

# Deploying Resources with ARM

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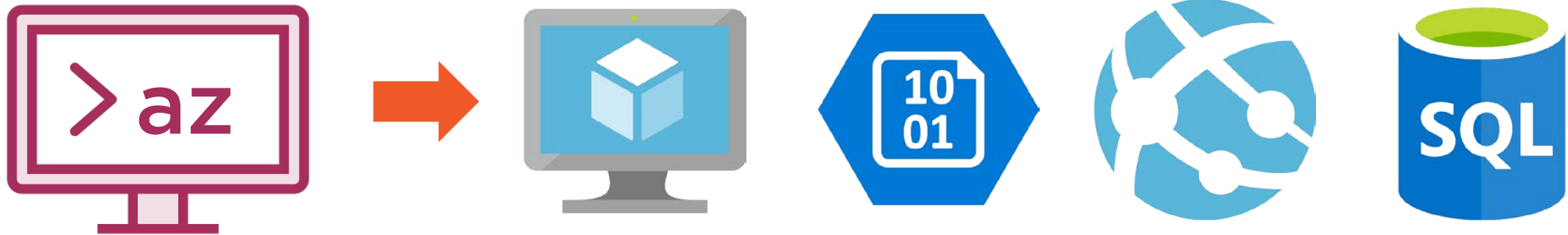
**Mark Heath**

CLOUD ARCHITECT

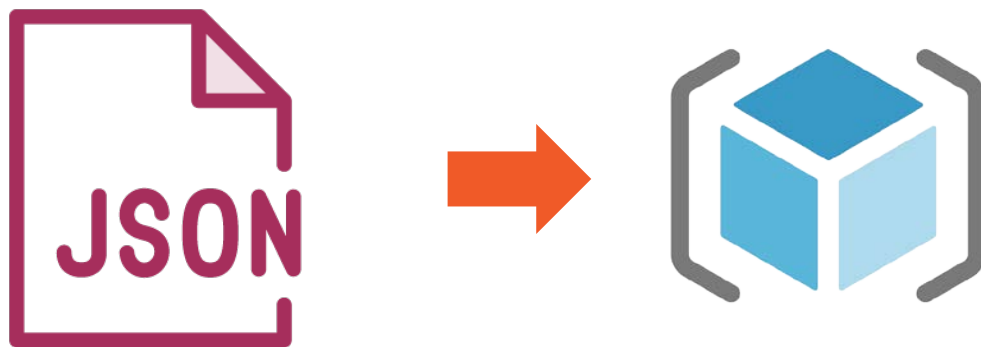
@mark\_heath [www.markheath.net](http://www.markheath.net)



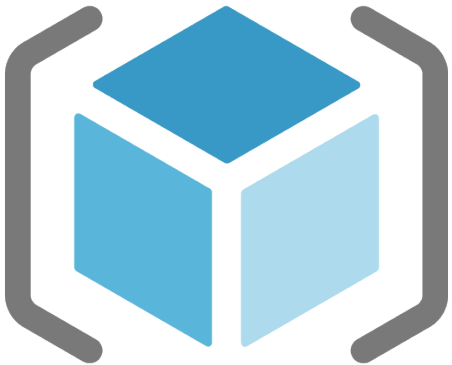
# Creating Azure Resources



## Azure Resource Manager (ARM)



# Benefits of Azure Resource Manager



## **Declarative model**

- Define what's in the resource group

## **Efficient deployment**

## **Incremental deployment**

## **Parameterized**

- Deploy different variations easily

## **Work well with the Azure CLI**

# Demo



## Create an ARM template

- az group deployment create

## Azure Quickstart templates library

- [github.com/Azure/azure-quickstart-templates](https://github.com/Azure/azure-quickstart-templates)
- Customize template parameters



# Demo



## Generate an ARM template

- az group export

## Creating templates

- Azure portal
- Visual Studio



# Demo



## **Deploy a local custom ARM template**

- az group deployment create

## **Deploy an updated template version**

- Add an additional web app

## **Revert to original template**

- Delete the additional web app



# Deploying Resources with ARM

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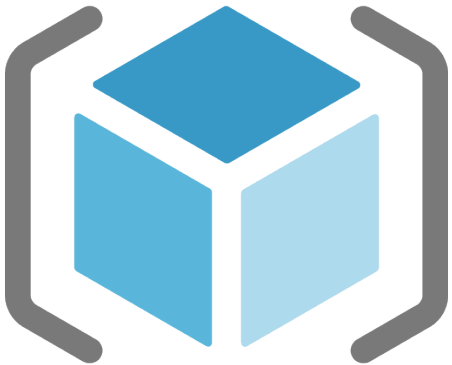
```
az group deployment create  
  
-n DeploymentName  
  
-g MyResourceGroup  
  
--template-file MyTemplate.json  
  
--parameters @MyParams.json  
  
--parameters UserName=mheath  
  
--mode Incremental
```

- ◀ Deploy an ARM template
- ◀ Deployment name
- ◀ Target resource group
- ◀ Location of the ARM template (or use --template-uri)
- ◀ Location of the parameters file
- ◀ Additional parameter overrides
- ◀ Deployment mode incremental or complete





# Creating ARM Templates



**az group export**

**Create automation script in Azure portal**

**Visual Studio tooling**

**Azure Quickstart templates**

- <https://github.com/Azure/azure-quickstart-templates>

Up next ...

Automating with  
Service Principals

