FULL or Complete Memory Dump option not listed in dropdown menu

If the "Complete memory dump" option is removed from the choice list in the later Windows versions, it is because Windows knows that a "Complete" memory dump isn't possible. e.g. The amount of physical RAM is more than 2GB, or the page file size isn't set to the size of physical memory or greater.

The "How to generate a kernel or a complete memory dump file in Windows Server 2008" KB article (http://support.microsoft.com/kb/969028) presents a good deal of information on what's new and different regarding obtaining a crash dump on Vista/2008, and also covers the "how to manually force a dump" topic too.

Depending on what type of memory dump file that you are trying to collect, the minimum size of the paging file will vary. Windows Server 2008 has three options for memory dump files:
- **Small Memory Dump** (64 KB for a 32-bit operating system, 128 KB for a 64-bit operating system)
- **Kernel Memory Dump**
- **Complete Memory Dump**

To enable complete memory dump files on your server, follow these steps:

It is recommended that you have a full backup of the PC before performing these operations. This procedure is done at the users own risk.

If you decide to continue, here are the minimum steps to follow:

Step 1: Create a paging file
1. Click **Start**, right-click **Computer**, and then click **Properties**.
2. Click **Advanced system settings** on the **System** page, and then click the **Advanced** tab.
3. Click **Settings** under the **Performance** area.
4. Click the **Advanced** tab, and then click **Change** under the **Virtual memory** area.
5. Select the system partition where the operating system is installed.
   Note To enable the system partition, you have to click to clear the **Automatically manage paging file size for all drives** check box.
6. Set the value of **Initial size** and **Maximum size** to the amount of physical RAM that is installed plus 1 megabyte (MB) under the **Custom Size** button.

Ex: for 4.0Gig (4096K) I made a page file of 4100K. *Record your current settings in order to restore these settings later.*
7. Click **Set**, and then click **OK** three times.

Step 2: Edit the Registry
1. Click **Start**, select **Run** and enter (without quotes) "regedt32" and click **OK**.
2. Go to **HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\CrashControl**
3. Change the **CrashDumpEnabled** registry data value from '2' to '1'

Record your current settings in order to restore these settings later.
4. Close the registry

Step 3: Reboot

Step 4: Set the Memory Dump file type to **Complete**
1. Click **Start**, right-click **Computer**, and then click **Properties**.
2. Click **Advanced system settings** on the **System** page, and then click the **Advanced** tab.
3. Click **Settings** under the **Startup and Recovery** area.
4. In the **Write debugging information** area, select **Complete memory dump**

Record your current settings in order to restore these settings later.
5. Click OK all the way out.

Once the Full memory dump has been captured, it is recommended to return the system to the original settings.

Below are all of the references from Microsoft. If is done, it is at your risk. It is recommended to have image backups before doing any of these procedures.

http://support.microsoft.com/kb/969028
http://technet.microsoft.com/en-us/library/cc721886.aspx
http://download.sysinternals.com/Files/Notmyfault.zip
http://support.microsoft.com/kb/950858/
http://msdn.microsoft.com/en-us/library/aa906217.aspx
http://support.microsoft.com/kb/885117/