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Title of Talk: _what's cloud and why use it_ Date of Talk: _6th August 2021_

WHAT IS and WHY CLOUD

Brain's speaking was informative and helpful, which presented us a general picture of Cloud fundamentals and provided detailed explanation on why and how the industry formed Cloud and takes advantage of it.

The speaker started the topic by showing the definition of Cloud, that is on-demand availability of computer resources without direct active management over the internet. The advantage is obvious in contrast to traditional on-premises infrastructure setup. Firstly, the pay-as-you-go model allows business to start quickly without worrying about infrastructure purchase and setup, stop the expense immediately when done with the Cloud computing resources, though it does not allow fine-grained control on the computing hardware and might cost more from a long-term perspective. Secondly, it let someone else and maybe professionals manage the infrastructure, which saves time and cost and probably keeps high efficiency and quality.

Why Cloud is so popular, it is owing to virtualization technology, that is OS virtualization and dockerization. OS virtualization uses technology like Hypervisor to emulate isolated OS environment on top of host OS, while dockerization creates isolated runtime environments sharing the same OS kernel with their host machines therefore is light, flexible and more popular, it's the standard unit of software that packages app and dependencies to run across all environments. The virtualization technologies allow applications to spawn and populate consistently and rapidly, which gives cloud clusters the arena to shine and prevail. Think about launching thousands of application instances in a few seconds, which is unthinkable in a traditional infrastructure, but a common task in Cloud.

Speaker also gave us an insight into docker's fundamentals and submodules, like docker file, docker image, container instance etc, due to the importance and popularity of docker. Although I was ware of docker and had hands-on experience as well, but the systematic introduction helped me gain a full picture of docker in terms of what and how.

To conclude, the speaker delivered considerable valuable information during the 30 mins and Cloud and virtualization especially docker, and made the time enjoyable and fruitful to us.