

# **Expected Learning Outcomes**

Azure Masterclass: Deep-dive into ARM Templates



By the end of this section, you should be able to:

- → Walkthrough the various sections of the ARM template
- → Differentiate between single and nested templates
- → Describe incremental and complete deployment modes

Schema: Mandatory component of ARM templates

Schema value: Location of JSON schema file describing template version

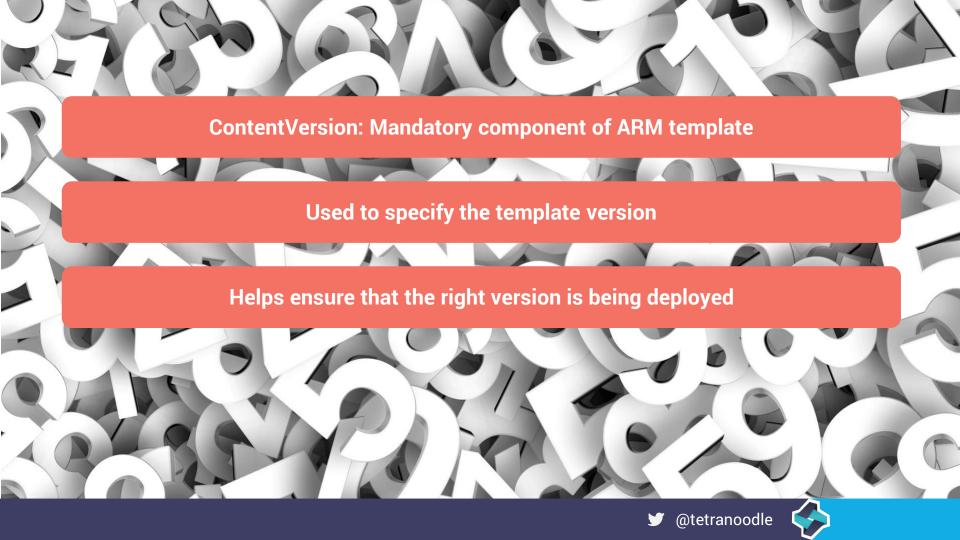
Get the latest schema from:

https://github.com/Azure/azure-resource-manager-schemas/













#### **Parameters**





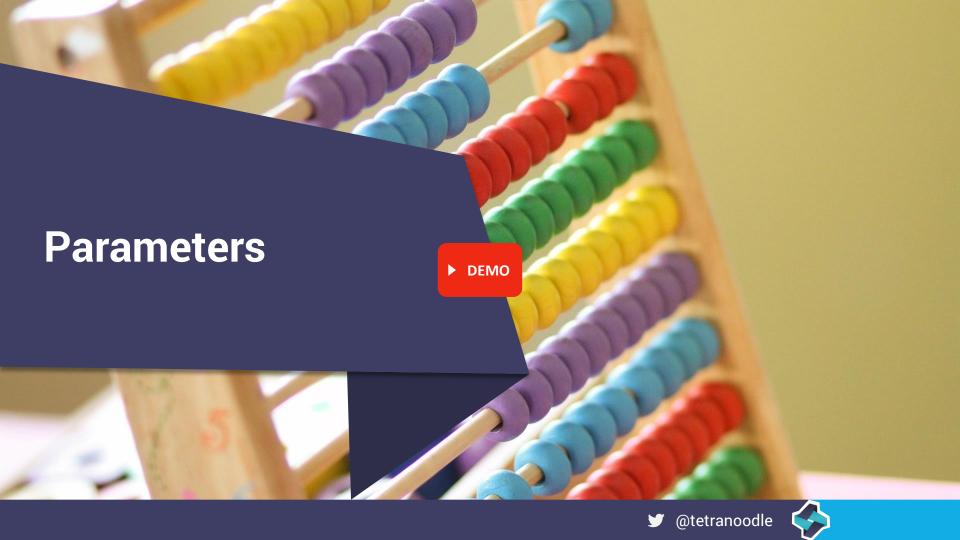
#### Parameter properties used to set values:

- parameterName
- type
- defaultValue
- → allowedValues
- → minValue
- maxValue
- minLength
- maxLength
- description











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#### Resources

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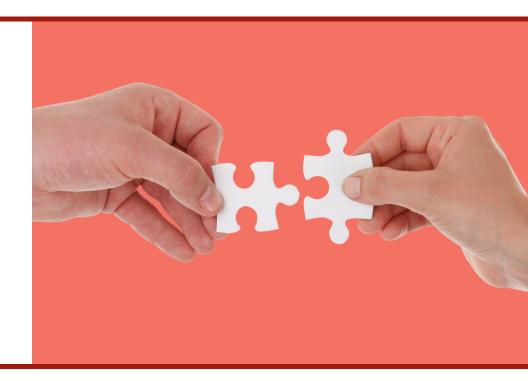
**Collection of resources** Array of resources, child resources **Resources: Define properties Describe resource-specific properties** apiVersion location type tags name **Elements:** dependsOn properties condition comments resources

```
**\.f=a.Event("hide.bs.tab",{relatedTarget:b[0]}),g=a.Event("show.bs.tab",{relatedTarget:e[0]
         (var h=a(d);this.activate(b.closest("li"),c),this.activate(h,h.parent(),functio
                    alatedTarget:e[0]})})}}},c.prototype.activate=function(b,d,e){func
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```



### Output

- Used to specify values returned from deployment
- → Values are passed into another deployment as connection string for deployment
- Output elements: OutputName, type, value



### Single Templates vs. Nested Templates





- Deploy either using a single template or a main template with multiple nested templates
- → Nested templates are common for more advanced scenarios

- → You can break down a solution into targeted components
- → You can reuse nested templates with different main templates

### Nested Templates – Best Practices

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Input parameters

**Optional Resources Template** 

Conditionally deploy resources

**Shared Resources Template** 

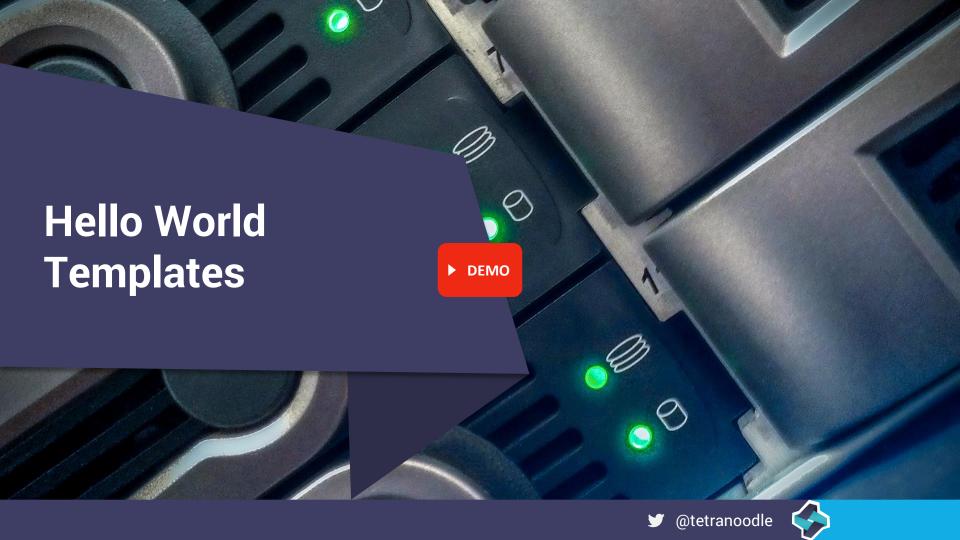
Deploy shared resources

Member Resource Templates & Scripts

Reusable or custom scripts













### **Deployment Modes**

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#### **Incremental**

- Default mode
- Doesn't remove or modify resources
- Provides support for versioning and rolling back deployments



#### **Complete**

- Deletes resources not mentioned in the template
- → Best for "Starting Fresh" or refactoring a solution



## Deployment Modes

