Azure Crash Class:

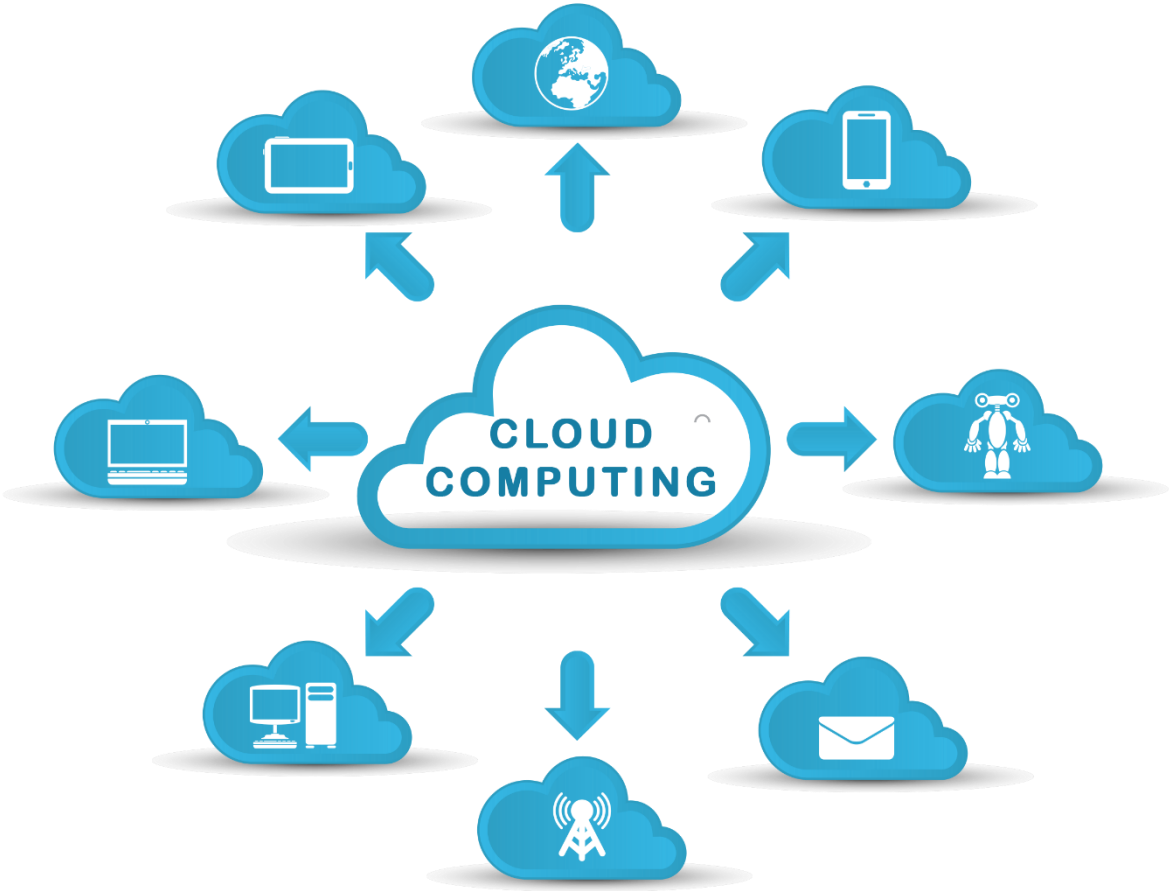
Introduction To Azure ARM Templates

Expected Learning Outcomes

Azure Crash Course: Introduction to ARM Templates

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

- **Understand basic cloud computing concepts**
- **Describe the Azure Resource Manager**
- **Outline the basic structure of an ARM template**



“Cloud computing is a kind of Internet-based computing that provides shared processing resources and data to computers and other devices on demand.”

- Wikipedia

Benefits

Of Cloud Computing

Capex To Opex


Agility


Flexibility

Green

Energy


€
Savings


Growth

- **Infrastructure as a Service (IaaS),** Providing Infrastructure hosting
- **Platform as a Service (PaaS),** Providing framework services to IT directors
- **Software as a Service (SaaS),** Providing software application service to end-users

What is ARM?

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Azure Resource Manager

- Support for pre-defined, structured templates
- Based on JSON syntax
- Define the resources to be deployed in Azure
- Provides security and auditing capabilities
- Supports multiple client SDKs

Benefits of using Azure Resource Manager

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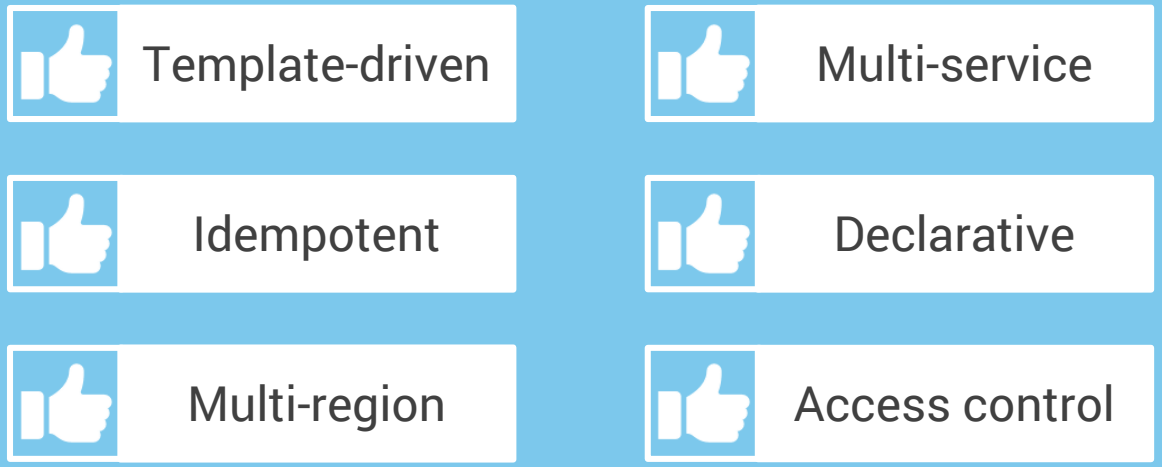
Some of the key benefits of using the Azure Resource Manager are:



Basic Structure of an ARM Template

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Here is the basic structure of an ARM template:

DeploymentTemplate.json*

http://schema.management.azure.com/schemas/2015-01-01/deploymentTemplate.json#

```
{
  "$schema": "http://schema.management.azure.com/schemas/2014-04-01-preview/deploymentTemplate.json#",
  "contentVersion": "<version-number-of-template>",
  "parameters": { <parameter-definitions-of-template> },
  "variables": { <variable-definitions-of-template> },
  "resources": [ { <definition-of-resource-to-deploy> } ],
  "outputs": { <output-of-template> }
}
```


Sample ARM Template

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If you take an empty resource template, it looks like this:

DeployTemplate.json*

http://schema.management.azure.com/schemas/2015-01-01/deploymentTemplate.json#

```
{
  "$schema": "http://schema.management.azure.com/schemas/2014-04-01-preview/deploymentTemplate.json#",
  "contentVersion": "<version-number-of-template>",
  "parameters": { <parameter-definitions-of-template> },
  "variables": { <variable-definitions-of-template> },
  "resources": [ { <definition-of-resource-to-deploy> } ],
  "outputs": { <output-of-template> }
}
```


ARM Templates In Azure

DEMO


Play Video

Tools for ARM Templates

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You can use Azure to create ARM resources

Azure is useful, but may not be scalable

Use one of many available IDEs or tools to edit JSON templates

Notepad

Visual Studio

Visual Studio Code

Sublime Text