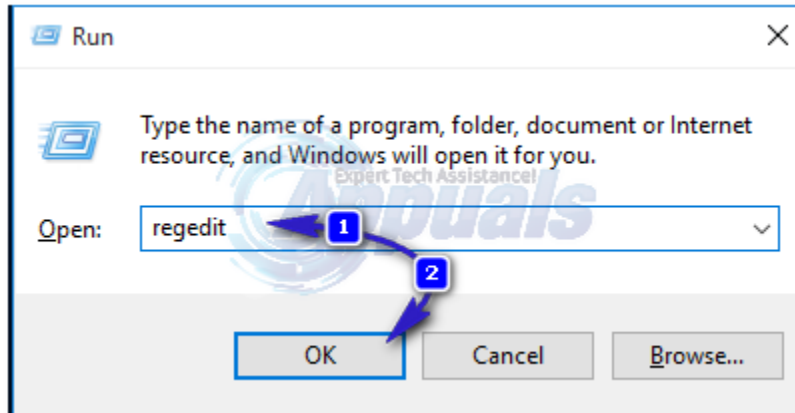


High DPI screen support

Until java 9 (which should have full support for high dpi screens) a tweak must be done on the client system that runs the SmartClient, what works for now is forcing first windows to use an external manifest:

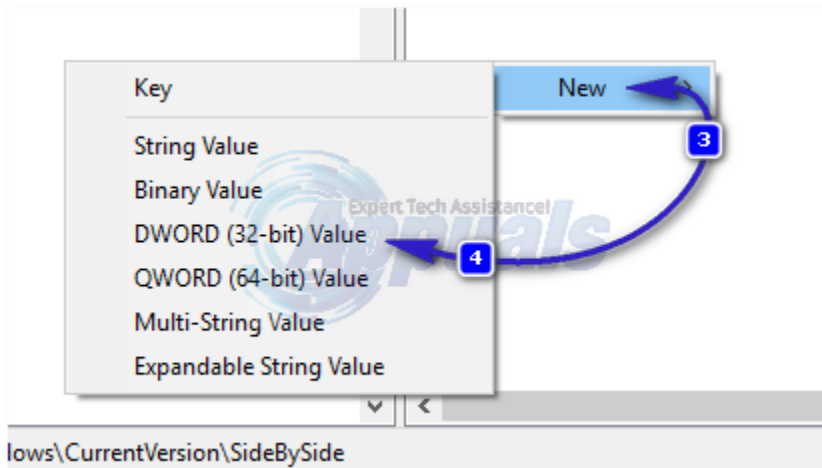
Press **Windows Logo** key + **R** to open a **Run**. Type in **regedit** and press **Enter**.



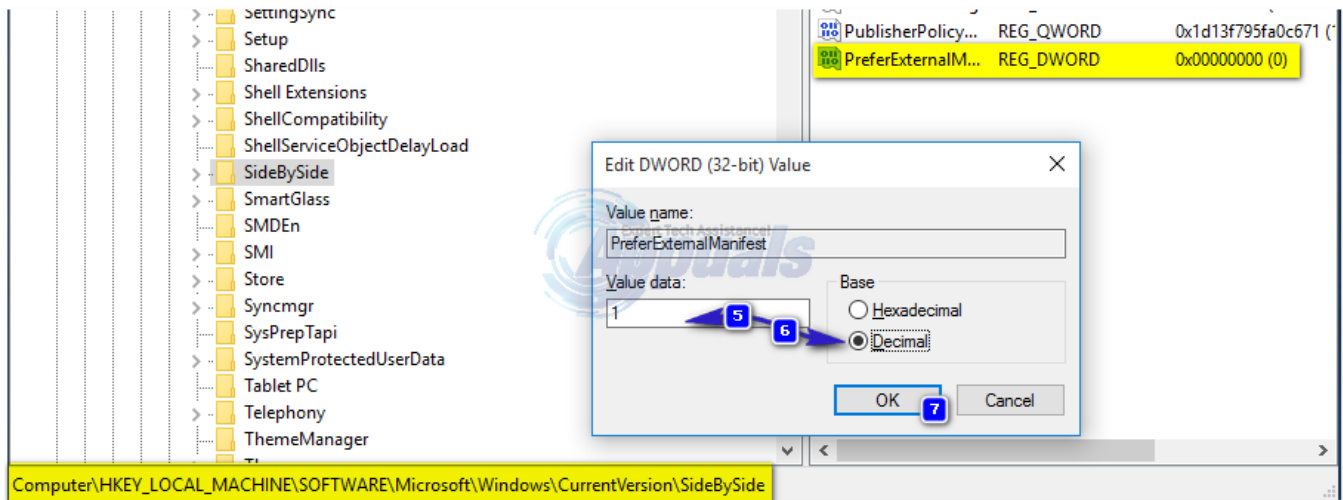
In the left pane of the **Registry Editor**, navigate to the following directory:

`HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion`

Click on **SideBySide** in the left pane to expand its contents in the right pane. Right-click on an empty space in the right pane, hover over **New** and click on **DWORD (32-bit) value**.



Name the file **PreferExternalManifest** and press **Enter**. Right-click the new DWORD value and click on **Modify**. Type **1** into the **Value Data**. Change the value's **Base** to **Decimal**. Click on **OK**. Close the **Registry Editor**.



Then create a xxxx.exe.manifest file with the following content:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>

<assembly xmlns="urn:schemas-microsoft-com:asm.v1" manifestVersion="1.0" xmlns:asmv3="urn:schemas-microsoft-com:asm.v3">

<dependency>
  <dependentAssembly>
    <assemblyIdentity
      type="win32"
      name="Microsoft.Windows.Common-Controls"
      version="6.0.0.0" processorArchitecture=""
      publicKeyToken="6595b64144ccf1df"
      language="">
    </assemblyIdentity>
  </dependentAssembly>
</dependency>

<dependency>
  <dependentAssembly>
    <assemblyIdentity
      type="win32"
      name="Microsoft.VC90.CRT"
      version="9.0.21022.8"
      processorArchitecture="amd64"
      publicKeyToken="1fc8b3b9a1e18e3b">
    </assemblyIdentity>
  </dependentAssembly>
</dependency>

<trustInfo xmlns="urn:schemas-microsoft-com:asm.v3">
  <security>
    <requestedPrivileges>
      <requestedExecutionLevel
        level="asInvoker"
        uiAccess="false"/>
    </requestedPrivileges>
  </security>
</trustInfo>

<asmv3:application>
  <asmv3:windowsSettings xmlns="http://schemas.microsoft.com/SMI/2005/WindowsSettings">
    <ms_windowsSettings:dpiAware xmlns:ms_windowsSettings="http://schemas.microsoft.com/SMI/2005/WindowsSettings">
      <false/>
    </ms_windowsSettings:dpiAware>
  </asmv3:windowsSettings>
</asmv3:application>

</assembly>
```

That first xxxxx part of the manifest needs to be of the exe file you want to have an external manifest

For the smartclient this means java, and then in particular the java webstart launcher file

so go to the java installation folder, mostly located in a location like this:

C:\Program Files\Java\jre1.8.0_111\bin

And then copy the manifest above to files like: jp2launcher.exe.manifest, javaws.exe.manifest, java.exe.manifest and javaw.exe.manifest

So all those exe files have a manifest file right besides it.

There can be 1 problem with this is and that is that the next release of Windows 10 doesn't support this external manifest setting anymore (it ignores the above registry setting). For me the current slow ring build of Windows 10 (beta release build of 14986 seems to broke this).

If that is the case then this can be only fixed by adjusting the manifest file inside the exe file, you need tools for this like ResourceTuner: <http://www.restuner.com/>

With that you can open the exe file an then adjust the manifest that the exe file has and change the ms_windowsSettings:dpiAware section if it has it to false (there should be a true then). If it doesn't have such a section copy the above manifest contents and replace it fully.