Execute a DOS command and capture the output

Here's a tip from Joe Donth that shows how to run and capture the output of a "DOS" command using `cmd.exe` (NT systems only?).

It works by running `cmd.exe` with the command to be run passed in *CommandLine* with the current directory optionally passed in the *Work*. The command is run and the output is returned as a string.

```
function GetDosOutput(CommandLine: string; Work: string = 'C:\'): string;
var
  SA: TSecurityAttributes;
  SI: TStartupInfo;
  PI: TProcessInformation;
  StdOutPipeRead, StdOutPipeWrite: THandle;
  WasOK: Boolean;
  Buffer: array[0..255] of AnsiChar;
  BytesRead: Cardinal;
  WorkDir: string;
  Handle: Boolean;
begin
  Result := '';
  with SA do begin
    nLength := SizeOf(SA);
    bInheritHandle := True;
    lpSecurityDescriptor := nil;
  end;
  CreatePipe(StdOutPipeRead, StdOutPipeWrite, @SA, 0);
  try
    with SI do
    begin
      FillChar(SI, SizeOf(SI), 0);
      cb := SizeOf(SI);
      dwFlags := STARTF_USESHOWWINDOW or STARTF_USESTDHANDLES;
      wShowWindow := SW_HIDE;
      hStdInput := GetStdHandle(STD_INPUT_HANDLE); // don't redirect stdin
      hStdOutput := StdOutPipeWrite;
      hStdError := StdOutPipeWrite;
    end;
    WorkDir := Work;
    Handle := CreateProcess(nil, PChar('cmd.exe /C ' + CommandLine),
                            nil, nil, True, 0, nil,
                            PChar(WorkDir), SI, PI);
    CloseHandle(StdOutPipeWrite);
    if Handle then
      try
        repeat
          WasOK := ReadFile(StdOutPipeRead, Buffer, 255, BytesRead, nil);
          if BytesRead > 0 then
          begin
            Buffer[BytesRead] := #0;
            Result := Result + Buffer;
          end;
        until not WasOK or (BytesRead = 0);
        WaitForSingleObject(PI.hProcess, INFINITE);
      finally
        CloseHandle(PI.hThread);
        CloseHandle(PI.hProcess);
      end;
  finally
    CloseHandle(StdOutPipeRead);
  end;
end;
```

To test it, drop a *TMemo*, a *TEdit* and a *TButton* on a form. Set the button's click event handler as follows:

```
procedure TForm1.Button1Click(Sender: TObject);
begin
  Memo1.Text := GetDosOutput(Edit1.Text);
end;
```

Type the required command in the edit box, e.g. `Help DIR`, and click the button to display the output in the memo control.

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