



# GLOBAL AZURE BOOTCAMP 2017 DENVER

Deploying Resources from  
ARM Templates Lab



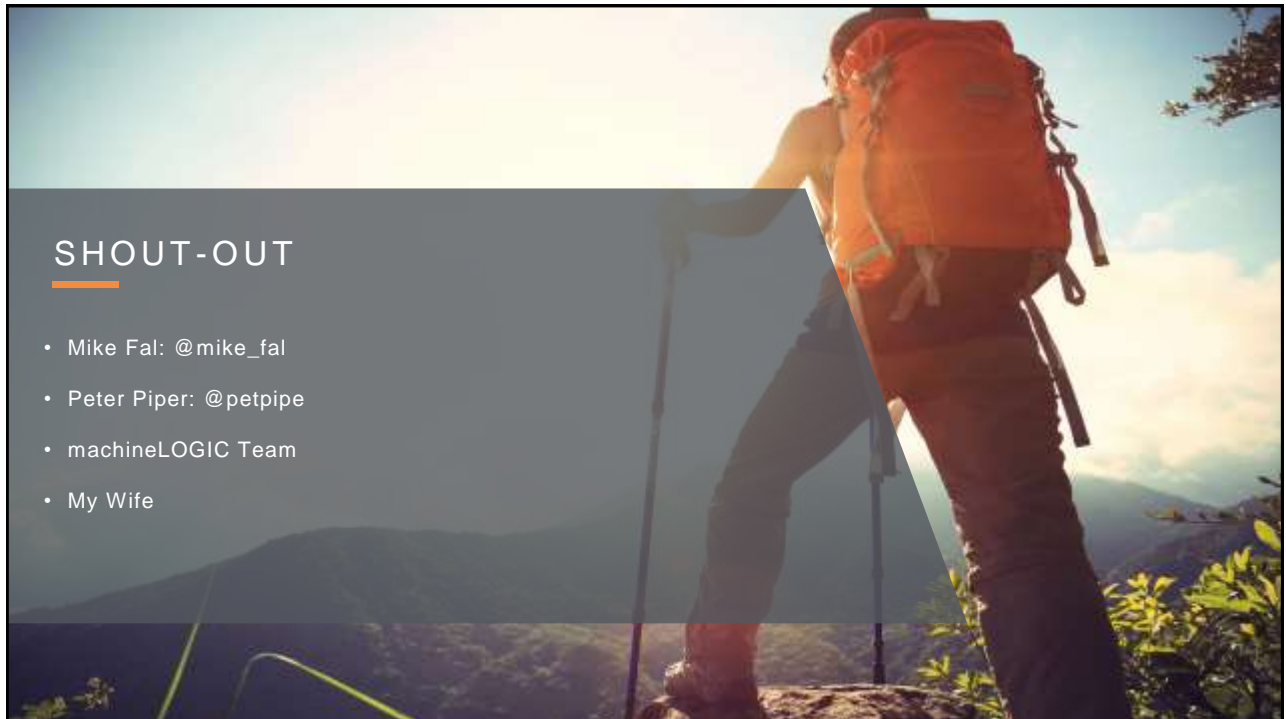
## ABOUT NATHAN TAYLOR

- Cloud Engineer for machineLOGIC
- I've been Working in Denver SMB IT market for 14 years
- **Certifications:**
  - Microsoft Specialist: Implementing Microsoft Azure Infrastructure Solutions
  - Microsoft Certified Solutions Associate Office 365
  - AWS Certified Solutions Architect Associate Level
- Twitter: @ntaylor0909

The background image for this section shows a hiker from behind, wearing a large orange backpack and using trekking poles, standing on a rocky trail overlooking a valley. The sky is bright and hazy.

## ABOUT MACHINELOGIC

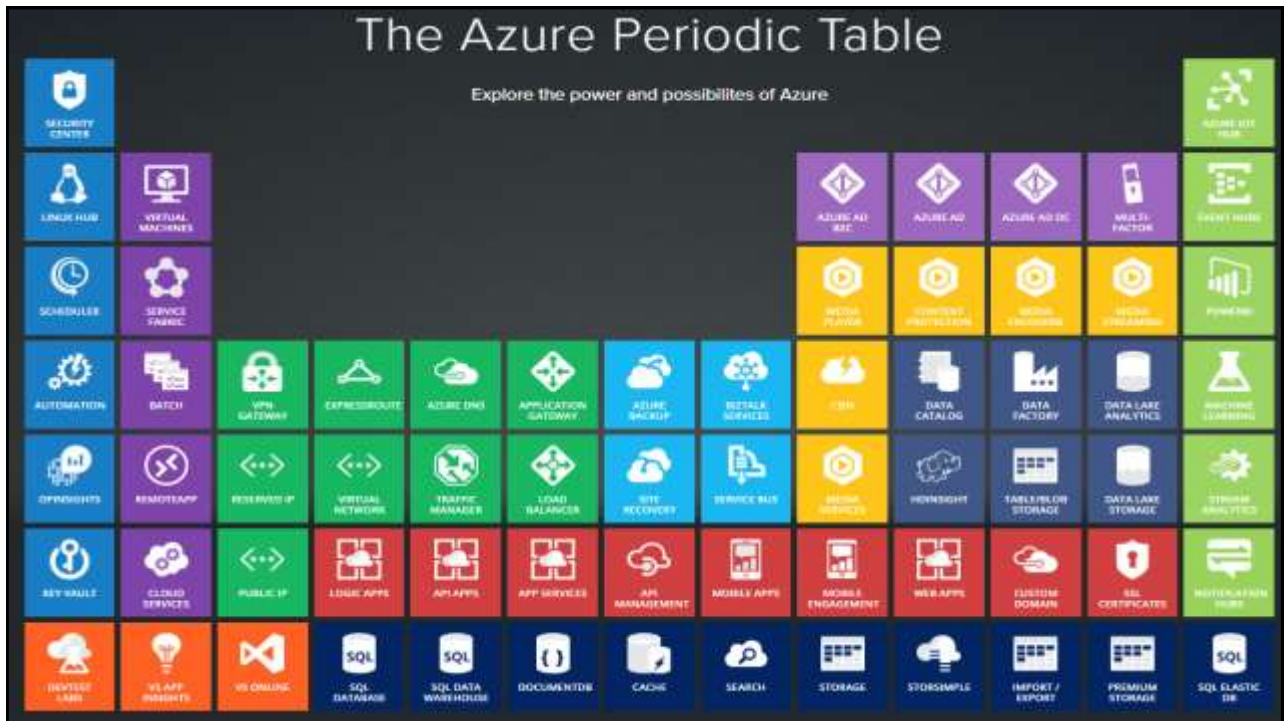
- Founded in 2001
- Based in Denver, Colorado
- Focused on Managed IT Services, Cloud Services, Talent Services
- Develop a meaningful relationship with our clients
- Apply our expertise to solve problems and create new opportunities



## WHAT ARE WE GOING TO LEARN IN THIS LAB?

- What Are ARM Templates
- Why Use ARM Templates
- Lab: Use ARM Templates to deploy resources in Azure





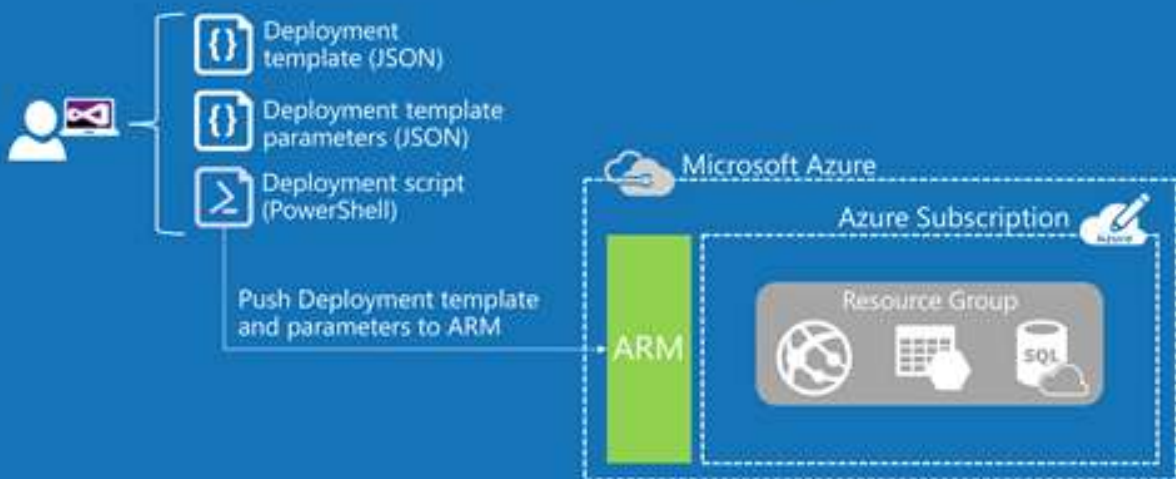


## ARM TEMPLATE DEPLOYMENT DEMO



## ARM TEMPLATES

### Azure Resource Group Project



## DEFINITIONS

- **ARM: Azure Resource Manager**
- **Resource Groups**
- **ARM Templates**



## COMPONENTS

- **ARM provides the following benefits:**
- Deploy, manage, secure, and monitor Azure resources as a group
- Deploy resources repeatedly
- Supports creating templates.
- Allows you to define dependencies between resources so they are deployed in the correct order
- Ability to apply RBAC policies to all resources in a Resource Group
- Ability to specify “tags” to resources for programmatic purposes
- Billing clarity Via Tagging or Resource Group



## WHY ARM?

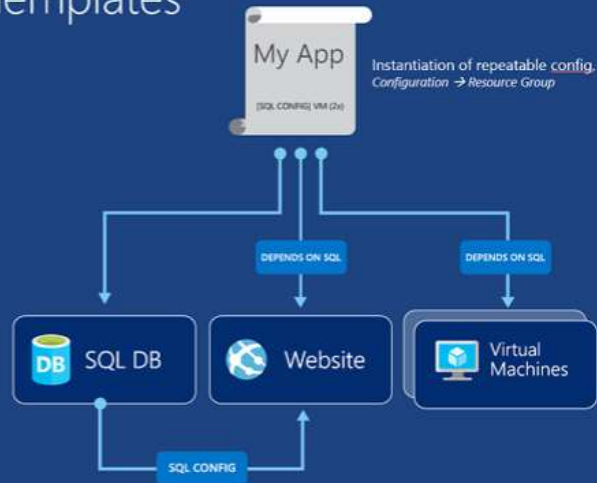
### Azure Resource Templates

#### Azure Templates can:

- Ensure Idempotency
- Simplify Orchestration
- Simplify Roll-back
- Provide Cross-Resource Configuration and Update Support

#### Azure Templates are:

- Source file, can be checked-in
- Specifies resources and dependencies (VMs, WebSites, DBs) and connections (config, LB sets)
- Support parametized input/output



## COMPONENTS

<u>Element Name</u>	<u>Required?</u>
\$schema	Yes
contentVersion	Yes
parameters	No
variables	No
resources	Yes
outputs	No

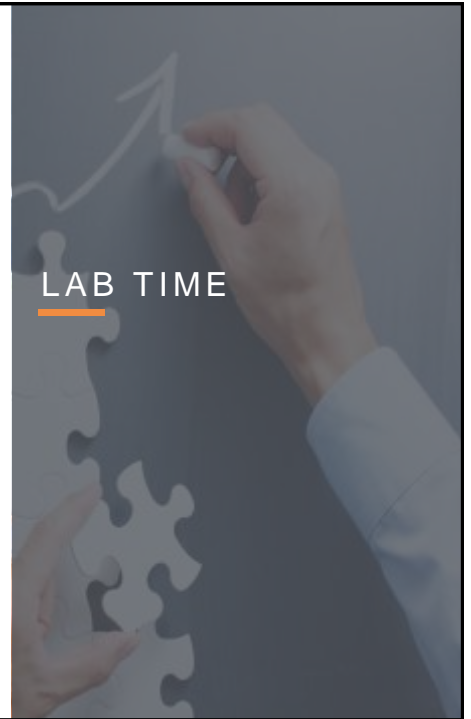


**OUTLINE:**

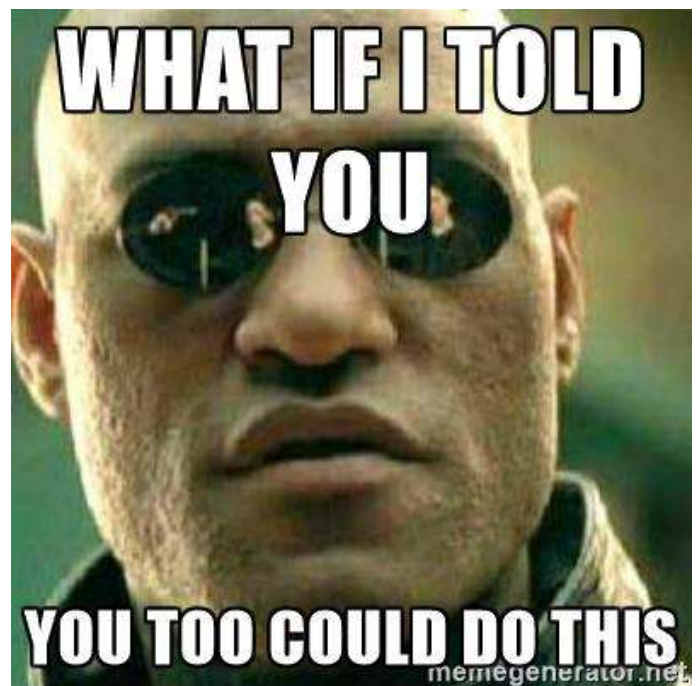
- GET LOGGED INTO THE PORTAL
- DOWNLOAD THE TEMPLATE
- DEPLOY THE TEMPLATE

- <http://bit.ly/abclab2017>

LAB TIME



ARM TEMPLATE  
DEPLOYMENT  
DEMO



- **When/How would I use this?**

- Infrastructure as Source Code. Throw templates in VSTS or GitHub to keep track of revisions.
- Repeatabe environments
- Learning!



## MORE RESOURCES

- **Tools for Working with ARM Templates:**

- Visual Studio 2017(Community Edition is Free)
- Visual Studio Code
  - Install the Azure Resource Manager Tools
- Sublime Text
- NotePad++

## • Options for Deploying ARM Templates:

- The Azure Portal
- PowerShell
- Visual Studio
- CLI (CLI 2.0 Preview)
- Github
- .Net
- Ruby
- Integrate with PowerShell-DSC, Chef, Puppet



DEPLOYMENT

## MORE RESOURCES

- Quickstart Templates:
  - [Github.com/azure](https://github.com/Azure/azure-quickstart-templates)
- Azure Documentation
  - [docs.microsoft.com/en-us/azure/](https://docs.microsoft.com/en-us/azure/)
- Channel 9/MVA videos
- Best Practice Docs
  - Azure Documentation and Github

- **ARM Templates:**

- Great way to learn Azure, ARM, Resource groups, infrastructure as code and other Azure concepts.
- Your Lab accounts will be shut down
- The Template will live on:  
<http://bit.ly/abclab2017>
- Don't forget to tip your waiter

CLOSING  
THOUGHTS

