

2. Partitioning Strategies

In this section, we will explore some partitioning strategies that you can think about. When deciding on a partitioning strategy, I think that a lot of it depends on how you intend to use the hard disk.



Here, we'll first begin by looking at the various "classes" or "types" of partitioning that we might do in a hard disk. In the later sections, we delve specifically into the steps for partitioning your disk, as well as a particular partitioning scheme I use for my home PC.

Refer to the diagram below. I see that partitioning of hard disks really depend on two opposing factors - flexibility and effort.

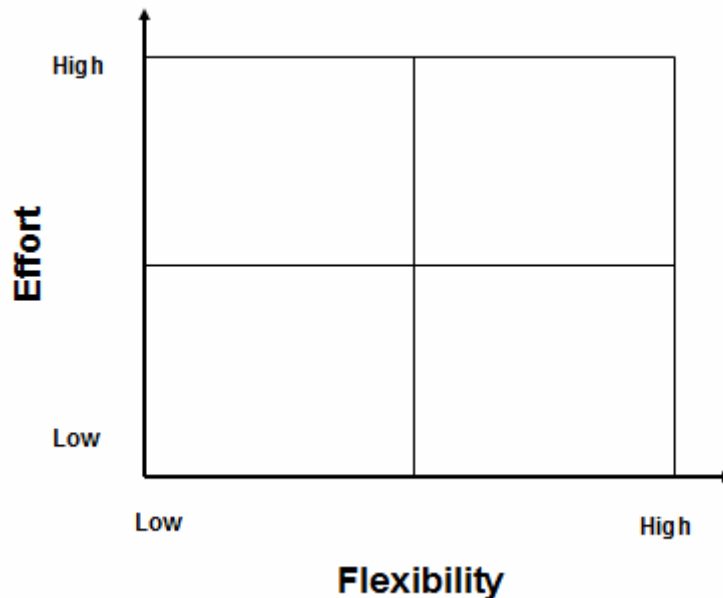
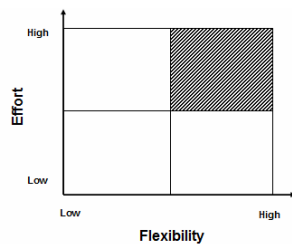


Figure 12: A matrix showing the trade-off between flexibility and effort when doing partitioning hard disks

Flexibility refers to the flexibility that the creation of partitions gives you as a computer user. This could be the convenience in booting up to different versions of Windows if you need a multi-boot machine, or it could be the increased choices you have in terms of organizing your user data.

Effort refers to the effort required to set up the partitions you require. Generally having more partitions definitely means more effort in setting up. However, we also need to think about cases where the operating system is more complex - e.g. Linux. In these cases, you might only have say two partitions in the hard disk but you may spend tremendous effort in working out the intricacies of a multi-boot scenario in Linux.

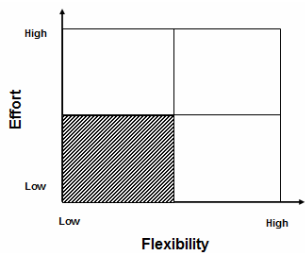
2.1 Partitioning Strategy 1



In the **upper right hand corner**, we have a scenario where we have high flexibility and high effort. An example would be cases where you have multiple partitions running vastly different operating systems. Something like 6 partitions running Windows XP, Windows Vista, Ubuntu Linux, Red Hat Linux, OS/2 and a user data partition would be classified in this quadrant.

This kind of setup takes a crazy amount of effort to set up - and very often I question why we need such complexity at all. Other than the most enthusiastic techies, I don't see that this kind of setup very much used. You might as well get different PCs instead of building so many partitions - it makes things simpler and less confusing.

2.2 Partitioning Strategy 2



In the **lower right hand corner**, we have a scenario where you get high flexibility and low effort. How is this possible? Well, one example is a situation where we have multiple related operating systems running in different partitions of a hard disk.

For example, if I have 4 partitions running Windows XP, Windows Vista, Windows 98 and a user data partition, then this would qualify as a potential high flexibility, low effort candidate.

Why? Because these related operating systems can typically work well with each other. If I install Windows 98 into my first partition, installing Windows XP and Windows Vista subsequently (instead of Linux) subsequently has some benefits because the Windows boot loader would recognize my existing Windows 98 partition and include it in the boot up menu. This saves some amount of effort in setting up the whole thing.