Experiences with Continuous Deployment and Software Security in Google, Netflix, Facebook and others

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Abstract. Continuous deployment is the software engineering practice of deploying many small incremental software updates into production, leading to a continuous stream of 10s, 100s, or even 1,000s of deployments per day. High-profile Internet firms such as Amazon, Etsy, Facebook, Flickr, Google, and Netflix have embraced continuous deployment. However, the practice has not been covered in textbooks and no scientific publication has presented an analysis of continuous deployment. This talk will relate experiences from the Continuous Deployment Summit, which has been run annually from 2015 to 2017. We will present a security integration checklist focusing on Communication, Culture and Technology, where we conclude that the summit participants get a green light for Technology, amber for Culture, and a red light for Communication.

Keywords: security, continuous deployment, DevOps

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