

Virtualization Technologies in Information Systems Education

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ABSTRACT

Information systems educators must balance the need to protect the stability, availability, and security of computer laboratories with the learning objectives of various courses. In advanced courses where students need to install, configure, and otherwise manipulate application and operating system settings, this is especially problematic as these activities threaten the stability of workstations and security of networks. Virtualization platforms offer the capability to integrate advanced topics into courses in a way that gives students control so that they can perform hands-on activities that would be infeasible on shared physical computers. This paper introduces virtualization technologies, discusses the use of desktop virtualization in a business information systems security course, outlines some challenges and limitations of virtualization, and enumerates additional opportunities and benefits of virtual technologies.

Keywords: Virtualization, Computer laboratory, Education, Security, VMWare, Parallels