Subject - FYI - discussing pros and cons of implementing virtualization in NetDef Incorporated.

Respected Sir,

I am going to share some information regarding pros and cons of implementing virtualization in NetDef Incorporated.

Virtualization, in simple words, is the ability to run multiple operating systems on one computer, whether that computer is a server or a PC. To elaborate more we can think of virtualization as a school bus. Instead of each parent driving their kid to school each day in their car with the resulting traffic jams and waste of time and fuel or having to build lots of extra lanes on the roads, we have the kids ride a big bus that can effectively carry a lot of people. We save resources like gas and space on the highways, as well as the parents' time.

So if we substitute the energy of gas for the energy in electricity, whether derived from coal or nukes or hydro, etc., and the congestion around schools for the space in your data center and the more efficient management and provisioning of servers. It will be easier to understand the benefits of implementing virtualization in our organization using this scenario.

Implementing virtualization will reduce our overall capital expenditure and Infrastructure cost. Also, virtual machines allow simple and easy deployment and it also provides an extra layer of security, i.e., in case something unwanted happens on our virtual machine, it will not affect our host system and we can create a new virtual machine without any problem, which is similar to case bus has some technical problem, we can deploy some other bus for the same or parents can drop children as well, since problem in bus is not affecting their personal vehicles.

There are also some limitations of implementing virtualization. Although there will be reduction in overall expenditure in the long run, virtualization will require some infrastructure cost upfront, just like parents will need to make sure that bus have enough capacity for all the children. Also, not all applications and servers support virtualization which can limit the capabilities of the

virtual environment, just like children will have limited privileges in the bus as compared to their parents vehicle.

There is also a factor of data risk, and we have to rely on Virtual Machines with enough data protection, which will be similar to choosing an appropriate bus driver for ensuring our children's safety.

All in all, there are many advantages of virtualization which may be beneficial for us in the long run, but there are also some limitations and risk factor that we have to keep in mind.

Thank you,

Yours Sincerely,

Gursimran Singh