
CREATING AZURE BATCH ACCOUNT SCRIPT

Install AzureCLI

Then install the latest Batch extensions

```
az extension add --source https://github.com/Azure/azure-batch-cli-extensions/releases/download/azure-batch-cli-extensions-2.0.1/azure_batch_cli_extensions-2.0.1-py2.py3-none-any.whl
```

The set of commands

<https://docs.microsoft.com/en-us/cli/azure/batch?view=azure-cli-latest>

SCRIPT NAME: create_project.sh

```
#!/bin/bash
# Feb 8, 2018
# Kirk Dahl
#
# Azure Deep Dive Training
# Final Project - Microsoft Azure Batch

clear
echo "STOP - have you logged into Azure yet? (y/n)"
read answer
case $answer in
    y) ;;
    n) exit;;
    *) exit;;
esac

#####
##### PREREQUISITES #####
#####

#CREATE RESOURCE GROUP
echo
echo
echo =====
echo "Creating Resource Group"
echo =====
az group create \
    --name rg-kirkdahl \
    --location eastus

#CREATE STORAGE ACCOUNT
echo
echo
echo =====
echo "Creating Storage Account"
```

```

echo =====
az storage account create \
  --resource-group rg-kirkdahl \
  --name sakirkdahl \
  --location eastus \
  --sku Standard_LRS

#CREATE VNET
echo
echo
echo =====
echo "Creating VNET"
echo =====
az network vnet create \
  --name vnet-kirkdahl \
  --resource-group rg-kirkdahl \
  --subnet-name subnet-kirkdahl

#####
##### BEGIN THE MICROSOFT BATCH INSTALLATION #####
#####

#CREATE BATCH ACCOUNT
echo
echo
echo =====
echo "Creating Batch Account"
echo =====
az batch account create \
  --name batchkirkdahl \
  --storage-account sakirkdahl \
  --resource-group rg-kirkdahl \
  --location eastus

#UPLOAD APPLICATION
echo
echo
echo =====
echo "Creating Application Package"
echo =====
az batch application package create \
  --resource-group rg-kirkdahl \
  --name batchkirkdahl \
  --application-id PartyApp \
  --package-file ./18.zip \
  --version 1.0

#CREATE JOB
echo
echo
echo =====
echo "Creating Job"
echo =====
az batch job create \
  --id PartyApp \
  --account-name batchkirkdahl \

```

```

--account-endpoint https://batchkirkdahl.eastus.batch.azure.com \
--pool-id webserver

#CREATE TASKS - using json files
echo
echo
echo =====
echo "Creating Job Tasks"
echo =====
# FIRST TASK UNZIPS WEBSITE CODE
az batch task create \
--job-id PartyApp \
--account-name batchkirkdahl \
--account-endpoint https://batchkirkdahl.eastus.batch.azure.com \
--json-file ./batch-task.json

# SECOND TASK RESTART APACHE SERVER
az batch task create \
--job-id PartyApp \
--account-name batchkirkdahl \
--account-endpoint https://batchkirkdahl.eastus.batch.azure.com \
--json-file ./batch-task2.json

#CREATE BATCH POOL
echo
echo
echo =====
echo "Creating Batch Pool"
echo =====
az batch pool create \
--template batch-pool.json \
--account-name batchkirkdahl \
--account-endpoint https://batchkirkdahl.eastus.batch.azure.com

```

SUPPORTING FILES

FILENAME: batch-pool.json

```

{
  "parameters": {
    "nodeCount": {
      "type": "int",
      "metadata": {
        "description": "The number of pool nodes"
      }
    },
    "poolId": {
      "type": "string",

```

```

        "metadata": {
            "description": "The pool ID "
        }
    },
    "pool": {
        "type": "Microsoft.Batch/batchAccounts/pools",
        "apiVersion": "2016-12-01",
        "properties": {
            "id": "[parameters('poolId')]",
            "virtualMachineConfiguration": {
                "imageReference": {
                    "publisher": "Canonical",
                    "offer": "UbuntuServer",
                    "sku": "16.04.0-LTS",
                    "version": "latest"
                },
                "nodeAgentSKUId": "batch.node.ubuntu 16.04"
            },
            "vmSize": "STANDARD_A1",
            "enableInterNodeCommunication": true,
            "targetDedicatedNodes": "[parameters('nodeCount')]",
            "enableAutoScale": false,
            "maxTasksPerNode": 1,
            "taskSchedulingPolicy": {
                "nodeFillType": "pack"
            },
            "url":
"https://batchkirkdahl.eastus.batch.azure.com/pools/webservers",
            "networkConfiguration": {
                "poolEndpointConfiguration": {
                    "inboundNatPools": [
                        {
                            "backendPort": 80,
                            "frontendPortRangeEnd": 4000,
                            "frontendPortRangeStart": 3000,
                            "name": "http.0",
                            "networkSecurityGroupRules": [
                                {
                                    "access": "allow",
                                    "priority": 150,
                                    "sourceAddressPrefix": "*"
                                }
                            ],
                            "protocol": "tcp"
                        }
                    ]
                },
                "subnetId": "/subscriptions/21ad651f-2ff2-49d2-87b2-50c56efef22c/resourceGroups/rg-kirkdahl/providers/Microsoft.Network/virtualNetworks/vnet-kirkdahl/subnets/subnet-kirkdahl"
            },
            "applicationPackageReferences": [
                {
                    "applicationId": "PartyApp",

```

```
        "version": 1.0
      },
    ],
    "packageReferences": [
      {
        "type": "aptPackage",
        "id": "apache2"
      },
      {
        "type": "aptPackage",
        "id": "unzip"
      }
    ]
  }
}
```

FILENAME: batch-task.json

```
{
  "applicationPackageReferences": [
    {
      "applicationId": "partyapp",
      "version": "1.0"
    }
  ],
  "commandLine": "sudo -S unzip -u /mnt/batch/tasks/apppackages/partyapp*.zip",
  "-d /var/www/html",
  "constraints": {
    "maxTaskRetryCount": 1
  },
  "containerSettings": null,
  "dependsOn": null,
  "displayName": "unzip",
  "id": "unzipSite",
  "userIdentity": {
    "autoUser": {
      "elevationLevel": "admin",
      "scope": "task"
    },
    "userName": null
  }
}
```

FILENAME: batch-task2.json

```
{
  "applicationPackageReferences": [
    {
      "applicationId": "partyapp",
      "version": "1.0"
    }
  ],
  "commandLine": "sudo -S systemctl restart apache2",
  "constraints": {
    "maxTaskRetryCount": 1
  },
  "containerSettings": null,
  "dependsOn": null,
  "displayName": "unzip",
  "id": "restartApache",
  "userIdentity": {
    "autoUser": {
      "elevationLevel": "admin",
      "scope": "task"
    },
    "userName": null
  }
}
```