Higher Ed and General AWS Resources

Higher Education Resources

- Internet2 NET+ AWS Service and Advisory Board
- re:Invent 2016 Sessions

    - AWS re:Invent 2022 - Rethink data governance as strategic empowerment (PRT100).
    - AWS Customer Success Stories
        - University of Newcastle Digitises Its Student and Researcher Experience on AW
        - University of Auckland Improves Agility, Innovation, and Resilience on AWS
        - Cornell University Case Study
        - Arizona State University Case Study
- Family Educational Rights and Privacy Act (FERPA) Compliance on AWS
- AWS Getting Started Videos for Education

    - How do I create and activate a new AWS account?
    - Creating and managing an organization
    - What is IAM?
    - AWS Cost Optimization Series
    - AWS Networking Fundamentals - Level 200 (United States)
    - Monitoring and Logging

        - What Is AWS CloudTrail?
        - Logging requests using server access logging
        - Logging IP traffic using VPC Flow Logs
    - Checklist for AWS Account Administration and Networking in Education
- NET+ AWS Service page (benefits, list of subscribers, etc.)
- NET+ AWS Program page (documentation, resources, service advisory board)

AWS General Resources

- Overview of the Cloud Adoption Framework Operations Perspective
- AWS Well-Architected Framework
- Best Practices for Security, Identity, & Compliance
- AWS Cloud Adoption Framework (CAF)
- Guidelines for a successful migration
- AWS YouTube channel
- AWS Labs on GitHub
- AWS Official Training and Certifications
- Lambda, API Gateway, and Microservices

    - Getting Started with Serverless Architectures

        - Video: several best practices at ~36 min mark
    - Using AWS Lambda with Amazon API Gateway

        - Video: deeper dive into Lambda and API gateway
        - Tutorial: Using Lambda with API Gateway
    - Implementing Microservices on AWS

        - Whitepaper: overview of AWS microservices and interaction between them
    - Controlling Access to API Gateway
    - Lambda Limits
- Lambda deployments
    - Fully managed with AWS Code Pipeline

        - Most complete option for modeling and automating your deployment steps
        - Leverages Code Pipeline (workflow automation), Code Deploy (build, test, and package your code), S3 (store code package), and CloudFormation (deployment)
    - Partially managed with AWS CloudFormation (blog entry with S3 integration

        - Primarily focused on deploying your code instead of using the console
    - Setting up a CI/CD pipeline by integrating Jenkins with AWS CodeBuild and AWS CodeDeploy
- Apache Spark and EMR
    - Introduction to Apache Spark

        - Video: a discussion about storage options and best practices with EMR at ~32 min mark
    - Using spot instances with EMR
- Cisco CSR1000V- Transit VPC with Transit Gateway
    - AWS Transit Gateway
    - AWS Solutions Implementations Library
    - Cisco CSR Implementation Guide

Unofficial Resources

- The Open Guide to Amazon Web Services
- Awesome AWS
- A Cloud Guru Certification Courses
- A Cloud Guru: Linux Training