

UAPO - Introduction to administration of computers and operating systems

Virtualization

Work in the course UAPO was about on all sides virtualization from start to finish teaching. Virtualization was our means for accomplish tasks and the overall study of the subject.

With virtualization we first met in the opening issues - install Windows Vista on new computer. But we did not install on a real machine, but on the virtual one. At this point it is important that the PCs was a truly faithful imitation of real computers, and not only visualization or emulation of Windows. The difference is obvious at first glance. Virtual station boots from the BIOS, like any other real computer. All this (and many more) are mediated by the VMware vSphere.

The VMware vSphere includes everything to manage these virtual channels. It does not have to install an external utility for a particular issue, which is very nice and it saves time. With this program it is easy to load the disk image, so you're not forced to work only with real media. Virtual station you can, stop (pause), restart and shut down(hard). Just as it is also a real computer with the exception of "pause mode", which do not find in the normal standing position.

With vSphere virtualization do not have virtualisation only one virtual machine on a real server. Full benefit of virtualisation is that we virtualize dozens of virtual stations on one server (or real computer), if the hardware of real machine is enough powerful. And that brings us to the issue of hardware requirements for the server on which the stations are operated. If we want to provide quality virtual machines, we have adapted to the performance of server hardware.

Important is also the backup server, because if we lose a real computer that serves as a server at the same time we lose a dozen virtual stations and therefore a lot of the data.

VMware vSphere can manage multiple virtual stations at once. With a few clicks you can create a new station, or even to clone an existing one. If a station has little power or disk space, nothing happens, again with a few clicks raise these values – as a real computer equipped with new hardware.

However, as the virtual machine looks like a real computer, it must be accessed from the security point of view as in real computers. In fact, the security against viruses and unauthorized entry into a virtual station should be at the maximum, because virtual machines are often turned on 24 hours a day, and remotely connect to it can anyone who knows the address. It is important to have a strong password to protect out stations.

At the station we were joined not only by VMware vSphere but also by remote service via the Windows. This is another feature of virtualization, you can connect almost everywhere on your

station. In crisis situations, such as when a virtual station stuck, once again we had to use VMware vSphere Client, and we solve the problem without difficulty.

Overall, I called virtualization a very useful and teaching with her through a very interesting and most flexible.

27. 1. 2012

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Natural studies - Informatics for Education