Development of Web-Based Remote Desktop to Provide Adaptive User Interfaces in Cloud Platform

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Abstract: Cloud virtualization technologies are becoming more and more prevalent, cloud users usually encounter the problem of how to access to the virtualized remote desktops easily over the web without requiring the installation of special clients. To resolve this issue, we took advantage of the HTML5 technology and developed web-based remote desktop. It permits users to access the terminal which running in our cloud platform from anywhere. We implemented a sketch of web interface following the cloud computing concept that seeks to enable collaboration and communication among users for high performance computing. Given the development of remote desktop virtualization, it allows to shift the user’s desktop from the traditional PC environment to the cloud platform, which is stored on a remote virtual machine rather than locally. This proposed effort has the potential to positively provide an efficient, resilience and elastic environment for online cloud service. This is also made possible by the low administrative costs as well as relatively inexpensive end-user terminals and reduced energy expenses.

Keywords: virtualization, remote desktop, HTML5, cloud computing

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