  AlwaysUseNumber: Boolean = True): String;
var
  DocIndex: Integer;
  FileName: String;
```

```
    FileNameFound: Boolean;
begin
  DocIndex := 1;
  Filenamefound := False;
  {if number not required and basefilename doesn't exist, use that.}
  if not(AlwaysUseNumber) and (not(fileexists(BaseFilename + ext))) then
  begin
    Filename := BaseFilename + ext;
    FilenameFound := true;
  end;
  while not (FileNameFound) do
  begin
    filename := BaseFilename + inttostr(DocIndex) + Ext;
    if fileexists(filename) then
      inc(DocIndex)
    else
      FileNameFound := true;
  end;
  Result := filename;
end;
```

I simply check if the file exists and return the first that doesn't.

Tip by Toby Allen

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