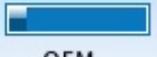One method to achieve
1. Delete existing Recovery partition 2 (so space can be allocated to OS partition).
2. Add deleted unallocated space to OS partition,   after deletion partition #3 becomes #2)
3. Make OS partition smaller to provide space for DATA partition.
4. Create new primary partition 3 (NTFS) and assign drive letter D.
        (Device holding drive letter D has drive letter re-assigned so D is available.)

Figure 1 Before Changes

Figure 1 is current status of Dell Laptop 750GB disk.

Figure 2 After Changes

Figure 2 is objective after changes.

So, the first step is that we need a partitioning program to move the partitions.. The free Mini Tool Partition Wizard v7.0 will do this nicely.

Download from this link.
http://www.partitionwizard.com/download/pwhe7.iso

This file is not to be installed. Burn this iso file to a blank CD as an image. Many programs will do this .
One such free program is ImgBurn. Download this free file from (or other locations)
http://download.imgburn.com/SetupImgBurn_2.5.6.0.exe

Figure 3

Figure 3: Partition Wizard changes are not final until the **APPLY** button is pressed. The **UNDO** is available to cancel the last change which has not been applied. The **DISCARD** button will cancel all changes which have not been applied.
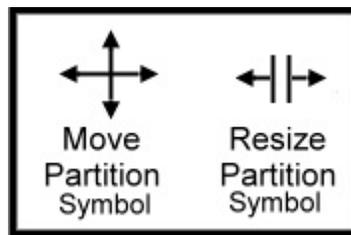
Figure 4

Figure 4 shows the symbols which will be displayed when mouse pointer is hovered over any area of the partition which can be moved or resized. **Be sure and select the proper symbol**.
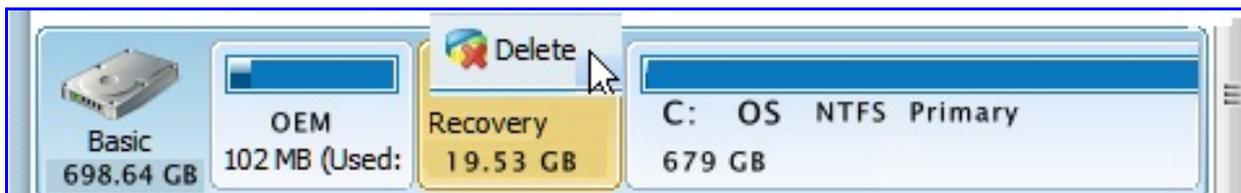
Figure 5

Figure 5: **Right** click (background color will change) on the Recovery partition.
Choose the Delete option.
After Deletion, the deleted partition will change to unallocated space.
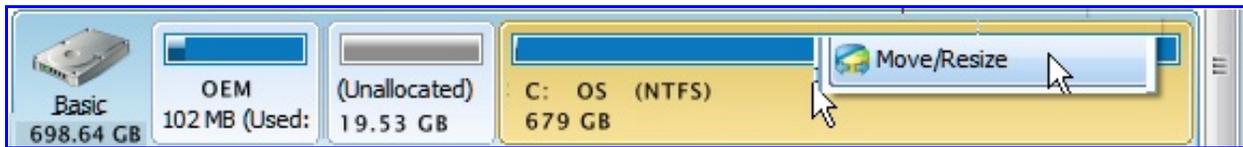
Figure 6

Figure 6:   **Right** click (background color will change) on the OS (C:) partition.
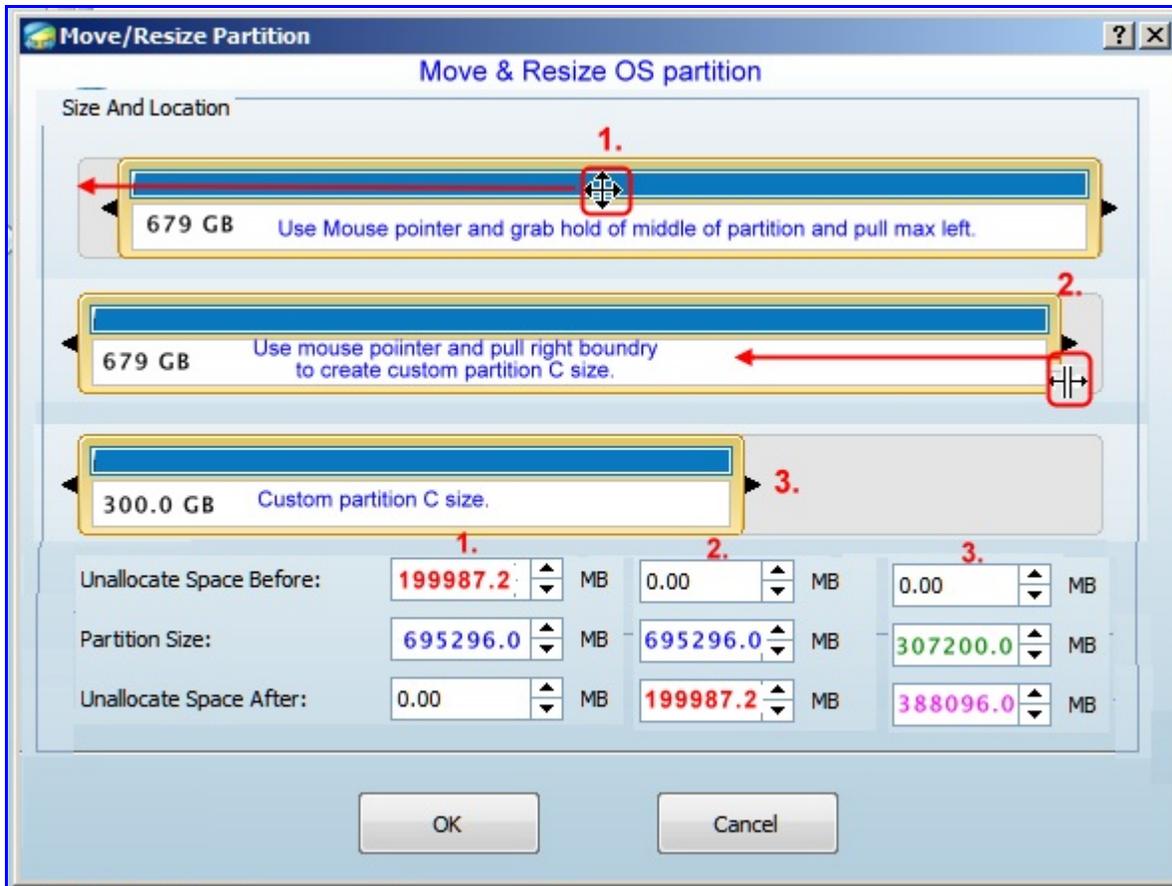   Select the **Move/Resize** option.

Figure 7

Figure 7:

Step 1:   Hover the mouse pointer in the center of the OS partition. Move symbol will appear.
Step 2:   Drag the whole partition to max **LEFT** so the "unallocated space before" moves to the
                "unallocated space after" position. The result should be the movement of (**red 199987.2**
                number) unallocated space from before the partition to the new position of after the
                partition.
        Partition Size should not change.   The partition size numbers are approximate. Yours may differ
        slightly as your size may be slightly different.

Step 3: After step 1 is correctly completed. Hover the mouse pointer over the right side boundary as illustrated by 2 in Figure 7. As you hover the right boundary, move the pointer until you get the Resize symbol. With the Resize symbol visible, grab the right margin and drag the right boundary left toward the center. Stop the movement when you reach the desired smaller GB size of the C: OS partition. This example shows this reduced partition size to be 300 GB. If you want a different size, select you own size. The results should look like item 3 above.

The **green 307200** (300GB)is the size of the C: OS partition.
The **purple 388096** (379 GB) is the planned size for the new Data partition.

When completed, (before leaving this screen) the unallocated space before should be 0.
Partition size should be the size you want to your drive C: OS partition.
The unallocated space after will be the size of the data partition–yet to be created.

Figure 8

Figure 8:   **Right** click (background color will change) on the new unallocated 379 GB partition. Select the **Create** option.
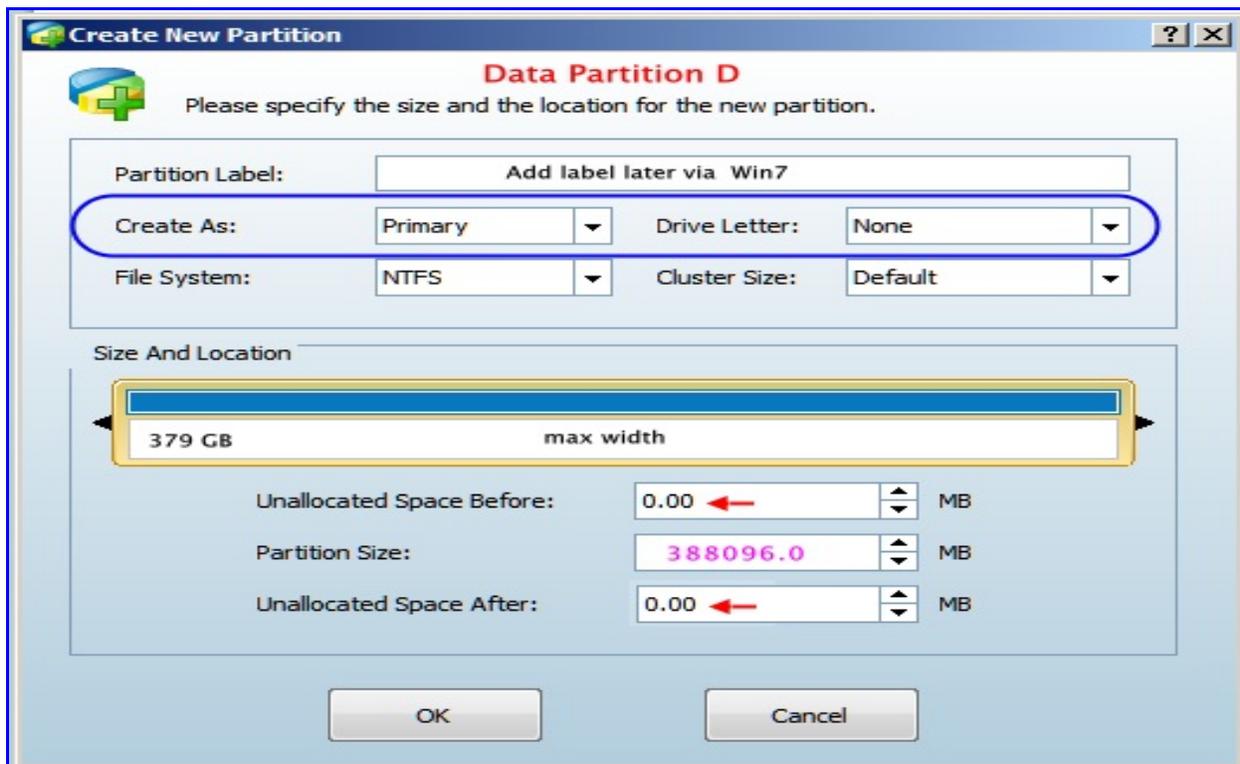

Figure 9

Figure 9: Confirm or change the partition type to be **PRIMARY.**
      Adjust drive letter to NONE. This can be assigned later in Win 7.
      Wait and assign volume name within Win 7.
      Data Partition size should occupy entire space with 0 unallocated space
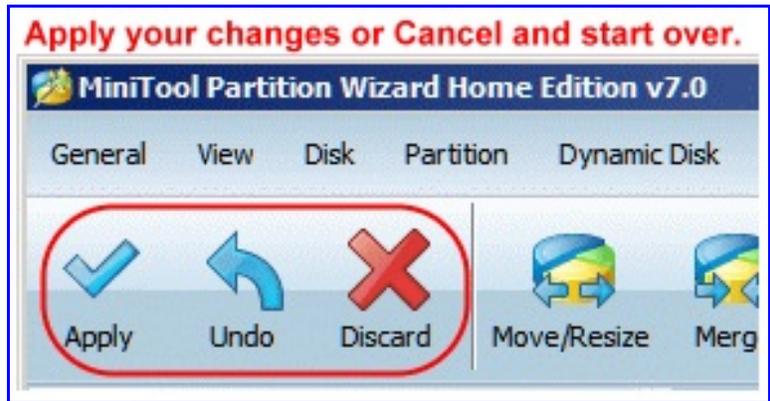   either before or after the partition.

Figure 10

Figure 10: If satisfied all is correct, then press the APPLY button;
      Otherwise, press the discard button and start all over.

Provide any additional additions of volume names and drive letters using Win 7 Disk Management console.

Caution:

These instructions provide only the mechanism to size the partitions as illustrated in this PDF.

As the active partition is being deleted, I do NOT know whether the repair using your Windows Recovery Disk will make your revised disk bootable. If you can copy the boot Recovery folder and edit the BCD file as suggested by MudCrab, that would probably be the preferred method to make your disk bootable.

If you should decide to keep the Recovery partition but add the data partition, then this PDF could still be used by starting at Figure 6 and starting at Step 2 of Figure 7.

If for any reason you should use Win7 to create the data partition, the partition type will be Logical which is why I chose the Partition Wizard in order to have a primary type partition.

Good luck.