
Subject: [BUG] TheIDE prevents using MSC Incremental link

Posted by [Shire](#) on Sun, 24 Feb 2013 11:59:34 GMT

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Incremental linking is very good think to accelerate debug builds and enabled by default in Microsoft compilers.

But TheIDE prevents using this technology.

LINK : app.exe not found or not built by the last incremental link; performing full link

Why?

Quote:LINK performs a full link if any of the following situations occur:

The incremental status (.ilk) file is missing. (LINK creates a new .ilk file in preparation for subsequent incremental linking.)

There is no write permission for the .ilk file. (LINK ignores the .ilk file and links nonincrementally.)

The .exe or .dll output file is missing.

The timestamp of the .ilk, .exe, or .dll is changed.

A LINK option is changed. Most LINK options, when changed between builds, cause a full link.

An object (.obj) file is added or omitted.

An object that was compiled with the /Yu /Z7 option is changed.

```
uppsrc/ide/Builders/Build.cpp
```

```
bool MakeBuild::Build
```

```
<...>
```

```
// Set the time of target to start-time, so that if any file changes during
```

```
// compilation, it is recompiled during next build
```

```
SetFileTime(target, start_time);
```

Changing target file timestamp is bad practice. Changing sources during compilation too . Hope you avoid this.

Also there is fully useless invoking of manifest tool:

app.exe.manifest : general error c1010070: Failed to load and parse the manifest.

```
uppsrc/ide/Builders/MscBuilder.icpp
```

```
bool MscBuilder::BuildPackage
```

```
<...>
```

```
if((IsMsc86() || IsMsc64()) && is_shared) {
```

```
    String mt("mt -nologo -manifest ");
```

```
    mt << GetHostPathQ(product + ".manifest") << " -outputresource:" << GetHostPathQ(product)
```

```
    << ";2";
```

```
    Execute(mt);
```

```
}
```

```
bool MscBuilder::Link
```

```
<...>
```

```
if((IsMsc86() || IsMsc64()) && HasFlag("SO")) {
```

```
    String mt("mt -nologo -manifest ");
```

```
    mt << GetHostPathQ(target + ".manifest") << " -outputresource:" << GetHostPathQ(target)
```

```
    << (HasFlag("DLL") ? ";2" : ";1");
```

```
    Execute(mt);
```

}

You can avoid error message by putting manually manifest file near resulting binary. But modern linker automatically (and by default) generates it for resulting executable.

If you want embed custom manifest, you can do it by linker options (/MANIFEST) in Package organizer.

I put these small modifications with proper support of precompiled headers here.

Subject: Re: [BUG] TheIDE prevents using MSC Incremental link

Posted by [Alboni](#) on Tue, 26 Mar 2013 15:45:35 GMT

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I noticed this too. You build. And then when you hit run it links again for no reason.

I suppose changing the timestamp serves a purpose here, but to avoid unnessecary relinking, all .obj and .lib files produced during compilation should have that same timestamp.

Subject: Re: [BUG] TheIDE prevents using MSC Incremental link

Posted by [aftershock](#) on Tue, 31 Mar 2020 13:14:17 GMT

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The bug still exists.

the solution would be I think to change the timestamp of the sourcefile instead of object files and executable if

the timestamp of the source file is after the start time

I lost a lot of time because incremental linking did not work.

a REAALY a lot of time.
