

# Myth: Without /3GB the total amount of memory that can be allocated across all programs is 2GB

---

 [devblogs.microsoft.com/oldnewthing/20040809-00](http://devblogs.microsoft.com/oldnewthing/20040809-00)

August 9, 2004



Raymond Chen

Virtual memory is not virtual address space (part 1).

I don't know where this myth comes from; it's a *non sequitur*.

Virtual address space describes how addresses are resolved, but since each process has its own virtual address space, the amount consumed by one program has no effect on that consumed by another program.

Say you have a program that allocates 1GB of memory. Run three copies of it. Now you have a total of 3GB of allocated memory. And none of the programs came even close to exhausting its 2GB virtual address space allotment.

Tomorrow, the debunking of a variation on this myth.

[Raymond Chen](#)

**Follow**

