Andrew Bach  
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In Chapter 23, we dived into how DevOps and compliance can walk hand in hand ensuring out software and infrastructure meets requirements and regulations that apply to the software. For example, a program for tracking prescriptions inside a health center would be bound to HIPAA regulations. At the end of the chapter, the author shares 2 case studies detailing some of the ways an engineer at Amazon implemented audit controls as well as an example where effective monitoring identified a backdoor maliciously added to an ATM system.

The first case study, "Providing Compliance in Regulated Environments", details some of the difficulties Amazon dealt with their DevOps pipeline and auditors. A principal engineer detailed how auditors would often request information on a scalable system using thousands of servers at once. This however was difficult as servers could be added and removed as the app scaled. In order to get around this, tooling was developed that allowed auditors and regulators to get in the moment access to the data they needed to complete their audits and ensure all requirements were being met successfully. Not only did this make it easier for information to be obtained for regulatory purposes, this also made the system information readily available for Amazon so they could ensure their system were working as expected as well.

The second case study follows Mary, who was leading the DevOps initiative at a financial firm. Early on she realized that the code review process was too heavily depended upon and pushed to have monitoring tools as well as effective automated testing and approvals added to their DevOps pipeline. These tools would pay off. A rogue employee was able to deploy a backdoor into the ATM systems to allow him to set them into maintenance and steal money. The monitoring tools detected the off schedule maintenance and were able to prevent further crime.

In conclusion, effective monitoring tools can aid in protecting your solutions while also working within your DevOps pipeline.