ARM template to create SQL DB server and database

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ARM template to create an Azure SQL Database server and database

This is a "How To" article to demonstrate a simple deployment template. The steps are taken from the public article Quickstart: Create a single database in Azure SQL Database using an ARM template. The template itself was adapted from Azure Quickstart Templates - SQL Database. Please check back on the public articles for any newer version.

Other interesting templates are available at Azure Quickstart Templates.

Create the template

A single database has a defined set of compute, memory, IO, and storage resources using one of two purchasing models. When you create a single database, you also define a server to manage it and place it within Azure resource group in a specified region.

The following template creates a server and `Standard` SLO databases from the values that you provide through the parameters. Note the `DependsOn` section that waits on the successful deployment of the server before starting to deploy the database:

```
{
  "$schema": "https://schema.management.azure.com/schemas/2019-04-01/deploymentTemplate.json#",
  "contentVersion": "1.0.0.0",
  "metadata": {
    "_generator": {
      "name": "bicep",
      "version": "0.5.6.12127",
      "templateHash": "17606057535442789180"
    }
  },
  "parameters": {
    "serverName": {
      "type": "string",
      "defaultValue": "[uniqueString('sql', resourceGroup().id)]",
      "metadata": {
        "description": "The name of the SQL logical server."
      }
    },
    "sqlDBName": {
      "type": "string",
      "defaultValue": "SampleDB",
      "metadata": {
        "description": "The name of the SQL Database."
      }
    },
    "location": {
      "type": "string",
      "defaultValue": "[resourceGroup().location]",
      "metadata": {
        "description": "Location for all resources."
      }
    },
    "administratorLogin": {
      "type": "string",
      "metadata": {
        "description": "The administrator username of the SQL logical server."
      }
    },
    "administratorLoginPassword": {
      "type": "secureString",
      "metadata": {
        "description": "The administrator password of the SQL logical server."
      }
    }
  },
  "resources": [
    {
      "type": "Microsoft.Sql/servers",
      "apiVersion": "2021-08-01-preview",
      "name": "[parameters('serverName')]",
      "location": "[parameters('location')]",
      "properties": {
        "administratorLogin": "[parameters('administratorLogin')]",
        "administratorLoginPassword": "[parameters('administratorLoginPassword')]"
      }
    },
    {
      "type": "Microsoft.Sql/servers/databases",
      "apiVersion": "2021-08-01-preview",
      "name": "[format('{0}/{1}', parameters('serverName'), parameters('sqlDBName'))]",
      "location": "[parameters('location')]",
      "sku": {
        "name": "Standard",
        "tier": "Standard"
      },
      "dependsOn": [
        "[resourceId('Microsoft.Sql/servers', parameters('serverName'))]"
      ]
```

```
      }
    ]
}
```

Deploy the template

Use the following PowerShell script to provide the required parameter values and deploy the resources:

```
$projectName = Read-Host -Prompt "Enter a project name that is used for generating resource names"
$location = Read-Host -Prompt "Enter an Azure location (i.e. centralus)"
$adminUser = Read-Host -Prompt "Enter the SQL server administrator username"
$adminPassword = Read-Host -Prompt "Enter the SQl server administrator password" -AsSecureString

$resourceGroupName = "${projectName}rg"

New-AzResourceGroup -Name $resourceGroupName -Location $location
New-AzResourceGroupDeployment -ResourceGroupName $resourceGroupName -TemplateUri "https://raw.githubuserconten

Read-Host -Prompt "Press [ENTER] to continue ..."
```

You can also go to the Deploy the template page and run the PS script through the "Try It" button.

Public Doc Reference

- Quickstart: Create a single database in Azure SQL Database using an ARM template
- Azure Quickstart Templates - SQL Database
- Azure Quickstart Templates

How good have you found this content?