

## CASE STUDY: RAPID PROTOTYPING WORKLOADS



# FEDERAL AGENCY RAPID PROTOTYPING WORKLOADS ON AWS

## ABOUT THE CUSTOMER

The client, Department of Homeland Security agency, is responsible for protecting and vetting travelers across the US. One of the agency's programs provides end-to-end credentialing and endorsement services for populations of workers and travelers seeking access to the Nation's critical transportation systems and other infrastructure.

## THE CHALLENGE

The agency was in immediate need of automating build and deployment processes to meet their mission of agile delivery process. Their entire infrastructure was in an on-premise data center. Even though it had virtualization, it did not have a true cloud infrastructure. In addition, the stringent security requirements made the process of provisioning infrastructure and configuring applications took several weeks. Experimenting and rapidly prototyping with different architectures and tooling was extremely slow, and the agency has a long procurement cycle for hardware. Therefore, AWS was suited for rapid development by providing immediate business value.

## THE SOLUTION

Capitis Solutions developed rapid prototypes for selecting the best Continuous Integration and Continuous Delivery pipeline using AWS cloud. The tools used included OpsWorks, EC2 and Cloud Formation. The development platform included Oracle SOA suite, Open Source Spring/JAVA microservices application, and Oracle Database. Several industry standard CI/CD tools, including Jenkins and Chef, were integrated with the pipeline to select the best DevOps pipeline architecture.

## THE BENEFITS

- Several hundreds of thousands of dollars were saved and many months of delay were eliminated
- Gained customer confidence by demonstrating concepts with working prototypes
- We were able to select the best solution within weeks versus months compared to an on-premises government data center
- We were able to troubleshoot initial configuration issues at a rapid pace by eliminating the security restrictions that inhibited the evaluation of technologies in traditional data centers
- We were able to effectively iterate over several prototypes of pipelines within a short period of time instead of spending effort on developing architecture diagrams and heavy documentation

## CAPITIS SOLUTIONS AND AWS

- We are playing a key role in developing automated CI/CD process for a major national security project. In addition, we are modernizing legacy systems with microservices and dockers built using open source technologies.

## NEXT STEPS

- To learn more about how AWS and Capitis Solutions can help your business, visit [www.capitissolutios.com](http://www.capitissolutios.com)