Subject: Maximum memory under Windows NT
Posted by rivers on Fri, 12 Mar 1999 08:00:00 GMT
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I have a question about maximum memory allocation under Windows NT. I have a high-end Windows NT workstation configured with

- Dual 450 MHz Pentium CPUs
- 1GB of RAM
- Windows NT Workstation 4.0, SP3

I have allocated 2GB of paging file space for virtual memory. The Task Manager/Performance screen shows a Commit Charge Limit of about 3200000, which makes sense, since it is the sum of the paging file and the physical memory.

However, when I try to allocate large arrays in IDL I find that it fails at

a = bytarr(1024, 1024, 1024)
i.e. it cannot allocate a 1 GB array, but it succeeds at
a = bytarr(1024, 1024, 1000)
i.e. just less than 1 GB.

When it fails I see that the Task Manager/Performance/Commit Charge Total is what I expect, and that it is not close to the Commit Charge Limit by a factor of 3.

Does anyone know what the maximum memory available to application programs is under Windows NT, and if there is a way to increase it? I realize that Windows NT is a 32-bit operating system, so the maximum can be no more than 4 GB, but I was not aware that it was limited to 1 GB, if indeed it is.

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