

Extending Array Capacity

Compaq Confidential - Need to Know Required

Disclaimer: You responsible for backing up all data prior to performing the following procedures. Compaq will not be liable for any data loss as a result of performing the following procedures. Compaq takes no responsibility for the accuracy or lack of any information contained herein. Use this information at your own risk.

Expanding and Extending Capacity

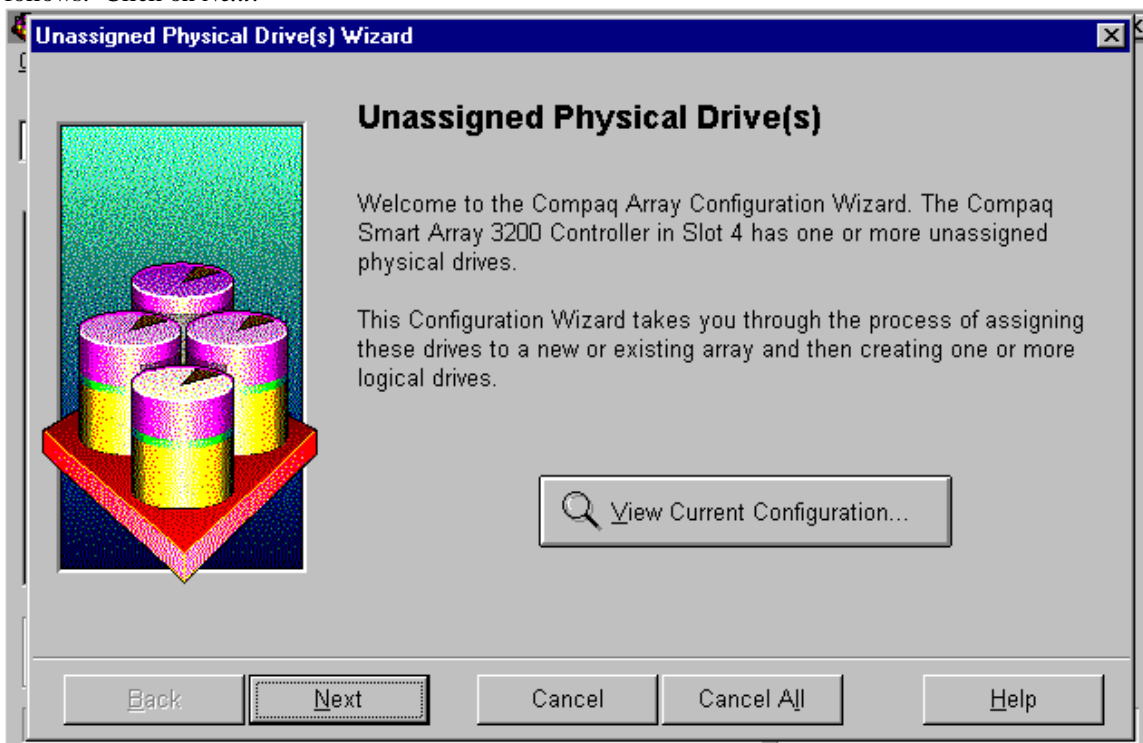
Capacity expansion refers to adding capacity to an existing array by creating additional logical drives. These additional logical drives will become part of the existing array and be protected under the fault-tolerance of that array. After capacity expansion is complete at the hardware level, you may need to complete further steps at the operating system level. This paper will not focus on capacity expansion.

Capacity extension refers to growing an existing logical drive. No additional logical drives are created during this process. After capacity extension is complete at the hardware level, you may need to complete further steps at the operating system level. This paper will focus on capacity extension.

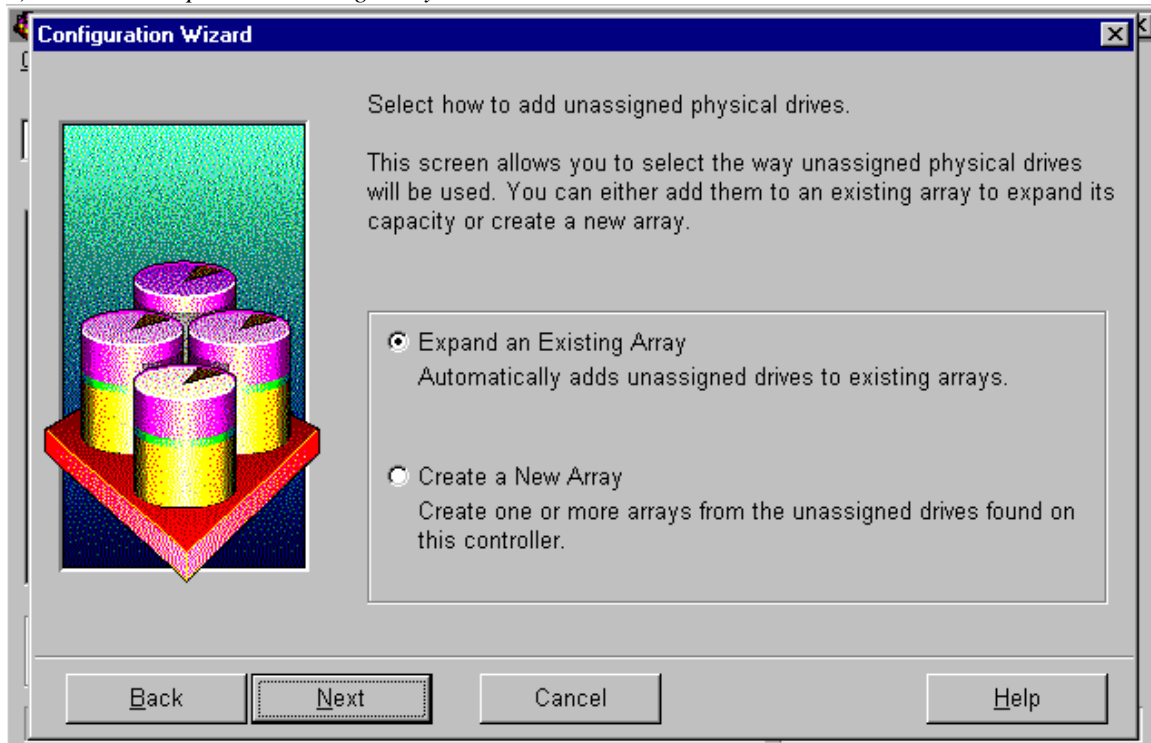
Extending Capacity (NOT supported on Smart 1, 2/P, 2/E, 2SL, 2DH, and 221 controllers)

In this example, the original array is a RAID 5 set of three 4.3 GB hard drives. Two 4.3 GB hard drives are then physically added simultaneously to the system.

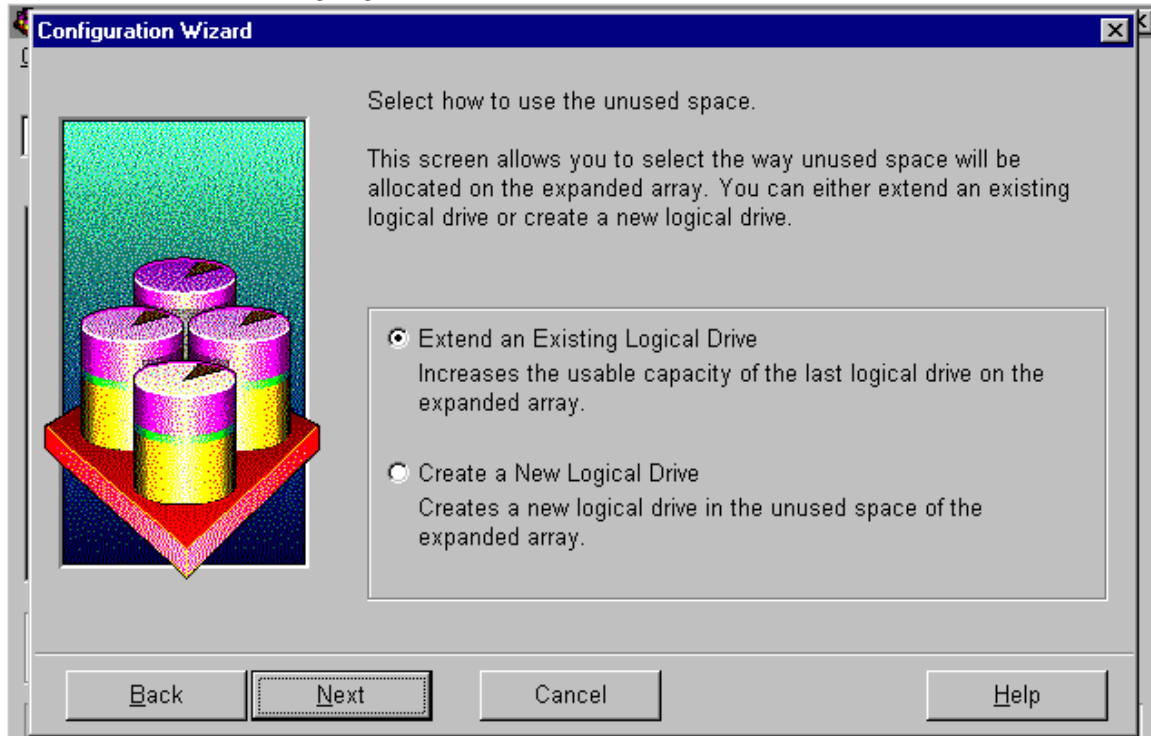
1) After adding drives to the system, run the Array Configuration Utility. A screen such as the one below follows. Click on *Next*.



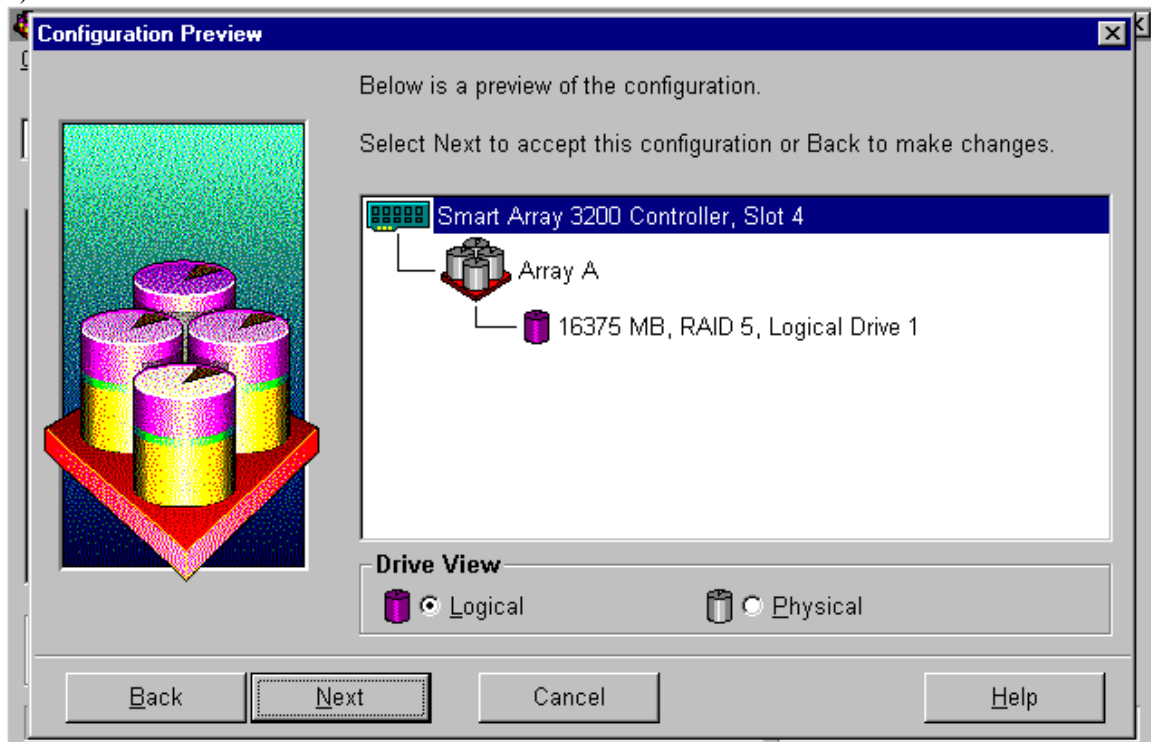
2) Click on *Expand an Existing Array*. Then click on *Next*.



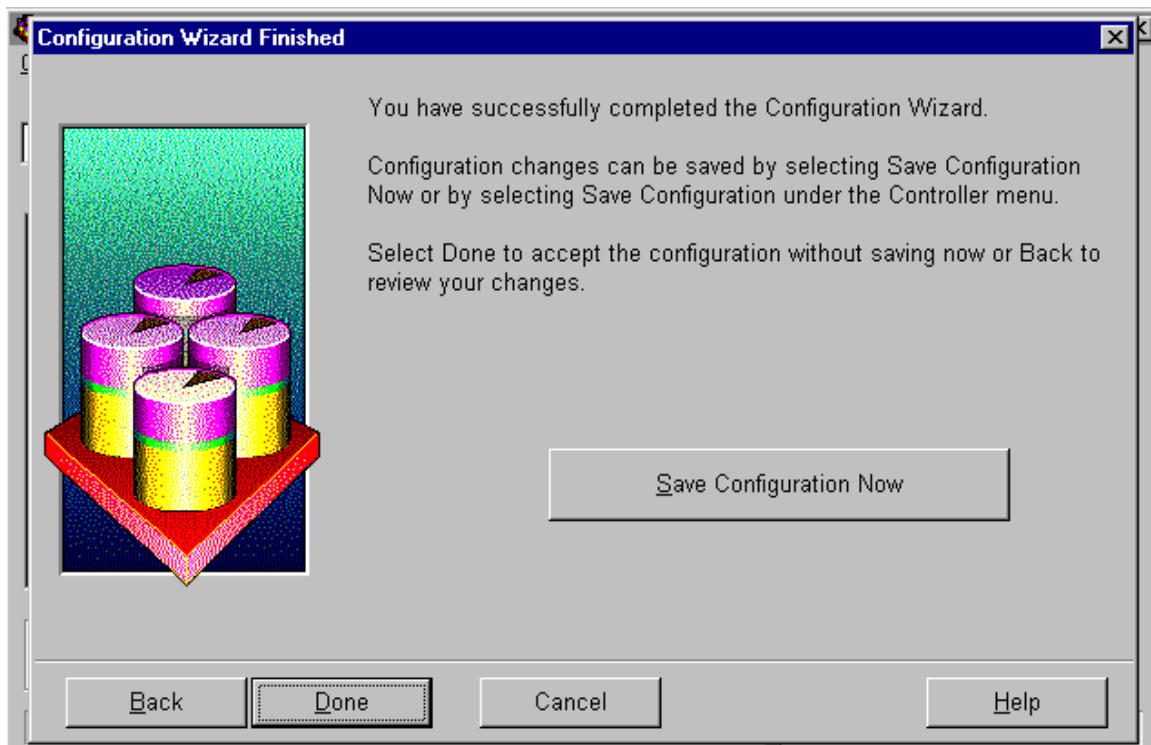
2) Select *Extend an Existing Logical Drive*.



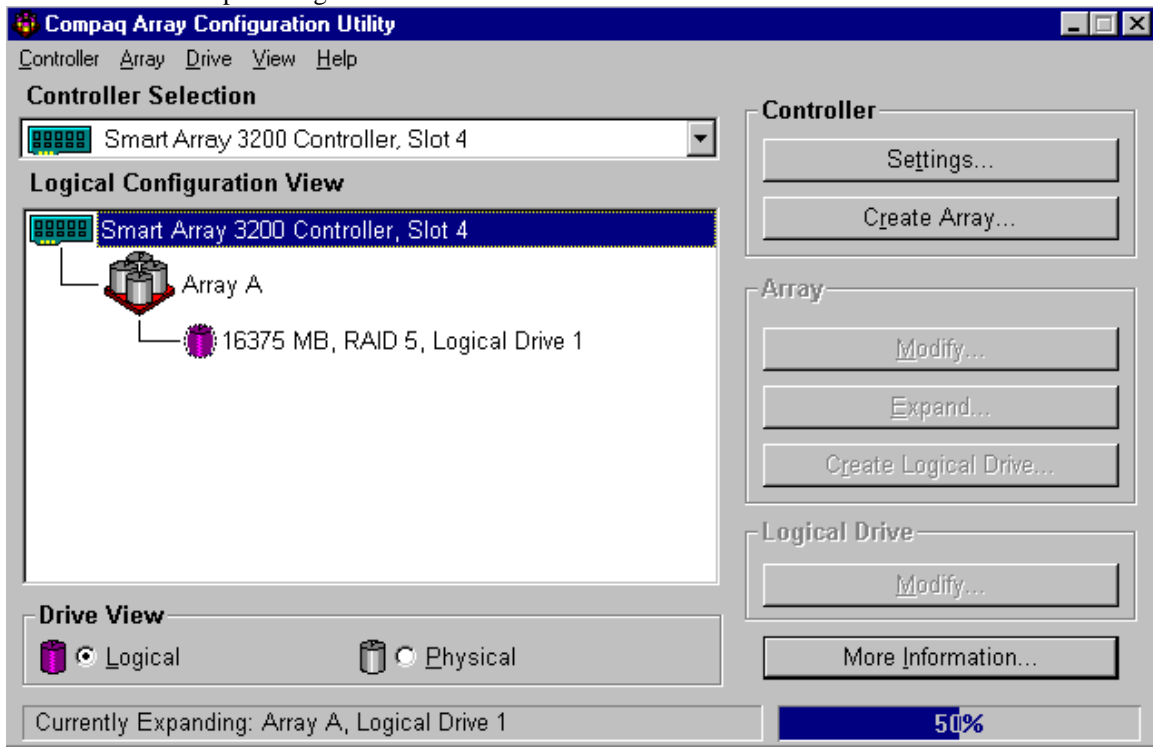
4) Click on *Next*.



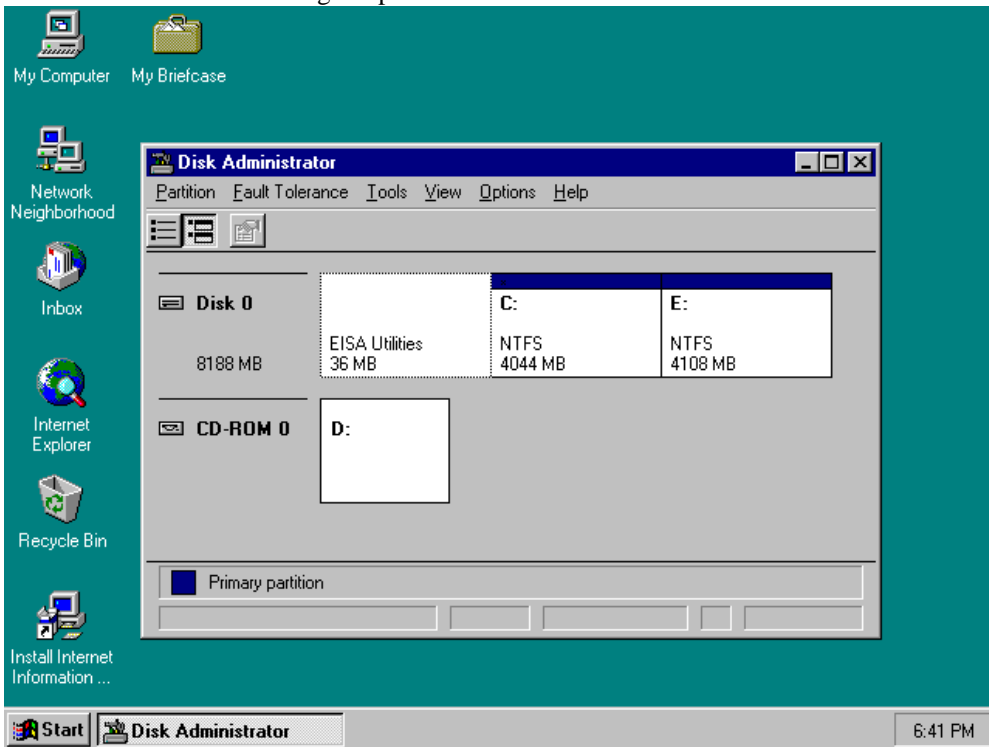
5) Click on *Save Configuration Now*.



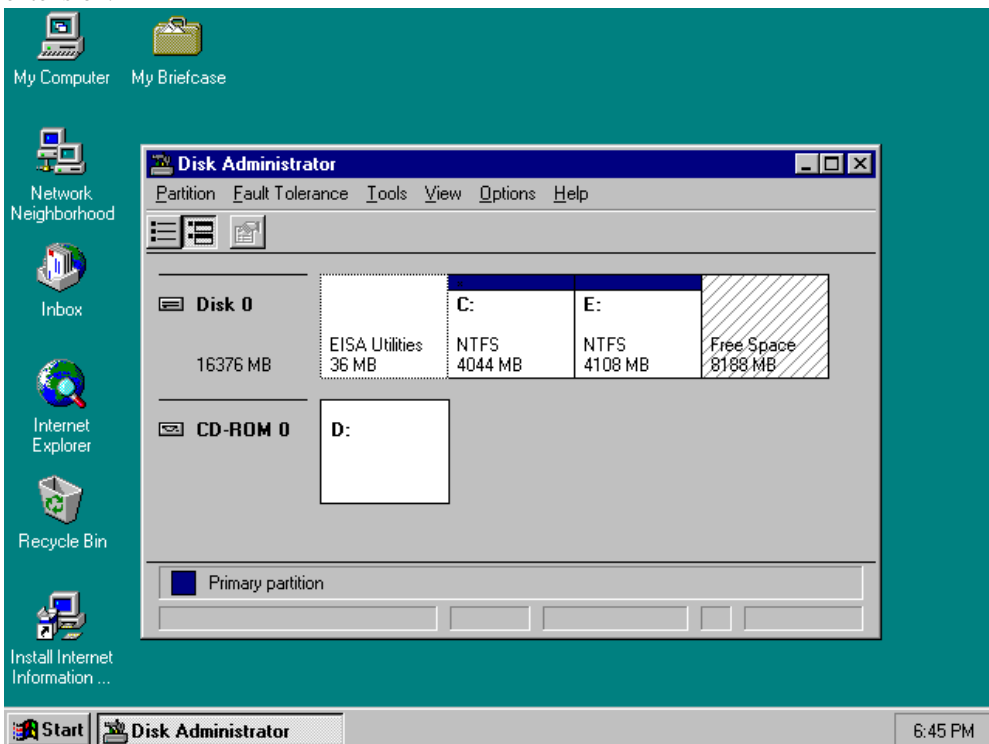
6) The array will begin extending the existing logical drive. The array configuration utility will show a percentage progress. Another utility that shows extension progress is Insight Manager. You may run the server with your operating system during extension. Should you reboot your server, the array will continue to extend at the last percentage before reboot.



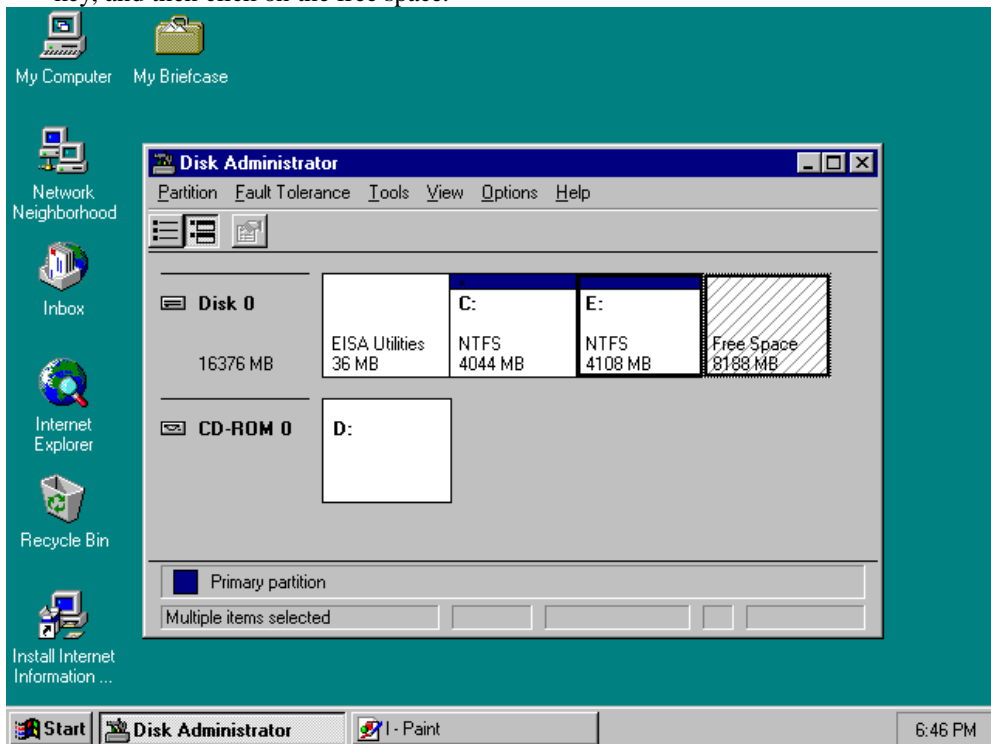
The remaining screenshots apply to NT 4.0 only.
This is a screenshot of the original partition structure.



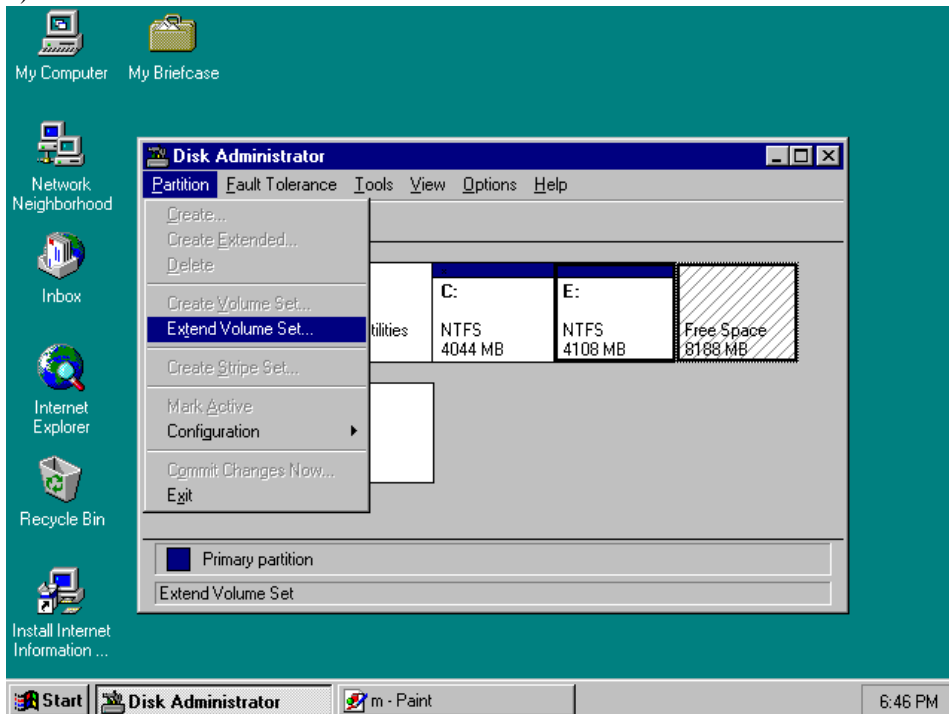
After array capacity expansion, you must reboot the server before NT Disk Administrator reports free space. NT 4.0 does not automatically extend any partitions in conjunction with the array's logical drive extension.

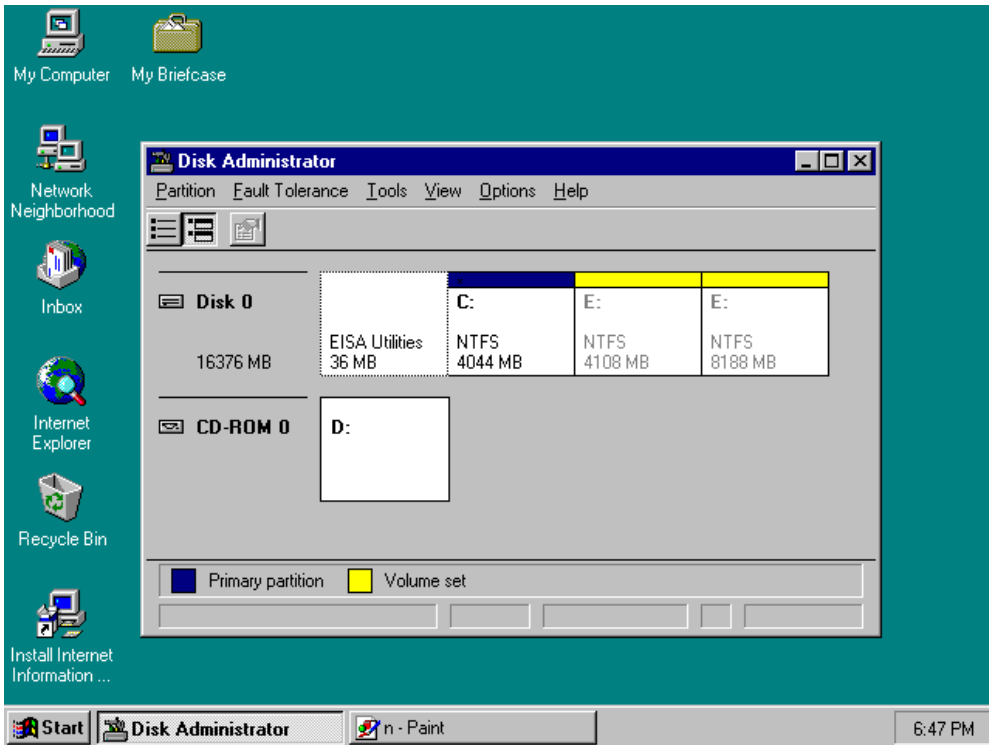


- 7) In this step, you will combine an existing NTFS partition with the free space into a volume set. The C: partition cannot be extended into a volume set. Click on the existing partition, hold down the Ctrl key, and then click on the free space.

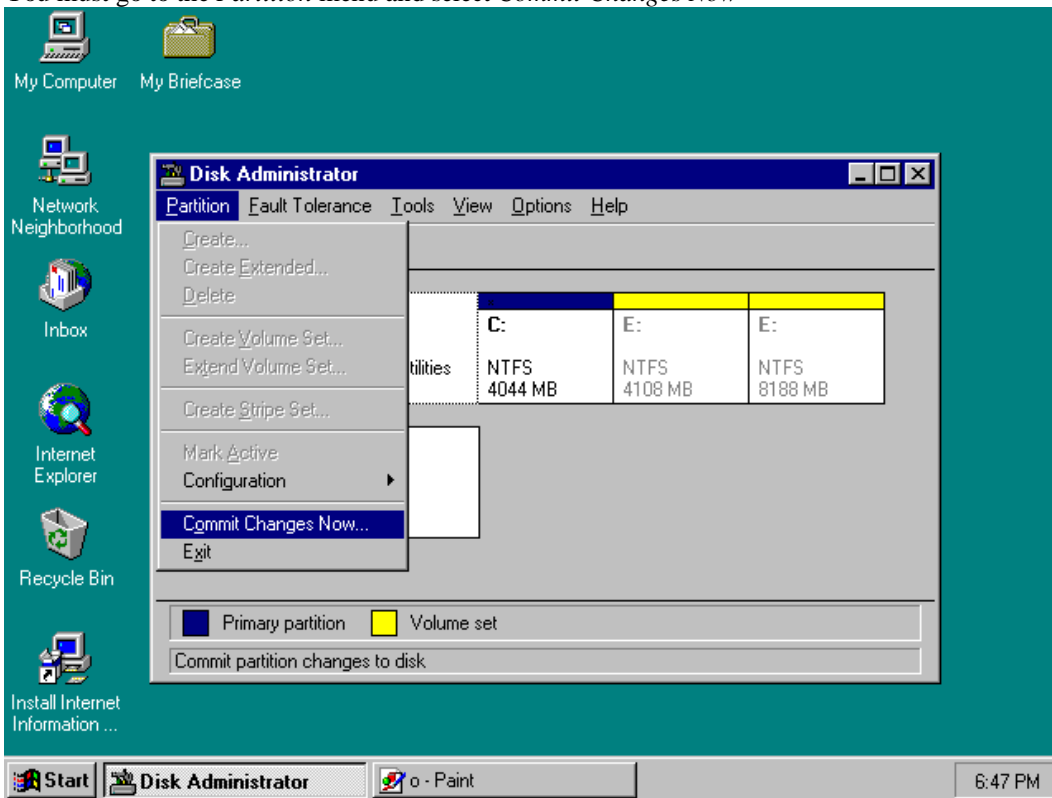


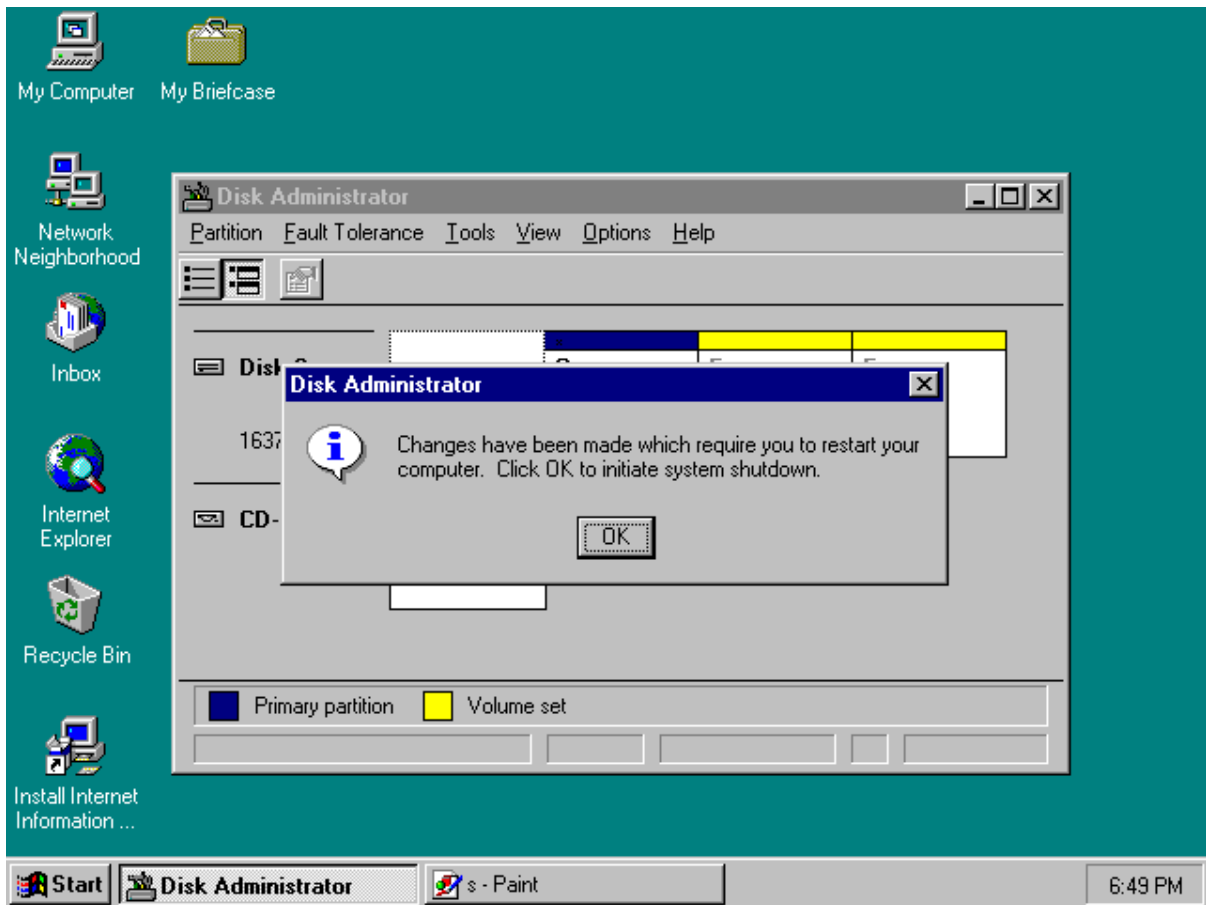
- 8) Select *Extend Volume Set* under the *Partition* Menu





You must go to the *Partition* menu and select *Commit Changes Now*





NT 4.0 requires you to reboot before the changes take effect.