

Expanding Array Capacity

Compaq Confidential - Need to Know Required

Disclaimer: The customer is 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

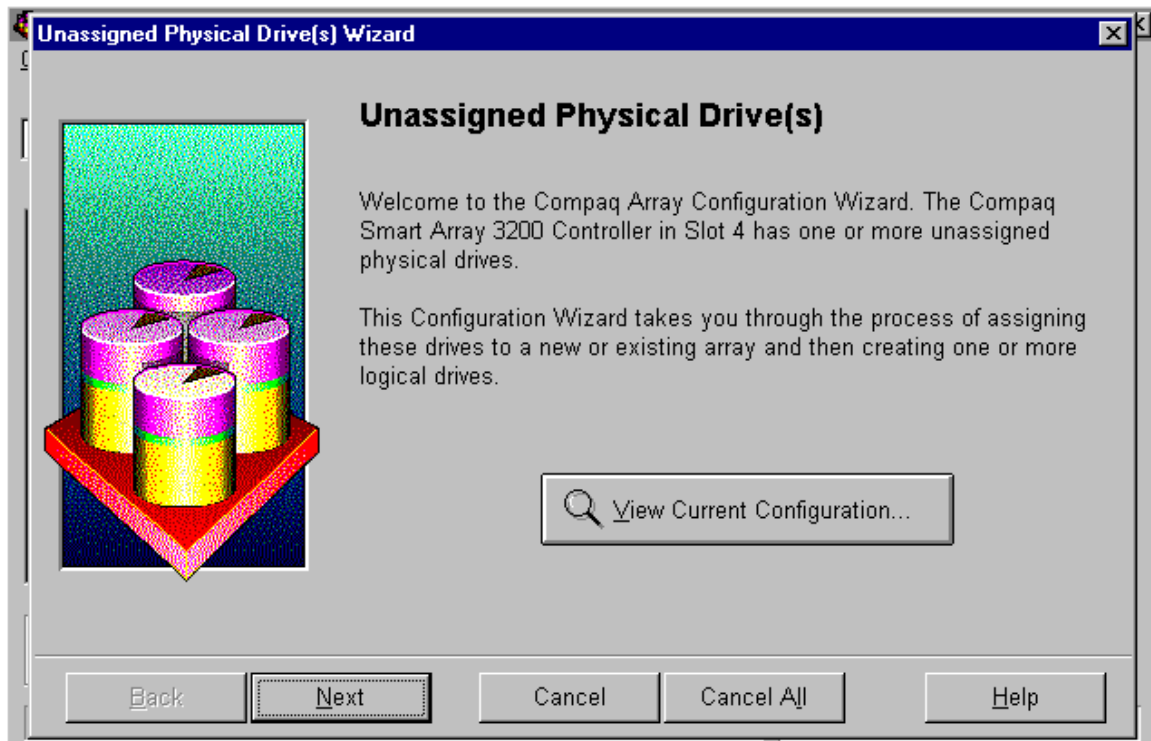
Capacity expansion refers to adding capacity to an existing array by creating additional logical drives. These additional logical drives will become part of the existing array and be protected under the fault-tolerance of that array. After capacity expansion is complete at the hardware level, you may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

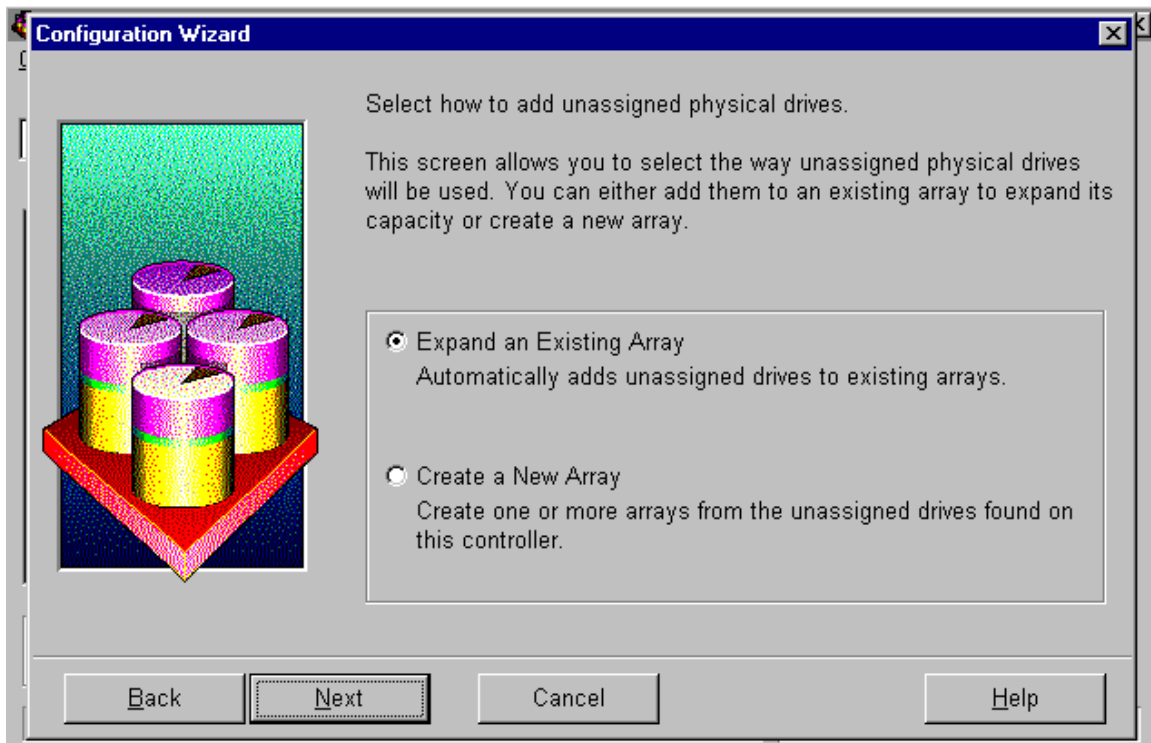
Expanding Capacity (NOT supported on Smart 1, 2SL, and 221 controllers)

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.

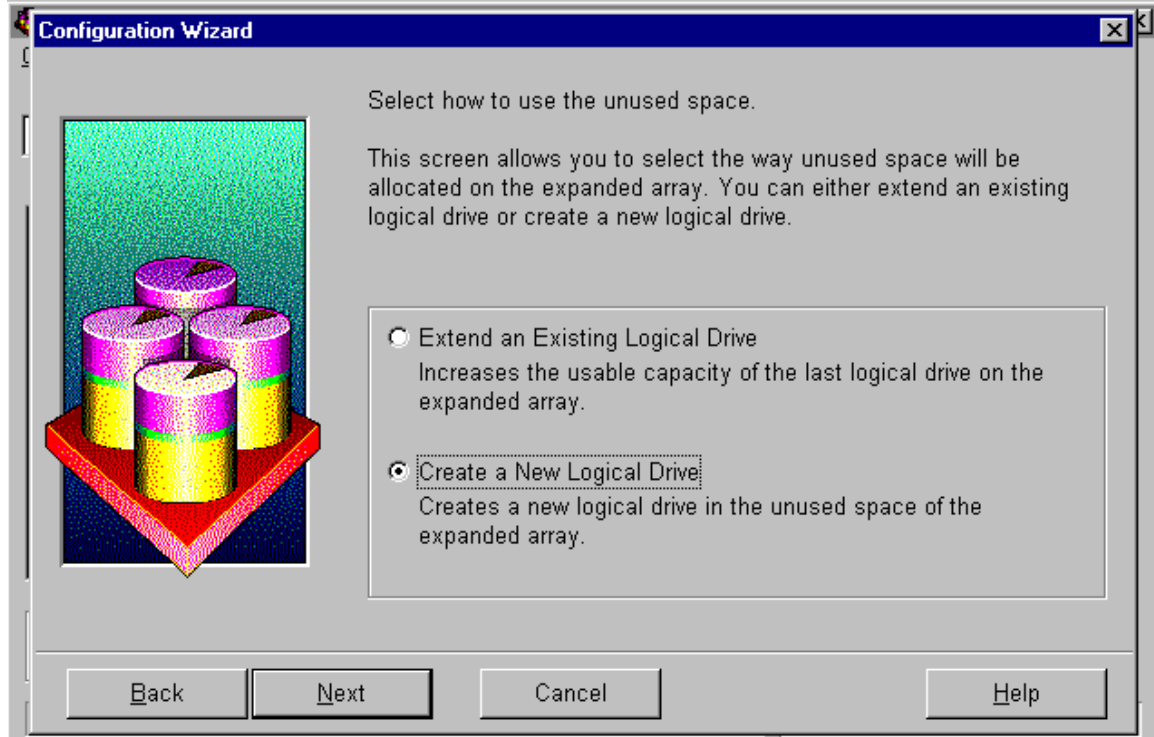
1) After adding drives to the system, run the Array Configuration Utility. A screen such as the one below follows. Click on *Next*.



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



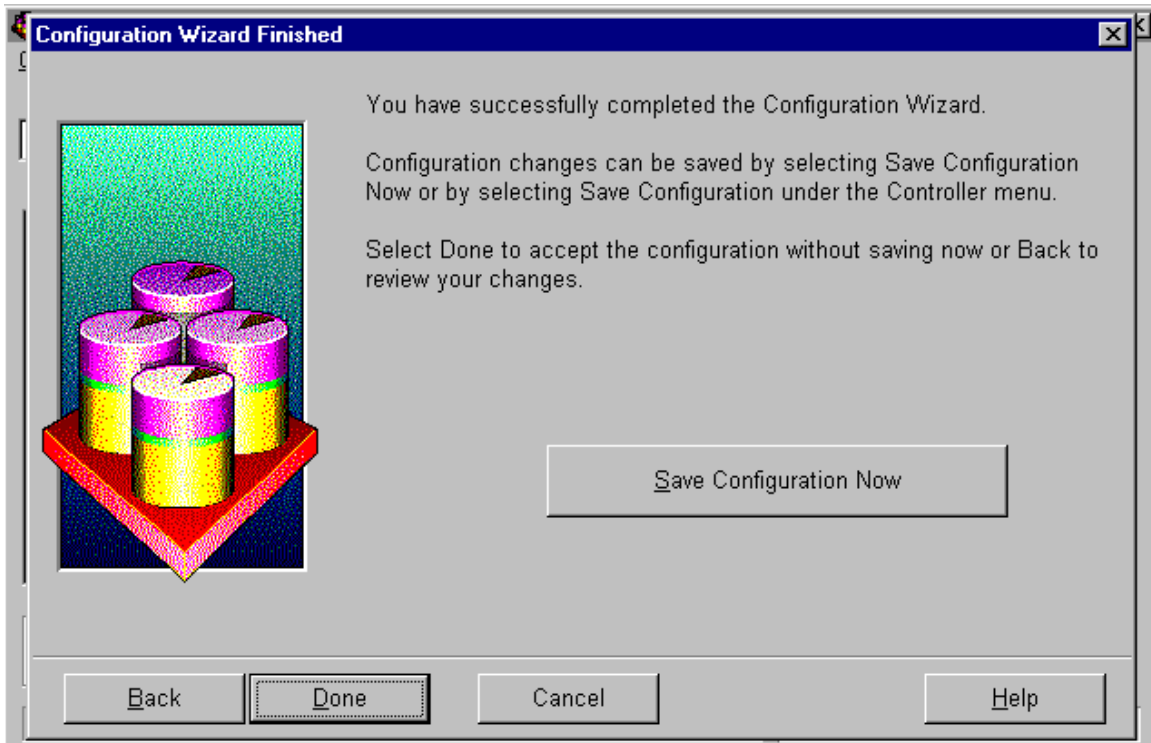
- 3) Select *Create a New Logical Drive*; this will be your only choice if you are using a Smart 2/P, 2/E, or 2DH.



- 4) Click on *Next*.

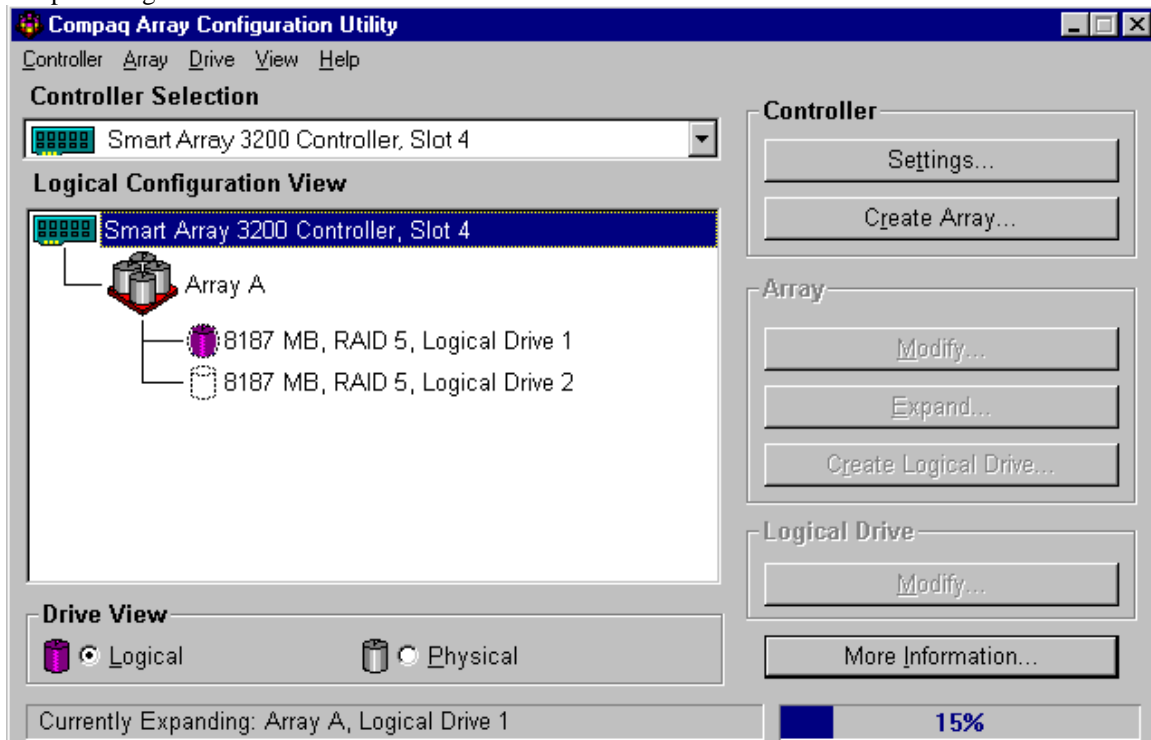


5) Click on *Save Configuration Now*.



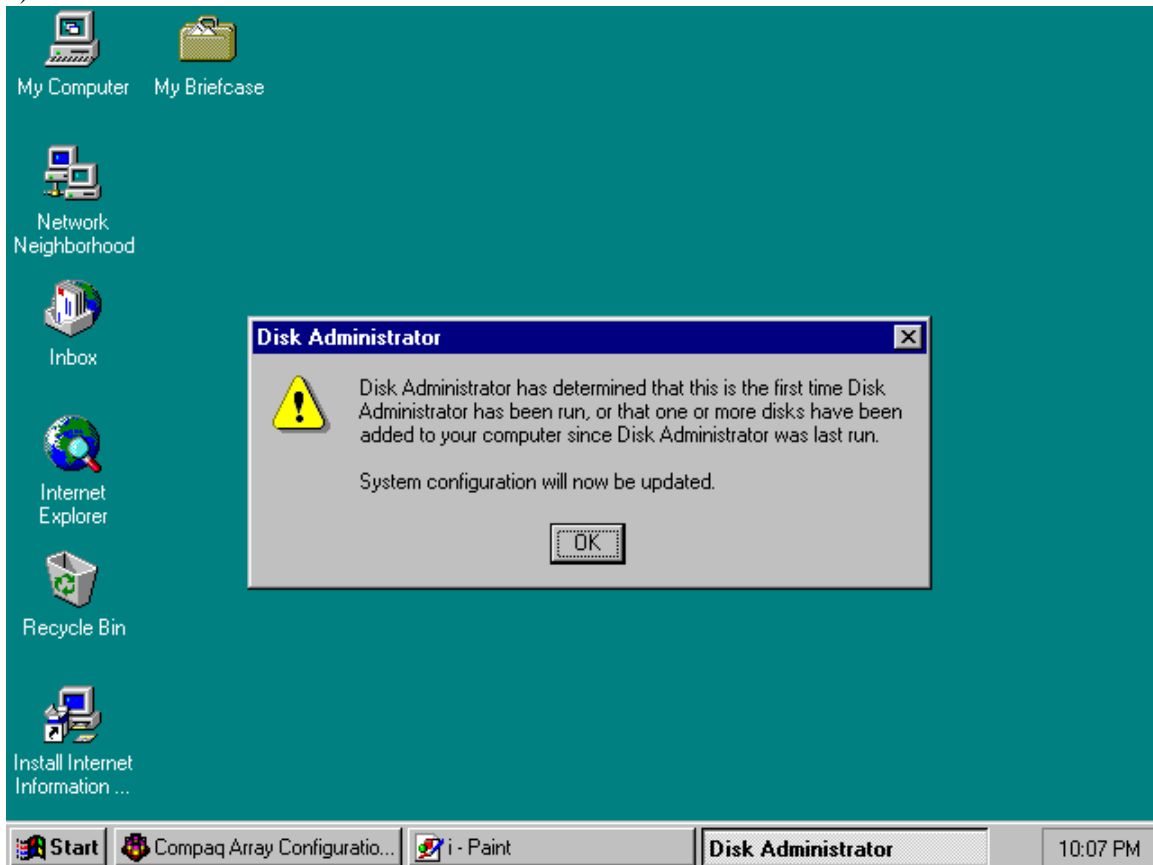
6) The array will begin expanding. The array configuration utility will show a percentage progress. Another utility that shows expansion progress is Insight Manager. You may run the server with your

operating system during expansion. Should you reboot your server, the array will continue to expand at the last percentage before reboot.

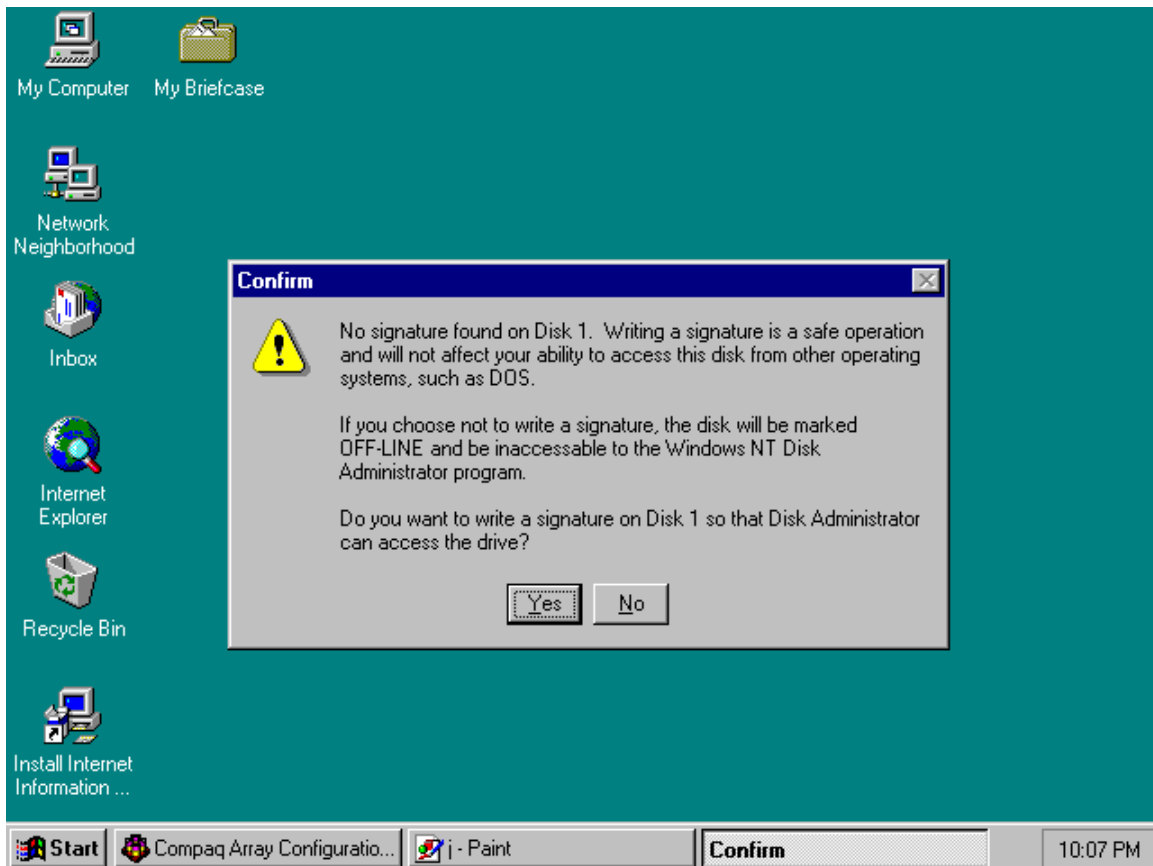


The remaining screenshots apply to NT 4.0 only.

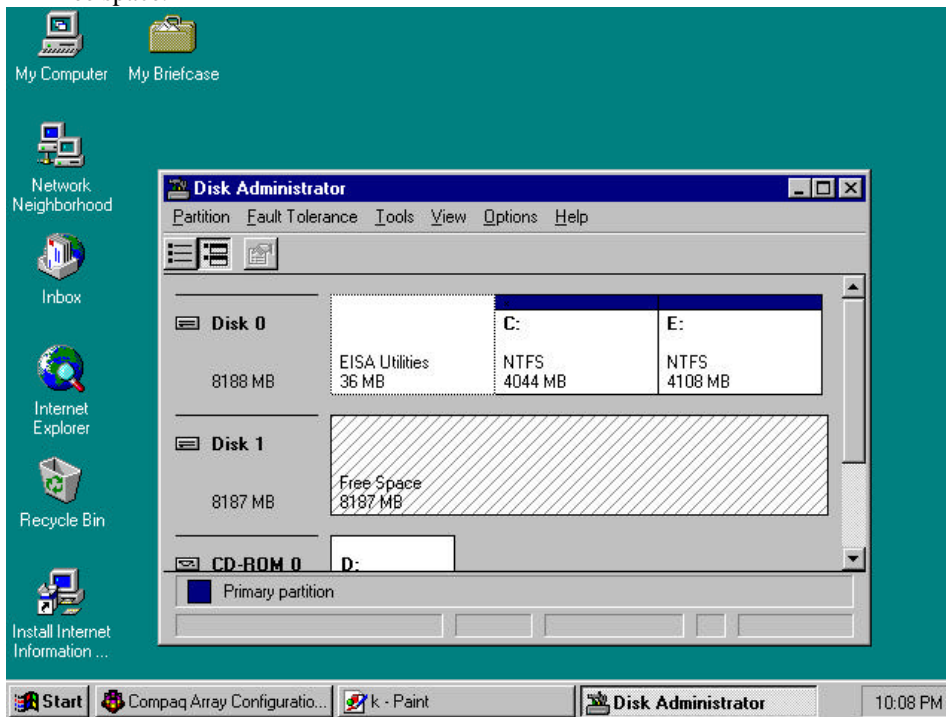
7) Run Disk Administrator and click OK.



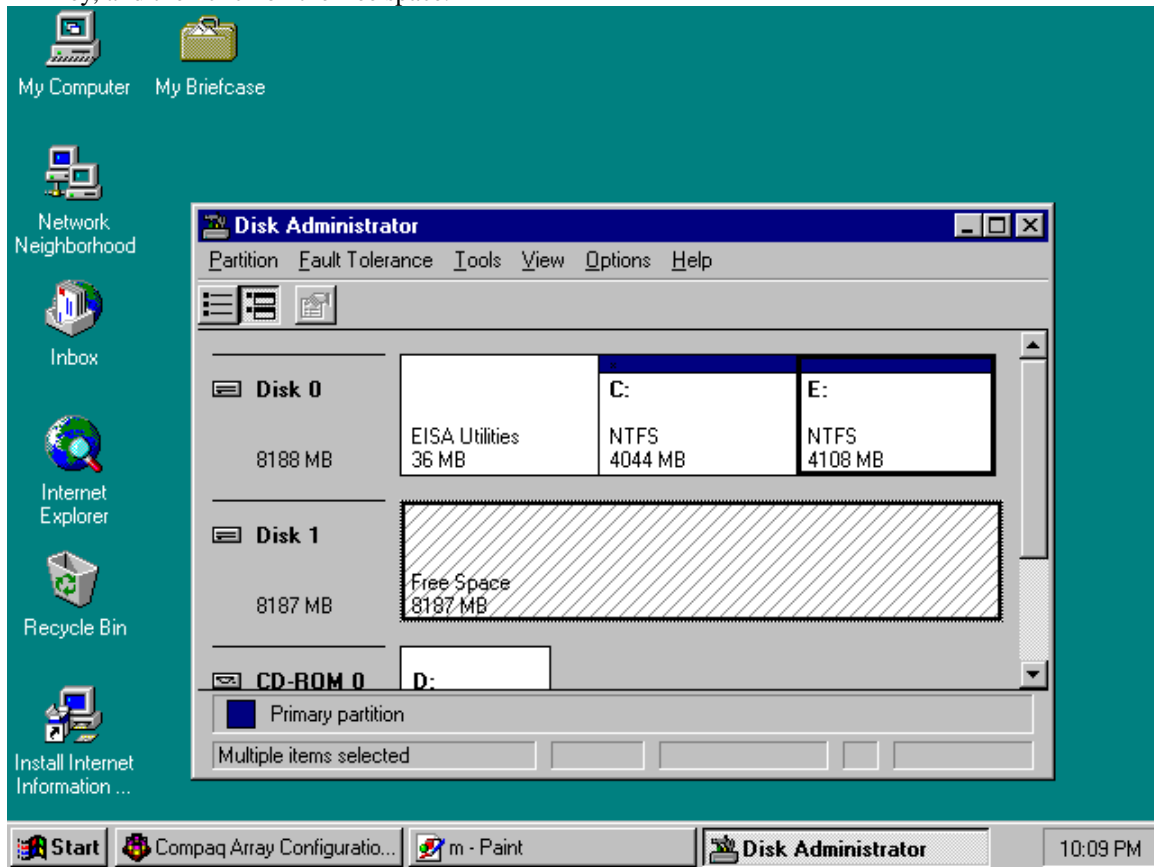
8) As a result of array capacity expansion, an additional logical drive has been created. NT Disk Administrator will view this as an additional hard drive. Click *Yes* to the following screen.



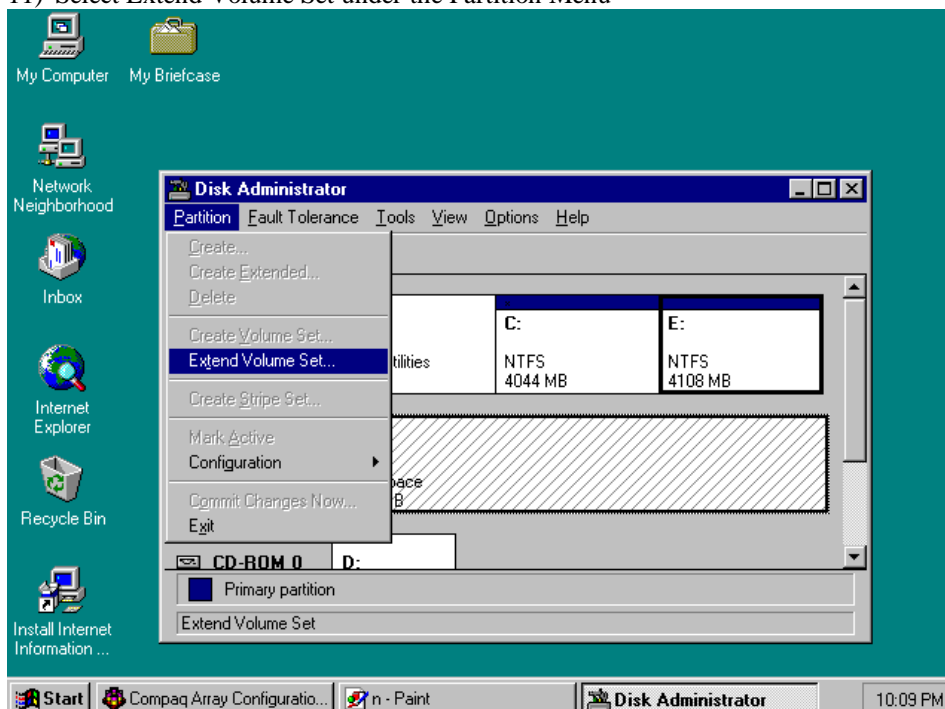
9) The additional logical drive (which consists of two 4.3 GB drives) will show up as one hard drive of free space.

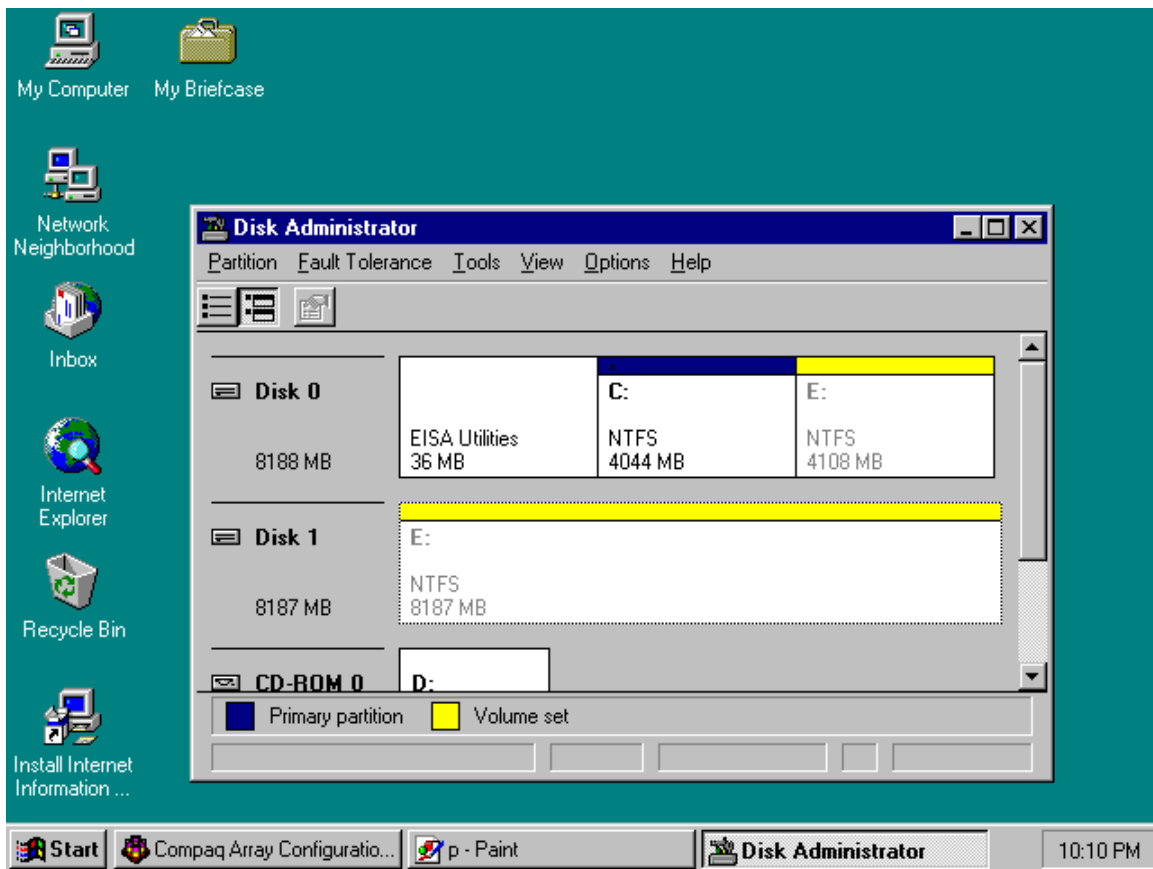


10) In this step, you will combine an existing NTFS partition with the free space into a volume set. The C: partition cannot be extended into a volume set. Click on the existing partition, hold down the Ctrl key, and then click on the free space.

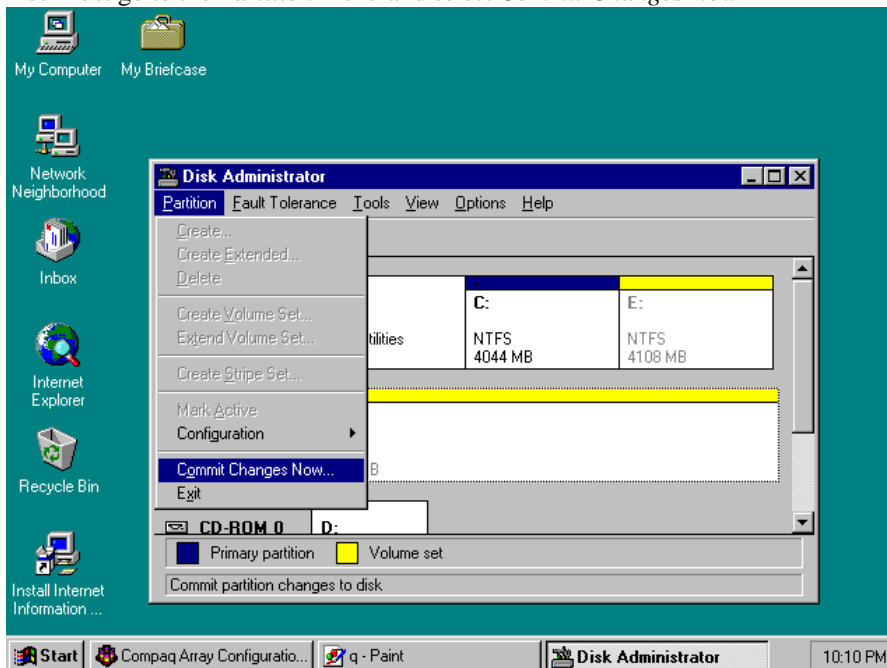


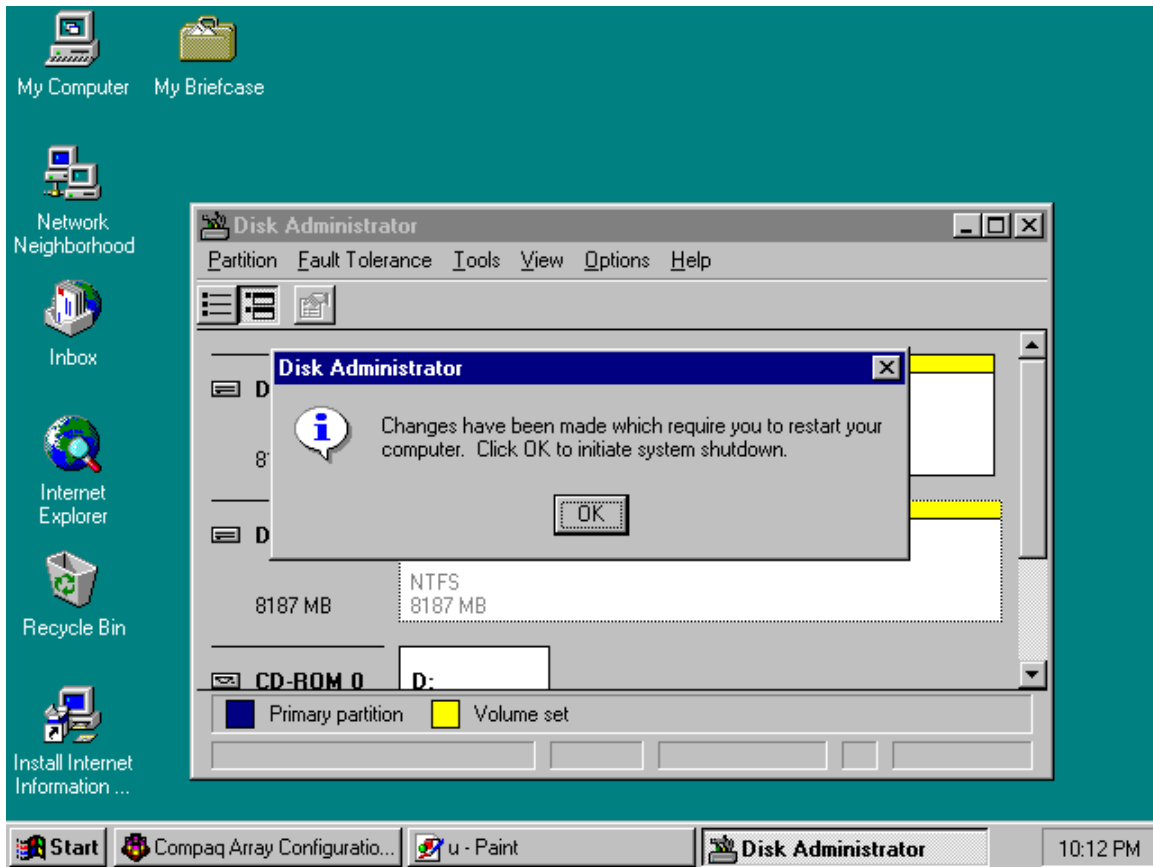
11) Select Extend Volume Set under the Partition Menu





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





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