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Could Operating Systems

A new era of operating systems has started, and it gain much popularity rapidly. The approach taken by many new startups such as, OSv, ClickOS, MiniOS, and others revisits an old approach to operating system construction, the library, and puts it in the context of cloud computing within a virtual machine. Cloud Operating Systems have simplified application stack by removing layers of abstraction and offering the promise of less complexity, increased system security and simplified management of application stacks in the cloud. Cloud Operating Systems are single tasked within a single Virtual Machine, most of the functionalities in an ordinary operating system are removed. Typical operating system that runs on the cloud has three layers application, language runtime and the OS Kernel. Cloud Operating system the other hand, Cloud Operating systems such as OSv remove some of the Operating System layers and replace it with a Language Runtime that is designed to cooperate with the virtual environment the Hypervisor provides. "Hypervisors expose an idealized and tightly controlled hardware environment within the VM that can be used directly by a language runtime. Add to this the fact that your typical cloud application only needs access to disk and a network (graphics, sound, and other functionality is implemented on top of network protocols)."

Kurth, Lars. "Are Cloud Operating Systems the Next Big Thing?" *Linux.com*. N.p., Dec.-Jan. 2013. Web. 15 Sept. 2014.