









# FAA NIEC AWS DevOps Immersion Day

10:00 AM - 10:15 AM		<b>Welcome &amp; Introductions</b> Let's get started with AWS!
10:15 AM - 10:45 AM		<b>DevOps on AWS</b> This presentation will introduce DevOps, cover some of the challenges customers face adopting DevOps and discuss building a DevOps practice on AWS.
10:45 AM - 11:15 AM		<b>CI/CD on AWS: Lab 1 - Application Development</b> In this lab you will create a web application, explore the microservices and create a Docker container for our web application.
11:15 AM - 11:30 AM		<b>Break</b> Take a minute to relax...
11:30 AM - 12:00 PM		<b>CI/CD on AWS: Lab 2 - Source Control</b> In this lab you will create a git source control repository with AWS CodeCommit using AWS Cloud Development Kit (CDK) and check in the web application code we created in the previous lab.
12:00 PM - 1:00 PM		<b>Lunch</b> Enjoy your meal!
1:00 PM - 1:30 PM		<b>CI/CD on AWS: Lab 3 - Continuous Integration</b> In this lab we will create a pipeline to build and test our application and then push our docker container to a container repository.
1:30 PM - 2:15 PM		<b>CI/CD on AWS</b> This presentation is a First Call Deck for CI/CD on AWS. First, it starts talking about the Foundations of CI/CD, ranging from the monolithic and microservice development lifecycle, the key reasons to adopt CI/CD principles and its effects, the release lifecycle, and the definitions of Continuous Integration, Continuous Delivery, Continuous Deployment and Operation Excellence. Then, it talks about the services AWS provides to support the whole development and CI/CD process, like AWS Cloud9, local IDE Toolkits, Amazon CodeGuru, AWS CodeSuite, Amazon CloudWatch and AWS X-Ray. Finally, it defines the Infrastructure as Code concept, and talks about AWS CloudFormation, AWS SAM, AWS CDK, AWS SDKs and AWS Chatbot.

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2:15 PM -  
3:00 PM



### CI/CD on AWS: Lab 4 - Continuous Deployment

In this lab we will provision our Test environment with AWS Cloud Development Kit (CDK) and extend our CI/CD pipeline to include Continuously Deploying our containerized web application to a test environment.

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3:00 PM -  
3:15 PM



### Break

Take a minute to relax...

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3:15 PM -  
3:45 PM



### CI/CD on AWS: Lab 5 - Continuous Delivery

In this lab we build on the previous Continuous Deployment, provision our production environment and setup a gated production deployment.

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3:45 PM -  
4:00 PM



### Conclusion & Next Steps

Here are some resources for you until next time...

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