

Review Questions 2

1. A virtual machine is an imitation of a computer system. It is software that runs on a larger computer so that the processing power can be used more efficiently. Whether that is running different operating systems or running things safer through isolation. A vm image is all the parts needed for a vm. Like applications, the os and everything else you would need. A vm is created from an image when the image gets copied over into whatever part of the memory will be running the virtual machine.
2. A hypervisor is software designed for the creation and use of virtual machines. Two types of hypervisors exist. Type one is where the hypervisor runs directly on the local computer's hardware. This type is more secure and safer. A type 2 is where the hypervisor runs on the systems os. The hypervisor then runs vm's on top of the systems os. In both once the hypervisor starts creating and managing multiple operating systems. This is done by abstracting the hardware of a computer. This allows the different vm's to all share the computers hardware to do the things they are made to do.
3. A container in comparison to a virtual machine is smaller. Instead of running a whole computer it is just the parts needed to run a single application. Since this trims off the fat it takes less resources to run containers compared to vm's.
4. Serverless Architecture works differently than containers. Instead of having all of the necessary parts in place to run your application at all times's(like in a container). Instead, whenever you send requests to use computation power to an outside source. This outside source charges you per computation rather than for the rental cost of the server space you would normally need. This allows for even less resource allocation than containers.