Microsoft Cloud Workshop: Serverless Architecture

Length
- 1 day

Prerequisites
- Workshop content presumes 300-level of architectural expertise of infrastructure and solutions design.
- We suggest students take a Microsoft Azure Essentials course (http://www.microsoft.com/en-US/azureessentials) prior to attending this workshop.

Audience
- Cloud Architects and IT professionals who have architectural expertise of infrastructure and solutions design in cloud technologies

What You'll Learn
- Use functions to independently scale and break down business logic into discrete components
- Use computer vision algorithms
- Provision and use Cosmos DB
- Create a Logic App to export processed data and conditionally send alerts
- Use App Insights to monitor a serverless topology
- Implement a Continuous Deployment process

In this 1-day, instructor-led workshop, you will setup and configure a serverless architecture within Azure using a combination of Azure Functions, Logic Apps, Event Grid, Cosmos DB, and Azure Storage. The focus is on removing server management from the equation, breaking down the solution into smaller components that are individually scalable, and allowing the customer to only pay for what they use.

Workshop Outline

Module 1: Whiteboard Design Session - Serverless Architecture
- Review the customer case study
- Design a proof of concept solution
- Present the solution

Module 2: Hands-on Lab - Serverless Architecture
- Azure data, storage, and serverless environment setup
- Develop and publish the photo processing and data export functions
- Create functions in the portal
- Monitor your functions with Application Insights
- Explore your data in Azure Cosmos DB
- Create the data export workflow
- Configure continuous deployment for your Function App
- Rerun the workflow and verify data export