#### Global Azure Bootcamp

Cloud Deployments: Azure Resource Manager Templates Made Easy





## Agenda

- ARM Intro Demo (Deploy An Entire Project And Setup Continuous Delivery In Less Than 10 Minutes)
- What Are Azure Resource Manager (ARM) Templates?
- Why Use ARM Templates?
- Platform & Tools
- ARM Template Components and Demo
- Planning Lifecycle For ARM Templates
- Resources For Building Templates
- Deployment Options
- Survey
- QA

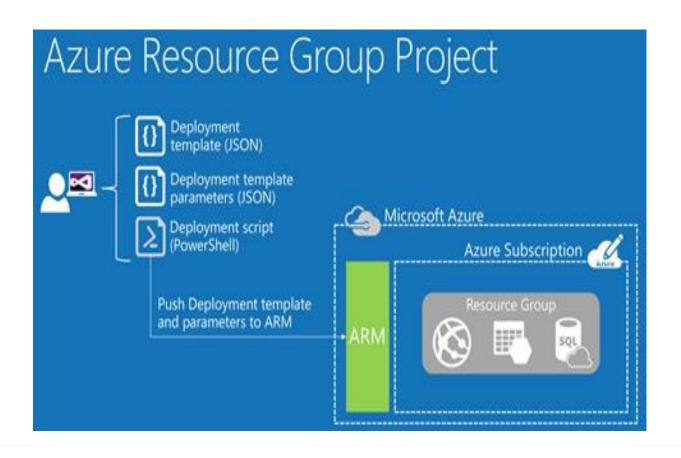


# DEMO



### What is a Azure Resource Manager (ARM) Template?

- First Announced At Build 2014
- Idempotent
- Declarative
- JSON Template Language
- Multiple Deployment Methods
- Works On Azure / Azure Stack





Usability Speed Cost Management Security



## Speed

- Reduce infrastructure delivery time from months to minutes
- Prevent deletion/modification of resources using resources locks
- Overlay infrastructure and configuration with a single file



## Usability

- Declaratively provision using templates across multiple environments
- Combine infrastructure deployment directly into application codebase
- Seamlessly Integrate templates into continuous deployment



## Cost

- Reduced footprint needed to manage and deploy infrastructure by allowing developers to deploy when and what they need on demand
- Resource tagging enables end to end cost visibility by classifications
- Defined templates provide more accurate cost estimations



#### Management

- Deploy, manage, and monitor all of the resources
- Set sequence of deployment by defining dependencies
- Enables to group & manage multiple resources as a single logical group

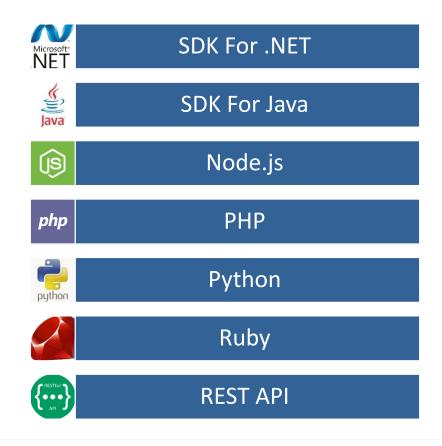


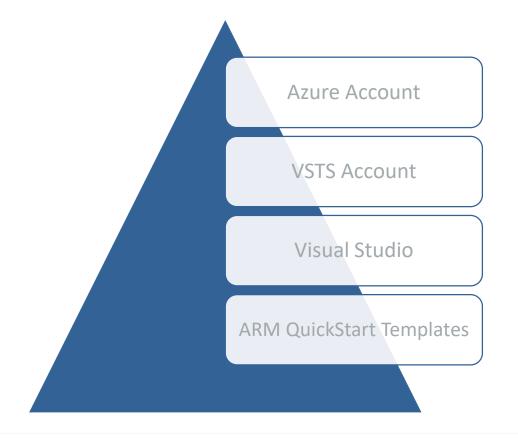
## Security

- Role-Based Access Control (RBAC) is natively integrated
- Deploy full or incremental changes preventing configuration drift
- All Deployments are tracked and logged, for all deployments mechanisms



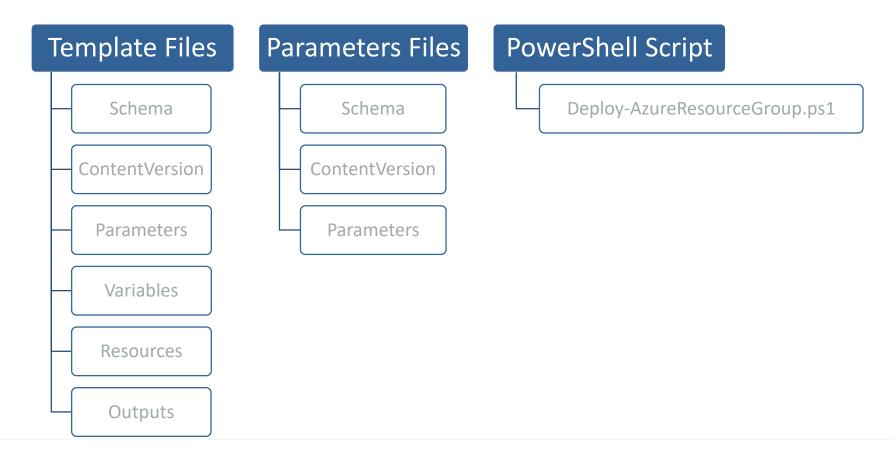
### Platforms & Tools - Something Free For Everyone!







## ARM Templates Components

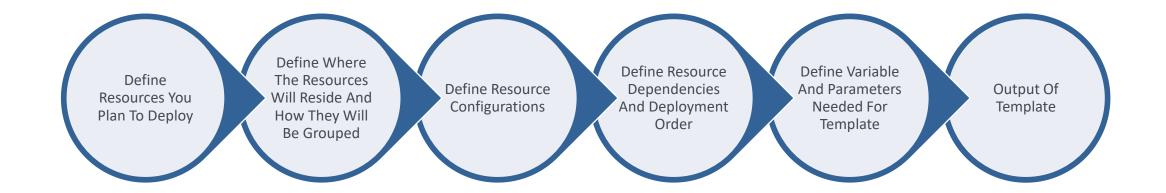




# DEMO



## ARM Template Lifecycle





## Deployment Options

GitHub (Click To Deploy)

**Visual Studio** 

Azure PowerShell

**Azure CLI** 

Azure Rest API



## Resources For Building Templates

- GitHub
  - Azure Open Source QuickStart Templates On GitHub (<a href="https://github.com/Azure/azure-quickstart-templates">https://github.com/Azure/azure-quickstart-templates</a>)
- Visual Studio
  - Premade Components In JSON Outline Using Resource Group Project
- Azure Portal
  - Automation Options From "Create A Resource" In Azure Portal
  - View Template From Deploy History
  - Export / Save Resource Group Level Via Automation Script
    - Download Template
    - Add To Template Library In Automation Script Section (Preview)
- Web Based
  - Azure Resource Explorer (<a href="https://resources.azure.com">https://resources.azure.com</a>)
  - ARM Visualizer (<u>http://armviz.io</u>)



# Q & A



#### Stay Connected

- http://blog.imseandavis.com
- http://www.linkedin.com/in/imseandavis
- https://github.com/imseandavis/presentations
- @seanasaservice

If you have questions or would like more information, feel free to contact me via email sean.davis@agilethought.com

