README.md

Bitbucket Pipelines Pipe: Azure VMSS Linux Script Deploy

This pipe will copy and run scripts on Azure Linux Virtual Machine Scale Sets using Custom Script Extension Version 2. Azure virtual machine scale sets let you create and manage a group of identical, load balanced, and autoscaling VMs. The Custom Script Extension Version 2 downloads and runs scripts on Azure virtual machines. This extension is useful for post-deployment configuration, software installation, or any other configuration/management task.

YAML Definition

Add the following snippet to the script section of your `bitbucket-pipelines.yml` file:

```
script:
  - pipe: microsoft/azure-vmss-linux-script-deploy:1.0.2
    variables:
      AZURE_APP_ID: $AZURE_APP_ID
      AZURE_PASSWORD: $AZURE_PASSWORD
      AZURE_TENANT_ID: $AZURE_TENANT_ID
      AZURE_RESOURCE_GROUP: '<string>'
      AZURE_VMSS_NAME: '<string>'
      AZURE_EXTENSION_COMMAND: '<string>'
      # AZURE_EXTENSION_FILES: '<string>' # Optional
      # AZURE_FORCE_UPDATE: '<boolean>' # Optional
      # AZURE_NO_WAIT: '<boolean>' # Optional
      # AZURE_PROVISION_AFTER_EXTENSIONS: '<string>' # Optional
      # AZURE_CLEANUP: '<boolean>' # Optional
      # DEBUG: '<boolean>' # Optional
```

Variables

Variable	Usage
AZURE_APP_ID (*)	The app ID, URL or name associated with the service principal required for login.
AZURE_PASSWORD (*)	Credentials like the service principal password, or path to certificate required for login.
AZURE_TENANT_ID (*)	The AAD tenant required for login with service principal.
AZURE_RESOURCE_GROUP (*)	Name of resource group.
AZURE_VMSS_NAME (*)	The name of the Virtual Machine Scale Set.
AZURE_EXTENSION_COMMAND (*)	The entry point script to execute.
AZURE_EXTENSION_FILES	Comma-separated list of files to be downloaded to the virtual machines. Any local file included in this list will be uploaded to an intermediary Azure Blob Storage first.
AZURE_FORCE_UPDATE	Force to update even if the extension configuration has not changed. Default: `false`.
AZURE_NO_WAIT	Do not wait for the long-running operation to finish. Default: `false`.
AZURE_PROVISION_AFTER_EXTENSIONS	Space-separated list of extension names after which this extension should be provisioned. These extensions must already be set on the vm.
AZURE_CLEANUP	Delete intermediary Blob Storage after deployment. Default: `false`.
DEBUG	Turn on extra debug information. Default: `false`.

(*) = required variable.

Prerequisites

You will need to configure required Azure resources before running the pipe. The easiest way to do it is by using the Azure cli. You can either install the Azure cli on your local machine, or you can use the Azure Cloud Shell provided by the Azure Portal in a browser.

Service principal

You will need a service principal with sufficient access to create an Azure App Service instance, or update an existing App Service. To create a service principal using the Azure CLI, execute the following command in a bash shell:

```
az ad sp create-for-rbac --name MyServicePrincipal
```

Refer to the following documentation for more detail:

- Create an Azure service principal with Azure CLI

Azure Virtual Machine

Using the service principal credentials obtained in the previous step, you can use the following commands to create an Azure Virtual Machine Scale Set in a Bash shell:

```
az login --service-principal --username ${AZURE_APP_ID}  --password ${AZURE_PASSWORD} --tenant ${AZURE_TENANT_ID}

az group create --name ${AZURE_RESOURCE_GROUP} --location australiaeast

az vmss create --resource-group ${AZURE_RESOURCE_GROUP} --name ${AZURE_VMSS_NAME} --image UbuntuLTS  --upgrade-policy-mode automatic --admir
```

Refer to the following documentation for more detail:

- Quickstart: Create a virtual machine scale set with the Azure CLI

Examples

Basic example

```
script:
  - pipe: microsoft/azure-vmss-linux-script-deploy:1.0.2
    variables:
      AZURE_APP_ID: $AZURE_APP_ID
      AZURE_PASSWORD: $AZURE_PASSWORD
      AZURE_TENANT_ID: $AZURE_TENANT_ID
      AZURE_RESOURCE_GROUP: $AZURE_RESOURCE_GROUP
      AZURE_VMSS_NAME: $AZURE_VMSS_NAME
      AZURE_EXTENSION_COMMAND: 'apt-get -y update && apt-get install -y apache2'
```

Advanced example

```
script:
  - pipe: microsoft/azure-vmss-linux-script-deploy:1.0.2
    variables:
      AZURE_APP_ID: $AZURE_APP_ID
      AZURE_PASSWORD: $AZURE_PASSWORD
      AZURE_TENANT_ID: $AZURE_TENANT_ID
      AZURE_RESOURCE_GROUP: $AZURE_RESOURCE_GROUP
      AZURE_VMSS_NAME: $AZURE_VMSS_NAME
      AZURE_EXTENSION_COMMAND: './script.sh -p my-package.zip -n default -s kestrel.service'
      AZURE_EXTENSION_FILES: 'custom-script/script.sh,my-package.zip,https://myresources/nginx/default,systemd/kestrel.service'
      AZURE_FORCE_UPDATE: 'true'
      AZURE_NO_WAIT: 'true'
      AZURE_PROVISION_AFTER_EXTENSIONS: 'NetworkWatcherAgentLinux VMAccessForLinux'
      AZURE_CLEANUP: 'true'
      DEBUG: 'true'
```

Support

This sample is provided "as is" and is not supported. Likewise, no commitments are made as to its longevity or maintenance. To discuss this sample with other users, please visit the Azure DevOps Services section of the Microsoft Developer Community: https://developercommunity.visualstudio.com/spaces/21/index.html.