

Find Files in Delphi

The custom procedure **FindFiles** locates files in a given directory (folder) and its subdirectories, and adds their **complete path** to a stringlist. Note that *recursion* is used: FindFiles calls itself at the end of the procedure! The meaning of the parameters of *FindFiles(FilesList, StartDir, FileMask)* is as follows:

- **FilesList** is a stringlist, that you have to create before calling FindFiles. Afterwards, don't forget to free this stringlist.
- In **StartDir** you specify the starting directory, including the disk drive. If you want to search an entire disk, specify the root directory (root folder) of that disk, such as C:\ or D:\
- In **FileMask** you pass the name of the file to find, or a file mask with wildcards, such as ? and *

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implementation
....

// Recursive procedure to build a list of files
procedure FindFiles(FilesList: TStringList; StartDir, FileMask: string);
var
  SR: TSearchRec;
  DirList: TStringList;
  IsFound: Boolean;
  i: integer;
begin
  if StartDir[length(StartDir)] <> '\' then
    StartDir := StartDir + '\';

  { Build a list of the files in directory StartDir
    (not the directories!) }

  IsFound :=
    FindFirst(StartDir+FileMask, faAnyFile-faDirectory, SR) = 0;
  while IsFound do begin
    FilesList.Add(StartDir + SR.Name);
    IsFound := FindNext(SR) = 0;
  end;
  FindClose(SR);

  // Build a list of subdirectories
  DirList := TStringList.Create;
  IsFound := FindFirst(StartDir+'*.*', faAnyFile, SR) = 0;
  while IsFound do begin
    if ((SR.Attr and faDirectory) <> 0) and
      (SR.Name[1] <> '.') then
      DirList.Add(StartDir + SR.Name);
      IsFound := FindNext(SR) = 0;
    end;
  FindClose(SR);

  // Scan the list of subdirectories
  for i := 0 to DirList.Count - 1 do
    FindFiles(FilesList, DirList[i], FileMask);

  DirList.Free;
end;

// Example: how to use FindFiles
procedure TForm1.ButtonFindClick(Sender: TObject);
var
  FilesList: TStringList;
begin
  FilesList := TStringList.Create;
  try
    FindFiles(FilesList, EditStartDir.Text, EditFileMask.Text);
    ListBox1.Items.Assign(FilesList);
    LabelCount.Caption := 'Files found: ' + IntToStr(FilesList.Count);
  finally
    FilesList.Free;
  end;
end;

```