**1**. There are 2 types the most popular Hypervisors: **Type 1** and **Type 2**.

The main differences between Type 1 and Type 2 is:

a) **Type 1** works directly with hardware to manage equipment and manage guest virtual machines. For **Type 2** you must install the base OS on which you can the Hypervisor need to be installed.

b) The first type of Hypervisor software has a very important feature - its code size is two orders of magnitude smaller than most modern operating systems. This provides an equally lower number of possible errors that cause the entire system to freeze.

So, the first Type of Hypervisors is Xen, VMware ESXi, Hyper-V and others. The second Type of Hypervisors is Oracle VM VirtualBox, VMware Workstation, KVM and others.

**2**. Features of Hypervisors:

a) **XEN (XENSERVER, CITRIX HYPERVISOR)** - XEN code is open (open source) and contains a minimum code size, has hardware virtualization and paravirtualization, and works as a hybrid hypervisor.

b) **VMWARE ESXI** - Enterprise virtualization solution, limited functionality in free version, high product stability, easy administration, minimal code size, wide range of supported guest systems

c) **HYPER-V** There are two options: for server operating systems MS Windows and as a separate product Microsoft Hyper-V Server, high product stability, easy administration, limited functionality in free version.

d) **Oracle VM VirtualBox** — opensource software, a lot of supporting systems, capable of supporting 64-bit guest systems, even if the host OS is 32-bit.

e) **VMWARE WORKSTATION** This is a proprietary software that works with x86-64 host operating systems. Supports over 200 guest OS. For the test, you can use the free version of Workstation Player, which is greatly reduced in functionality compared to the Pro version

f) **Kernel-based Virtual Machine, KVM** - opensource software, It contains QEMU components for user mode and modules for Intel, AMD.  
gittest