Abstract:

DevOps is a development methodology aimed at bridging the gap between Development (Dev) and Operations, emphasizing communication and collaboration, continuous integration, quality assurance and delivery with automated deployment utilizing a set of development practices. On the other hand, most of the companies are migrating to the Cloud environments because of scalability and elasticity of the cloud resources.

Over the years software development lifecycles moved from waterfall to agile models of development. These improvements are moving downstream toward IT operations with the evolution of DevOps. In order to meet the demands of an agile business, IT operations need to deploy applications in a consistent, repeatable, and reliable manner. This can only be fully achieved with the adoption of automation. This benefits in reduced cost and time efficiency in delivering the products. Cloud services like Amazon Web Services (AWS), Azure and Google cloud platform supports numerous DevOps principles and practices that IT departments can capitalize on to improve business agility.

Our review focuses on DevOps principles and practices supported on one of the widely used cloud computing platforms. We would like to leverage the services provided by AWS Cloud, since it is currently best in the breed. As there are many cloud services provided by AWS, we will emphasize on tools such as “CodeCommit”, “CodePipeLine”, “CodeDeploy”, “EC2”, “AWS Lambda” and “CloudFront”. Also, we emphasize on the significance of DevOps and tries to explore the process of transformation from a legacy method and explains the impact of the change on overall architecture and software scale out.

At the end of the review, an in-depth understanding of the benefits of DevOps with Cloud Service will be gained.

References:


3. R. Punjabi and R. Bajaj, “User stories to user reality: A DevOps approach for the cloud,”


