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I just wanted to write down some quick notes about virtual machines. Virtual Machines have always been an effective and efficient way to emulate multipl computers without requiring all of the space and hardware. They create a con isolated operating system installation within your normal operating system. posting, i'll define two words: host and guest. The host is the native computer are running and guest is the virtual machine instance that is running on the They are implemented in two ways: emulation and virtualization.

Emulation involves emulating the virtual machines hardware and architectur Microsoft's VirtualPC is an example of an emulation based virtual machine. It the x86 architecture, and adds a layer of indirection and translation at the gu which means VirtualPC can run on different chipsets, like the PowerPC, in ad the x86 architecture. However, that layer of indirection slows down the virtua machine significantly.

Virtualization, on the other hand, involves simply isolating the virtual machi memory. The host instance simply passes the execution of the guest virtual n directly to the native hardware. Without the translation layer, the performanc virtualization virtual machine is much faster and approaches native speeds. since the native hardware is used, the chipset of the virtual machine must ma Usually, this means the Intel x86 architecture. VMWare is an example of this application for Windows.

Regardless of your virtual machine direction, they provide a way to run separa logical instances of an OS on one physical computer. Some uses of this includ

1. Development test bed – Creating separate virtual machines for developmen environments enables you to customize your laptop for particular environme: without messing with your actual laptop. Good for all those WebSphere or Biz installs.

2. Testing Environment – The ability to recreate a customer specific environm including all relevant hot fixes & service packs, proves to be invaluable when debugging production problems.

3. General Sandbox – Ever want to try a piece of software, but were afraid ruir computer? Most virtual machines have the ability to rollback in-memory chat preserve a particular state of the virtual machine. This provides a good safety

These are just some of the uses of virtual machines. I am sure people will figu