Out of Memory error message because of the desktop heap limitation in Windows Vista or in Windows 7

To resolve this problem, modify the desktop heap size. To do this, follow these steps:

1.   Click **Start**, type **regedit** in the **Start Search** box, and then click **regedit.exe** in the **Programs** list.

     Note If you are prompted for an administrator password or for confirmation, type your password, or click**Continue**.
2.   Locate and then click the following registry subkey:
     HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Session Manager\SubSystems
3.   Right-click the **Windows** entry, and then click **Modify**.
4.   In the **Value data** section of the **Edit String** dialog box, locate the **SharedSection** entry, and then increase the second value and the third value for this entry.

Notes

*   The second value of the SharedSection registry entry is the size of the desktop heap for each desktop that is associated with an interactive window station. The heap is required for each desktop that is created in the interactive window station (WinSta0). The value is in kilobytes (KB).
*   The third SharedSection value is the size of the desktop heap for each desktop that is associated with a "non-interactive" window station. The value is in kilobytes (KB).
*   We do not recommend that you set a value that is over **20480** KB for the second SharedSection value.

By default, the Windows registry entry contains the following data in an x86-based version of Windows Vista.

```
%SystemRoot%\system32\csrss.exe
ObjectDirectory=\Windows
SharedSection=1024,3072,512
Windows=On
SubSystemType=Windows
ServerDll=basesrv,1
ServerDll=winsrv:UserServerDllInitialization,3
ServerDll=winsrv:ConServerDllInitialization,2
ProfileControl=Off
MaxRequestThreads=16
```

Note By default, the second value for the SharedSection entry is 3072 in an x86-based version of Windows Vista. By default, this second value for this entry is 20480 in an x64-based version of Windows Vista.

In Windows Vista and in later operating systems, memory allocations are dynamic. Therefore, there is no limitation for memory allocation. However, if you allocate too much memory to the desktop heap, negative performance may occur. This is the reason why we do not recommend that you set a value that is over 20480.

Note The desktop heap size is not affected by the physical RAM on the computer. Therefore, you cannot improve the performance by adding physical RAM.

Out of Memory error message appears when you have a large number of programs running – XP/2000

To correct this problem, increase the size of the desktop heap:

1. Run Registry Editor (Regedt32.exe).
2. From the
   `HKEY_LOCAL_MACHINE`
   subtree, go to the following key:
   `\System\CurrentControlSet\Control\Session Manager\SubSystems`
3. Select the **Windows** value.
4. From the **Edit** menu, choose **String**.
5. Increase the SharedSection parameter.

   For Windows NT:
   SharedSection specifies the system and desktop heaps using the following format:
   SharedSection=*xxxx,yyyy*
   Add ",256" or ",512" after the *yyyy* number.

   For Windows 2000, Windows XP, and Windows Server 2003:
   SharedSection uses the following format to specify the system and desktop heaps:
   SharedSection=*xxxx,yyyy,zzzz*
   For 32-bit operating systems, increase the *yyyy* value to "12288";
   Increase the *zzzz* value to "1024".
   For 64-bit operating systems, increase the *yyyy* value to "20480";
   Increase the *zzzz* value to "1024".