

Section 15: Special Topics

CS 162

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1 Virtual Machines, Containers

1. What happens when an application running on the Guest OS issues a system call?

2. What happens when the Guest OS tries to execute a privileged instruction?

3. Which page table is used for address translation when an application running on the Guest OS is executing?

2 Orchestration (Optional)

1. Explain what a container orchestrator does and why its necessary.

2. What does Mesos (without additional libraries) offer that is similar to modern container orchestrators? How is it different from an orchestrator the likes of Kubernetes?

3. Explain why reconciliation is a useful method of desired state management.

4. Explain what each of the following Kubernetes objects are: Node, Pod, Deployment, Service, Ingress