STCLOUD Quiz 1 Reviewer

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1. Introduction to Virtualization and Cloud

1. This method relies on physical servers and data centers to deliver computational resources.
   (a) Traditional
   (b) Virtualization
   (c) Cloud
2. This method includes the delivery of computing resources via network on a paid basis.
   (a) Traditional
   (b) Virtualization
   (c) Cloud
3. Which computing method delivers dedicated resources for computing?
   (a) Traditional
   (b) Virtualization
   (c) Cloud
4. Which computing method shares and allocates resources as needed?
   (a) Traditional
   (b) Virtualization
   (c) Cloud

5. Which computing method requires a higher CapEx?

   (a) Traditional

   (b) Virtualization

   (c) Cloud

6. Which method requires a higher OpEx?

   (a) Traditional

   (b) Virtualization

   (c) Cloud

7. Which method is generally considered more cost effective for a startup?

   (a) Traditional

   (b) Virtualization

   (c) Cloud

8. Roan owns a company that requires frequent migration of data from database to database. Which method would reduce his operational costs, allowing him to save as much as possible?

   (a) Traditional

   (b) Virtualization

   (c) Cloud

9. Renzo is keeping classified and military documents for the government. It is imperative that security is of utmost importance. What is the best method to do this?

   (a) Traditional

   (b) Virtualization

   (c) Cloud

10. Enzo wants to run 10 different Windows operating systems. What is the best way for him to do so?

    (a) Traditional

    (b) Virtualization

    (c) Cloud

11. Adriel is a loyal fan of Linux who wants complete control over the software and hardware of his system. Which computing method best suits him?

    (a) Traditional

    (b) Virtualization

    (c) Cloud

12. Which computing method has attributes of being self-contained and boasting hardware independence?

    (a) Traditional

    (b) Virtualization

    (c) Cloud

2. Virtualization

1. When running multiple virtual machines, Proxmox allocates and divides the resources as necessary. Which virtualization property applies the most here?

    (a) Partitioning

    (b) Isolation

    (c) Encapsulation

    (d) Hardware Independence

2. Kenneth owns 5 different desktops with each having a different operating system. He wishes to transfer a Windows 7 virtual machine he has to each system. Which virtualization property applies the most here?

    (a) Partitioning

    (b) Isolation

    (c) Encapsulation

    (d) Hardware Independence

3. Nomu wants to insert a virus into an operating system to test its effects. In order to do so, he uses a virtual machine to test the virus on. Which virtualization property applies the most here?

   (a) Partitioning

   (b) Isolation

   (c) Encapsulation

   (d) Hardware Independence

4. ParaSync needs a Windows XP virtual machine as soon as possible. To do so, they downloaded a virtual machine off the internet. Which virtualization property applies the most here?

   (a) Partitioning

   (b) Isolation

   (c) Encapsulation

   (d) Hardware Independence

5. A company named HansAsks wants to install a container on every developer machine for the entire company to develop chatbots without needing excess configuration. Which virtualization property applies the most here?

   (a) Partitioning

   (b) Isolation

   (c) Encapsulation

   (d) Hardware Independence

6. Harrie wants to run 2 virtual machines on his high-end desktop at the same time. However one of the virtual machines is experiencing frame drops whilst the other one runs smoothly. Which virtualization property is lacking here?

   (a) Partitioning

   (b) Isolation

   (c) Encapsulation

   (d) Hardware Independence

7. Alaric manages a company that uses three different virtual machines for different processes. One day, a malware attack attacks one of the virtual machines. However, the other two virtual machines are able to run completely fine without any issues. Which virtualization property is best applied here?

   (a) Partitioning

   (b) Isolation

   (c) Encapsulation

   (d) Hardware Independence

8. A company wants to consolidate all of its workstations into their servers. To do this, they place weaker computers on each employee's desk and they use remote access to access a server where their desktops are installed. What type of virtualization is this?

   (a) Server Virtualization

   (b) Network Virtualization

   (c) Desktop Virtualization

   (d) Storage Virtualization

   (e) Data Virtualization

   (f) Application Virtualization

9. An internal network is created in a machine running a hypervisor that connects all of the virtual machines together. What type of virtualization is this?

   (a) Server Virtualization

   (b) Network Virtualization

   (c) Desktop Virtualization

   (d) Storage Virtualization

   (e) Data Virtualization

   (f) Application Virtualization

10. Roan's research project involved data coming from multiple sources: a REST API, several CSV files and a MySQL database. In order to analyze the data as a whole, what type of virtualization can he use?

    (a) Server Virtualization

    (b) Network Virtualization

    (c) Desktop Virtualization

    (d) Storage Virtualization

    (e) Data Virtualization

    (f) Application Virtualization

11. Enzo wants to play a Windows-exclusive game, but his computer runs Linux. What type of virtualization can he use to run his game?

    (a) Server Virtualization

    (b) Network Virtualization

    (c) Desktop Virtualization

    (d) Storage Virtualization

    (e) Data Virtualization

    (f) Application Virtualization

12. Clive has ran out of disk space on his laptop and wants to store all of his important homework, slides, and images. To do this, he bought multiple drives that he then configures to make it look like one single drive local to his computer. What type of virtualization is this?

    (a) Server Virtualization

    (b) Network Virtualization

    (c) Desktop Virtualization

    (d) Storage Virtualization

    (e) Data Virtualization

    (f) Application Virtualization

13. Renzo wants to set-up multiple web applications, and database services for his Parasync, but he is limited to his Raspberry Pi. Thus, he setup a virtual machine so he can partition the exact computing resources for the various services

    (a) Server Virtualization

    (b) Network Virtualization

    (c) Desktop Virtualization

    (d) Storage Virtualization

    (e) Data Virtualization

    (f) Application Virtualization

3. Hypervisors and Cloud

1. Which of the following responsibilities are not covered by the hypervisor?

    (a) Creating virtual machines

    (b) Downloading an operating system

    (c) Running a virtual machine

    (d) Sharing resources to a virtualized operating system

2. An IT team at ParaSync can quickly provision a development VM for their developers. Which of the following benefits of hypervisors is **most** seen in this scenario?

    (a) Speed

    (b) Efficiency

    (c) Flexibility

    (d) Portability

3. ParaSync needs to run its software on Windows XP, but they do not have a native Windows XP machine to test with. Instead, their IT team gives them a Windows XP virtual machine to test their software. Which of the following benefits of hypervisors is **most** seen in this scenario?

    (a) Speed

    (b) Efficiency

    (c) Flexibility

    (d) Portability

4. An IT team was able to replace their fleet of 12 physical servers with 2 physical servers running 12 virtual machines. Which of the following benefits of hypervisors is **most** seen in this scenario?

   (a) Speed

   (b) Efficiency

   (c) Flexibility

   (d) Portability

5. An IT team notices that their electrical bill from the 4 servers they are running is quite high even if they are not being used much. To solve this problem, they set up their infrastructure such that only one server is turned on at night while the others are only turned on during the day. Which of the following benefits of hypervisors is **most** seen in this scenario?

   (a) Speed

   (b) Efficiency

   (c) Flexibility

   (d) Portability

6. Sean, a security researcher at a cybersecurity firm needs a virtual machine on his local machine to have an isolated environment to test malware. What should he use?

   (a) Traditional

   (b) Type-I hypervisor

   (c) Type-II hypervisor

7. A team of video editors needs maximum performance to edit videos for Linus Tech Tips. What should they use?

   (a) Traditional

   (b) Type-I hypervisor

   (c) Type-II hypervisor

8. Enzo wants to switch to Linux and wants to evaluate different distros that he can switch to. Since he is more after the feature of each distro, he doesn't need the best performance for evaluation. What should he use?

   (a) Traditional

   (b) Type-I hypervisor

   (c) Type-II hypervisor

9. Roemer wants to run multiple virtual machines for a web application he made. Ideally, he wants to have as much performance as he can get. What should he use?

   (a) Traditional

   (b) Type-I hypervisor

   (c) Type-II hypervisor

4. Cloud Concepts

1. Cloud allows you to think of infrastructure as _____

   (a) Hardware

   (b) Software

   (c) Code

   (d) Resources

2. Which of the following is not a disadvantage of traditional computing?

   (a) Require space, staff, security and planning

   (b) Higher OpEx than cloud

   (c) Longer procurement cycle

   (d) Provision capacity requires guessing

3. Which of the following is not an advantage of cloud computing?

   (a) Good for cases where a lot of dedicated resources are needed at a large space

   (b) More flexible than traditional computing

   (c) More agile than traditional computing

   (d) Doesn't need heavy-lifting tasks (racking and stacking, manual setup and installation, assembly, etc.)

4. A developer needs to deploy a database and authentication solution in the cloud for an app they are making. What service model should they use?

   (a) Infrastructure as a Service (IaaS)

   (b) Platform as a Service (PaaS)

   (c) Software as a Service (SaaS)

5. An IT team needs to deploy several services on the cloud and needs to have full control over the operating systems installed and the network. What service model should they use?

   (a) Infrastructure as a Service (IaaS)

   (b) Platform as a Service (PaaS)

   (c) Software as a Service (SaaS)

6. A graphic designer wants to use a cloud service to create a simple portfolio website. They do not really care about the specifics of the technology used, and only care that they get their portfolio online. What service model should they use?

   (a) Infrastructure as a Service (IaaS)

   (b) Platform as a Service (PaaS)

   (c) Software as a Service (SaaS)

7. DLSU hosts CCS cloud in Gokongwei Hall, which is located in the campus. What deployment model are they using?

   (a) Public Cloud

   (b) Hybrid Cloud

   (c) Private Cloud (On-Premises)

8. A startup company wants to deploy services with minimal CapEx since they have low capital. What deployment model should they use?

   (a) Public Cloud

   (b) Hybrid Cloud

   (c) Private Cloud (On-Premises)

9. An organization that used traditional computing with their own servers is starting to slowly shift to cloud computing. Currently, some of their services are in the cloud, while some are still on premises. What deployment model are they using?

   (a) Public Cloud

   (b) Hybrid Cloud

   (c) Private Cloud (On-Premises)

10. A company wants to launch their new service globally. What deployment model should they use?

    (a) Public Cloud

    (b) Hybrid Cloud

    (c) Private Cloud (On-Premises)

11. Which of the following is not a web service?

    (a) Custom Web Application with a REST JSON API

    (b) Valve API

    (c) Game server that uses a non-standard API

    (d) A development server API that is exposed on port 3000