

修改 Delphi RTL 提速的 MOD 使用说明

国外牛人不但开发了许多 Delphi 开源项目，比如 Synopse,还找出了 Delphi 性能瓶颈、BUG。通过修改 RTL 库。实现了速度提升，并且实现了线程安全的增强。

偶们一起来看看，他有多强。

注意：本测试只限于 Delphi 极客进行研究，造成任何损失，笔者概不负责。

- 1.首先当然是你必须要有 Delphi 7 / Delphi 2007
- 2.然后下载相应版本的 RTL 修改版本。

If the **System.pas** file month and year are 08/2002,
download [SynopseRTL082002.exe](#)

If the **System.pas** file month and year are 09/2002,
download [SynopseRTL092002.exe](#)

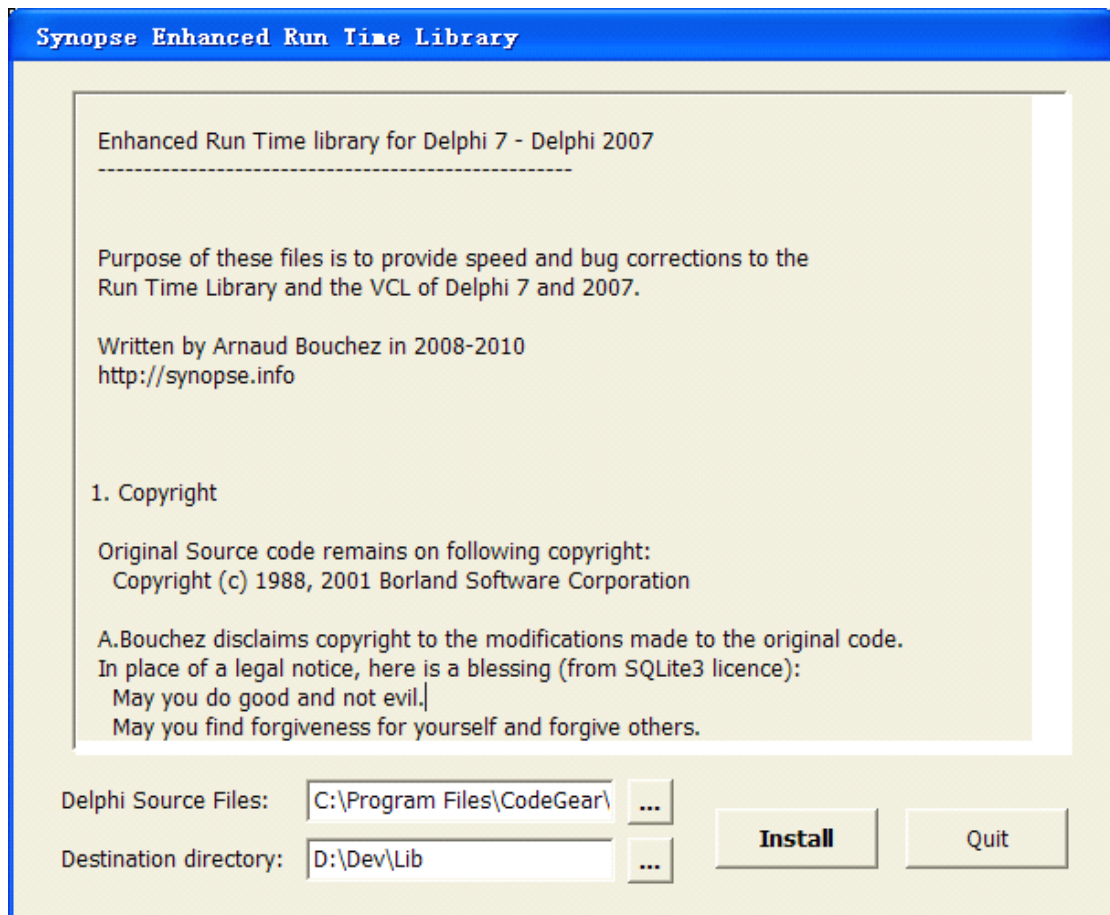
If the **System.pas** file month and year are 04/2004, you should have already applied the 7.1 update: try to download [SynopseRTL042004.exe](#)

You can download the compiled System.dcu and Syslnit.dcu (for Delphi 7) from [SynopseRTLdcu.zip](#).

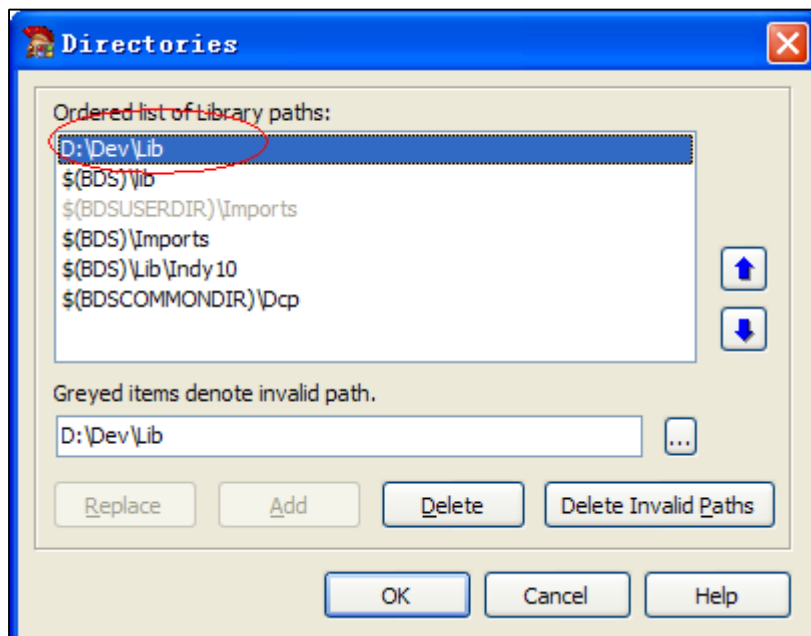
The patcher for Delphi 2007 System.pas and Syslnit.pas is [SynopseRTL2007.exe](#).

注意你的 system.pas 文件日期。

- 3.安装补丁到你的目录,用默认文件夹就可以,需要指定 source 目录,2007 版本，指定到 source\win32



4.在你的 delphi 配置里面，将补丁的程序路径放在最前面



5.验证有多强

在修改之前，测试如下程序：

```
program Project2;
```

```
{$APPTYPE CONSOLE}
```

```
uses
```

```
    SysUtils,
```

```
    windows,
```

```
    classes;
```

```
var start,stop:integer;
```

```
    l:integer;
```

```
    list:array of string;
```

```
    i,j:integer;
```

```
    s:string;
```

```
begin
```

```
    start:=GetTickCount();
```

```
    l:=1000000;
```

```
    SetLength(list,l);
```

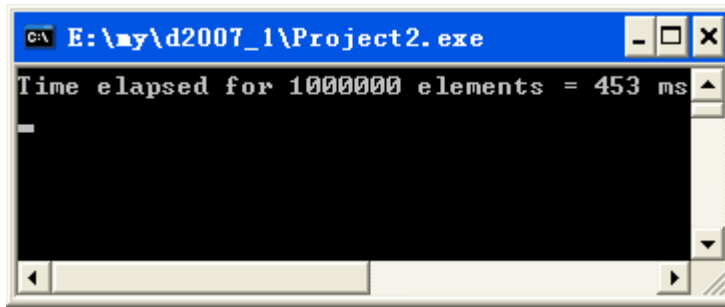
```
    for i:=0 to l-1 do
```

```

begin
j:=1+Random(500);
SetLength(s,j);
list[i]:=s;
end;
for i :=0 to l-1 do
begin
Delete(list[i],1,Length(list[i])-1);
end;
stop:=GetTickCount();
writeln('Time elapsed for ',l,' elements = ',(stop-start),' ms');
readln;
{Result:
- Borland System unit (2006) <700 ms for 1 million elements
- "Enhanced" System unit ~ 2400 ms!
}
end.

```

测试结果:



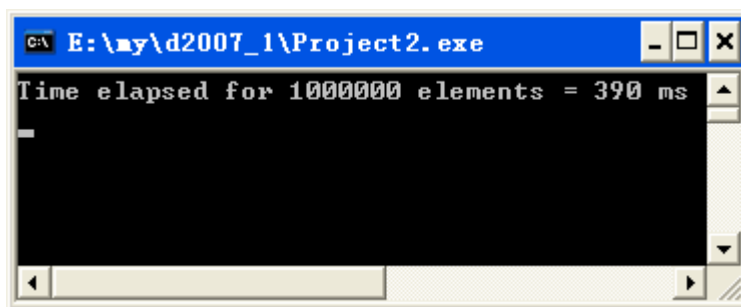
```
C:\> E:\my\d2007_1\Project2.exe
Time elapsed for 1000000 elements = 453 ms
```

CPU:I3 4 线程

内存:2G

操作系统:windows xp sp3

然后用这个增强包修改后，测试:



```
C:\> E:\my\d2007_1\Project2.exe
Time elapsed for 1000000 elements = 390 ms
```

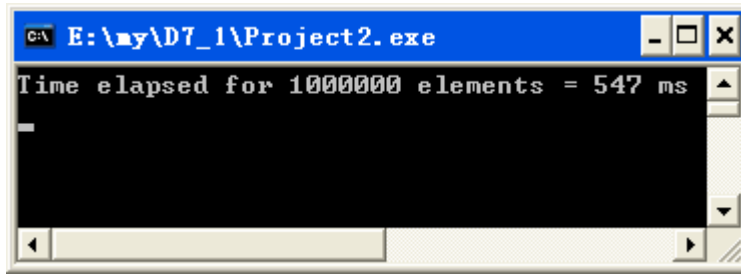
速度提升 = $(453 - 390) / 453$

$= 0.13907284768211920529801324503311$

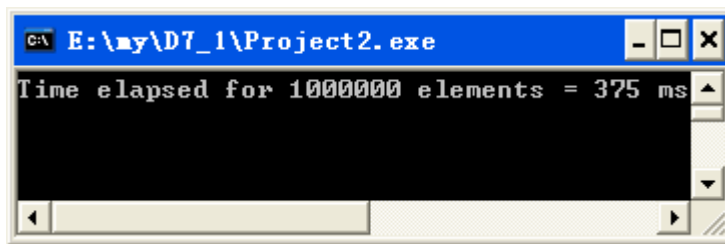
大约 13.9%的性能提升。

这是 D7 的测试:

原始的



修改后:



速度提升 $(547 - 375) / 547 = 0.31444241316270566727605118829982$

大约 31.4%

重要的是还有其他修改。

注意 Delphi7 需要 fastmm499 版本, 用下面程序进行测试.

```
program Project2;
```

```
{$APPTYPE CONSOLE}
```

```
uses
```

```
    FastMM4,
```

```
    SysUtils,
```

```
    windows,
```

```
    classes;
```

```

var start,stop:integer;

    l:integer;
    list:array of string;
    i,j:integer;
    s:string;
begin

    start:=GetTickCount();

    l:=1000000;
    SetLength(list,l);
    for i:=0 to l-1 do
    begin
        j:=1+Random(500);
        SetLength(s,j);
        list[i]:=s;
    end;
    for i:=0 to l-1 do
    begin
        Delete(list[i],1,Length(list[i])-1);
    end;
    stop:=GetTickCount();
    writeln("Time elapsed for ',l,' elements =',(stop-start),' ms');
    readln;
    {Result:
    - Borland System unit (2006) <700 ms for 1 million elements
    - "Enhanced" System unit ~ 2400 ms!
    }
end.

```

Happy 吧。

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经常出没在:<http://www.fpcn.com> QQ 群: 34176611

相关 URL:

<http://www.synopse.info/fossil/wiki/Synopse+OpenSource>

<http://blog.synopse.info/post/2010/01/18/Enhanced-System-Run-Time-for-Delphi-7-and-Delphi-2007>