Adding a New Physical Volume

This discussion assumes that the hardware has already been installed and needs to be configured for use. It also assumes that the Gnome desktop has been installed as it makes use of GUI packages to install and configure the new physical volume.

Install the Logical Volume Management Tool

1. Open the *Terminal* application (**Applications/System Tools/Terminal**) and log in as a super-user.

2. At the prompt in the *Terminal* window enter

    yum install system-config-lvm

    to install the *Logical Volume Manager*.

3. Exit the *Terminal* application (enter **exit** at the prompt, or select **File/Close Window** from the menu bar).

Configure the Physical Volume Using the Logical Volume Management Tool

1. Start the *Logical Volume Management* Tool (**System/Administration/Logical Volume Management**).

2. Expand **Uninitialized Entities** in the leftmost column and select the drive to be configured (in this example, it is */dev/sdb*)
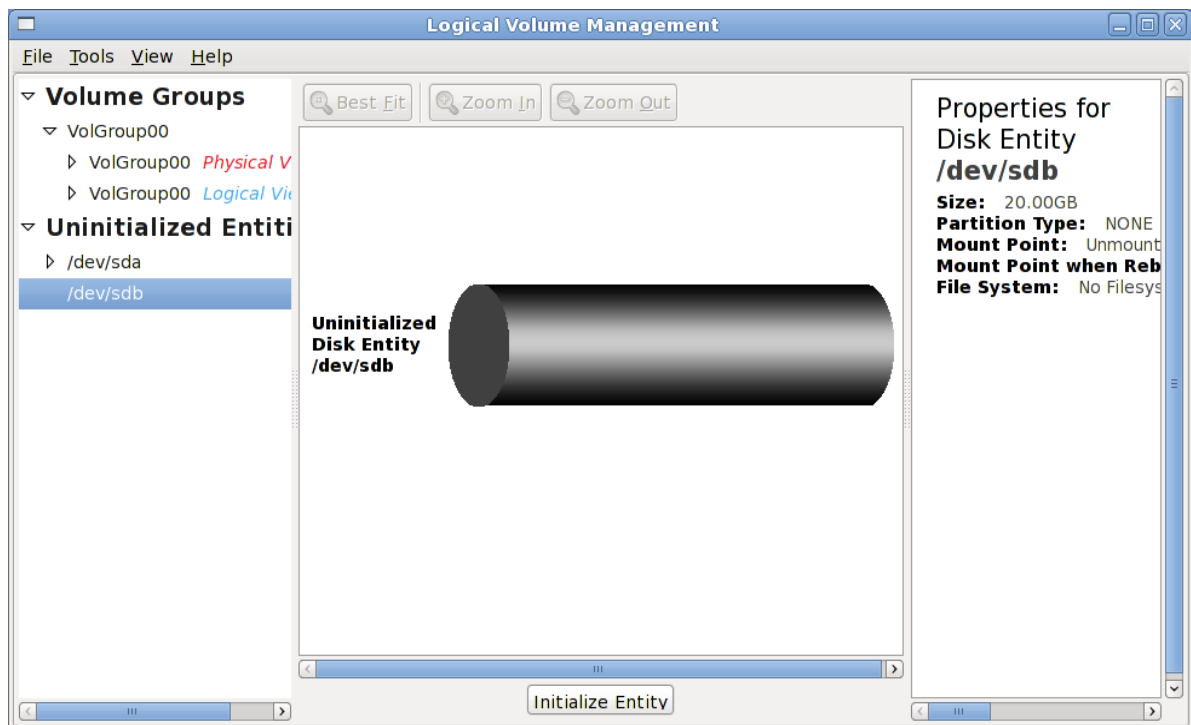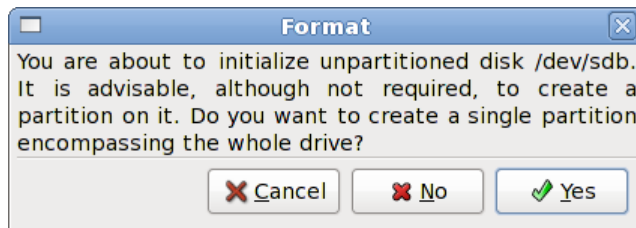

Press the *Initialize Entry* button at the bottom of the window.

3. Click *Yes* when the following pop-up window appears
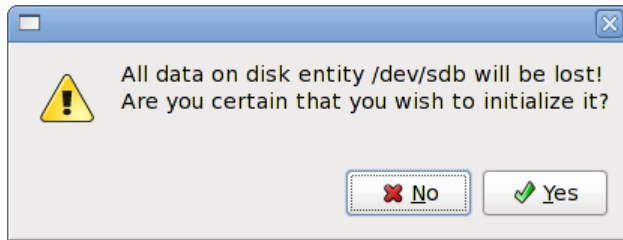
4. A *Format Authorization* window will pop up next. Click *Yes* to continue.


5. When the format has completed, the main window will appear and show that there is now an **Unallocated Volume** present (in the left column). Expand this entry and select the newly added device partition (in this case, */dev/sdb*. *Partition 1*)
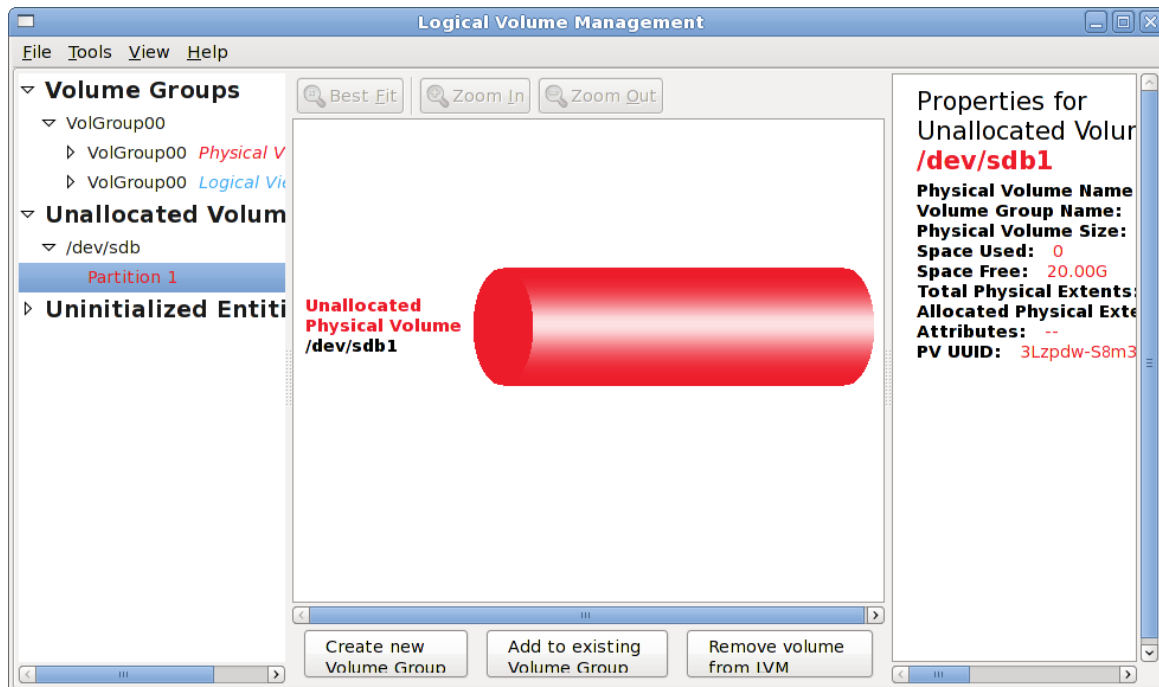

Press the *Create New Volume Group* button at the bottom of the screen.

6. When the **New Volume Group** window appears, enter the name of the new volume group, modify any other parameters appropriately (or accept the defaults) and press the *Ok* button.
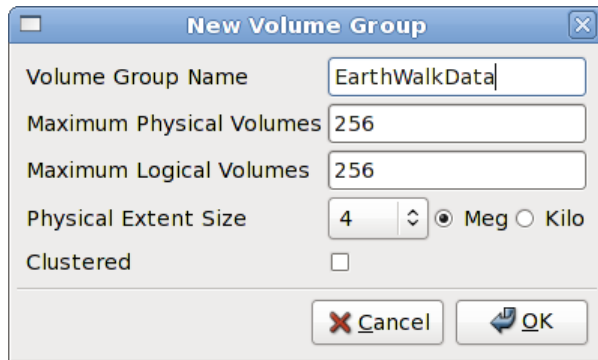
7. A new view will be presented showing the Volume Groups. Highlight the Logical View entry for the new partition and click the *Create New Logical Volume* button at the bottom of the screen
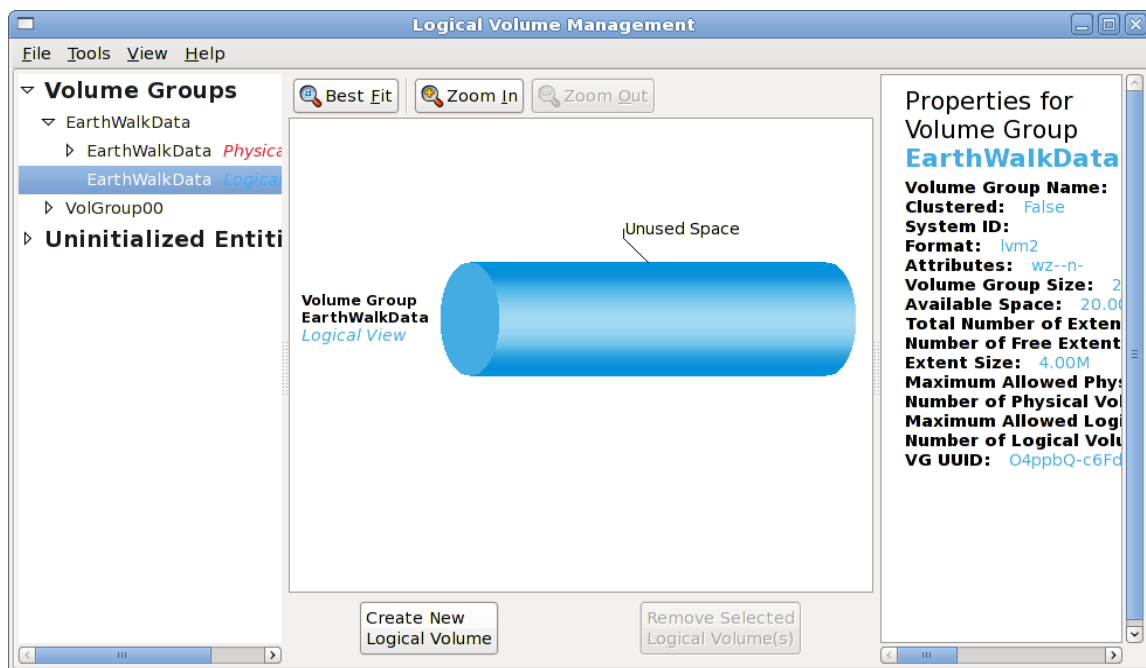
8. Fill in the fields on the *Create New Logical Volume* pop-up window appropriately. In this example, a new logical volume named **Data**, using the **Ext3** file system and consuming all of the remaining space on the volume will be created, mounted and entered into **/etc/fstab** to be mounted automatically upon restarts.
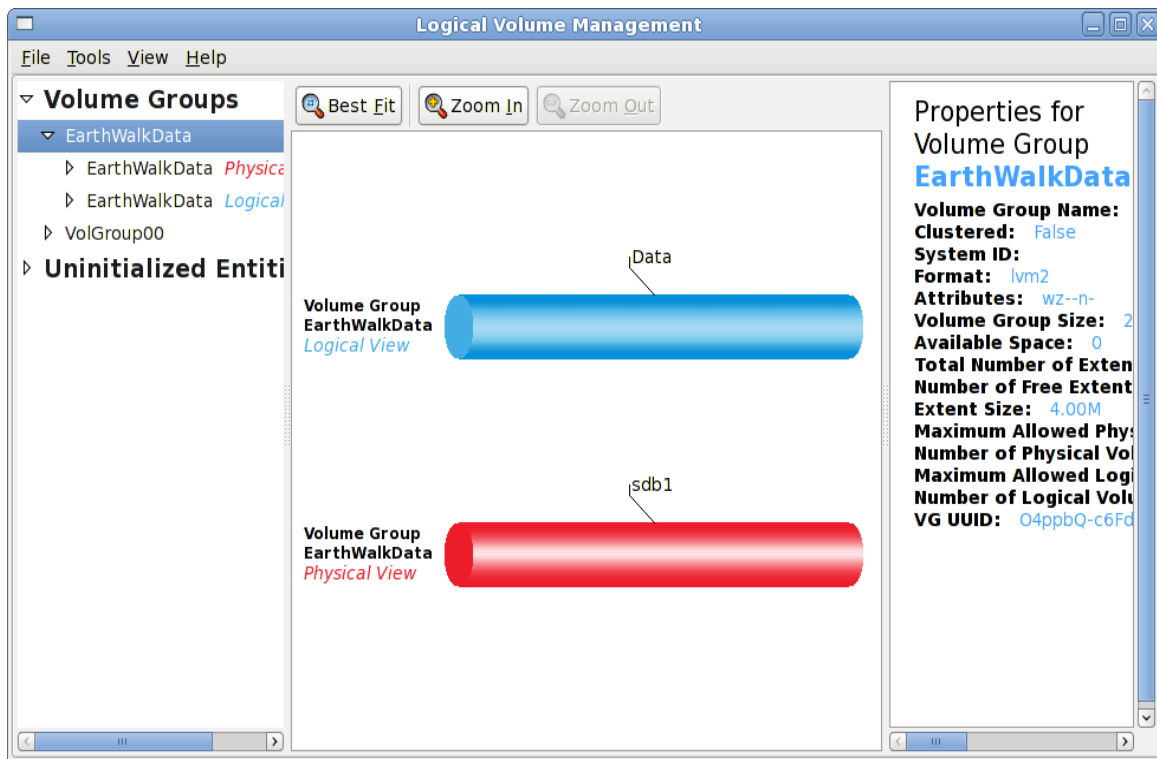
Press the *Ok* button to create the new volume. If the following pop-up window appears, press the *Yes* button to continue.

9. When the allocation has been completed, a window similar to the following will be displayed showing the newly allocated logical volume:

The new Volume Group is now ready for use.

10. Select **File/Quit** from the main menu to exit the *Logical Volume Management* tool.