

# *Virtual Machines*



## **Exercises**

- 18.12 Describe the three types of traditional hypervisors.
- 18.13 Describe four virtualization-like execution environments, and explain how they differ from “true” virtualization.
- 18.14 Describe four benefits of virtualization.
- 18.15 Why are VMMs unable to implement trap-and-emulate-based virtualization on some CPUs? Lacking the ability to trap and emulate, what method can a VMM use to implement virtualization?
- 18.16 What hardware assistance for virtualization can be provided by modern CPUs?
- 18.17 Why is live migration possible in virtual environments but much less possible for a native operating system?

