ARM Template for Creating a Resource Group and Storage Account

Introduction

This document provides an ARM (Azure Resource Manager) template for deploying a Resource Group and a Storage Account in Azure. ARM templates enable Infrastructure as Code (IaC), allowing consistent and repeatable deployments.

ARM Template Structure

An ARM template consists of the following sections:

1. **$schema**: Defines the location of the JSON schema file.

2. **contentVersion**: Specifies the version of the template.

3. **parameters**: Accepts user-defined values to make the template reusable.

4. **variables**: Stores values used within the template.

5. **resources**: Defines the Azure resources to be deployed.

6. **outputs**: Returns values after deployment (optional).

ARM Template Code

Below is an ARM template for creating a Resource Group and a Storage Account:

```
{
  "$schema": "https://schema.management.azure.com/schemas/2019-04-01/deploymentTemplate.json#",
  "contentVersion": "1.0.0.0",
  "parameters": {
    "resourceGroupName": {
      "type": "string",
      "metadata": {
        "description": "Name of the Resource Group."
      }
    },
    "location": {
      "type": "string",
      "defaultValue": "West Europe",
      "metadata": {
```

```json
        "description": "Azure region for deployment."
      }
    },
    "storageAccountName": {
      "type": "string",
      "metadata": {
        "description": "Name of the Storage Account."
      }
    }
  },
  "resources": [
    {
      "type": "Microsoft.Resources/resourceGroups",
      "apiVersion": "2021-04-01",
      "name": "[parameters('resourceGroupName')]",
      "location": "[parameters('location')]"
    },
    {
      "type": "Microsoft.Storage/storageAccounts",
      "apiVersion": "2021-09-01",
      "name": "[parameters('storageAccountName')]",
      "location": "[parameters('location')]",
      "sku": {
        "name": "Standard_LRS"
      },
      "kind": "StorageV2",
      "properties": {}
    }
  ]
}
```

Deployment Instructions

Using Azure CLI

1. Login to Azure:

2. az login

3. Deploy the template:

4. az deployment sub create --location "West Europe" --template-file template.json --parameters resourceGroupName=MyResourceGroup storageAccountName=mystorageacct

Using Azure PowerShell

New-AzSubscriptionDeployment -Location "West Europe" -TemplateFile template.json -resourceGroupName "MyResourceGroup" -storageAccountName "mystorageacct"

Conclusion

This ARM template simplifies the provisioning of a Resource Group and a Storage Account in Azure. Using Infrastructure as Code (IaC) ensures consistency and reduces manual deployment errors.