Management and security of multi-cloud applications

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Abstract

Single cloud computing platforms, like Amazon's EC2, Google Cloud and Microsoft Azure, are common and popular today. Obtaining resources from a multiple cloud system gives clients competitive pricing, flexibility of resource provisioning, better points of presence and reduced risk of a total blackout. When these clients happen to be carriers, like Internet service providers, seeking to deploy their network services over multiple clouds, there still are many research challenges that inhibit large-scale deployments. This talk revolves around some of the key issues that were designated as "challenges" at the beginning of the network virtualization journey, and still need considerable research to see any kind of resolution in the near future. Specifically, I will present my work on the techniques that improve availability of virtual network services and secure inter-domain flow of data in the context of Internet of Things and multi-cloud based health networks.