Green communication

Technology, Information Technology

GOING GREEN affiliation HOW TO GO GREEN Green data storage and green data centers The can reduce its carbon footprint while still having the maximum output from its output, technology resources and physical space. The IT department generates lots of carbon emissions, thanks to the electricity that they use run their machines. The university can thus employ several methods of green data storage that are way friendly to the environment.

One method of green data storage that the university can employ is virtualization both at the desktop and the server. Through the use of software, one server will mimic the work of several others, thus saving on the resources (which are primarily power and cooling costs at the data center) that would have been required to maintain all the servers. Moreover, virtualization will reduce the operating and capital costs for the university, while still delivering high application ability.

The implementation of solid state disks (SSD) is also a path for going green in data storage. Since SSDs are fixed and do not have movable parts, they are not susceptible to damage or shock like the traditional hard drive. Moreover, they offer cost savings since they have a lower energy productivity and higher efficiency.

The university can also employ the use of massive array of idle disks, abbreviated as MAIDS. MAIDS are advantageous over the traditional storage methods in that they tend to have a relatively larger storage capacity over their counterparts. Furthermore, they have lower power consumption than tapes and hard drives. All these attributes point to saving on resources, which is the key to a green environment.

A green data center can be defined as the repository management, dissemination and storage of data in which the systems (lighting, mechanical and electrical) are designed for minimum environmental impact and maximum energy efficiency (Greentechmedia. com, 2015). Green data centers are environmental conscious have lower carbon footprints and operate at lower power levels, hence reducing both capital and operating cost for an organization.

The university can ensure that the data center is environmental friendly by minimizing power constraints. This can be achieved by locating the servers to areas that power is cheaper through server virtualization. Furthermore, the university can monitor the individual power consumption of the devices that it has and determine what should be changed (Technet. microsoft. com, 2015). Green data centers should have efficient lighting, like LEDs, that can reduce the power consumption by 80%. The cooling system should be as efficient as possible to contain the hot air from servers. Un-used equipment should be turned off or decommissioned since idle servers still consume power.

Conclusion

Green technology is the way forward and the computing department should not be left out. We should adopt practices that are eco-friendly. They include having green data storage, green data centers, green cloud computing, green grid, and green wireless and green software. When all the above factors are combined and executed fully, there will be a reduction in power consumed, heat dissipated and a reduction in waste . Even at the rate that

technology keeps changing, we need to be able to keep up in order for the ecosystem to continue existing.

References

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